

STANDING COMMITTEE ON AGRICULTURE
(2006-07)

FOURTEENTH LOK SABHA

MINISTRY OF AGRICULTURE

(Department of Agricultural Research & Education)

DEMANDS FOR GRANTS (2007-2008)

TWENTY EIGHTH REPORT



LOK SABHA SECRETARIAT
NEW DELHI

APRIL, 2007/VAISAKHA, 1929 (Saka)

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Presented to Lok Sabha on 27.04.2007

Laid in Rajya Sabha on 27.04.2007



LOK SABHA SECRETARIAT

NEW DELHI

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COA No. 193

Price: Rs.

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Published under Rule 382 of the Rules of Procedure and Conduct of Business in
Lok Sabha (Eleventh Edition) and Printed by

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Composition of the Standing Committee on Agriculture (2006-2007)

Prof. Ram Gopal Yadav – Chairman

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3. Shri Anil Basu
4. Shri Manoranjan Bhakta
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2. Shri A.K. Singh - Joint Secretary
3. Shri Hardev Singh - Director
4. Shri N.S. Hooda - Deputy Secretary
5. Sh. Anil Kumar - Senior Executive Assistant

PREFACE

I, the Chairman, Standing Committee on Agriculture, having been authorized by the Committee to submit the Report on their behalf, present this Twenty Eighth Report on the Demands for Grants (2007-2008) of the Ministry of Agriculture (Department of Agricultural Research & Education).

2. The Demands for Grants of the Ministry of Agriculture were laid on the table of the House on 19th March, 2007. Under Rule 331E of the Rules of Procedure and Conduct of Business in Lok Sabha, the Committee has to consider the Demands for Grants of the concerned Ministries/Departments under its jurisdiction and make a report on the same to both the Houses of Parliament.

3. The Committee took evidence of the representatives of the Ministry of Agriculture (Department of Agricultural Research & Education) at their sitting held on 22nd March 2007. Minutes of the sitting are placed at Appendix-I.

4. The Committee wish to express their thanks to the officers of the Ministry of Agriculture (Department of Agricultural Research & Education) for giving evidence and for placing before the Committee the study material and information desired in connection with the examination of Demands for Grants of the Department of Agricultural Research & Education.

5. The Committee considered and adopted the report at their sitting held on 20th April 2007. Minutes of the sitting are placed at Appendix-II.

6. For facility of reference, the observations/recommendations of the Committee have been printed in bold letters and placed as Part II of the report.

NEW DELHI;
20 April, 2007
30 Chaitra, 1929 (Saka)

PROF. RAM GOPAL YADAV
Chairman,
Standing Committee on Agriculture.

PART – I

CHAPTER – I

Introduction

1.1 The Department of Agricultural Research and Education (DARE) was created in December 1973 on the recommendation of Shri P.V.Gajendragadkar Committee which was appointed to examine the functioning of ICAR to deal with the policy matters and provide the Indian Council of Agricultural Research (ICAR) with the requisite linkages with the Government of India, the State Governments, foreign governments and international agencies. Before the existence of the Department of Agricultural Research & Education, Indian Council of Agricultural Research (ICAR) was functioning as a registered society under the administrative control of the Ministry of Food and Agriculture. The financial assistance to State Research Institute and other Research Institutions was granted in the form of block grant by the Ministry of Food & Agriculture.

The Organisational set up of DARE

1.2 DARE is headed by a Secretary to the Government of India who is also the ex-officio Director-General of the ICAR. Additional Secretary, DARE functions as Secretary, ICAR also. The Financial Advisor of the DARE is the Financial Advisor of the ICAR as well. Functional administrative support down the line is provided by officers from the organized services, CSS and, wherever necessary, from the ICAR.

Major Functions of DARE

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

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

Indian Council of Agricultural Research

1.4 The Indian Council of Agricultural Research (ICAR) is an apex scientific organization at the national level. The responsibility of the ICAR is for promoting and augmenting science and technology programmes relating to agricultural research, education and demonstration of new technologies as first line extension activities. The mandate of the ICAR is:

- * To plan, undertake, aid, promote and coordinate education, research and its application in agriculture, animal science, fisheries, agro-forestry, home science and allied sciences.
- * To act as a clearing-house for research and general information relating to agriculture, animal husbandry, fishery, agro-forestry, home science 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, animal science, fisheries, agro-forestry, 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 organizations.

1.5 There are six types of research outfits in the ICAR System. These are: (i) National Institutes or Deemed Universities, (ii) Central Institutes (CIs), (iii) Project Directorates (PDs), (iv) National Research Centres (NRCs), (v) All India Coordinated Research Projects (AICRPs), and (vi) National Bureaux (NB).

The National Institutes/Deemed Universities are the well-developed Institutes with large infrastructure and facilities. These Institutes perform not only research functions but also carry out teaching and extension education activities. They also offer programmes leading to Master and Doctoral Degrees. These Institutes are quite broad-based in terms of networks and they have research stations spread over various parts of the country.

The Central Institutes do not carry out teaching activities as they generally concentrate on research and wherever possible undertake some extension activities as well. Their main activity is research and a number of them have research stations in other parts of the country also. The

scientists of these institutes carry out research pertaining to the commodity or discipline for which these Central Institutes have been set up.

The Project Directorates are highly specialized outfits. They are devoted to a particular commodity or a group of commodities depending upon the importance of the subject. Some of them are also devoted to particular discipline. For example, there are project directorates for maize, rice, wheat, cattle, poultry, water management, cropping systems, etc.

The National Research Centres are specialized research outfits for basic and strategic research and scientific pursuit of knowledge with respect to commodity or discipline; capable of undertaking a swift response to challenges of economic importance or crisis of investigative nature in the commodity, species, discipline to which they are dedicated.

The National Bureaux are set up with a view to collecting and conserving genetic as well natural resources. These bureaux are repositories of various natural resources such as land, plant, animals, fish and microbes of our country.

All India Coordinated Research Projects are unique type of network of research. They are spread over various parts of the country and design their research activities for trial of newly developed varieties for yield performance and input use. The data thus generated gives enormous information about the adaptability of a variety or a control measure.

Different types of research outfits devoted to a particular crop/commodity/discipline are being monitored by the respective Subject Matter Divisions in the headquarters of ICAR, which ensures that there is no duplication of work done by these outfits. Research Advisory Committees addresses the concerns of each Institute, NRC, Directorate and Bureaux. The Director of NRC and Project Director of Directorates is also the coordinator of respective crop/commodity/discipline oriented coordinated Programme. Also, Annual Workshops are regularly organised for programme review and further programme formulation. This ensures efficient function of the system.

1.6 As per the Annual Report (2006-07) of the Department, the research set up of ICAR includes 48 Central Institutes, 5 National Bureaux, 12 Project Directorates, 32 National Research Centres and 62 All-India Coordinated Research Projects. Besides, some Externally Aided Projects (EAPs) are also in operation. The ICAR also promotes research, education and extension education in 40 State Agricultural Universities (SAUs), 1 Central Agricultural University, 4 Central Universities and 5 deemed Universities by giving financial assistance in different forms.

Inter-Organisational Relationship/linkages between DARE and ICAR

1.7 The inter-organizational relationship/linkages with ICAR including details of procedural and practical aspects of relationship between DARE and ICAR are as follows:-

- (i) DARE deals with only Governmental policy matters and provides the ICAR with requisite linkages with Central/State Government agencies and international agencies without, in any way, duplicating the work already being done in the ICAR.
- (ii) Whatever can be done in the ICAR without any serious impediment on account of it not being a Government department, is done in the ICAR and only the unavoidable minimum tasks, which are required to be performed in the name of the Government or which otherwise required governmental authority, is done by DARE.
- (iii) The ICAR by itself is competent to enter into correspondence with the State Governments. However, important issues, involving policy matters or problems, which are required to be sorted out at Government levels, are referred to DARE.

The DARE discharges the responsibilities, which were the responsibilities of the Department of Agriculture in relation to ICAR. The DARE obtains Government of India's clearance for the deputation of the Council's officers, wherever necessary.

The finalization of Agreements, Protocols and Cultural Exchange Programmes with foreign governments is done by DARE. Fellowships and training facilities offered by foreign governments are dealt with by DARE. International conferences, seminars, symposia, etc. held at Government level are also dealt with by DARE.

National Research Projects being implemented with assistance from foreign governments are processed by the ICAR through DARE.

The correspondence with UN agencies such as UNDP, UNICEF, UNIDO, FAO, WHO, IBRD, etc. is through DARE. Assignment of Indian Experts to UN agencies and processing of cases of fellowships/training facilities offered by UN agencies is processed by DARE.

There is complete integration of the administrative and technical wings of ICAR and DARE. By and large a single file system operates between DARE and ICAR.

Funding Pattern followed by DARE/ICAR

1.8 The Committee has been informed that National Research Centres, Project Directorates, National Projects, Deemed to be Universities (under the umbrella of ICAR) and Krishi Vigyan Kendras are funded on 100 per cent basis. All India Coordinated Research Projects are funded on 75:25 basis except in North Eastern Region, Central Institutions, some associations/institutions where these are funded on 100 per cent basis. Besides, ICAR also provide development grant for SAUs augmenting their library, farm, equipment and laboratory facilities. Support is also provided for niche area excellence, experiential learning, Rural Awareness Work Experience etc.

The Council draws the grant from the Government of India, Pay & Accounts Office, New Delhi through DARE in 4 or 5 installments for further remittances to research institutes/ Project Directorates/ AICRP/SAUs/ KVKs including ICAR Hqrs. The Council remits the funds to the institutes on quarterly basis in a year based on their requisitions of funds.

The KVKs are funded on 100 per cent basis. The funds are released to the KVKs by the Zonal Coordinating Units based on the Audit Utilization Certificate and commensurate performance in implementing the activities of KVKs.

1.9 Details of the Programmes under various Sectors are indicated below:-

Sector	Programmes
1	2
(i) Crop Science	<ol style="list-style-type: none"> 1. Plant Genetic Resources 2. Food Crops 3. Forage Crops 4. Commercial Crops 5. Oilseeds 6. Plant Protection 7. Plant Biotechnology 8. Seed Technology and Breeder Seed Production
(ii) Horticulture	<ol style="list-style-type: none"> 9. Fruits, Vegetables, Potato & Tuber Crops 10. Plantation Crops 11. Spices 12. Floriculture, Medicinal & Aromatic Plants 13. Post-Harvest Management
(iii) Natural Resource Management	<ol style="list-style-type: none"> 14. Soil Inventory 15. Soil Management 16. Nutrient Management 17. Water Management 18. Cropping Systems Research
(iv) Agricultural Engineering	<ol style="list-style-type: none"> 19. Farm Implements and Machinery 20. Post-Harvest Engineering & Technology 21. Energy Management in Agriculture 22. Irrigation Drainage Engineering
(v) Animal Science	<ol style="list-style-type: none"> 23. Animal Genetic Resources Conservation 24. Livestock Improvement 25. Livestock Products Technology 26. Animal Health
(vi) Fisheries	<ol style="list-style-type: none"> 27. Capture Fisheries 28. Culture Fisheries 29. Fish Genetic Resources

Sector	Programmes
	30. Harvest & Post Harvest Technology 31. Human Resource Development
(vii) Agricultural Statistics & Economics	32. Agricultural Statistics & Computer Application 33. Agricultural Economics & Policy Research
(viii) Agricultural Extension	34. Krishi Vigyan Kendras 35. NRC for Women in Agriculture 36. Directorate of Information & Publications in Agriculture (DIPA)
(ix) Agricultural Education	37. Strengthening of Agricultural Education 38. National Academy of Agricultural Research Management
(x) Department of Agricultural Research and Education	39. International Cooperation and Central Agricultural University
(xi) Management and Information Services (MIS)	40. ICAR Headquarters including DIPA
(xii) Externally Aided Projects	41. National Agricultural Innovative Project (World Bank Aided)

1.10 Details of the Priorities and Thrust Areas under DARE/ICAR are indicated below:-

PRIORITIES AND THRUST AREAS

- Enhancing Productivity, Profitability and Product Quality
- Cost-effective Management of Biotic and Abiotic stresses
- Hybrid Technology
- Biotechnology
- Biodiversity
- Supply Augmentation of Seed and Planting material
- Vaccines and Diagnostics
- Post-harvest Management
- Water, Nutrient and Energy Management
- Resource Conservation Technologies
- Agricultural Diversification
- Climatic Change
- Organic Farming
- Agricultural policy Research
- Application of statistical methods and computer in agriculture
- Technology Transfer Methodology

CHAPTER – II

Demands for Grants of the Department of Agricultural Research and Education for the year 2007-08

2.1 The Demands for Grants of the Department of Agricultural Research and Education (DARE) for the year 2007-08 are included as Demand No. 2 under the Ministry of Agriculture. Besides Secretariat's expenditure of the Department, the Demand includes contribution to international bodies, payment of grants-in-aid to the Indian Council of Agricultural Research to enable it to meet the expenditure on various research institutes controlled by it and for its several research projects, schemes and activities. The provision also includes payment of net proceeds of cess under the Agricultural Produce Cess Act, 1940.

2.2 For the year 2007-08, the Department has been allocated a total amount of Rs. 2460.00 crore (Rs. 1620.00 crore for Plan and Rs. 840.00 crore for Non-Plan expenditure) on Revenue Account. Allocations made in 2006-07 and 2007-08 are indicated below:

(Rs. in crore)

Major Head	Budget 2006-07			Revised 2006-07			Budget 2007-08		
	Plan	Non-Plan	Total	Plan	Non-Plan	Total	Plan	Non-Plan	Total
3451-Secretariat Economic Services (Salaries, Travel, Office Expenses, etc.)	-	1.55	1.55	-	1.55	1.55	-	1.65	1.65
2415-Crop Husbandry, Soil & Water Conservation including Agro-Forestry, Animal Husbandry, Dairy Development Fisheries, Contributions to International Organizations, Assistance to CAU, Payment of net proceeds of Cess under APCA, 1940	1215.00	808.45	2023.45	1287.00	844.45	2131.45	1458.00	838.35	2296.35
2552-Lump-sum provision for projects/schemes in N.E. & Sikkim	135.00	-	135.00	143.00	-	143.00	162.00	-	162.00
TOTAL	1350.00	810.00	2160.00	1430.00	846.00	2276.00	1620.00	840.00	2460.00

2.3 The detailed Demands for Grants (2007-2008) of the Department were laid on the Table of the Houses (Parliament) on 19 March, 2007.

Analysis of Allocations made to DARE/ICAR out of the total Plan Budget of the Government of India during IXth, Xth & First year of the XIth Plan

2.4 The Financial Growth of DARE / ICAR for different years of IX Plan and X Plan in terms of percentage of yearly Plan Outlays w.r.t. Total Central Plan Outlay of the Country is given below. It is evident from the Table that this percentage is fluctuating between 0.36% to 0.61% during IXth and Xth Plan, being 0.53% during the year 2006 – 07. During the first year (2007 – 08) of XIth Plan this percentage has been reduced to 0.51% even though during each year of Xth Plan it ranged between 0.52% to 0.61%.

(Rs. in crore)

Plan / Year	Plan Outlay of DARE / ICAR	Total Central Plan Outlay of Country*	% of DARE w.r.to total Central Plan Outlay
IX PLAN			
1997-98	331.17	91838.17	0.36
1998-99	531.17	105187.16	0.50
1999-00	573.50	103520.93	0.55
2000-01	629.55	117333.80	0.54
2001-02	684.00	130181.34	0.53
X PLAN			
2002-03	775.00	144037.80	0.54
2003-04	775.00	147892.60	0.52
2004-05	1000.00	162947.29	0.61
2005-06	1150.00	211253.49	0.54
2006-07	1350.00	254041.00	0.53
XI PLAN			
2007-08	1620.00	319992.00	0.51

* Source : website – indiabudget.nic.in

2.5 The Outlays (BE/RE), Actual Expenditure and Percentages in respect of DARE/ICAR w.r.t. the total Central Plan Outlay of the country from 2002-07 (Xth Plan) and 2007-08 (First Year of XI Plan) are as given in Table below:

Analysis of Allocation (BE), actual RE and Expenditure of DARE/ICAR and its percentage out of Central Plan (BE/RE) outlay, during Xth Plan

(Rs. in crore)

		2002-03	2003-04	2004-05	2005-06	2006-07	2007-08
a.	Plan Outlay / BE for DARE / ICAR	775.00	775.00	1000.00	1150.00	1350.00	1620.00
b.	Actual RE for DARE / ICAR	725.00	775.00	900.00	1070.00	1430.00	--
c.	Actual Expenditure incurred by DARE / ICAR	680.56	701.78	858.98	1048.97	1430.00*	---
d.	Total Plan Outlay / BE of Central Government	144037.80	147892.60	162947.29	211253.49	254041.00	319992.00
e.	Total Plan Outlay / RE of Central Government	136867.00	141766.00	150818.15	205338.00	244229.00	---
f.	Percentage of Total Plan Outlay / BE provided to DARE Out of Central Government	0.54	0.52	0.61	0.54	0.53	0.51
g.	Percentage of Actual RE of DARE / ICAR out of total Plan Outlay / RE of Central Government	0.53	0.55	0.55	0.52	0.58	---

(Rs. in crore)								
			2002-03	2003-04	2004-05	2005-06	2006-07	2007-08
h.	Percentage of Actual Expenditure of DARE / ICAR out of total Plan Outlay / BE as well as RE of Central Government	w.r.t BE	0.47	0.47	0.53	0.50	0.56**	---
		w.r.t RE	0.50	0.49	0.60	0.51	0.58**	---

Central Plan Outlays provided by Planning Commission / website indiabudget.nic.in

*Actual expenditure for 2006 - 07 yet to be accomplished, this is RE which is tentatively assumed as actual expenditure.

** Based on RE 2006-07

2.6 It is observed from the above Table that during Tenth Plan, the percentage of DARE/ICAR's outlay BE w.r.t. Central Sector Plan outlay (BE) was 0.54(2002-03); 0.52(2003-04); 0.61(2004-05); 0.54(2005-06) and 0.53(2006-07) which further decreased to 0.51 in the first year of XIth Plan, i.e., (2007-08). Percentage of Actual RE w.r.t. Central Plan RE was 0.53 (2002-03); 0.55(2003-04); 0.55(2004-05); 0.52(2005-06) and 0.58(2006-07). Analysis of Expenditure shows further decline in percentage at RE, viz. 0.50 (2002-03); 0.49(2003-04); 0.60(2004-05); 0.51(2005-06) and 0.58^s(2006-07)-[^s RE tentatively assumed as actual expenditure]. So, it is very evident from the above analysis that during these five years, i.e. 2002-2007 the percentage share of DARE/ICAR w.r.t. Central Plan Outlay(RE) remained statically low, ranging from 0.52 to 0.58 per cent.

2.7 When asked about the details regarding amount proposed by them in their budget proposals, amount allocated, amount actually given as RE, its percentage to AGDP, etc. during

the last ten years, i.e. from 1997-98 to 2007-08, the Department furnished the details as indicated below:-

(Amount rupees in crore)

Year	Plan			Non-Plan			Total Allocation		Agricultural GDP (AGDP) at current prices	% age of DARE (BE) allocation w.r.t AGDP at Current Prices	%age of DARE's RE w.r.t AGDP at Current Prices
	Amt. Propose	BE	RE	Amt. Proposed	BE	RE	BE	RE			
2002-03	1500.00	775.00	725.00	810.44	723.80	723.80	1498.80	1448.80	472679	0.32	0.31
2003-04	1500.00	775.00	775.00	812.27	735.92	735.92	1510.92	1510.92	533642	0.28	0.28
2004-05	1800.00	1000.00	900.00	795.09	753.31	775.00	1753.31	1675.00	536629	0.33	0.31
2005-06	1900.00	1150.00	1070.00	805.07	792.00	830.00	1942.00	1900.00	595058** *	0.33	0.32
2006-07	2000.00	1350.00	1430.00	837.00	810.00	846.00	2160.00	2276.00	652403**	0.33	0.35
2007-08	1945.50	1620.00	--	856.00	840.00	-	2460.00	--	*	*	*

Source; Central Statistical Organisation (CSO)

AGDP figures include Agriculture, Forestry & Logging and Fishing

AGDP 2005-06 - Quick Estimate***

AGDP 2006-07 - Advance Estimate**

*AGDP figures for 2007 - 08 are not yet projected / available - CSO

2.8 The percentage of increase in Plan and Non-Plan allocation made for 2007-08 over the year 2006-07 is reported to be 20.00 per cent and 3.70 per cent respectively.

2.9 The Committee were keen to know from the Department as to where India stands with regard to amounts allocated for carrying out Plan and Non-Plan activities of Agricultural Research and Education and its percentage to Agriculture GDP among developed and developing countries during each of the five years of XIth Plan. In reply, the Department stated as under:

‘Recent data for expenditure on agriculture R&D are not readily available.

However, quick estimates show that India spent Rs 2680 crore in 2002-03, which was 0.55% of AgGDP. The expenditure rose to Rs 3535.7 crore in 2005-06, which is 0.62% of AgGDP. The total expenditure in 2006-07 is estimated to be Rs 4198.5 crore.

Research expenditure in India vis-à-vis in other countries, 2000

Country/region	Intensity (% of AgGDP)
India	
2000	0.34
2006	0.37
China, 2000	0.40
Brazil, 2000	1.81
Japan, 2000	3.62
USA, 2000	2.65
All Developing Countries, 2000	0.53
All Developed Countries, 2000	2.36

Note: Comparable data are available for 2000 only.'

Review of Financial Outlays to DARE/ICAR and allocation/utilization of funds during the Ninth and Tenth Plan

2.10 The Committee noted that initially the Planning Commission had communicated **the** Ninth Plan (1997-2002), outlay of Rs.2,635.22 crore in respect of DARE/ICAR, which was subsequently increased to Rs. 3,376.95 crore in August 2000 as a result of Parliamentary Standing Committee on Agriculture's (PSCA) continuous positive recommendations that it should be at least 1 per cent of Agricultural GDP with a tendency to gradually grow upto 2 % of AGDP. However, the total of yearly allocations (through Annual Plans) was only Rs. 2,749.39 crore which was subsequently subjected to cuts at RE stage and the total allocation was further reduced to Rs. 2,514.17 crore.

2.11 The Committee were informed by the Department that the Planning Commission had constituted the Tenth Plan Working Group for DARE under the chairmanship of late Prof. S.K. Sinha (ex-Director, IARI). Prof. Sinha had recommended, inter-alia to "provide 1 per cent of the GDP of Agriculture and Allied Sector (Rs.25,000 crore now) for agricultural research and education. Out of this, allocate Rs.15,000 crore to States by providing a budget line in the State Plan for their agricultural research and education programmes, of which 50 per cent should be through project funding."

2.12 The Department had proposed a minimum requirement of Rs. 15,000 crore along with a one-time catch up grant of Rs. 1,000 crore for the Tenth Plan. However, the Planning Commission approved only Rs. 4,868 crore which was subsequently raised to Rs. 5,368 crore by providing Rs. 500 crore for establishing new Krishi Vigyan Kendras (KVKs) and Rs.68 crore for Jammu Agriculture University against the proposal of Rs.16000 crore (including Rs.1000 crore as one time catch-up grant).

2.13 The allocation for the Annual Plan 2002-03 (the first year of Tenth Plan) was Rs. 775 crore, which was reduced to Rs. 725 crore at RE stage. However, the actual expenditure for the year 2002-03 was Rs. 680.56 crore. For the Annual Plan 2003-04 against the projected demand for Rs. 1,300 crore and a catch up grant of Rs. 200 crore, the Planning Commission allocated Rs. 775 crore only. The Department had also informed that “there was an understanding at the Departments’ meeting with Planning Commission that its plan allocation for 2003-04 would be raised to Rs.1,000 crore. However, the final allocation from Planning Commission for DARE/ICAR’s Annual Plan 2003-04 was only Rs.775 crore. Similarly, during the Departments’ meeting on Budget discussion with the Ministry of Finance, a strong plea was made not to cut the allocation of Rs.775 crore for 2002-03.”

2.14 The Committee noted that though the Department was provided Rs.775 crore as RE 2003-04, the Anticipated Expenditure was Rs. 741.53 crore only but actual expenditure went further down to Rs. 701.78 crore. That means, the Department failed to utilize Rs. 73.22 crore out of the finally allocated Rs. 775.00 crore during 2003-04.

2.15 The Department had proposed an amount of Rs. 1800.00 crore as BE (2004-05). However, the allocation (BE) for the Annual Plan 2004-05 was Rs. 1,000.00 crore, which was reduced to Rs. 900.00 crore at RE stage. The Department was asked to give the reasons for reducing Plan BE (2004-05) by Rs. 100.00 crore at RE stage and the impact of this reduction on the activities of the Department. In their reply the Department stated as under:

“The Ministry of Finance has reduced Plan BE 2004-05 by Rs. 100 crore at RE stage and no particular reasons have been communicated to the Department for this reduction, though the Department had requested for restoring the original allocation of Rs. 1,000 crore. The Department has reprioritized its programmes/schemes to get adjusted the requirement within the reduced allocation of Rs. 900 crore.”

2.16 The actual expenditure for the year 2004-05 was Rs. 858.98 crore. That means, the Department did not achieve the financial targets by Rs. 41.02 crore in the year 2004-05. In pursuance of repeated recommendations by the Parliamentary Standing Committee on Agriculture for providing 1 per cent of AGDP funds to DARE/ICAR, the Planning Commission has enhanced the Plan outlay from Rs. 1,000.00 crore in 2004-2005 to Rs. 1,150.00 crore in 2005-06 against the proposed amount of Rs. 1,900 crore.

2.17 The Committee wanted to know the reaction of the Department about this increase in budgetary allocation for their plan activities and whether this increase in Plan BE is sufficient just to cover the annual inflationary costs involved in Department’s research and educational activities or this increase is over and above the annual added cost of inflation. The Department in its reply stated as under:

‘The Department welcomes the increase of Plan Budget from Rs. 1,000 crore during 2004–2005 to Rs. 1,150 crore during 2005–2006. The Department has prioritized its activities/programmes to adjust within this enhanced outlay; however, in case of further need, the Department would seek enhanced funding at RE 2005–2006 stage.

Even if the cost of input machinery, raw material, maintenance, other research expenses including annual inflation put together at conservative estimate, the increase in Budgetary Allocation may not allow the Department to adequately address all research issues. However, the Department is prioritising its activities to offset the annual increase in the cost due to these factors.’

2.18 However, in spite of seeking enhanced funding at RE 2005-06 stage, the Department got Rs. 1070.00 crore only which were Rs. 80.00 crore less than the BE (2005-06). The actual expenditure for the year 2005-06 was Rs. 1048.97 crore. That means, the Department failed to utilize rs.21.03 crore out of finally allocated Rs.1070.00 crore during 2005-06.

2.19 The Department proposed an amount of Rs. 2000.00 crore for the terminal year of the Tenth Plan, viz. 2006-07. However, they got Rs. 1350.00 crore as BE (2006-07).

2.20 The Committee again wanted to know the reaction of the Department about this increase in budgetary allocation for their Plan activities and whether the allocation is adequate enough and in consonance with the Government's declared intention to give priority to agricultural research. To this point, the Department replied as under:

‘The Department welcomes the increase of Plan Budget from Rs. 1150 crore during 2005 – 06 to Rs. 1350 crore in 2006–07, which accounts for 17.39%. The Department has prioritized its activities / programmes to adjust within this enhanced outlay, though it has been pursuing the requirement of enhanced funding with the funding agencies. The Department has already taken up the issue at the highest level seeking additional funds.’

2.21 When enquired whether this increase in Plan BE is sufficient only to cover the annual inflationary costs involved in Department's research and educational activities or this increase is over and above the annual added cost of inflation, the Department replied as under:

‘Even if the cost of input machinery, raw material, maintenance, other research expenses including annual inflation put together at conservative estimate, the increase in Budgetary Allocation may not allow the Department to adequately address all research issues. However, the Department is prioritising its activities to utilize the resources optimally.’

2.22 The Committee noted that at RE 2006-07, the plan budget was enhanced from Rs.1350 crore to Rs.1430 crore (through Supplementary Demands of Grant 2006-07) in order to partly meet the additional funding commitment i.e. Rs.50 crore to provided under the freshly approved component of “State of Agricultural Education in the Country in the context of the new challenges” and Rs.30 crore to Punjab Agricultural University as part of the Rs.100 crore special grant specially approved by the Government. So far, the utilization of the allocation of Rs.1430 crore in 2006-07 (RE) is reportedly expected to be fully utilized.

2.23 In conclusion, the Committee observed that against the Xth Plan outlay of Rs.5368 crore, the total of yearly allocations (through Annual Plans) comes to Rs.5050 crore. The individual year-wise break-up being Rs.775 crore, Rs.775 crore, Rs.1000 crore, Rs.1150 crore and Rs.1350 crore for the years 2002-03, 2003-04, 2004-05, 2005-06 and 2006-07 respectively. However, at the RE stage it was subjected to cut in the years of 2002-03, 2004-05 and 2005-06, the total allocation made through REs was Rs.4900 crore only. The utilization of Plan Expenditure with reference to RE during first four years of Xth Plan in %age was 93.87%, 90.55%, 95.44% and 98.03% respectively. The allocation of Rs.1430 crore in 2006-07 (RE) is expected to be fully utilized. The overall fund utilization for the entire Xth Plan period is expected to be of the order of 96.33% with respect to total allocation through Revised Estimates.

XI Plan Financial Proposals of DARE/ICAR

2.24 The DARE/ICAR has proposed Rs. 1945.50 crore for the first year of XI Plan i.e. 2007-08, out of it, the proposal of Rs.286.75 crore is reported to be meant for National Agricultural Innovative Project (NAIP-World Bank Aided Project), which was approved in Xth Plan and will continue in XIth Plan also. The total project cost of NAIP is Rs.1189.99 crore out of which Rs.100 crore was approved for Xth Plan period.

2.25 It has been reported that the Council had been making concerted efforts to get more funds through Annual Plans of X Plan and the matter was taken up at highest level in the Ministry of

Finance and Planning Commission, this also resulted that the Council could get additional funds at RE 2006-07 i.e. the BE of Rs.1350 crore was enhanced to Rs.1430 crore. The adequate funding of National Agricultural Research System has always been emphasized at various fora like Parliamentary Standing Committee on Agriculture which has always been recommending an allocation equivalent to at least 1% of AGDP. Apart from this the XI Plan Working Group on Agricultural Research and Education has also recommended that at least a sum of Rs.31,672 crore should be provided for the various sectors and SAUs, in addition to this the EAPs/World Bank Aided Projects also need to be funded as per their approved programmes. During XIth Plan period no funds are proposed for one time catch up grant because the Planning Commission had not provided any fund during Xth Plan against the Department's proposal of Rs.1000 crore for this propose, though it was repeatedly emphasized by the Department. Moreover in accordance with the recent instructions, the critical repairs and maintenance upto 15% could also be included in Plan budget during XIth Plan.

2.26 The Sector-wise Projections of proposed outlay for XIth Five Year Plan (2007-12) and first year of XIth Plan (2007-08) are given below:

Name of the Sector	Rs. in Crore		
	XIth Plan Proposed Outlay	Annual Plan 07-08 Proposed Outlay	Budget Estimates (2007-08)
CROP SCIENCE (including Seed Production Project)	1991.08	341.55	310.00
HORTICULTURE	702.52	148.70	70.00
NATURAL RESOURCE MANAGEMENT	630.12	98.06	80.00
AGRICULTURAL ENGINEERING	262.20	46.63	40.00
ANIMAL SCIENCE	1074.99	149.52	90.00
FISHERIES	235.74	47.14	40.00
AGRIL. ECO. & STATISTICS	26.05	4.51	4.00
AGRICULTURAL EXTENSION	2300.00	316.29	281.00
AGRICULTURAL EDUCATION	2705.00	289.51	312.00
MANAGEMENT & INFORMATION SERVICES	0.00	0.00	37.50
CENTRAL AGRI. UNIV. + DARE	759.27	157.04	56.50
HEADQUARTERS	85.00	16.80	0.00

Name of the Sector	Rs. in Crore		
	XIth Plan Proposed Outlay	Annual Plan 07-08 Proposed Outlay	Budget Estimates (2007-08)
NATIONAL AGRICULTURAL INNOVATION PROJECT	1178.43	286.75	285.00
NATIONAL FUND FOR BASIC AND STRATEGIC AGRICULTURE RESEARCH	126.00	18.00	9.00
INDO US KNOWLEDGE INITIATIVE	100.00	25.00	5.00
GRAND TOTAL	12176.40	1945.50	1620.00

2.27 The Committee observed from the above facts and figures that there is a major decrease in the financial outlay proposed by the DARE/ICAR for the XIth Plan (Rs.12176.40 crore) which happens to be Rs.3823.60 crore less than the outlay proposed by them for Xth Plan (Rs.16000.00 crore) against a sharp increase in the outlay proposed at Rs.31672.00 crore for XIth Plan by the XIth Plan Working Group on Agriculture Research and Education in comparison to Xth Plan Working Group which recommended Rs.25000 crore for the same cause.

One Time Catch-Up Grant

2.28 The Committee were informed that the DARE/ICAR has a number of institutions/laboratories, which are more than twenty years old. It was felt necessary that a one time catch-up grant may be sought from the Planning Commission so that the requirement of renovation of old infrastructure and up-gradation/replacement of obsolete equipment could be met. The Ninth Plan Working Group recorded that one time catch-up grant was the critical need for upgrading laboratory equipment, pilot plants, farm and laboratory facilities, class rooms and audio visual facilities. In order to have excellent academic standard (State Agricultural Universities) and to have globally competitive research working environment, the Eighth Plan and Ninth Plan Working Groups had recommended Rs.300 crore and Rs.500 crore, respectively as one time catch-up grant.

During the Eighth Plan period, Planning Commission did not provide any amount for one time catch-up grant. During the Ninth Plan, the Planning Commission had communicated a total outlay of Rs. 3,376.95 crore (including EAPs) out of which Rs.400 crore was indicated as one time catch-up grant but through Annual Plans no separate allocations were made for catch-up grant, though the Department had proposed an allocation of Rs.100 crore, Rs.200 crore, Rs. 250 crore and Rs. 306.81 crore for the year 1998-99, 1999-2000, 2000-2001 and 2001-2002, respectively.

2.29 The Committee noted that a few years back the Department had taken a decision that all its Institutes, State Agricultural Universities (SAUs), etc. were directed to utilise 30 per cent of their total grant in aid every year for the purposes the 'One time Catch-Up Grant' was meant. The Department was asked to give the details of amount and percentage of funds used for the cause of 'One Time Catch-Up Grant' and the benefit obtained from following the direction in this regard. The Department in its reply stated as under:

'The Department had almost in every year of Ninth Plan, proposed amounts for one time catch-up grant but the Planning Commission while communicating the individual Annual Plan allocations did not provide separate amount for this purpose though repeated requests were made to. Subsequently, Planning Commission had communicated that the amounts indicated for annual plans also included the amount for one time catch-up grant, i.e. the Department could meet its requirement of catch up grant out of their Annual Plan budgets only. Accordingly, the Department had taken a decision in the year 1999-2000 that the Institutes could spend upto a maximum of 20 per cent of their respective Plan B.E. (1999-2000); during 2000-2001, this percentage limit was raised to 30 per cent and for 2001-02, it was decided that the Institutes could incur expenditure under one time catch up grant to the extent to which they could spare the money after meeting their other essential research necessities. For State Agricultural

Universities, these percentages were 30 per cent for 1999-2000, 40 per cent for 2000-01 and for 2001-02, it was allowed on par with institutes.

In this regard, the Department had written a number of times to the Planning Commission. The Parliamentary Standing Committee has always strongly recommended that the Planning Commission and Ministry of Finance should provide an amount of Rs.400 crore towards one time catch-up grant which the Planning Commission had communicated to the Department. Due to non-receipt of separate funds through Annual Plans of Ninth Plan from Planning Commission, no separate head of expenditure for catch up grant was maintained by the Institutes/ICAR, i.e. this expenditure is included into the Annual Plan actual expenditures of various years of Ninth Plan. Since the similar conditions with regard to obsolete equipments, age old infrastructure including laboratories and other related research facilities exist, the Department had again proposed an amount of Rs.1,000 crore during Tenth Five Year Plan but the Planning Commission has not yet made separate allocations specifically for catch up grant through Annual Plans’.

2.30 The Committee, while examining Demands for Grants (2005-2006) of the Department, wanted to know as to whether any further progress has been made by the Department for procuring the required funds from the Planning Commission and Ministry of Finance. To this point, the Department in their reply stated as under:

‘The Department had pursued the requirement of one time catch up grant with the Planning Commission during the initial years of Xth Five Year Plan. The Planning Commission had responded that " *the catch up grant which was meant for upgrading the research facility of ICAR's institutions had already been taken care of while approving the proposals during Tenth Five year Plan*". The Department has been able to address the

modernization of infrastructure and replacement of obsolete equipments to the extent possible through its annual plan allocations.’

2.31 The Committee felt that the reply of the Government was stale in a way that it stated the action taken/matter pursued in the initial years of the Xth Plan while the Committee clearly asks about the further progress/latest initiation made by the Department for procuring the required One Time Catch Up Grant from the Planning Commission/Ministry of Finance. The Committee also felt from the lackadaisical attitude/lack of efforts of the Department that the Department is no more requiring/interested to get One Time Catch Up Grant of Rs. 1000.00 crore as it has stopped making any fresh efforts to procure the same. To these points/feelings of the Committee, the Department reacted as under:

‘The Department projected a requirement of Rs.1000 crore as One Time Catch up Grant for the entire Tenth Plan Period. The Planning Commission did not indicate any provision for the same while communicating the Tenth Plan outlay of the Department, which was pegged at Rs. 5368 crore. Thereafter the Department consistently proposed a requirement of Rs.200 crore as Catch up Grant in each year i.e. 2002-03, 2003-04 and 2004-05. The response of the Planning Commission to these proposals was *‘the catch up grant which was meant for upgrading the research facility of ICAR’s institutions had already been taken care of while approving the proposals during Tenth Five Year Plan’*. Due to the clear-cut stand taken by Planning Commission on this issue, the Department did not pursue the matter further, however the modernization of infrastructure and upgradation of research facilities are being taken care of through Annual Plan allocations in accordance with EFC/SFC approval. The Department will also assess whether or not it would require the catch up grant in the XIth Plan as also the quantity of fund required for the purpose.’

2.32 While examining the DFG (2006-07), the Committee in their 19th Report, Recommendation No. 5, had taken a serious view of the adamant and rigid stand taken by the Planning Commission on this issue of One time Catch-up-Grant demanded for the Department's requirement of latest State-of-the-art technology for research system and to provide modern infrastructure for the same and they were also not happy about the callous/pessimistic attitude of the Department in this matter as for the last two years they have stopped pursuing the matter with the Planning Commission and they desired the Department to put an end to their passive attitude and pursue the matter more vigorously and emphatically giving detailed reasons, with the Planning Commission and Ministry of Finance till the issue of One time Catch-up-Grant was resolved in favour of the DARE/ICAR. The Committee also strongly urged the Planning Commission and the Ministry of Finance to provide much needed one time catch up grant of Rs. 1000 crore over and above the annual allocations, in a phased manner to ICAR given its track record of service to the nation and being privy to agricultural revolution in the country.

2.33 The Government in its action taken reply have stated that the Recommendations have been sent to Planning Commission and Ministry of Finance.

2.34 The Committee commented in their 24th Action Taken Report (2006-07) based on 19th Report on DFG (2006-07) of the Department that they would like to be apprised of the pursuing efforts made by the Department and final response of the Planning Commission and Ministry of Finance with regard to the recommendation of the Committee regarding one time catch up grant of Rs.1000 crore over and above the annual allocations to ICAR. Further Action Taken Replies from the Department in this regard is awaited.

2.35 While examining the DFG (2007-08) of the Department the Committee had again asked about the further progress that has been made by the Department for procuring the required funds as One Time Catch Up Plan of Rs.1000 crore from the Planning Commission and Ministry of Finance. To this point, the Department in their reply stated:

‘During the year 2006-07 Rs 200 crore were provided to meet the upgradation of SAUs. In addition, Rs 30 crore is given to Punjab Agricultural University, Ludhiana as a special grant also to augment its infrastructure. Additional grant has been provided through Seed Project to improve the farm facility in SAUs and ICAR Institutes.

The Planning Commission in the guidelines for formulation of XI Five Year Plan has indicated that in the Plan budget critical repair and maintenance upto 15% of the plan budgetary support can be included.’

Budgeting Procedure and Practice being followed in the Department

2.36 While scrutinizing the DFG (2004-05) of the DARE, the Committee enquired about the entire procedure and practice followed by the Department every year, from the beginning till end, for preparation of their own budgetary proposals as well as RE proposals and getting actual allocations in their favour from the Ministry of Finance. The Department in its reply had stated as follows:

‘A circular is issued to all the constituent units, i.e., Institutes/National Research Centres (NRC)/Project Directorates(PD)/Agricultural Scientist Recruitment Board (AGRB)/Publication & Information Division/ICAR Head Quarters etc. sometime in the 2nd week of August for inviting proposals of RE of the current financial year and BE of the next financial year. The Subject Matter Divisions (SMDs) are also requested to scrutinize the proposals of RE/BE and send it to Budget Section with their recommendations for finalization. The Plan proposals are required to be sent to Assistant Director General (Plan Implementation & Monitoring) as the Plan allocation is firmed up by him in consultation with the SMDs concerned. The Non-Plan proposals duly scrutinized by the SMDs are received in Budget Section. In the meantime the Budget circular is also received from the Ministry of Finance in the 1st/2nd week of September and as per their requirement, the Statement of Budget Estimates (SBE) is sent to them sometime in the

last week of October. While preparing the SBE estimated increase over BE allocation and demands of the units are considered so far as Non-Plan proposal is concerned. On the basis of the RE, the BE of the next year is prepared keeping in view the further increase needed over RE allocation. The Plan allocation is also depicted in the SBE as per the demands made by the different units/SMDs. So far as Plan BE for the next year is concerned, the Planning Commission intimates the Allocation ceilings. After submission of the SBE, a discussion is arranged by the Ministry of Finance, sometime in the month of November between the FA of the concerned Ministry/Department and the Secretary (Expr.), Ministry of Finance.

The RE/BE allocation is generally received from the Ministry of Finance sometime in the 1st-2nd week of January. The Plan allocation (BE) of the next financial year is received from the Planning Commission sometime in the 1st week of February. In the meantime the Budget proposals received from the SMDs are scrutinized by the Plan Implementation & Monitoring (PIM)/Finance Division/Budget Section keeping in view the expenditure trend of the particular Institute/NRC/PD for the last 3 years and the justifications furnished for the demand and the overall allocation made by the Ministry of Finance in the RE/BE. On the basis of this exercise and keeping in view the final allocation the SMD-wise/Institute-wise allocation is decided and communicated to the Institute/NRC/PD concerned by the end of January or 1st week of February.’

2.37 On being asked to suggest any meaningful change in any of the existing procedures/practices relating to preparation of budgetary proposals and getting the actual allocations released from Ministry of Finance in time, the Department in its reply stated as under:

‘The final Plan-Non Plan Allocations if conveyed by December, it would bring a positive change in effective utilization of scarce resources.’

2.38 Accordingly, the Committee had recommended in their Recommendation No. 5 of 2nd Report (2004-05) (14th Lok Sabha) that BE/RE grants/funds should be made available to the concerned Department some time in the month of December or a little earlier. In reply to this recommendation the Department has conveyed that Ministry of Finance had intimated that they have noted the recommendation and that all efforts would be made by them to comply with the recommendation.

2.39 While examining DFG (2005-06) of DARE the Department was asked to state whether the funds as recommended by the Committee, have since been made available well in time. In its reply, the Department stated as under:

‘The draft of S.B.E was submitted to M.O.F. on 21st October, 04. The RE for 2004-05 under Plan/Non-Plan and BE 2005-06 (Non-Plan) received from Ministry of Finance on 3 January 2005 vide MOF D.O. letter No. 2 (77)-B(cdn)/2004 MOF. DEA (Budget Division), New Delhi dated 30.12.2004. On receipt of the allocations from M.O.F., the Division/Institute wise allocations were made and funds were allocated accordingly.’

2.40 Through a supplementary point, the Department was asked to state that on receipt of the allocations RE (2004-2005) from Ministry of Finance on 3 January 2005, how much time the Department took in making Division/Institute-wise allocations and on which date the funds were actually given to Institutes. The Department in its reply stated as under:

‘The Non-Plan RE (2004-05) was conveyed in 3rd week of January 2005 to ICAR Institutes. Sectoral Plan RE for 2004-05 was conveyed in first week of January 2005 to all the SMDs and subsequently Institutes/ Scheme-wise break-up was conveyed to them in first week of February 2005. The funds are, however, remitted on the basis of requisitions from the Institutes keeping in view the budgetary provisions and funds availability with the institute.’

2.41 The Committee observed from the above and stated in their 10th Report (2004-05), Recommendation No.4 that they were perturbed to note that the RE/BE allocations were received from the Ministry of Finance on 3rd January 2005, but the Department took about one month's time in communicating the final allocations to the Institutes/NRC/PD concerned. This has happened so in the era of cyber/net revolution in the country where every State/District headquarters has the cyber connectivity. Evidently, for all practical purposes, the Department and the Ministry of Finance have failed to bring about any positive change or reform in their entire budgetary process during 2004-2005 despite their assurance and reiterated that it would be in the overall interest of the Department if the budgetary process is streamlined so as to ensure that the final Plan and Non-Plan allocations are conveyed to the concerned Institutes/Divisions within the Department by the month of December every year for an effective and optimal utilization of the scarce financial resources.

2.42 Similarly, while scrutinizing DFG (2006-07) of the DARE, the Department was again asked to apprise the Committee as to when RE (2005-06) and BE (2006-07) were communicated to the Department by the Planning Commission, Ministry of Finance and how much time the Department took to allocate funds Division/Institute-wise. To these points the Department replied as under:

‘The Plan BE 2006-07 was communicated by the Planning Commission vide communication No.11016/7(6)/2005-PC dated 8-2-2006, which was received in the Department on 10-2-2006. The Plan BE is not communicated by Ministry of Finance.

The RE 2005-06, communicated by Ministry of Finance on 16-1-2006 was in turn communicated to the Subject Matter Divisions (SMDs) on 20-1-2006 i.e. in 4 days time. The BE 2006-07, received by the Department on 10-2-2006 was also communicated to SMDs in 4 days time. The copies of these communications are endorsed to Finance Division of the Department for remittances of the funds.

The draft of SBE 2005-06 was submitted to Ministry of Finance vide Council's letter No. 1(23)/2005-Budget dated 25.10.2005 The Ministry of Finance vide letter no. 2(78)-BE (CDN)/2005 dated 16.01.2006 communicated the RE 2005-06 under Non-Plan/Plan and BE 2006-07 under Non-Plan. On the basis of this allocation, division/institutes-wise allocations were made and accordingly, the funds were remitted.'

2.43 The Committee observed from the above and stated in their 19th Report (2005-06) Recommendation No. 3 that they were, however, perturbed to note that the RE (2004-05) and RE (2005-06) allocations were received from the Ministry of Finance on 3rd January 2005 and 16 January, 2006 respectively, which not only was in contradiction to the crux of the recommendations of the Committee in this regard but also was in contradiction to the repeated positive assurances given by the Department/Planning Commission/Ministry of Finance in this matter. Evidently, for all practical purposes, all the three major parties involved in the entire budgetary process, namely, the Department, Planning Commission and the Ministry of Finance have failed to bring about any positive change or reform in their entire budgetary process during 2004-2005 and 2005-2006 despite their assurances.

2.44 The Government in its action taken reply to the above observation have stated that the recommendation of the Committee expressing the concerns about the entire tardy budgetary process have been sent to Ministry of Finance and Planning Commission. The Department will utilize the opportunity at the finalization of RE 2006-07, wherein the representatives of Ministry of Finance and Planning Commission participate, to plead for reformative changes in the entire process.

2.45 The Committee in their 24th Action Taken Report (2006-07) based on 19th Report, have commented that they have noted from the reply of the Government that the Department would utilize the opportunity at finalization of RE 2006-07, wherein the representatives of Ministry of Finance and Planning Commission participate, to plead for reformative changes to be made in

the entire tardy budgetary process and would like to be apprised of the final outcome of the pleading made by the Department in this regard.

2.46 While examining DFG (2007-08) of the Department, the Committee asked about the same issue in the following format and the Department in their Reply furnished the desired information as under:

Sl. No.	Item of Information	Name of the SMD(s)	Date(s) receiving	Date(s) sending
1	The exact date(s) of issuing Circular to all constituent units for inviting proposals of RE (2006-07)	Finance Division circular	-	10-8-2006
2	The exact date(s) of receiving proposal of RE(2006-07) and BE(2007-08) by each of the all Subject Matter Divisions (SMDs), separately, from various constituent units.	ICAR Headquarter does macro level macro level monitoring. The Micro level monitoring is done by concerned Divisions.		
3	The exact date(s) on which each of the all SMDs, separately, completed their scrutiny of the proposals of RE/BE and sent to it to Budget Section with their recommendations for finalisation.	Crop Science NRM Fisheries Ag. Extension Ag. Engg. Horticulture Animal Sc. Education		12-1-2007 12-12-2006 27-10-2006 4-10-2006 23-1-2007 14.12.2006 29.12.2006 ----
4	The exact date(s) on which the Budget Section has sent, [SMD-wise(dates)] the Plan proposals to ADG (Plan Implementation Monitoring)	The dates of sending are as per sl. No.3, these are sent by SMD to ADG (PIM)		
5	The exact date(s) on which the Plan proposals (RE 2006-07/BE 2007-08) were received by ADG (P/M) SMD-wise from Budget Section.	-do-		
6	The exact date(s) on which the Plan allocation RE(2006-07)/BE(2007-08) of each of the SMDs, were firmed up by ADG(P/M) in consultation with SMDs concerned.	ADG (PIM)		12-12-2006 (Tentative RE 2006-07) 18-1-2007 (RE-2006-07) 23-2-2007 (BE 2007-08)
7	The exact date(s) on which the Non-Plan RE(2006-07)/BE (2007-08) proposals duly scrutinized by each of the SMDs were received in Budget Section.	Director (Finance)	15-11-2006	13-11-2006
8	The exact date of receiving Budget circular from MoF during (2006-07)	PIM/ Finance	23-9-2006	21-9-2006
9	The exact date(s) of sending statement of Budget Estimates (SBEs) to MoF	Director (Finance)	Last date given by MoF was 31.10.2006	1-11-2006 (SBE Proposed) 20-2-2007 (Final SBE) (Plan)
10	The exact date of receiving Plan BE(2007-08) allocation ceilings by the Planning Commission	No ceilings of allocations were intimated by Planning Commission.		

Sl. No.	Item of Information	Name of the SMD(s)	Date(s) receiving	Date(s) sending
11	The exact date of discussion held between FA (DARE) and the Secretary (Expr.) MoF on SBE.		27-11-2006	
12	The exact date(s) of receiving RE/BE allocation from MoF during (2006-07)	Planning Com. MoF	8-2-2006 (BE 06-07) 4-1-2007 (RE 06-07)	
13	The exact date of receiving Plan BE (2007-08) from the Planning Commission	Planning Commission	9/14-2-2007 (Oversight Committee additional plan allocation received on 14.2.2007)	
14	The exact date(s) on which the final allocation were decided SMD-wise and were communicated to each of the SMDs, separately	ADG (PIM)/ Director (Finance)	-	23-2-2007 (Plan BE 2007-08) RE 2006-07 Non Plan approved on 15-1-2007 by DG. BE 2007-08 approved on 15-1-2007 by DG.
15	The exact date on which each of the Institute/NRC/PD concerned actually were communicated their RE(2006-07) by their respective SMDs.	Crop Science NRM Fisheries Ag. Extension Ag. Engg. Horticulture Animal Sc. Education		25-1-2007 19-1-2007 22-1-2007 31-1-2007 9-2-2007 5-2-2007 29.12.06 17-12-2006

2.47 Observing from the above information, the Committee through a Supplementary point asked as to how the Department would prove that they have complied with their own assurance given earlier to the Committee that they would take expeditious steps to distribute and communicate the allocated funds (RE 2006-07) which in the instance case were communicated to them on 4.1.2007 and the SMDs have taken more than 35 days time to communicate the RE allocations within the Department to their respective institutes/NRC/PD, etc. To this point, the Department replied:

‘In the meeting held on 27.11.2006, Secretary(Expenditure), MoF while deciding the RE 2006-07 for DARE/ICAR through discussion with Financial Adviser indicated the Plan RE as Rs 1430 crore. Initiating an advance action the Department communicated tentative RE 2006-07 to all SMDs on 12.12.06 itself. The final RE 2006-07 of Rs 1430 crore was officially conveyed by MoF on 4.1.2007 and the Department also intimated sectoral allocations to Division on 18.1.07. Animal Science and Education Divisions also took an advance action by communicating the tentative RE to its institutes so as to keep them in a state of preparedness, although final RE 2006-07 was conveyed on 18.1.2007 and 5.2.2007 respectively.

This year the Department endeavoured to take expeditious steps to communicate the sectoral RE 2006-07 on the basis of RE figures indicated by MoF in end November though formal communication was received by the Department on 4.1.2007.’

Introduction of Zero Based Budgeting (ZBB) leading to Integration of Plan Schemes of ICAR

2.48 The Committee noted that the Planning Commission had undertaken an exercise of Zero Based Budgeting in which the 235 Plan Schemes being operated during IX Plan were integrated into 71 main schemes and 108 sub-schemes which facilitated their clearance from competent authority (SFC/EFC/CCEA) comparatively at a quicker pace.

2.49 The Committee had enquired about the concept of Zero Based Budgeting and its salient features and its linkages with the merger/integration/convergence/phasing out of Plan schemes. The Department in its reply stated as under:

‘The Secretary, Department of Expenditure, Ministry of Finance in his letter on introduction of Zero Base Budgeting (ZBB) has stated that ZBB is essentially a management concept which links Planning, Budgeting, Review and Operational Decision Making into a single integrated process. In the most literal sense, ZBB implies

constructing a budget without any reference to what has gone before, based on a fundamental reappraisal of purposes, methods and resources. Every programme or a task should be subjected to ZBB Scrutiny to see if it could be done more cost effectively or it could be eliminated altogether because of introduction of other schemes or because it has outlived its utility. In case of autonomous institutions, their continuing need should be evaluated and ways found to make them self-reliant.

In retrospect, conventional budgeting followed by performance budgeting was in operation prior to the application of Zero Based Budgeting. Conventional budgeting used to give financial outlays in terms of the object of expenses and sources of revenue for that year. It did not focus on the end use of the money spent.

Performance Budgeting, on the other hand, emphasizes the classification of the function, programmes and activities of the Department or Agencies and relates these to the financial outlay required.

ZBB seeks to reverse the whole process of conventional budgeting by its unequivocal assertion that it is not the expenditure that should justify the output. Instead, it should be the output that must justify the expenditure; its implementation requirements and implications. In essence, ZBB is an integration of Planning and Budgeting into a single process with sole objective of development and redeployment of scarce resources through a rigorous and rational scrutiny. Thus, it is a management tool which provides a systematic method for evaluating all operations and programmes, old or new, allows for budget reductions and expansions within the limits of affordability in a rational manner and permits the re-allocation of resources from low to high priority programmes. Finally, ZBB is the ex-ante cost-benefit analysis of all decision-making in an organisation.

As a follow up of directives of the Govt. of India the Department in consultation with Planning Commission applied ZBB scrutiny to all Plan schemes for their

continuation in Tenth Plan. Primarily the objective of this exercise was to reduce the number of Plan Schemes for expeditious clearance of Tenth Five Year Plan Proposals. In this exercise original Plan projects, viz. ICAR, Institutes, NRCs, PDs, AICRPs etc. have been brought together/integrated into 71 main Plan projects. The integration of these schemes facilitated sharing of common facilities like guest house, auditorium, costly equipment, laboratory, staff quarters, etc. particularly among the ICAR establishments located close by. The scientific and administrative staff is being utilized appropriately for optimal result.

In order to reduce the number of schemes, the Department while considering the EFC proposal of CIPHET(main scheme) along with its sub schemes AICRPs PHT, APA and Jaggery & Khandsari; the scheme of AICRP Jaggery & Khandsari has been integrated with the AICRP Post Harvest Technology w.e.f. 1.4.2004. Apart from this, the Department owing to the exercise of integration of schemes based on ZBB during the Xth Plan , following 9 schemes were weeded out.

1. AICRP on Post Harvest Technology of Horticultural Crops
2. AICRP on Microbial Decomposition and Recycling of Farm and City Waste
3. AICRP on Tillage Requirement
4. AICRP on Engineering Measures for Efficient land & Water Management
5. Network Project on Embryo Transfer technology in Animal Production
6. AICRP on Blood Protosta
7. AICRP on Agricultural Drainage

8. Project on Promotion of Research and Development of Hybrid Seed in selected crops
9. AICRP on Management of Diaraland

The reasons for weeding out these schemes are that either these outlived their utility or needed re-prioritisation based on national needs. The important re-prioritised activities of these projects have been integrated with other related plan schemes of the Department.

In addition to the above weeded out schemes, the following schemes are reported to have completed their mandate and have been terminated during Xth Plan :

- a. National Agricultural Technology Project
- b. Indo-French project on breeding and culture of Seabass.’

New Schemes Proposed to be Initiated during the Eleventh Plan

2.50 When enquired about the details of the new schemes initiated/proposed to be initiated during the Eleventh Plan, the Department replied as under:

‘The Oversight Committee on OBC quota in higher education recommended to establish (i) National Institute for Biotic Stress Management (ii) National Institute for Abiotic Stress Management and (iii) National Institute for Agricultural Biotechnology. The Department has also proposed a new initiative on Intellectual Property Management and Transfer/ Commercialization of Agriculture Technologies.’

Approval of SFG/EFC/CCEA of Plan Schemes of ICAR meant for Eleventh Plan

2.51 The Committee enquired about the latest status of SFC/EFC/CCEA clearance, of each of the main Plan Schemes (with details of sub-schemes under each of the main Plan Schemes) of DARE/ICAR for 11th Plan period. To this point, the Department replied as under:

‘For each Plan period the Department of Expenditure, Ministry of Finance circulates a set of procedures / guidelines which are followed by each Department to determine whether a particular Plan Project / Scheme pertains to SFC or EFC depending upon the financial size of the respective proposal.

For XIth Plan period no SFC / EFC has been held as yet because the Department has not yet received the communication from Planning Commission regarding XIth Plan outlay, etc. of the Department.’

Eleventh Plan (2007-2012) Working Group on Agricultural Research & Education

2.52 The Committee were keen to know as to when the Eleventh Plan Working Group was constituted and when their Report was submitted along with the details of their salient recommendations. To these points, Department replied as under:

‘The XI Plan Working Group was constituted by Planning Commission vide letter No. M-12043/02/2006-Agril. dated 8th May, 2006 and was asked to submit the Report by end of September, 2006. The Working Group submitted its Report to the Planning Commission by end of January, 2007.

The Planning Commission has not communicated the Recommendation/ Report of the XI Plan Working Group to this Department.’

Number of employees in position against the sanctioned strength in DARE/ICAR

2.53 The Committee enquired about the latest number of employees in position against the sanctioned strength in DARE/ICAR and the Department has furnished the information as under:

Sl. No	Posts	Total post Sanctioned	Total Employees in position	Shortfall
1.	<u>Scientific</u>			
	2002-03	6428	4588	1840
	2003-04	6428	4531	1897
	2004-05	6428	4458	1970
	2005-06	6428	4609	1819
	2006-07	6428	4184	2244
2.	<u>Technical</u>			
	2002-03	8146	7643	503
	2003-04	7862	7258	604
	2004-05	7765	7100	665
	2005-06	7952	7355	597
	2006-07	7893	7119	774
3.	<u>Administrative</u>			
	2002-03	5325	4964	361
	2003-04	5413	5153	260
	2004-05	5198	4787	411
	2005-06	5103	4705	398
	2006-07	4814	4355	459
4.	<u>Supporting</u>			
	2002-03	10571	10268	303
	2003-04	10276	9744	532
	2004-05	10708	9724	984
	2005-06	10145	9174	971
	2006-07	9980	8964	1016

Note: These figures are as on 30th September of the respective financial year.

2.54 The Committee wanted to know that in pursuance of their recommendation No. 6 of 2nd Report (2004-2005) and Recommendation No. 9 of 10th Report (2005-06) regarding urgency to fill all the vacancies in ICAR, and getting all the restrictions removed on recruitment of Scientific/Technical Work Force of ICAR; what further efforts/progress has been made in this regard by the Department. To this point, Department replied as under:

‘Subsequent to the last review, the ICAR had conducted, through the Agricultural Scientists' Recruitment Board (ASRB) two All India Examinations of the Agricultural Research Service (ARS) for appointment of Scientists in the entry grade of Rs.8000-

13500 i.e. ARS 2005 and Special Recruitment Drive for filling up vacancies in reserved categories in various disciplines of the ARS. Through these two examinations 145 scientists were recruited.

The Examination of ARS 2006 is scheduled to be held on 15th April, 2007 for filling up 220 positions of scientists in various disciplines.

It is expected that by the end of this year around 297 fresh recruits shall be available in the entry grade of scientists in the scale of Rs.8000-13500.

The ASRB in 2006 had issued advertisement for filling up 429 scientific positions in various grades of Senior Scientist / Principal Scientist / Head of Division / Project Coordinator and other positions in Research Management Cadre.

Of the 429 senior positions as mentioned above recommendations have been received for 145 posts and the offers have been issued.

The ASRB is in the process of releasing another advertisement shortly comprising of 125 posts.'

2.55 On a point whether the Department has been implementing the Government's orders/norms of reducing the number of employees by 2% every year in all the categories, the Department stated as under:

'The Department has been implementing the Government's orders dated 16.05.2001 prescribing norms of reducing the number of employees by 2% every year in all other categories (except in the scientific category). The exercise has resulted in the reduction of total number of posts from 32103 in 2000-01 to 29121 in 2005-06.'

2.56 The Department was also asked to give details of the impact of reduction in the work force as per Government's norms with particular reference to highly technical and scientific manpower and to this point, the Department replied:

‘Scientific manpower is not reduced and technical and other manpower is effectively redeployed judiciously to meet the changing needs. Some of the supporting activities have also been outsourced.’

Grading/Categories of Scientists in DARE/ICAR

2.57 When asked about the updated break up of all the Scientists working/associated with DARE/ICAR under various gradings/categories, the Department has furnished the following information in this regard:

Category	Sanctioned Strength	Scientists in Position				
		2002-03	2003-04	2004-05	2005-06	2006-07
Scientist	3881	3108	3026	2959	3518	3043
Senior Scientist	1651	817	737	864	510	692
Principal Scientist	749	536	628	516	470	453
RMP	147	127	140	119	111	140
Total	6428	4588	4531	4458	4609	4328

Note: The figures are as on 30th September of the respective financial year
The figures for 2006-07 are as on 31.1.2007

2.58 The Committee wanted to know the latest position regarding the fact that quite a number of scientists have been on unauthorized absence for quite some time and most of them were believed to be settling down abroad as had also been deposed before the Committee a few years back and asked the Department to furnish year-wise and category-wise details of scientists unauthorizedly absent from duties since 2002-03 onwards till date and whether the Department has identified the reasons for such happenings and what remedial steps Department has taken or propose to take in this regard. To these points, the Department replied as under:

‘The total number of scientists on unauthorized absence (spread over a period of five years) is 41. It emerges from the year-wise details that the number of scientists on unauthorized absence ranges between 4 to 13 in different years with an average of 08 per year. Considering the size of the cadre the situation does not seem to be alarming.

Mostly these are entry grade scientists who remain on unauthorized absence for various personal reasons. However, stern action as per relevant rules are taken in such cases.’

Years	Category-wise Scientists on unauthorized absence			Total
	Principal Scientist	Senior Scientist	Scientist	
2002-03	-	01	08	09
2003-04	-	-	06	06
2004-05	-	01	08	09
2005-06	-	-	04	04
2006 till date	-	05	08	13
Total	-	07	34	41

Growth in Agriculture

2.59 The Committee noted that a moderate annual average growth of 3.0 per cent in the first six years of the new millennium starting 2001-02, notwithstanding a growth of 10 per cent in 2003-04 and 6 per cent in 2005-06, agriculture and allied sector has continued to be a cause of concern (Table below). The structural weaknesses of the agriculture sector reflected in low level of public investment, exhaustion of the yield potential of new high yielding varieties of wheat and rice, unbalanced fertilizer use, low seeds replacement rate, an inadequate incentive system and post harvest value addition were manifested in the lackluster agricultural growth during the new millennium.

Five Year Plan	Annual average growth rate (at constant prices)	
	Overall GDP growth rate	Agriculture & Allied Sectors (per cent)
Seventh Plan (1985-90)	6.0	3.2
Annual Plan (1990-92)	3.4	1.3
Eighth Plan (1992-97)	6.7	4.7
Ninth Plan (1997-2002)	5.5	2.1
Tenth Plan (2002-07)	7.6	2.3
2002-03	3.8	-7.2
2003-04	8.5	10.0
2004-05 (P)	7.5	0.0
2005-06 (Q)	9.0	6.0
2006-07 (A)	9.2	2.7

P: Provisional, Q: Quick estimates, A: Advance estimates
Note: Growth rates prior to 2001 based on 1993-94 prices and from 2000-01 onwards based on new series at 1999-2000 prices.
Source: CSO

2.60 The Department was asked to explain as to what is meant by ‘exhaustion of the yield potential of new high yielding varieties of wheat and rice’ and whether they have any role and responsibility to favourably reverse the exhaustion of the yield potential of new high yielding varieties of wheat and rice. To these points, the Department stated as under:

‘It may not be appropriate to say that yield potential of HYVs of wheat and paddy is exhausted. In fact, there is a high yield potential yet to be harnessed with improvement management practices. However, there is slow growth in crop yields because of narrowing down of yield gap, problems with inputs use and increasing preference of farmers to grow fine/better grain quality varieties. ICAR’s crop breeding programmes focus on increasing yield potential, besides other criteria’.

2.61 When asked about the reasons identified by DARE/ICAR for ‘unbalanced fertilizer use’ and ‘low seeds replacement rate’ and whether they have any role and responsibility to check the unbalanced fertilizer use and enhance seeds replacement rate. To these points, the Department stated as under:

‘Imbalanced use of fertilizer is mainly because of lack of knowledge about potential yield impacts of P & K, inadequate soil testing facilities, disparities in inter nutrient/fertilizer prices. ICAR has taken steps to promote balanced use of fertilizer through its frontline extension programmes.

Some of the recommendations to check imbalanced use of fertilizer are:

- The subsidy regime may be restructured to encourage more balanced use of fertilizer.
- To augment supplies of organic manures, the cost effective technologies for the preparation of rural and urban composts, vermicomposts and enriched composts should be developed.

- New effective biofertilizer strains tolerant to different biotic and abiotic stresses need to be developed.
- Countrywide network of 1000 advanced soil testing laboratories for more coverage and enhanced capacity of soil testing service (as recommended by National Commission on Farmers) may be opened up.
- The laboratories may also help maintain soil health cards by the farmers by entering soil test and fertilizer recommendations for major crops of the areas

The low seed replacement rate is because of (a) lack of awareness about yield advantages of use of quality seed, (b) inadequate attention paid by private sector and state governments to promote new varieties and (c) weak infrastructure facilities for seed supply in the eastern and hill regions. ICAR has taken steps to augmented supply of breeder seed to all seed agencies’.

2.62 The Committee noted that low yield per unit area across almost all crops has become a regular feature of Indian agriculture (Table below). For example, though India accounted for 21.8 per cent of global paddy production, the estimated yield per hectare in 2004-05 was less than that in Korea and Japan, and only about a third of that in Egypt, which had the highest yield level in the reference year. Similarly, in wheat, while India, accounting for 12 per cent of global production, had average yield slightly lower than the global average, it was less than a third of the highest level estimated for the UK in 2004-05. For coarse grains and major oilseeds, Indian yields are a third and 46 per cent, respectively, of the global average. In cotton, the situation is slightly better with Indian yields at 63 per cent of the global average. While agro-climatic conditions prevailing in countries may partly account for the differences in yield levels, nonetheless for major food as well as commercial crops, it has been reported that there is tremendous scope for increasing yield levels with technological breakthroughs.

International comparisons of yield Selected commodities – 2004-05					
		Metric tonnes/hectare			
Rice/paddy		Wheat		Maize	
Egypt	9.8	China	4.25	U.S.A	9.15
India	2.9	France	7.58	France	7.56
Japan	6.42	India	2.71	India	1.18
Myanmar	2.43	Iran	2.06	Germany	6.69
Korea	6.73	Pakistan	2.37	Philippines	2.1
Thailand	2.63	U.K.	7.77	China	4.9
U.S.A	7.83	Australia	1.64		
World	3.96	World	2.87	World	3.38
Cotton		Major Oilseeds			
China	11.10	Argentina	2.51		
U.S.A	9.58	Brazil	2.48		
Uzbekistan	7.98	China	2.05		
India	4.64	India	0.86		
Brazil	10.96	Germany	4.07		
Pakistan	7.60	U.S.A	2.61		
		Nigeria	1.04		
World	7.33	World	1.86		
Source: Ministry of Agriculture and Cooperation					

2.63 The Committee asked the Department to explain as to why low yield per unit area across almost all crops has become a regular feature of Indian agriculture. To this point, the Department replied as under:

‘Crop yield appear to be low in India because :

(a) Indian agriculture is predominantly rainfed; 65% area is under rainfed agriculture, and also there was an erratic pattern of rainfall.

- Rice in Egypt, Japan, and Korea is grown totally under assured irrigation compared to only 52% area under irrigation in India.
- In India, rice is grown under diverse ecologies; out of the total 44.8 million ha rice area 52.3% is irrigated, 26.3% rain fed lowland, 14.3% upland and the rest 7.1% flood prone. Accordingly, the average productivity in these diverse ecologies are 4.5 tons/ha under irrigated systems, 2.3 in rainfed

lowlands, 1.4 in uplands and 2.1 in flood prone areas. This variation among the ecologies, which are not uniformly favourable, drastically reduces the average productivity.

(b) Shorter period of crop growth due to latitudinal and seasonal differences in comparison to other countries.

- In India spring wheat is grown which has a duration of nearly 5 months which is followed by another crop, while in UK winter wheat is grown which have a higher yield potential than the spring wheat is of longer duration (>9 months) and further no additional crop is taken after winter wheat crop.
- Average yield of maize in India is about 2 t/ha. In certain areas the yield levels range from 4-6 t/ha during winter season. Maize in India is grown in tropical environments and having short duration from 80 to 110 days in kharif and very less area with 160 days in winter season. Further maize is predominantly grown on marginal soils with low inputs. In USA, France, Germany and even in China the crop is generally grown in temperate climate with high input and longer duration.
- Rice productivity in states like Punjab during kharif (5.75 t/ha) and in Tamil Nadu (5.75 t/ha) and Andhra Pradesh (5.5 t/ha) during rabi are comparable to that of China (6.3t/ha). Further in Indian conditions, rice is followed by wheat in Punjab, and rice in Andhra Pradesh and Tamil Nadu as compared to other countries where it is taken as a sole crop.

(c) Less and imbalanced use of fertilizer (e.g. 390 kg/ha in Egypt, 380 kg/ha in Korea as against 104 kg/ha in India).

(d) High incidence of insects and pests during the kharif season, which adversely affect the crop yields.

(e) Inefficiencies in use of irrigation water resources

2.64 The Committee enquired whether it is not the mandate of DARE/ICAR to develop technologies & techniques to increase yield per unit area for all the crops through their R&D activities. To this point, the Department replied as under:

‘ICAR is responsible for technology development and refinement and a number of other agencies are responsible for their transfer and commercialization.’

2.65 When the Department was asked to explain as to how and when they are likely to tap the tremendous scope for increasing yield levels with technological breakthroughs, they replied:

‘Significant yield gains can be realized through application of available knowledge and technologies. But this requires revitalization of state extension system and concerted efforts by other development agencies and input supply system.

The ICAR – SAU system has developed several new varieties / hybrids, crop production and protection technology, which have potential to increase the productivity. The yield increases have been demonstrated in farmers fields through Front Line Demonstrations

Through the application of new technologies such as transgenic, molecular breeding, gene pyramiding etc., it is possible to increase yield levels in certain food and commercial crops. The ICAR has already sanctioned Network Research Projects in these research areas.’

Concern over prevailing low wheat production and productivity in the country

2.66 The Committee noted that the President of India in his address to Parliament on 23rd February, 2007, has said that wheat production has been low but wheat stock has been replenished in order to control the rise in prices.

The Committee asked the Department to give the reasons for low wheat production and productivity in the country area/zone wise and their role and responsibility and steps they have taken or proposed to take to increase the production and productivity of wheat. To these points, the Department in their Reply stated:

'Zone-wise constraints for low productivity:

Zone	Area	Constraints
North western Plains Zone (9.5 mha)	Punjab, Haryana, Delhi, Rajasthan (except Kota and Udaipur divisions) and Western UP (except Jhansi division), parts of J&K (Jammu and Kathua distt.) and parts of HP (Una dist. and Paonta valley) and Uttaranchal (Tarai region)	Ground water depletion, Decreasing soil carbon content, Imbalanced use of fertilizers, Micronutrient deficiency – Zn, S, Mn, <i>Phalaris minor</i>
North eastern Plains Zone (9.5 mha)	Eastern UP, Bihar, Jharkhand, Orissa, West Bengal, Assam and plains of NE States	Lack of improved seed, Imbalanced and under-use of fertilizers, late sowing due to waterlogging and poor drainage, heat stress, arsenic contamination, salinity/alkalinity
Central Zone (5.5 mha)	Madhya Pradesh, Chhattisgarh, Gujarat, Kota and Udaipur divisions of Rajasthan and Jhansi division of Uttar Pradesh	Heat stress, late sowing, Water scarcity and drought, Soil crusting and cracking
Peninsular Zone (1.0 mha)	Maharashtra, Karnataka, Andhra Pradesh, Goa, plains of Tamil Nadu	Heat stress, drought & water stress, soil crusting and cracking, late sowings

Steps taken to increase production and productivity of wheat

The yield gap between research stations and farmer's field is around 1.0 -1.5 tones per hectare, the gap being more prominent in the states of Madhya Pradesh, Bihar, Rajasthan and Uttar Pradesh. The State-wise area and production of wheat clearly indicates high productivity in the states of Punjab and Haryana while it is very low in, MP, Bihar, UP (central and eastern),

Rajasthan etc. However, with the available technologies it seems possible to bridge this gap, especially under irrigated conditions.

ICAR has implemented the following research strategies to increase the wheat productivity in the country.

- Sustainability of rice-wheat system
 - Resource conservation technologies
 - Refinement and indigenization of machines
 - Developing tillage specific varieties
 - Diversification/intensification
 - Water and nutrient use efficiency
 - Tackling weeds and pests under new tillage
 - Residue management
 - Land leveling through laser leveler
- Improving soil health
 - Increasing carbon content
 - Correction of micro-nutrient deficiencies/toxicity
 - Balance use of fertilizers
- Crop Protection measures
 - Integrated pest management
 - Survey and surveillance for new races
 - Combating rusts through durable resistance
 - New race of yellow rust – 78S84
 - New race of black rust – *Ug99*
 - Creating effective resistance against leaf blight and Karnal bunt
 - Newly emerging problems of termites and aphids
- Breaking yield barriers
 - Exploitation of heterosis for developing hybrids
 - Based on CMS system
 - Broadening of genetic base of varieties
 - Use of winter x spring hybridization
 - Use of synthetics, bultre, Chinese germplasm
 - Use of alien species for biotic and abiotic stresses
 - Biotechnological interventions
 - Gene pyramiding
 - Marker aided selection for biotic, abiotic and quality traits
 - Transgenics for Abiotic stresses
 - Structural and functions genomics
- Quality improvement
 - Developing product specific varieties – bread, noodles, pasta etc.
 - Increasing protein content, sedimentation value and grain hardness to match international standards
 - Improving protein content and semolina recovery in durums
 - Biofortification (Zn, Fe, beta-carotene)'

2.67 The Committee observed that Government is concerned about the stagnation in the production and productivity of pulses. A critical deficiency is the availability and quality of certified seeds and, therefore, it has been proposed to expand the Integrated Oilseeds, Oil palm, Pulses and Maize Development Programme. There would be a sharper focus on scaling up the production of breeder, foundation and certified seeds. The Indian Institute of Pulses Research (IIPR), Kanpur, the National and State level seeds corporations, agricultural universities, ICAR centres, KRIBHCO, IFFCO and NAFED as well as large private sector companies would be invited to submit plans to scale up the production of seeds. Government would fund the expansion of IIPR, Kanpur, and offer the other producers a capital grant or concessional financing in order to double the production of certified seeds within a period of three years.

2.68 The Committee wanted to know the reasons for critical deficiency of the availability and quality of certified seeds has been there and what DARE can do to overcome this deficiency by improving the quality of seeds. To these points, the Department replied as under:

‘The availability of quality certified seeds is being promoted through NSC, SFCI and State Seed Agencies. Seed Village Scheme and involvement of private sector may need to be promoted. The conversion of breeder seed to certified seed will have to be fully realized.

Breeder seed production is the mandate of ICAR which is being produced through different centers of ICAR and State Agricultural Universities. It is an indent driven process where different states submit their indents to Department of Agriculture and Cooperation and which after compilation, is forwarded to ICAR for production of breeder seed of different crops. Breeder seed is used for foundation seed production and foundation seed is used for certified seed production by National Seed Corporation, States Farms Corporation of India, States Seed Corporations and other private seed producers. The breeder seed production is always higher than the DAC indent.

Moreover, the ICAR centres are equipped to produce the enhanced quantity of breeder seed if so required by the indenting agencies. However, there is a poor conversion of breeder seed to foundation seed and from foundation seed to certified seed, subsequently. Certified seed production need to be strengthened to produce adequate quantity of quality seed.

ICAR, through its newly developed project of “Seed Production of Agricultural Crops and Fisheries” is also attempting for large scale quality seed production.’

2.69 The Committee wanted to know whether there is any scientific justification to the possibility that the breeder seeds of pulses developed by DARE/ICAR later on becoming poor or of bad quality by the time they reach the stage of certified seeds. To this point, the Department stated as under:

‘Well laid procedure of seed production, certification, storage standards are worked out and have been notified. If proper procedures for seed production are followed, there is hardly any possibility of deterioration of seed quality at the stage of certified seed.’

Oilseeds

2.70 The Committee noted that production of nine oilseeds at 23.6 million tons in 2006-07 (2nd AE) is estimated to decline by 15.7 per cent compared to their production in 2005-06.

2.71 The Department was asked to explain the reasons for decline in oilseeds production by 15.7 per cent in 2006-07 and the remedial measures the Department proposes to take for reversing the oilseeds production growth rate. To this point, The Department stated as under:

‘Oilseed crops are mainly grown under rainfed conditions during the kharif and rabi seasons. During 2006-07, groundnut crop in Andhra Pradesh has suffered largely due to late and deficit rainfall. Similarly, continuous and heavy rains in Gujarat resulted in decline of productivity. The necrosis disease in sunflower also added in total decline

of production. Decline in oilseed production is mainly due to low production of groundnut because of adverse weather conditions. Similarly, the shift of cultivation from oilseeds to wheat in several parts of the country also contributed in the decline of oilseeds production.

Programmes to develop varieties/hybrids with early maturity, drought resistance and having high yield are taken up in different oilseed crops. Cultivation of oilseed crop is being promoted in non-traditional areas and intercropping. Similarly, the crop management technology for maximization of productivity is being advised to the farmers. Front Line Demonstrations on improved technology for enhanced production of different oilseed crops are being conducted.'

Extension System

2.72 The Committee noted that the green revolution of the 1960s was brought about by thousands of agricultural extension workers who worked side by side with our farmers under a programme called Training and Visit (T&V). Sadly, the extension system seems to have collapsed and in order to revive extension work, the Ministry of Agriculture is said to be advised, in consultation with State Governments to draw up a new programme that will replicate T&V with suitable changes.

2.73 When enquired whether DARE/ICAR is having any positive role and responsibility to revive the agrarian extension system which seems to have collapsed and as to why even after spending crores of rupees every year on their various schemes under Agriculture Extension Sector (AES) which includes Krishi Vigyan Kendras (KVKs), they failed to avoid collapsing of agrarian extension system, they replied as under:

'The Department of Agriculture and Cooperation through State Government is the nodal agency for extension. The State Government through their extension agencies

implement various programmes and schemes related to input provision, technology transfer, value addition and marketing.

DARE/ICAR provides technological back stopping for the agricultural extension system. For this purpose the ICAR has established a network of Krishi Vigyan Kendras aiming at technology assessment, refinement and demonstration of technology/product, and human resource development support through training of extension personnel and farmers. The KVKs are mandated for frontline extension programme. Considering the resources available within the KVK, it is beyond their capacity to cater the grass root level extension system in the absence of a functional extension system. In order to create awareness of improved agricultural technologies a large number of awareness programmes are organized. Seeds and planting material produced by the KVK are also made available to the farmers. During the last one year, the KVKs conducted 4109 on-farm trials to identify the location specificity of improved technologies under various farming systems; organized 53974 frontline demonstrations to establish its production potential on the farmers' fields, training 9.75 lakh farmers and 0.97 lakh extension personnel. The KVKs also organized 78548 awareness programmes benefiting 41.90 lakh farmers and extension personnel. The KVK produced 8278 tons of seed and 72 lakh planting material for availability to farmers.'

Agricultural Extension

2.74 The BE/RE 2006-07, Exp. upto 28 Feb.07 and BE 2007-08 have been observed for the schemes under AE sector as under:

Major Head 2415

(Rs. in lakh)

Sl.	Name of the Scheme	BE 2006-07	RE 2006-07	Exp. upto 28 Feb. 07	BE 2007-08
1.	Krishi Vigyan Kendras (New + Old)	26782.00	28700.00	25024.2	27474.2
2.	NRC for women in Agriculture	107.85	66.00	46.22	74.5

2.75 The Department was asked to give detailed bifurcation of the specific amounts meant for New and Old KVKs respectively out of Rs. 27474.2 lakh allocated as BE 2007-08 and location wise details and funds allocated for each new KVK respectively and the time by which these new KVKs will be operational. To these points, the Department replied as under:

‘The establishment of new KVK depends on receipt of proposal from suitable organization, sufficient area/population coverage, availability of suitable land for establishment and fulfillment of other requirements. A provision has been made for Rs. 700.00 lakh for establishment of 35 new KVKs during 2007-08 and the remaining Rs. 26774.20 lakh for the continuation of old KVKs. Government has approved for establishment of KVKs in 589 rural districts of which 546 have been sanctioned. Based on the assessment made, establishment of KVKs in eight districts has not been found to be viable due to merger of district, non availability of suitable land, inadequate farming population/area. The list of 35 districts includes one each in Haryana, Jammu & Kashmir, Jharkhand, Manipur, Orissa, Uttaranchal and West Bengal; two in Bihar, Gujarat and Meghalaya; three in Arunahcal Pradesh, Assam and Madhya Pradesh; five in Chattisgarh; and eight in Uttar Pradesh.’

2.76 The Committee enquired about the latest/updated position with regard to (a) fully functional; (b) semi/partially functional; (c) Non-functional KVKs in the country along with the reasons for non-functionality of the KVKs in each case. To this point, the Department replied as under:

‘The ICAR has sanctioned 546 KVKs in the country of which 3 are non-functional due to financial and administrative problems, which are Kathua (Jammu & Kashmir), St. Ravi Das Nagar (Uttar Pradesh) and Vidisha (Madhya Pradesh). Out of the remaining 543 KVKs, 223 were sanctioned during 2004-05 to 2006-07. These KVKs are in the various stages of development. The remaining 320 KVKs are developed KVKs.’

2.77 To the point, whether the Department has received any complaints regarding malfunctioning of KVKs during each of the last three years and the latest status of each such complaint, the Department replied as under:

‘The complaints were received during the last three years in respect of KVKs at Allahabad, St. Ravi Das Nagar and Khagaria regarding administrative and financial problems. The complaint in respect of the KVK, Allahabad was enquired into and some corrective measures have been taken. The KVK at St. Ravi Das Nagar has been closed after conducting an inquiry into the problems and taking into account the withdrawal of KVK land by the State Government. The complaint against the KVK at Khagaria is being enquired into.’

2.78 While examining the Demands for Grants (2007-08) of the Department, the Committee took oral evidence of the representatives of the Department on 22.03.2007. During that meeting Members of the Committee raised some points and wanted to know about the reasons for prevailing shortage of staff in KVKs. To this point, the Department stated as under:

‘Overall 64% post are filled. However, it is worth mentioning that 261 KVKs were sanctioned in last 28 years as against 101 during the last two year. The codal formalities for filling up the posts takes time. The matter was also discussed in the previous VCs’ Conference held on 21-22 February, 2007 for filling of the posts on priority.’

2.79 The Committee also enquired about the reason RE 2006-07 for NRC for Women in Agriculture has been reduced to Rs. 66.00 lakh from the BE 2006-07 of Rs. 107.85 lakh. To this point, the Department replied as under:

‘The RE 2006-07 for NRC for Women in Agriculture has been reduced due to vacant scientific positions and accordingly research contingency and equipments requirement.’

Financial Analysis of Various Sectors of DARE/ICAR

2.80 The Committee observed the sectoral details of ICAR, Plan BE and RE for 2006-07, Expenditure upto 28 Feb. 07. & Plan BE for 2007-08 as under:

(Rs. in lakhs)					
Sl.	Name of Division/ Sector	Budget Estimates 2006-07	Revised Estimates 2006-07	Expenditure upto 28 Feb. 2007	Budget Estimates 2007-08
1.	Crop Science	31800.00	30600.00	26060.19	31000.00
2.	Horticulture	7000.00	6377.00	4339.40	7000.00
3.	ICAR Headquarters	2500.00	1750.00	1231.66	1750.00
4.	Agricultural Extension	27000.00	28816.00	25070.42	28100.00
5.	Agricultural Education	21200.00	43686.00	37660.28	31200.00
6.	Economic, Statistics & Management	400.00	350.00	252.28	400.00
7.	Agricultural Engineering	4000.00	3700.00	2834.80	4000.00
8.	Nature Resource Management	8500.00	7642.00	6819.16	8000.00
9.	Animal Science	8500.00	7000.00	5219.16	9000.00
10.	Fisheries	3000.00	2730.00	2145.59	4000.00
11.	Indo-French Seabass Project	50.00	50.00		
12.	EAP/NAIP	10000.00	1100.00	293.43	28500.00
13.	National Fund for Strategic Research	5000.00	600.00	162.84	900.00
14.	DARE + CAU	5550.00	8099.00	7285.91	5650.00
15.	Indo-US Knowledge Initiative	500.00	500.00	180.07	500.00
16.	Oversight Committee for Central Agriculture				2000.00
	GRAND TOTAL	135000.00	143000.00	119555.19	162000.00

2.81 The Committee noted that under Crop Science Sector RE 2006-07 was reduced by Rs. 1200.00 lakh and asked the reasons for reducing the funds under this sector. In their reply, the Department stated as under:

‘The scientific manpower which was required to be put in place through either creation or recruitment could not be done and hence it affected not only the establishment charges but also the commensurate expenditure on contingency, equipment etc. Some new pipeline projects were anticipated but did not materialized.’

2.82 The Committee observed that under Horticulture Sector RE (2006-07) was Rs. 6377 lakh has been reduced by Rs.623 lakh as the BE (2006-07) was Rs.7000 lakh. Expenditure upto 28 Feb. 2007 is Rs.4339.40 lakh but BE (2007-08) again has been kept at Rs.7000 lakh for this sector and asked about the specific reasons for such reductions in this important sector during 2006-07 and the reasons for again keeping BE upto Rs.7000 lakh, in spite of the fact that there was a shortfall of Rs.2660.60 lakh from the BE (2006-07) of Rs. 7000 lakh. To these points, the Department replied as under:

‘The reason for reduction in RE is that the institutes had made provision of funds under Estt. Charges/HRD in anticipation of getting some posts created and accordingly the budget under establishment charges, contingency etc. had to be reduced. Moreover the new centres such as NRC for Litchi and NRC for Pomegranate (being new outfit) could not utilise the funds under Works as CPWD did not start the construction in time. Besides, due to slow pace of work at newly created Seed Production Centre of IIVR, Varanasi and CISH at Malda, and the non-functioning of Ghazipur center of CPRI RE of the Division was reduced.’

2.83 The Committee noted that under ICAR Hqs. Sector, BE(2006-7) was Rs. 2500 lakh, RE(2006-07) was Rs.1750 lakh and the exp. upto 28 Feb.2007 is 1231.66 lakh and asked about the specific reasons for reducing the RE by Rs.750 lakh along with the reasons for even spending less than fifty percent amount from BE. In their reply, the Department stated as under:

‘The major reason for reduction of RE 2006-07 by Rs.750 lakhs is on account of reduction in allocations for CGIAR institutions and Modernization of ICAR Hqs. The

reduction in CGIAR allocation is because of non-receipt of utilization certificate by ICAR from CGIAR institutions for the funds released during the previous financial year 2005-2006 and savings in different items of approved and completed Works of X Plan under Modernization of ICAR Hqrs.’

2.84 The Committee observed that under Agricultural Education sector, BE(2006-07) was Rs.21200 lakh, RE 43686 lakh and exp. 37660.20 lakh while BE (2007-08) is Rs.31200 lakh and desired to know as to what necessitated for such a steep increase of Rs.22486 lakh at RE stage along with the justification of keeping BE(2007-08) at Rs.31200 lakh which is much lower than exp. upto 28 Feb.07 of Rs.37660.28 lakh. In their reply, the Department stated as under:

‘During the year 2006-07 additional allocation of Rs.200 crores was approved by Govt. of India for strengthening and development of agricultural education in the country. This amount was released to the Agricultural Universities for specific components like human resource development, niche areas of excellence, experiential learning – hands-on-training and infrastructure development. Therefore, the R.E. 2006-07 was higher than the B.E. 2006-07. ‘

2.85 The Committee noted that under the ESM Sector, RE (2006-07) was reduced by Rs.50 lakh and the exp. was Rs.147.72 lakh less than BE and asked about the reasons for reducing RE and low expenditure. To this point, the Department stated as under:

‘The funds provided for works/renovation could not be spent due to lack of competition and as such the tenders have to be refloated which delayed the entire process.’

2.86 The Committee observed that under Agricultural Engineering sector, RE (2006-07) was reduced by 300 lakh and exp. is Rs.1165.2 lakh less than BE but BE(2007-08) is again kept at Rs.4000 lakh which is same as BE (2006-07) and were keen to know the reasons for reducing

RE (2006-07) along with the reasons for low expenditure and justification for again keeping same BE while it could not spend about Rs.1165 lakh from the same BE during 2006-07. To these points, the Department stated as under:

‘The reason for reducing the RE (2006-07) for Agril. Engg. Division by 300 lakh was because of the inability of CIRCOT, Mumbai to utilize the budgeted amount under works due to non-receipt of approval of Heritage Committee of the Mumbai Municipal Corporation.

BE (2007-08) for the SMD has been kept as the same as BE (2006-07). The increase over the RE (2006-07) is only marginal, i.e. about 8%, to cover the inflation and the establishment charges etc.’

2.87 The Committee noted that under Natural Resources Management (NRM) Sector, RE was reduced by Rs. 858 lakh and the shortfall is Rs.1680.84 lakh from BE and wanted to know the reasons for reducing the RE and shortfall. In their reply, the Department stated as under:

‘Some work items of NBSSLUP, Nagpur could not be taken up due to non-clearance of Master Plan of IARI where the building of Delhi Centre was to be constituted. Allocation of Centre for Makhana was reduced in the revised EFC.’

2.88 The Committee observed that under Animal Science Sector, RE was reduced by Rs.1500 lakh and the shortfall is Rs. 3280.84 lakh, BE (2007-08) is Rs. 9000 lakh and enquired about the justification of keeping BE (2007-08) more than BE (2006-07) which has a shortfall of Rs.3280.84 lakh with the reasons for reducing RE and shortfall. To these points, the Department in their reply stated as under:

‘In view of approved EFCs of various schemes, the RE was reduced, as it was exceeding to the total of the approved allocations made under EFCs of the various schemes of Animal Science Division during X Plan period.’

2.89 The Committee noted that under Fisheries Sector, RE was reduced Rs.270 lakh and shortfall is Rs. 854.41 lakh from BE (2006-07). BE(2007-08) is kept at Rs.4000 lakh and asked about the reasons for reducing RE and the shortfall along with the justification for keeping BE (2007-08) more than Rs. 1000 lakh from BE (2006-07) which has a shortfall of Rs.854.41 lakh. To these points, the Department stated :

‘Under fisheries sector BE 2006-07 was Rs 3000 lakh which was subsequently revised to Rs 2730 lakh. There is no shortfall in achieving the financial targets. Further BE 2007-08 is kept at Rs 4000 lakh in view of the new initiatives in fisheries research and infrastructure development during the XI Five Year Plan.’

2.90 The Committee observed that under Indo-French Seabass Project Sector, BE/RE was Rs. 50 lakh, but exp. is blank and wanted to know the reasons for the same. To this point, the Department in their reply stated as under:

‘Under Indo French Seabass Project, the RE/BE 2006-07 was Rs 50 lakh against which an expenditure of Rs 40.86 lakh has been incurred.’

2.91 The Committee noted that under EAP/NAIP, RE was reduced by Rs.8900 lakh and shortfall is Rs. 9706.57 lakh from BE while BE (2007-08) is Rs.28500 lakh which is Rs.18500 lakh more than BE (2006-07) and wanted to know the justification of keeping BE (2007-08) much higher when much lower BE last year had a drastic shortfall. To these points, the Department stated as under:

‘The higher BE of Rs.285 crore for 2007-08 is kept on account of completing all the preparatory work, standardizing the norms and procedures, approval mechanisms in place for a real take off for the project.’

2.92 The Committee observed that under National Fund for Strategic Research, RE was reduced by Rs.4400 lakh and shortfall is Rs.4837.16 lakh while the BE (2007-08) is Rs.900 lakh and enquired about the reasons for sharply reducing BE at RE stage along with the reasons for huge shortfall. The Department was also asked to give justification for such a higher allocation as BE (2007-08) when the exp.in 2006-07 was only Rs.162.84 lakh. In their reply, the Department stated as under:

‘The reduction in the BE at RE stage was on account of delay in sanctioning of the projects after completing rigorous screening of large number of proposals and other procedural formalities and therefore RE 2006-07 was reduced. The BE for 2007-08 is kept at Rs.9 crore to meet the second year commitment of the 14 sanctioned projects as well as to support new projects to be approved.’

2.93 The Committee noted that under CAU, RE was increased by Rs.2549 lakh and the exp. is Rs.Rs.7285.91 lakh but BE (2007-08) is Rs.5650 lakh and wanted to know the justification of keeping lower BE(2007-08) than the exp. of 2006-07 along with the reasons for increasing RE. To these points, the Department stated as under:

‘The XI Plan Proposal of the Central Agricultural University, Imphal will require approval of the Cabinet Committee on Economic Affairs(CCEA). Till such time the approval of CCEA is received, only committed /ongoing activities would be undertaken by the CAU. Since the approval of CCEA is likely to take sometime ,it is expected that the expenditure during the year 2007-08 (first year of XI Plan) is not likely to exceed Rs 55 crores.’

2.94 The Committee observed that under Indo-US Knowledge Initiative, shortfall is Rs.319.93 lakh and BE (2007-08) is blank and wanted to know the reasons for shortfall in 2006-07 and as to why BE (2007-08) figures are not given. In their reply, the Department stated as under:

‘The project was started in the final year of the X Plan in September, 2006. Therefore, collaborations could materialize only for the expenditure of Rs.241.02 lakhs. The shortfalls, therefore, is Rs.258.98 lakhs not Rs.319.93 lakhs as shown in the statement. The BE 2007-08 has been kept as Rs 5 crore.’

2.95 The Committee noted that under Oversight Committee for Central Agriculture, BE (2007-08) is kept at Rs. 2000 lakh and desired to know the details of this Committee, its tenure, its agenda and its jurisdictional functionalities, etc. and how the Deptt. proposes to spend Rs. 2000 lakh during 2007-08. In their reply, the Department stated as under:

‘The Oversight Committee was constituted by the Ministry of Human Resource Development vide notification No. 1-1/2005-UI (A) dated 29.5.2006 under the Chairmanship of Sh. Veerappa Moily. The Committee was to examine the provision of 27% admission of OBC in higher education. The Committee also recommended the establishment of 3 new institutes viz. National Institute of Abiotic Stress Management, National Institute of biotic Stress Management and National Institute of Agricultural Biotechnology. The provision of funds have been made to meet out expenditure on these two counts.’

Status of implementation of Scheme/Projects of DARE/ICAR meant for North East States

2.96 The Committee desired to know the details of various schemes/Projects of DARE/ICAR meant for North Eastern States including Sikkim and their status of implementation during each of the last five years, year-wise; and scheme-wise along with the progressive details-physical/financial targets/achievements-wise, etc. To these points, the Department in their reply stated as under:

‘Division wise schemes/projects in North-Eastern States are as follow:

Sr. no.	Division	Scheme/Proejct
1.	Natural Resource Management	ICAR- Complex for North-Eastern Regions, Barapani, Meghalaya AICRP (All India Coordinated Research Project) - Centre of Water Management, Barapani
2.	Fisheries	Central Inland Fisheries Research Institute, Guwahati
3.	Animal Sciences	National Research Centre on Yak, Dirang NRC on Mithun, Nagaland NRC on Pig, Guwahati AICRP-Centres of FMD, ADMAS, Pig, Poultry, Sheep, Goat, Buffaloes
4.	Education	Assam Agricultural University, Jorhat AICRP-Centre on Home Science Nagaland University (Faculty on Agriculture)
5.	Crop Science	AICRP centres on Rice, Maize, Chickpea, MULLARP, Wheat & Barley, Forage crops, Sugarcane, soybeans, Jute & Fiber, Biological control, Honey Bee, White Grub, NSP-crops, NGPGR, ND (including DNA),
6.	Horticulture	Central Potato Research Institute, Regional Stations at Shillong & Kahikuchi, AICRP- centre of Potato, Palms, Tuber crops, Fruits, vegetables, Mushroom
7.		Central Agricultural University, Imphal’

‘Salient Achievements During Xth Plan (2002-07)

A. Variety Development and release

- 7 varieties, 4 for mid-altitude and 3 for valley land ecosystems with yield potential of 3.5 – 4.0 and 5.5 to 7.0 t/ha, respectively were developed and released. Since 2005, these varieties are being grown by the farmers of these two ecosystems particularly in Meghalaya and Manipur states. Details on yield etc. farmers field are being collected.
- 3 varieties of tomato with yield potential of 53.3 to 63.7 t/ha were released and also put under All India Vegetable Improvement trials.
- One variety of turmeric named as Megha Turmeric – 1 with yield potential of 25.0 t/ha and with curcumin content of 6.8% was released. The variety, due to its higher yield (25 t/ha against 15.5 t/ha from the existing ones), has become very popular.

B. Varieties in the pipeline for release

- 3 maize varieties, 2 composites (RCM1-1 and 1-3) and 1 pop corn (RCM1-2) are ready for release.
- 2 genotypes of tomato (Megha Tomato 1 & 2) have been proposed for release.
- 2 genotypes of brinjal developed by the institute (RCMB – 1 & Sel – 5) are in the last year of AICVIP trial.
- 2 high yielding genotypes of ricebean, 2 of blackgram, 2 of pea and 1 of pigeonpea are under multilocational trials for release.

C. Development of Package of Production:

- Needed package support for production and protection of developed and screened varieties were developed.
- Citrus rejuvenation package was also developed to address the issue of citrus decline.
- Package of high density pineapple planting with 55,000 suckers / ha against the practice of 25,000 suckers / ha was developed.

D. New Programmes

- Technology development for organic agriculture – the institute is taking lead .
- Intensive Integrated Farming System technology benefiting from system approach and complementarities of crop-livestock-fish systems.
- Technology assessment and refinement programme for popularization of technology.
- Developed of DNA-based animal disease diagnostic technique for faster diagnosis and control of animal diseases.
- Developed DNA-based parasitic disease diagnosis kits for field veterinarians and also software for protozoan parasitic profile.
- Developed DNA-based protocol for sexing of ducks and chicks.
- Developed software for acid soil amelioration measures.
- Perfected artificial insemination technology in pig and popularized it at village level.
- Standardized fish breeding programme and addressed the issue of non-availability of fish fingerlings.

E. New Introduction

- Strawberry was introduced in mid-hill situations in Meghalaya and Sikkim. In Meghalaya it is currently being grown by farmers leading to the opening up of scope for diversification.
- Passion fruit was introduced among farming community in Manipur, Nagaland and Sikkim.
- Kiwi fruit was popularized in Sikkim.
- Cole crops like broccoli was introduced.
- Multi-tier agroforestry system like MPT + Pineapple + Black pepper was introduced.
- Improved farm tools and implements were manufactured in the institute and introduced in the region.
- Introduced Vanaraja poultry breed in the region to promote backyard poultry.

F. Natural Resource Management

- Farming system technology developed could check soil erosion from 46 t/ha earlier to the level of 8 – 10 t/ha.
- 3000 agri-horti crop germplasm were collected, screened and identified. 1400 of them preserved in gene bank.
- 185 ornamental fish species collected and identified from the region. Their captive breeding is presently being taken up.
- Developed bio-organics from weed flora as crop growth promoter.

G. Fisheries & Animal Science

- Pen culture technology standardized and tested
- Beel Fishery development undertaken
- Technology demonstrated on composite carp culture and crop breeding
- A herd of Swamp buffaloes established and introduced artificial insemination
- Embryo technology standardized in Yak and first Embryo Transfer calf in the world born in 2005

- Production and distribution of complete feed block made of locally available feed materials for Yak feeding during lean period
- Artificial insemination introduced for Mithun

H. Central Agricultural University:

- *The college of Home Science in Tura, Meghalaya established*
- *College of Agricultural Engineering and Post-harvest Technology has been recently established in Ranipool, Sikkim*
- *Infrastructure facilities have been further developed in the existing colleges of Agriculture (Imphal), Veterinary (Mizoram), Fisheries (Tripura) and Horticulture (Arunachal Pradesh)*
- *Post graduate College on Agriculture has been initiated at Barapani, Meghalaya'*

2.97 The Committee desired to know the details of funds allocated as BE, RE and actual expenditure incurred on each of the schemes meant for NE States with shortfall/excess during 2002-07, scheme-wise, year-wise along with allocations made for 2007-08. In their reply, the Department furnished the following information in this regard :

‘Division-wise details of funds allocated and actually spent for the NEH regions:

Sl No.	Name of Division	X-Plan allocation	<u>Actual Expenditure (Rs. Lakhs)</u>					Actual Expenditure upto Feb, 2007
			2002-03	2003-04	2004-05	2005-06	2006-07	
1	Natural Resource Management	3270.5	493.36	597.45	795.72	771.37	524.9	3384.50*
2	Animal Sciences	4411.2	537.00	688.60	1016.90	983.20	1013.10	4238.80
3	Education	3366.41	220.41	297.73	191.00	829.00	1808.81	3341.93
4	Crop Science	1442.55	318.34	285.48	368.35	263.64	600.00	1835.81
5	Horticulture	1628.0	172.0	277.0	358.0	250.6	250.6	1309.0
6	Fisheries	765.0	114.90	199.20	175.90	97.90	45.40	633.30
7	DARE	221.78	15.54	22.95	26.86	54.76	73.6	193.71
Total		14,883.66						14,429.27

2.98 The Committee wanted to know whether all the 10% of the Plan Budget allocated for the Schemes of DARE/ICAR meant for NE States have been fully utilized during 2002-07 with reasons along with the details of unutilized amounts deposited in Central Non-lapsable Pool

meant for N-E States during 2002-07, year-wise. To these points, the Department in their reply stated as under:

‘The DARE/ICAR made the following drawal in respect of mandatory 10% plan budget for NEH region which was spent in the respective years.

(Rs in crore)

Year	10% of the allocation	Drawal of funds
2002-03	72.50	46.49
2003-04	77.50	69.65
2004-05	90.00	71.89
2005-06	107.00	106.71
2006-07	143.00	135.00 *

* Rs 8 crore is yet to be drawn by DARE for CAU, Imphal for which the supplementary demand for grant has been submitted to the Parliament in the 3rd batch of Supplementary Demand for Grants.’

2.99 The Committee further enquired through a supplementary point as to whether the funds drawal and the funds actually utilized in each year of the X Plan are the same and the reasons for shortfall, if any, (i) from 10% of the allocation, (ii) from the difference between drawal of funds and funds actually utilized for NEH region. In their reply, the Department stated as under:

‘The ICAR has following Institutes located in the NEH region and their entire expenditure under Plan is treated as expenditure on NEH region:

1. ICAR Research Complex for NEH Region, Barapani
2. NRC on Yak, Dirang, Arunachal Pradesh
3. NRC on Pig, Guwahati.
4. NRC on Mithun, porba, Nagaland.
5. NRC on Orchids, Pakyang, Sikkim

Besides, Central Agricultural University, Imphal, is also located in the North Eastern Region. Further, a number of Regional Stations of various Institutes and centers of All India Coordinated Research Projects are also located in NEH region where expenditure is incurred from the grants drawn for NEH region. From the trend of the expenditure, it is crystal clear that the expenditure in the Institutes located in the NEH region is increasing.’

Effect of Hormone-Injected Milk Production on Animal and Human Health

2.100 While examining the Demands for Grants (2007-08) of the Department, the Committee took oral evidence of the representatives of the Department on 22.03.2007. During that meeting Members of the Committee raised some points and wanted to know whether DARE/ICAR is aware about the fact that cattle are given some injections for enhancing milk produced by the cattle and the details of the content being used by the owners of the cattle/livestock. They were also keen to know whether ICAR has done any research on the milk produced by way of injecting some material into the milch animals and whether the milk so produced is good for human consumption. Also whether the injection has an impact on the milk-cycle of the cattle/buffalo for producing milk. To these points, the Department in their reply stated as under:

‘ICAR/DARE is aware of this practice prevalent among livestock farmers of some regions of the country especially in Punjab, Haryana, U.P, Gujarat etc. The material used for the purpose is a crude preparation of Oxytocin, a peptide hormone that has the basic function of facilitating secretion of milk from the udder and expulsion of fetus/placenta during parturition. The farmers use the preparation of this hormone for salvaging complete milk retained in the udder. ICAR has not initiated any work on this issue as it is known that no hormone is secreted in the milk. The hormone does not stimulate milk synthesis as such or is secreted in the milk and hence no risk for the consumers. Repeated use of the hormone on the animal can have some effect on the health of the animal especially on udder health.’

PART II

RECOMMENDATIONS/OBSERVATIONS

Recommendation No. 1

Need for allocating DARE/ICAR Outlay to a minimum of one per cent of AGDP for the XIth Plan

The Committee note that the Department of Agricultural Research & Education has proposed an outlay of Rs.12176.40 crore for carrying out all their sectoral activities including funding to State Agricultural Universities (SAUs), Externally Aided Projects (EAPs) like, National Agricultural Innovative Project (NAIP) and Indo-US Knowledge Initiative and also include the requirement of critical repairs and maintenance during the XIth Plan as per the recent instructions of the appraisal agencies.

The Committee note that Brazil spends about 1.81 per cent of AGDP on Agricultural Research while countries like Japan and USA spend about 3.62% and 2.65% of their AGDP on agrarian research. Astonishingly, in comparison to the average of all leading industrialized countries whose spending on agrarian research is about 2.36% of their respective AGDP, India's spending on agricultural research ranged between 0.31% to 0.35% during 2002 to 2007 which is even less than all the developing countries average of 0.53% for the year 2000.

The Committee are dismayed and unable to comprehend the constraints of the Planning Commission as to why they should not earmark adequate funds for DARE/ICAR, even after the elected representatives of the people, i.e. members of Parliamentary Standing Committee on Agriculture, unanimously and strongly recommending in favour of at least 1% of AGDP share to DARE/ICAR as well as Planning Commission's own Working Group on DARE recommending the same percentage for DARE during the IXth,

Xth Plan and XIth Plan periods. In the instant case, the XIth Plan Working Group has recommended Rs.31,672.00 crore for agrarian research and education.

In view of the above, the Committee strongly urge the Planning Commission and the Ministry of Finance to have a positive and broad-minded approach towards the greater national need of the hour to enhance public funding for agrarian research and education upto the desired level of 1% to 2% of AGDP for the XIth Plan so that the ever growing population of the nation can have food and fodder security.

Recommendation No. 2

Decline in DARE/ICAR proposed/demanded allocation for XIth Plan

The Committee observe that Ninth Plan Working Group constituted by the Planning Commission for DARE/ICAR had recommended that DARE should be provided at least one per cent of Agricultural Gross Domestic Product (AGDP) initially, with a gradual increase upto two per cent of AGDP in subsequent years. Similarly, Xth Plan Working Group for DARE had also recommended at least one per cent of AGDP share which amounted to about Rs.25,000 crore at that time. The XIth Plan Working Group on Agricultural Research and Education has also recommended that at least a sum of Rs.31,672 crore should be provided for various sectors and State Agriculture Universities (SAUs), in addition to the funding of the Externally Aided Projects(EAPs)/World Bank Aided Projects as per their approved programmes.

To the sheer astonishment of the Committee, DARE has proposed/demanded an allocation of Rs.12176.40 crore for the XIth Plan which happens to be Rs.3823.60 crore less than the outlay proposed/demanded by them for Xth Plan which was Rs.16000.00 crore (including Rs.1000.00 crore as one-time catch up Grant for replacing/renovating the age-old/obsolete infrastructure/equipments, etc.)

The Committee have always been very strongly recommending year after year to the Planning Commission and Ministry of Finance for providing at least one per cent of AGDP to DARE/ICAR for fulfilling their mandate, but have failed to understand the attitude of the Department that has belittled the Department's own pleadings before the Parliamentary Standing Committee on Agriculture for seeking enhanced funding every year.

The Committee would like to be informed of the reasons as to why the DARE has failed to propose more outlay for XIth Plan which was expected to be greater than the Xth Plan Projections of Rs.16000.00 crore, which was repeatedly endorsed by the Committee through their various recommendations.

Recommendation No. 3

Inadequate allocation to DARE/ICAR in the first year of the XIth Plan (2007-08)

The Committee observe that the DARE proposed an Annual Plan (2007-08) Outlay of Rs.1945.50 crore. Against their proposed requirement, they were allocated Rs.1620.00 crore. That means, the Department got Rs.325.50 crore less than the projected outlay which will obviously hamper the desired/targeted growth functioning of the DARE/ICAR, especially, in their vital research & development and educational activities.

The Committee further observe that this BEs (2007-08) of Rs.1620.00 crore which includes Rs.290.00 crore exclusively meant for Externally Aided Project (EAPs), namely, (NAIP-Rs.285.00 crore and Indo-US Knowledge Initiative-Rs.5.00 crore-i.e., Rs.1620.00 crore minus Rs.290.00 crore = Rs.1330.00 crore as Domestic Budgetary Support (DBS). Moreover, this Annual Plan Outlay also includes critical repairs and maintenance component upto 15% of the total Annual Plan. If the above figures are compared with the RE(2006-07) which was Rs.1430.00 crore and the EAPs component was Rs.16.50 crore at RE stage, it is evident that the net Domestic Budgetary Support for the year 2007-08 is Rs.1330.00 crore which happens to be Rs.83.50 crore less than the DBS of Rs.1413.50 crore for 2006-07 at RE stage. Therefore, it is more than evident that virtually for all practical purposes, the DARE/ICAR has got less DBS for 2007-08 than what they got in 2006-07(RE) to carry out all their planned research and educational activities.

The Committee, therefore, strongly deplore the tendency of the Planning Commission and Ministry of Finance/Government wherein they practically give less money to the Department but theoretically propagate that they have taken good care of the agrarian research and education which is the foundation for providing not only food security to the entire population of the nation at present and in future but also has the

power to decide the course of agriculture of India on which 70% of the population is dependent for their livelihood.

The Committee, therefore, recommend that the Planning Commission and Ministry of Finance should adequately increase the funding of DARE/ICAR, at least upto their proposed outlay of Rs.1945.50 crore during 2007-08, so that they can do the needful more enthusiastically to usher the Second Green Revolution into India.

Recommendation No. 4

Need to provide additional funding for Externally Aided Projects (EAPs) and World Bank (WB) Aided Projects over and above the Budget Estimates of DARE/ICAR

The Committee note that the XIth Plan Working Group on Agricultural Research and Education has recommended that at least a sum of Rs.31,672 crore should be provided for the various sectors and SAUs, and in addition, the Externally Aided Project (EAPs)/ World Bank Aided Projects (WBPs) also need to be funded as per their approved programmes.

The Committee observe that external aid is for certain purposes and objectives that are different from the regular on-going schemes of the DARE/ICAR and EAPs are strictly time bound programmes involving the Collaborating and Donor Agency for the very specific cause/purpose and as such at times, may not have a direct link with the on-going schemes/projects of the Department, being run with the Domestic Budgetary Support(DBS) provided to the Department.

The Committee, therefore, recommend that the Planning Commission and the Ministry of Finance should do the needful in tune with the Committee's view towards excluding the EAPs/WBPs component from the Plan BEs of the DARE/ICAR by providing EAPs allocation separately over and above the BEs meant for the Department from 2007-08 itself and the Department should be provided Rs.290.00 crore for EAPs/WBPs over and above the BEs of Rs.1620.00 crore for 2007-08. Unless this is done and DARE gets Rs.290.00 crore additional funding for EAPs over and above Rs.1620.00 crore BEs(2007-08), all the claims/declaration of the Government to give priority enhanced funding to DARE/ICAR during 2007-08 will only be an eye-wash as is evident from the facts and figures that if Rs.290.00 crore are subtracted from the BE(2007-08) of Rs.1620.00 crore, Rs.1330.00 crore are left for on-going 71 main Plan Schemes with 108 sub-schemes of

**DARE/ICAR as DBS, which is even Rs.83.50 crore less than Rs.1413.50 crore DBS of RE
2006-07.**

Recommendation No. 5

One Time Catch up Grant should be provided separately

The Committee observe that the DARE/ICAR has a number of institutions/laboratories, which are more than twenty years old. It was felt necessary that a one time catch-up grant may be sought from the Planning Commission, so that the requirement of renovation of old infrastructure and up-gradation/replacement of obsolete equipment could be met. The Ninth Plan Working Group recorded that one time catch-up grant was the critical need for upgrading laboratory equipment, pilot plants, farm and laboratory facilities, class rooms and audio visual facilities. In order to have excellent academic standards in State Agricultural Universities and to have globally competitive research working environment, the Eighth Plan, Ninth Plan & Tenth Plan Working Groups had recommended Rs.300 crore, Rs.500 crore & Rs.1000 crore respectively as one time catch-up grant.

The Committee have been strongly recommending and urging the Planning Commission and Ministry of Finance year after year to provide the much needed one time catch up grant over and above the annual allocations in a phased manner to ICAR, given its track record of service to the nation and being privy to agricultural revolution in the country.

The Committee also note that in this regard, the Department had written a number of times to the Planning Commission but the Planning Commission had always taken a rigid stand that the very purpose for which this grant was sought and felt necessary, viz., critical repair/renovation/upgradation of research and education facilities, etc., had already been taken care of in the total Plan Budgetary Support. Maintaining their earlier stand again, the Planning Commission in their guidelines for formulation of XI Five Year Plan

has indicated that in the Plan budget critical repair and maintenance upto 15% of the Plan budgetary support can be included.

The Committee are dismayed with the routine response of ignoring and rejecting the recommendation of the Committee by the Planning Commission and pessimistic attitude of the Department in giving up the efforts to procure the essentially required one time catch up grant. The Committee strongly deplore the attitude of the Planning Commission to give false promises since IXth Plan onwards.

Further, the plea of the Planning Commission that the requirement of one time catch up grant has been taken care of in the Xth Plan allocations and hence no separate funding was required, is baseless as the Annual Plan allocations are always much below the budget proposals of the Department and hardly enough to maintain the on-going schemes of the Department. The meagre funding provided to the Department has always been inadequate and has proved insufficient for changing/renovating the obsolete infrastructure/equipment as is evident from the nil response from all the ICAR Institutes and SAUs who were given instructions during the IXth Plan that 20 to 40% of their total Annual Plan grant every year was meant for the purpose of one time catch up grant, but not even a single Institute/SAU could do that and the conditions with regard to obsolete equipments, age old infrastructure including laboratories and other related research facilities remain the same which is why the Department had again proposed an amount of Rs.1,000 crore during the Tenth Five Year Plan but the Planning Commission had never made separate allocations specifically for catch up grant through Annual Plans.

So far as the latest guidelines/instructions of the Planning Commission for formulation of XIth Five Year Plan which indicated that in the Plan budget critical repair and maintenance upto 15% of the Plan budgetary support can be included, is concerned, it is more than evident from the financial budgetary figures of the Department for the year

2006-07 and 2007-08 that although there seems to be some increase in BE (2007-08) i.e., Rs.1620.00 crore [Gross Budgetary Support (GBS) which includes DBS + EAPs] from the RE(2006-07) of Rs.1430.00 crore yet practically the actual Domestic Budgetary Support viz., Rs. 1620.00 crore(GBS) – Rs. 290.00 crore (EAP) = Rs.1330.00 crore is Rs.83.50 crore less than the DBS of RE (2006-07) which is Rs.1413.50 crore.

The Committee, after keeping in view the potential of agriculture in changing socio-economic condition of millions of Indians, urge the Planning Commission and the Government to seriously consider agricultural research & education as one of the central elements of the planning efforts in the XIth Five Year Plan. The Committee as well as the Government have widely accepted that concomitant with high growth rate in our economy, agriculture must grow at 4%, as the improvement in productivity is the most important option to raise production which can't be done without developing new varieties of seeds which needs a lot of investment.

The Committee, therefore, urge the Planning Commission and the Ministry of Finance to have interactive sessions with the Department to understand, assess and negotiate the requirement of one time catch up grant in the favour of the Department as per the latest requirement to be assessed by physical verification of the ICAR Institutes and SAUs rather than imposing their terms and conditions to do the major renovation/upgradation of infrastructure/laboratories from the meagre annual domestic budgetary support.

Recommendation No. 6

Slow Budgetary Process needs revamping for optimal utilization of public money

The Committee note that in spite of the positive assurance from the Planning Commission, the Ministry of Finance and also by the Department during the examination of the last three DFGs of the DARE/ICAR regarding the implementation of the recommendations of the Committee that RE/BE grants/funds should be made available to the Department and various Institutes under its jurisdiction sometime in the month of December or a little earlier, practically nothing positive has been done so far, as is evident from the factual information made available to the Committee by the Department.

The Committee observe that Ministry of Finance conveyed RE(2006-07) to the Department officially on 4.1.2007 and the Department also intimated sectoral allocations to the Division(s) located in the Headquarters of the Department, on 18.1.2007. From the first written reply of the Department, it is clear that the exact date on which the Subject Matter Divisions(SMDs) actually communicated the RE(2006-07) to the concerned Institute/NRC/PD was : (i) Crop Science on 25.1.2007; (ii) NRM on 19.1.2007; (iii) Fisheries on 22.1.2007; (iv) Agricultural Extension on 31.1.2007; (v) Agricultural Engineering on 9.2.2007; (vi) Horticulture on 5.2.2007; (vii) Animal Science on 29.12.2006; and (viii) Education on 17.12.2006. When enquired further on a supplementary point as to how the Animal Science and Education SMDs were able to convey RE(2006-07) on 29.12.06 and 17.12.06 respectively, to various Institutes/NRCs/PDs under them, even when Ministry of Finance conveyed RE(2006-07) on 4.1.2007, the Committee were further informed that 'Animal Science and Education Divisions also took an advance action by communicating the tentative RE to its Institutes so as to keep them in a state of preparedness, although final RE 2006-07 was conveyed on 18.1.2007 and 5.2.2007 respectively.' The Department has stated that 'In the meeting held on 27.11.2006 Secretary(Expenditure), Ministry of

Finance, while deciding the RE 2006-07 for DARE/ICAR through discussion with Financial Adviser, indicated the Plan RE as Rs 1430 crore. Initiating an advance action, the Department communicated tentative RE 2006-07 to all SMDs on 12.12.06 itself. The final RE 2006-07 of Rs 1430 crore was officially conveyed by MoF on 4.1.2007 and the Department also intimated sectoral allocations to Division on 18.1.07.'

The Committee feel that if Animal Science and Education Divisions could take an advance action by communicating the tentative RE to its Institutes on 29.12.2006 and 17.12.2006; respectively, then why the other six SMDs failed to take the same advance action in the month of December itself. Astonishingly, the Department has given belated action taken dates for their first six SMDs and advance action taken dates for the last two SMDs in the same reply. Moreover, the Department is admitting in their reply that the formal and actual RE(2006-07) was conveyed to the concerned Institutes etc. by their respective SMDs, as late as, for Horticulture & Education on 5.2.2007 and Agricultural Engineering on 9.2.2007 whereas Animal Science SMD is said to have conveyed on 18.1.2007 to its institutes, why Horticulture, Education and Agricultural Engineering. took 18 to 21 days more time to do the same.

The Committee strongly deplore the tendency of the Department to give confusing and misleading information/statements and later on cover up/polish their delays in action while replying to the points raised by the Committee and advise the Department to concentrate on improving their financial and administrative skills, as the Department took about 15 days time to formally convey the RE 2006-07 to its various SMDs located within the same building and SMDs in turn took about 18 to 21 more days to convey the same to their respective Institutes/NRCs/PDs, etc.

The Committee unanimously urge the Planning Commission, the Ministry of Finance and the Department to seriously look into their procedural working in order to

improve the entire tardy budgetary process to ensure that the RE/BE etc. are conveyed to the end-users, i.e., actual Institutes etc. of the Department, in the month of December itself or a little earlier for optimal utilization of scarce public money.

Recommendation No.7

Need to develop more High Yielding Varieties (HYVs) and improved management practices for existing HYVs of Wheat & Rice

The Committee note that it has been generally experienced that there is exhaustion of yield potential of new high yielding varieties (HYVs) of wheat and rice. Though the Department claims that in fact, there still exist a high yield potential which is yet to be harnessed with improvement in management practices and it may not be appropriate to say that yield potential of HYVs of wheat and paddy is exhausted, yet the Committee feel that the ICAR has done precious little in this direction and it must increase its research and monitoring activities to find out the truth in what majority of the farmers and stakeholders are experiencing that there is exhaustion of yield potential of new HYVs of wheat and paddy as this fact has also been reported in Government's own Economic Surveys.

The Committee, therefore, expect the ICAR to put in more vigorous research efforts to develop more HYVs and improved management practices to remove all the barriers coming in the way to harness the untapped high yield potential of new HYVs and popularise those improved management practices and HYVs among the farmers through their extension and education network.

Recommendation No.8

Need to augment dedicated Research, Educational and Extension Activities of ICAR for accelerating Agricultural Growth Rate

The Committee note that imbalanced use of fertilizer, low seeds replacement rate, low post harvest value addition, etc., are among the reasons manifested in the lackluster agricultural growth which stands at a moderate annual average growth of three per cent in the first six years of the new millennium starting 2001-02.

The Committee are of the considered view that DARE/ICAR, being the apex body for agrarian research & education, is directly responsible as per their mandate which includes (i) finding out cost effective technologies for preparing various health and organic composts; (ii) developing new effective biofertiliser strains tolerant to different biotic and abiotic stresses; and (iii) scientific management of proposed 1000 advanced soil testing laboratories and helping in maintenance of soil health cards containing appropriately recommended fertilizer to be used by the farmers. Similarly, one of the main reasons for low seed replacement rate is said to be “lack of awareness about yield advantages of use of quality seed”, also demands ICAR’s attention.

The Committee, therefore, urge the DARE/ICAR to look into these issues seriously and find out practical solutions/remedies to all these problems coming in the way of achieving high growth rate of agriculture, through their dedicated research, educational and extension activities in a time bound manner.

Recommendation No.9

Need to find real and practical remedies for abiotic and biotic stresses by ICAR causing heavy damages to the crops every year

The Committee note that the production of nine oilseeds at 23.6 million tonnes in 2006-07 (2nd Advance Estimates) is estimated to decline by 15.7 per cent compared to their production in 2005-06. The reasons for decline in production of oilseed crops during 2006-07 are reported to be (i) largely due to late and deficit rainfall causing loss to groundnut crop in Andhra Pradesh; (ii) continuous and heavy rains in Gujarat resulted in decline of productivity; (iii) necrosis disease in sunflower also added to total decline of production, etc.

The Committee observe that basically abiotic and biotic stresses are the main reasons for decline in productivity and production of oilseeds as well as for other major foodcrops almost every year and these are in the knowledge of ICAR which in spite of high claims in doing the needful to fight the challenges of abiotic and biotic stresses for more than five decades, has failed to provide practical solutions to these perennial problems Indian Agriculture System is facing continuously.

As crores of rupees of the public money have been spent to find solutions/remedies to these stresses during the last more than fifty years, the Committee, therefore, recommend that ICAR should provide real and practical solutions/remedies in a time bound manner to fight with abiotic and biotic stress faced by the Indian farmers and the Committee should also be informed of the reasons of failure to provide viable solutions for such a long time and the action taken or proposed to be taken in this regard.

Recommendation No.10

Need to improve the functional status/shortage of staff in KVKs

The Committee note that the ICAR has sanctioned 546 KVKs in the country out of which 3 are non-functional due to financial and administrative problems. Out of the remaining 543 KVKs, 223 were sanctioned during 2004-05 to 2006-07. These KVKs are said to be in various stages of development. The ICAR claims that the remaining 320 are developed KVKs.

The Committee also note that the explanation extended by the ICAR for prevailing shortage of staff in KVKs that 'Overall 64% post are filled. However, it is worth mentioning that 261 KVKs were sanctioned during last 28 years, as against 101 during the last two year. The codal formalities for filling up the posts take time. The matter was also discussed in the VCs' Conference held on 21-22 February, 2007 for filling of the posts on priority'. However, the Committee observe that the explanation given by the Government speaks volumes of the lack of organisational and management skills and lackadaisical approach of the DARE/ICAR in filling up the 36 per cent overall pending posts in KVKs. The Committee are dismayed at finding the ground reality different from the rosy picture the Department gives about the fully functional status of 320 KVKs. The Committee are aware that many of the KVKs which ICAR claims to be fully and satisfactorily functional are only semi or partially functional in spite of the fact that these were sanctioned more than 5, 8 or even 10 years ago.

The Committee, therefore, urge the Department to look into the problems/barriers which are coming into the way of making all the KVKs fully rather optimally functional and remove the shortage of all categories of staff in KVKs during 2007-08 itself.

The Committee further recommend that the Department should develop a regular mechanism with immediate effect through which the Department should not only always inform and apprise the local Members of Parliament about the major events/activities of KVKs of their areas but also invite them to actively involve/participate in the activities of the KVKs.

Recommendation No.11

Concern over Hormone -injected Milk Production and its effect on Human and Animal Health

The Committee are aware that the practice of injecting hormone for enhancing milk production is prevalent among livestock farmers of almost all regions of the country, especially in Punjab, Haryana, U.P., Bihar, Gujarat, Maharashtra, Tamil Nadu, Kerala, etc. The material used for the purpose is a crude preparation of Oxytocin, a peptide hormone that has the basic function of facilitating secretion of milk from the udder and expulsion of fetus/placenta during parturition. The farmers use the preparation of this hormone for salvaging complete milk retained in the udder. However, repeated use of the hormone on the animal can have a bad effect on the health of the animal especially on udder health.

The Committee express their concern over the issue and are astonished as to why the ICAR has not initiated any work on this issue even when they (ICAR) are very well aware of the fact that repeated use of the hormone on the animal can have some bad effect on the health of the animal. The Committee are not satisfied with the reasoning of the Department for not initiating any work on the whole issue as according to them, no hormone is secreted in the milk as it does not stimulate milk synthesis as such and hence no risk for the consumers.

In the opinion of the Committee, this is a serious matter which directly involves animal's health and field experiences tell that it reduces animal's lactation years and also affects human health. The Committee, therefore, urge the Department to initiate research on this issue afresh on both the aspects, viz., animal as well as human health from every angle and make the livestock farmers and consumers aware about their research findings on the bad/ill effects of injecting hormone repeatedly in the animal out of greed to gain

more milk and money, through their network of KVKs, scientists-farmers interactive session and through media advertisements.

NEW DELHI;
20 April, 2007
30 Chaitra, 1929 (Saka)

PROF. RAM GOPAL YADAV
Chairman,
Standing Committee on Agriculture.

(Vide Para 3 of the Preface of this Report)

MINUTES OF THE EIGHTH SITTING OF THE STANDING COMMITTEE ON AGRICULTURE HELD ON THURSDAY, THE 22 MARCH, 2007 AT 1400 HRS. IN COMMITTEE ROOM 'B', GROUND FLOOR, PARLIAMENT HOUSE ANNEXE, NEW DELHI

The Committee sat from 1400 hrs to 1520 hrs

PRESENT

Shri Khagen Das – In the Chair

MEMBERS

LOK SABHA

2. Shri Anil Basu
3. Shri Girdhari Lal Bhargava
4. Shri Prabodh Panda
5. Smt. Rupatai D. Patil Nilangekar
6. Smt. Kalpana Ramesh Narhire

RAJYA SABHA

7. Shri Vikram Verma
8. Shri Sk. Khabir Uddin Ahmed
9. Shri Debabrata Biswas
10. Shri Sharad Anantrao Joshi

SECRETARIAT

- | | | | |
|----|-------------------|---|------------------|
| 1. | Shri A.K.Singh | - | Joint Secretary |
| 2. | Shri Hardev Singh | - | Director |
| 3. | Shri N.S. Hooda | - | Deputy Secretary |
| 4. | Ms. Amita Walia | - | Under Secretary |

WITNESSES

- | | | |
|----|------------------|---|
| 1. | Dr. Mangala Rai | Secretary (DARE) & Director General (ICAR) |
| 2. | Sh. A.K.Upadhyay | Addl. Secretary (DARE) & Secretary (ICAR) |
| 3. | Dr. Rita Sharma | Addl. Secretary & Financial Adviser (DARE/ICAR) |
| 4. | Dr. S.P.Tiwari | Deputy Director General (Crop Science & Horticulture) |

5.	Dr. S.Ayyappan	Deputy Director General (Fisheries & Animal Science)
6.	Dr. P.Das	Deputy Director General (Agril. Extension)
7.	Dr. J.S.Samra	Deputy Director General (NRM)
8.	Dr. H.P.Singh	Deputy Director General (Horticulture)
9.	Dr. Nawab Ali	Deputy Director General (Engineering)
10.	Dr. Mruthyunjaya	National Director (NAIP)
11.	Dr. K.S.Khokhar	Assistant Director General (PIM)

In the absence of the Hon'ble Chairman, Standing Committee on Agriculture, the Committee chose Sh. Khagan Das, M.P., Lok Sabha to act as Chairperson for the sitting under Rule 258(3) of the Rules of Procedure and Conduct of Business in Lok Sabha.

2. At the outset, the Chairperson welcomed the Members of the Committee and the representatives of the Department of Agricultural Research and Education (DARE) to the sitting convened for taking evidence in connection with the examination of Demands for Grants (2007-2008) of DARE/ICAR. The Chairperson drew attention to Direction 55(1) of the 'Directions by the Speaker' regarding treating the entire proceedings of the sitting confidential till the Report of the Committee is presented to the Parliament. He also requested the Secretary to introduce his colleagues.

3. After introduction of the officials, the Secretary gave a brief overview of the budgetary allocation for the year 2007-2008 and also highlighted the activities/achievements made by the Department during the year, particularly with regard to initiating National Agriculture Innovation Project; Indo-US Knowledge Initiative; sanctioning of 14 path-breaking projects under National Fund for Basic & Strategic Research; developing indigenous Bird Flu Vaccine and analysing about 80,000 samples of birds; Horticulture Mission; independent evaluation of KVKs; developing 45 new varieties of different cereals, oilseeds, pulses, etc; and developing Vision 2025 Document for all the 91 Institutes of ICAR, etc.

4. The Chairperson and Members of the Committee raised several queries regarding ATMA and whether DARE has any share in funding provided for it; on KVKs; need for research on having better quality of sugarcane which yields more sugar; on vacancies of scientists and other staff in ICAR and KVKs; need for research on the quality of hormone-injected milk and its effects on animal and human health; low percentage of allocation made to DARE/ICAR during 2007-08 with regard to Central Plan Outlay of Government of India as well as AGDP; reasons for getting Rs.1620 crore (BE) against the projected Rs.1945 crore for 2007-08; internal resource generation and matching grant, etc. The

representatives of the Ministry replied to the queries one by one and assured to send replies to the queries which could not be replied during evidence.

5. A copy of the verbatim proceedings has been kept.
6. The witnesses then withdrew.

The Committee then adjourned with a vote of thanks to the Chair.

(Vide Para 5 of the Preface of this Report)

MINUTES OF THE ELEVENTH SITTING OF THE STANDING COMMITTEE ON AGRICULTURE HELD ON FRIDAY, THE 20 APRIL, 2007 AT 1030 HRS. IN COMMITTEE ROOM 'A', GROUND FLOOR, PARLIAMENT HOUSE ANNEXE, NEW DELHI

The Committee sat from 1030 hrs to 1245 hrs

PRESENT

Prof. Ram Gopal Yadav – Chairman

MEMBERS

LOK SABHA

2. Shri Manoranjan Bhakta
3. Shri Girdhari Lal Bhargava
4. Shri Khagen Das
5. Shri Gadakh Tukaram Gangadhar
6. Shri Prabodh Panda
7. Shri K.J.S.P. Reddy

RAJYA SABHA

8. Shri Harish Rawat
9. Dr. M.S.Gill
10. Shri Vikram Verma
11. Shri Sk. Khabir Uddin Ahmed
12. Shri Sharad Anantrao Joshi
13. Shri M.Rajasekara Murthy

SECRETARIAT

- | | | | |
|----|-------------------|---|------------------|
| 1. | Shri A.K.Singh | - | Joint Secretary |
| 2. | Shri Hardev Singh | - | Director |
| 3. | Shri N.S. Hooda | - | Deputy Secretary |
| 4. | Ms. Amita Walia | - | Under Secretary |

At the outset, the Chairman welcomed the Members. Thereafter, the Committee took up for consideration the Draft Reports on Demands for Grants (2007-08) of the following Ministries/Departments :-

(1) Ministry of Agriculture

(i) Department of Agriculture & Cooperation

(ii) Department of Agricultural Research & Education

(iii) Department of Animal Husbandry & Dairying

(2) Ministry of Food Processing Industries

2. The Committee adopted the Draft Reports with minor additions/modifications, as suggested by the members of the Committee.

3. The Committee then authorised the Chairman to finalise the above-mentioned Reports on Demands for Grants (2007-08) and present them to the House on a date and time convenient to him.

4. The Chairman thanked the Members for their cooperation and valuable suggestions made by them during consideration of the Demands for Grants of the concerned Ministries/Departments.

The Committee then adjourned .