

STANDING COMMITTEE ON AGRICULTURE
(2005-06)

FOURTEENTH LOK SABHA

MINISTRY OF AGRICULTURE

(Department of Agricultural Research & Education)

DEMANDS FOR GRANTS (2006-2007)

NINETEENTH REPORT



LOK SABHA SECRETARIAT
NEW DELHI

MAY, 2006/VAISAKHA, 1928 (Saka)

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Presented to Lok Sabha on 19.05.2006

Laid in Rajya Sabha on 19.05.2006



LOK SABHA SECRETARIAT

NEW DELHI

MAY, 2006/VAISAKHA, 1928 (Saka)

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Composition of the Standing Committee on Agriculture (2005-2006)

Prof. Ram Gopal Yadav – Chairman

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Lok Sabha

2. Shri Hiten Barman
3. Shri Manoranjan Bhakta
4. Shri Girdhari Lal Bhargava
5. Shri Kuldeep Bishnoi
6. Smt. Anuradha Choudhary
7. Shri Khagen Das
8. Shri Dharmendra
9. Shri Sharanjit Singh Dhillon
10. Shri Raghunath Jha
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13. Shri Sippiparai Ravichandran
14. Shri K.J.S.P. Reddy
15. Shri Y.S. Vivekananda Reddy
16. Shri Harihar Swain
17. Shri M.P. Veerendra Kumar
18. Shri Deepender Singh Hooda
19. Vacant
20. Vacant
21. Vacant

Rajya Sabha

22. Smt. Mohsina Kidwai
23. Shri Harish Rawat
24. Dr. M.S.Gill
25. Shri Pyarelal Khandelwal
26. Shri Raj Nath Singh
27. Shri Sk. Khabir Uddin Ahmed
28. Shri Bhagwati Singh
29. Shri Datta Meghe
30. Shri Bashistha Narain Singh
31. Shri Sharad Anantrao Joshi

SECRETARIAT

- | | | | |
|----|-------------------|---|----------------------------|
| 1. | Shri A.K. Singh | - | Joint Secretary |
| 2. | Shri Hardev Singh | - | Deputy Secretary |
| 3. | Shri N.S. Hooda | - | Under Secretary |
| 4. | Sh. Anil Kumar | - | Senior Executive Assistant |

∞ Shri Deepender Singh Hooda nominated as a Member of the Committee on 9 December, 2005 vice Shri Prakash V.Patil expired on 21 October, 2005.

⊕ Shri Lal Chandra Kol ceased to be a member of this Committee due to his expulsion from Lok Sabha w.e.f. 23 December, 2005.

⊗ Shri Mahboob Zahedi ceased to be the member of this Committee owing to his demise on 8 April, 2006.

☆ Shri Shivraj Singh Chouhan has resigned his seat in Lok Sabha on dated 10th May, 2006.

INTRODUCTION

I, the Chairman, Standing Committee on Agriculture, having been authorized by the Committee to submit the Report on their behalf, present this Nineteenth Report on the Demands for Grants (2006-2007) 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 14th March, 2006. 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 12th April 2006. The Committee also took evidence of the representatives of the Ministry of Commerce & Industry, Ministry of Finance and Planning Commission along with the Ministry of Agriculture on 2nd May 2006.

4. The Committee wish to express their thanks to the officers of the Ministry of Agriculture, Ministry of Finance, Ministry of Commerce & Industry and Planning Commission 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 18th May 2006.

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;
18 May, 2006
28 Vaisakha, 1928 (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) comes under the umbrella of the Ministry of Agriculture. 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. There were three National Institutes - Indian Agricultural Research Institute (IARI), Indian Veterinary Research Institute (IVRI) and National Dairy Research Institute (NDRI)

In the year 1972, replying to a debate in the Parliament triggered by an unfortunate incident of suicide by a Scientist, the then Minister of Food and Agriculture announced the formation of a high-powered Committee headed by Shri P.V. Gajendragadkar to examine the functioning of ICAR.

The Committee, emphasizing the importance of Agriculture and the responsibility of the Government to help in the proper and adequate food production, recommended that the Government should assume direct responsibility for Agricultural Research & Education and accordingly recommended that the ICAR may be made a Department of the Union Government under Ministry of Food and Agriculture and be named as Department of Agricultural Research & Education.

The Government, while agreeing to the recommendation to create the new Department, also decided to retain the Indian Council of Agricultural Research as a Registered Society and

also accepted the recommendations of the high-powered Committee for conferring a greater degree of autonomy and flexibility in its functioning. Accordingly, the Department of Agricultural Research and Education (DARE) was created in December 1973 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.

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, (iii) Project Directorates, (iv) National Research Centres, (v) All India Coordinated Research Projects (AICRPs), and (vi) National Bureaux.

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. Thus, they have scientists for research as well as for teaching and extension. They carry out these activities through various divisions in their campuses. 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 are generally smaller than the national institutes in size. They 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. They neither have divisions nor research stations. They are mandated to promote the activities for which they have been established.

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.

The kind of job to be performed, magnitude of the job, need of the research/education/extension, resources available, etc. are the critical factors in determining the establishment of different kind of institutions and systems for effective functioning.

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.

Inter-Organisational Relationship/linkages between DARE and ICAR

1.6 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.

1.7 As per the Annual Report (2004-05) of the Department, the research set up of ICAR includes 47 Central Institutes, 5 National Bureaux, 12 Project Directorates, 31 National Research Centres and 91 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 38 State Agricultural Universities (SAUs), 5 deemed Universities and 1 Central Agricultural University by giving financial assistance in different forms.

1.8 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. Biotechnology 8. Seed Technology 9. National Seed Project
(ii) Horticulture	<ol style="list-style-type: none"> 10. Fruits 11. Vegetables 12. Potato & Tuber Crops 13. Plantation Crops 14. Spices 15. Floriculture, Medicinal & Aromatic Plants 16. Post-Harvest Management of Horticultural Crops
(iii) Natural Resource Management	<ol style="list-style-type: none"> 17. Soil Resource Inventory 18. Cropping Systems Research 19. Water Management 20. Nutrient Management 21. Agroforestry Research
(iv) Agricultural Engineering	<ol style="list-style-type: none"> 22. Farm Implements and Machinery 23. Post-Harvest Engineering & Technology 24. Energy Management in Agriculture 25. Irrigation Drainage Engineering
(v) Animal Science	<ol style="list-style-type: none"> 26. Animal Genetic Resources Conservation 27. Livestock Improvement 28. Livestock Products Technology 29. Animal Health
(vi) Fisheries	<ol style="list-style-type: none"> 30. Capture Fisheries 31. Culture Fisheries 32. Fish Genetic Resources 33. Harvest & Post Harvest Technology 34. Fisheries Education
(vii) Agricultural Economics & Statistics	<ol style="list-style-type: none"> 35. Agricultural Economics & Policy Research 36. Agricultural Statistics & Computer Application
(viii) Agricultural Extension	<ol style="list-style-type: none"> 37. <ol style="list-style-type: none"> a. Krishi Vigyan Kendras and Trainers' Training Centres. b. Technology Assessment and Refinement through Institute

	Village Linkage Programme. 38. NRC on Women in Agriculture 39. Directorate of Information & Publications of Agriculture
(ix) Agricultural Education	40. Strengthening of Agricultural Education 41. National Academy of Agricultural Research Management
(x) Management and Information Services	42. ICAR Headquarters including DARE, Support to National Academy of Agricultural Science (NAAS) & Professional Societies, etc.
(xi) World Bank and other Foreign Aided Projects	43. World Bank Aided – National Agricultural Innovative Project, Other Foreign Aided Project. 44. Indo French proposal on Seabass Breeding and Culture.

CHAPTER – II**Demands for Grants of the Department of Agricultural Research and Education
for the year 2006-07**

2.1 The Demands for Grants of the Department of Agricultural Research and Education (DARE) for the year 2006-07 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 2006-07, the Department has been allocated a total amount of Rs. 2160.00 crore (Rs. 1350 crore for Plan and Rs. 810.00 crore for Non-Plan expenditure) on Revenue Account. Allocations made in 2005-06 and 2006-07 are indicated below:

(Rs. in crore)

Major Head	Budget 2005-06			Revised 2005-06			Budget 2006-07		
	Plan	Non-Plan	Total	Plan	Non-Plan	Total	Plan	Non-Plan	Total
3451-Secretariat Economic Services (Salaries, Travel, Office Expenses, etc.)	-	1.45	1.45	-	1.45	1.45	-	1.55	1.55
2415-Crop Husbandry, Soil & Water Conservation, Animal Husbandry, Dairy Development, Fisheries, Forestry, Contributions to International Organizations, Assistance to CAU, Payment of net proceeds of Cess under APCA, 1940	1035.00	790.55	1825.55	963.55	828.55	1791.55	1215.00	808.45	2023.45
2552-Lump-sum provision for projects/schemes in N.E. & Sikkim	115.00	-	115.00	107.00	-	107.00	135.00	-	135.00
TOTAL	1150.00	792.00	1942.00	1070.00	830.00	1900.00	1350.00	810.00	2160.00

2.3 The detailed Demands for Grants (2005-2006) of the Department were laid on the Table of the Houses (Parliament) on 18 March 2005.

Allocations made to DARE/ICAR out of the total Plan Budget of the Government of India

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.

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 1999-2000 to 2006-2007 are as given in Table below:

The Outlays and Percentages in respect of DARE/ICAR w.r.t. total Central Plan Outlay of the Country is as given in Table below:

(Rs. in crore)

		1999-2000	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	
a.	Plan Outlay/BE for DARE/ICAR	573.50	629.55	684.00	775.00	775.00	1000.00	1150.00	1350.00	
b.	Actual RE for DARE/ICAR	504.00	550.00	684.00	725.00	775.00	900.00	1070.00	--	
c.	Actual Expenditure incurred by DARE/ICAR	455.28	516.34	669.18	680.56	701.78	858.98	1070.00*	--	
d.	Total Plan Outlay/BE of Central Government	103520.93	117333.80	130181.34	144037.80	147892.60	162947.29	211253.49	254041.00	
e.	Total Plan Outlay/RE of Central Government	96310.00	108587.00	127856.00	136867.00	141766.00	150818.15	205338.00		
f.	Percentage of Total Plan Outlay/BE provided to DARE Out of Central Government	0.55	0.54	0.53	0.54	0.52	0.61	0.54	0.53	
g.	Percentage of Actual RE of DARE/ICAR out of total Plan Outlay/RE of Central Government	0.52	0.51	0.53	0.53	0.55	0.55	0.52		
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	0.44	0.44	0.51	0.47	0.47	0.53	0.51**	
		w.r.t RE	0.47	0.47	0.52	0.50	0.49	0.60	0.52	

* Central Plan Outlays provided by Planning Commission/website india.gov.in

** Based on RE 2005-06

2.5 It is observed from the above Table that during the third year (1999-2000) of the Ninth Plan, the percentage of DARE/ICAR's outlay BE as well as RE w.r.t. Central Sector Plan outlay (BE/RE) was 0.55 per cent and 0.52 per cent, respectively. This percentage has been marginally decreasing at BE stage during the years 2000-2001, 2001-2002, 2002-2003 and 2003-2004 as 0.54, 0.53, 0.54, and 0.52 respectively. It has only gone higher during 2004-2005 (third year of the Tenth Plan) to 0.61 per cent at BE stage but actually, remained at 0.55 per cent at RE stage. And, in 2005-2006 the fourth year of the Tenth Plan, this percentage was only 0.54 at BE stage which was even 0.01 per cent lower than the 0.55 per cent in 1999-2000. During the current terminal year of the Xth Plan, i.e., 2006-2007, this percentage is only 0.53 per cent. So, it is very evident from the above analysis that during these eight years, i.e. 1999-2000 to 2006-2007 the percentage share of DARE/ICAR w.r.t. Central Plan Outlay remained statically low, ranging from 0.55 to 0.53 per cent and during 2006-2007 is further likely to go down [from 0.53 per cent (BE stage)] at RE stage.

2.6 When asked about the details regarding amount proposed by them in their budget proposals, allocated, its percentage to AGDP, etc. during the last ten years, i.e. from 1994-95 to 2004-05, the Department furnished the details as indicated below:-

Growth of Financial Outlay of DARE/ICAR as a percentage of Agriculture GDP

(Rs in crore)

Year	Plan			Non-Plan			Total Allocation		Agriculture GDP (AGDP) at current prices	percentage of DARE (BE) allocation w.r.t. AGDP at Current Prices	percentage of DARE's Actual RE w.r.t. AGDP
	Amt. Proposed	Amt. Allocated	Actual (RE)	Amt. Proposed	Amt. Allocated	Actual (RE)	BE	RE			
1994-95	336.67	275.00	274.99	202.00	202.00	220.64	477.00	495.63	255193	0.19	0.19
1995-96	383.50	310.00	290.00	238.86	238.86	245.73	548.86	535.73	277846	0.20	0.19
1996-97	440.34	289.30	310.80	244.08	244.08	255.00	533.38	565.80	334029	0.16	0.17
1997-98	1000.00	331.17	331.17	268.10	268.10	354.32	599.27	685.49	353490	0.17	0.19
1998-99	531.17^	531.17	445.00	475.02	475.02	560.94	1006.19	1005.94	406498	0.25	0.25
1999-2000	712.68^	573.50	504.00	633.79	633.79	800.00	1207.29	1304.00	422392 #	0.29	0.31
2000-01	1082.59	629.55	550.00	864.36	775.00	775.00	1404.55	1325.00	423522 #	0.33	0.31
2001-02	1225.70	684.00	684.00	705.05	705.05	712.09	1389.05	1396.09	473004 #	0.29	0.29
2002-03	1500.00^	775.00	725.00	810.44	723.80	723.80	1498.80	1448.80	456044 #	0.33	0.32
2003-04	1500.00	775.00	775.00	812.27	735.92	735.92	1510.92	1510.92	534689	0.28	0.28
2004-05	1800.00	1000.00	900.00	795.09	753.31	775.00	1753.31	1675.00	556146	0.31	0.30
2005-06	1900.00	1150.00	1070.0	805.07	792.00	830.00	1942.00	1900.00	595389	0.33	0.31
2006-07	2000.00	1350.00	-	837.00	810.00	-	2160.00	-	*		

Source: Agriculture Statistics at a Glance, August 2003 – Directorate of Economics and Statistics, Ministry of Agriculture

Central Statistical Organization

^ These figures exclude catch up grant

@ Agriculture GDP figures including (Agriculture, forestry & logging and fishing. AGDP 2004-05 – Quick Estimates.

AGDP 2005-06 – Advance Estimates.

* Agricultural GDP figures for this year are not available in the document form.

2.7 The percentage of increase in Plan and Non-Plan allocation made for 2006-07 over the year 2005-06 is reported to be 17.39 per cent and 2.27 per cent respectively.

2.8 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 last five years. In reply, the Department stated as under:

“The information on percentage of Agricultural GDP spent on Agricultural research is updated based on the latest available data covering following countries, which include some developed, developing and SAARC countries.

Public Agricultural Research Expenditure

Country	Per cent of AgGDP
India (1999)	0.31
Sri Lanka (1999)	0.81
China (1999)	0.37
Latin America (1995)	0.98
USA (1995)	2.45
UK (1998)	2.89
Germany (1995)	3.52
Japan (1997)	3.93
New Zealand (1995)	3.30
France (1995)	2.00
Australia (1996)	4.02
South Africa (2000)	3.04
All developing countries (1995)	0.62
All industrialized countries (1995)	2.64

Note: For India, it is three year average ending 1999

Source: Pardey and Beintema (2001), Pardey et al. (1999) and www.asti.cgiar.org. India data are estimates by the authors.

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

2.9 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.

2.10 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."

2.11 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).

2.12 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.”

2.13 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.

2.14 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.”

2.15 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.

2.16 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 prioritizing its activities to offset the annual increase in the cost due to these factors.”

2.17 However, instead of getting 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 figures for the year 2005-06 were not made available by the Department in April, 2006 as accounts were yet to be finalized.

2.18 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).

2.19 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.”

2.20 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 prioritizing its activities to utilize the resources optimally.”

One Time Catch-Up Grant

2.21 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.

2.22 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”.

2.23 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.”

2.24 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.”

Main Plan Projects/Schemes of ICAR

2.25 The Committee noted that the Planning Commission had undertaken an exercise of Zero Based Budgeting (ZBB) in which ongoing 235 Plan Schemes were integrated into only 71 Main Plan Schemes to facilitate discussion and finalisation by SFC/EFC and quicken their approval for implementation.

2.26 During scrutiny of DFG (2005-06) of DARE, when asked about the total number of sub-schemes under 71 Main Plan Schemes and whether any schemes/sub-schemes were dropped owing to the exercise of integration of schemes based on ZBB during the Tenth Plan, the Department replied as under:

“The Department has 127 sub-schemes in operation under 71 Main Plan Schemes. The total number of Schemes along with sub-schemes is 198 and 9 Schemes were weeded out during the Tenth Plan.”

2.27 While examining DFG (2006-07) of DARE, the Department informed the Committee about the numbers of sub-schemes in operation under the 71 Main Plan Schemes as under:

“At present there are 180 schemes including 71 main schemes and 109 sub schemes are in operation.”

Budgeting Procedure and Practice being followed in the Department

2.28 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/Project Directorates/Agricultural Scientist Recruitment Board/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 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.”

2.29 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.”

2.30 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.

2.31 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.”

2.32 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.”

2.33 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.”

Zero Base Budgeting

2.34 The Committee enquired about the 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. Owing to the exercise of integration of schemes based on ZBB during the Xth Plan, following 9 schemes were weeded out:

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 Protesta
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.”

2.35 The Committee also enquired as to whether the Department has experienced any direct or indirect gains due to introduction of ZBB in the areas of (a) savings of finances, (b) better research output; and (c) smooth technical and administrative management of schemes etc. and the purpose for which the whole exercise of the integration of Plan Schemes of DARE/ICAR were undertaken has been fully achieved. To these points, the Department replied as under:

“As a result of ZBB exercise, the number of SFCs/EFCs has been reduced to 71. While considering the Xth Plan proposal of SFCs/EFCs, the decisions were taken regarding sharing common facilities of guest houses, costly equipments and other research facilities; thus this indirectly helped in (a) saving of finances, (b) better research output and (c) smooth technical and administrative management of schemes particularly located at the same location.”

New Schemes Initiated during the Tenth Plan

2.36 When enquired about the details of the new schemes initiated during the Tenth Plan, the Department replied as under:

“The Department has initiated following new activities during Tenth Plan, these new activities have been integrated with the existing institutions i.e. no fresh establishment has been created following the directives of Planning Commission.

1. Network Programme on Insect Biosystematics (Part of Indian Agricultural Research Institute , Division of Entomology)
2. Network Project on Transgenics (Part of Indian Agricultural Research Institute / National Research Centre on Plant Biotechnology)
3. Network on Impact, Adaptation and Vulnerability of Indian Agriculture to Climate Change (integral part of All India Coordinated Research Project - Agro meteorology)
4. Network on Organic Farming (this activity will function as an integral part of All India Coordinated Research Project - Cropping System Research)
5. Veterinary Type Culture (Part of National Research Centre - Equine)
6 Seed Production in Agricultural Crops and Fisheries ((as a new activity of the Project Directorate - Seed, Mau)

Apart from above, a World Bank funded project named as ‘National Agricultural Innovation Project’ has already been approved by EFC and is under process before its submission to Cabinet Secretariat for seeking the approval of CCEA as the project cost is Rs 100 crore.

Approval of SFG/EFC/CCEA of Plan Schemes

2.37 The Department was asked to mention the exact date/month/year when the last batch of main Plan Schemes with their sub-schemes (meant for Tenth Plan) were got approved by SFC/EFC/CCEA, respectively, in order to determine the maximum time taken in final approval of these schemes by SFC/EFC/CCEA. To this point, the Department replied as under:

Last batch of main plan schemes with their sub schemes approved by the SFC/EFC/CCEA

SFC		
1	<ul style="list-style-type: none"> • National Institute of Research on Jute and Allied Fibres technology, Kolkata • Indian Agricultural Statistical Research Institute including NCAP • National Academy of Agricultural research and Management (NAARM), Hyderabad • NRC Pig including AICRP Pig 	SFC 24.10.2003
2	Strengthening and Modernization of ICAR Hqrs. including sub schemes	SFC 11.11.2003
3	National Bureau of Agriculturally Important Microbes and Insects, New Delhi	SFC 25.11.2003
EFC		
1	Indian Institute of Sugarcane Research comprising sub schemes	EFC 23.2.2004
2	<ul style="list-style-type: none"> • NRC Weed Science comprising AICRP Weed Control • Central Institute for Research on Goat comprising AICRP Goat • National Dairy Research Institute comprising sub schemes 	EFC 24.2.2004
2	Central Institute of Cotton Research, Nagpur comprising sub schemes	EFC 25.2.2004
CCEA		
1.	Continuation and Establishment of new Krishi Vigyan Kendras (KVKs)	CCEA 20.1.04
2.	Central Agricultural University, Imphal	CCEA 13.1.05
3.	Strengthening and Development of Agricultural Education comprising sub-schemes	CCEA 29.3.2005
5.	Project Directorate on Oilseeds Research, Hyderabad comprising sub-schemes	CCEA 4.5.2005.
4.	Indian Agricultural Research Institute New Delhi	CCEA 11.05.05

	including NCIPM, NRCPB, DMR, AICRPs on Maize, Floriculture, Pesticide Residue, Nematode and Network Projects on Transgenics in Crops and Insects Biosystematics (new activity)	
5	Seed Production in Agricultural Crops and Fisheries (as a new activity of the Project Directorate - Seed, Mau)	CCEA 29.12.2005.

2.38 The Tenth Plan has begun since April, 2002. The perusal of the reply above clearly shows that CCEA clearance to 6 main schemes with sub-schemes were cleared/approved by CCEA as late as 13.1.2005, 29.3.2005, 4.5.2005, 11.5.2005 and 29.12.2005 which means it took about three years to three years nine months time in getting CCEA clearance to these schemes which were costing Rs. 100 crore or more for the Tenth Plan.

2.39 The Committee asked the Department to give details of the 6 main schemes and its sub-schemes with the respective cost of each sub-scheme and total of the main scheme and the dates when the Standing Finance Committee (SFC) and Economic Finance Committee (EFC) of each of these 6 main schemes with sub-schemes cleared the dates on which these 6 main schemes were sent to CCEA for their approval, respectively, in order to determine how much time each of these 6 schemes remained pending with CCEA. To these points, the Department replied as under:

1. “Continuation and Establishment of Krishi Vigyan Kendras (KVKs) - no sub scheme

Amount Approved by the EFC/CCEA	Rs 860 crore
Date of EFC held	30.9.2003 (11th EFC)
Date of Agenda note submitted to Cabinet Secretariat	12.1.2004
CCEA Approved	20.1.2004

2. Central Agricultural University

Amount Approved by the EFC/CCEA	Rs 283.18 crore
Date of EFC held	25.2.2004 & 22.3.2004 (25th & 27th EFC)
Date of Agenda Note submitted to Cabinet Secretariat	31.12.2004
CCEA Approved	13.1.2005

3. Strengthening and Development of Agricultural Education comprising sub schemes

Main Scheme/ Sub Schemes	Approved by the EFC/CCEA (ICAR Share) (Rs in crore)
Development and Strengthening of SAUs	463.87
Development and Strengthening of Deemed Universities	17.11
Development and Strengthening of Central Universities	7.72
Rural Awareness Work Experience	20.10
Best Teacher Award	0.50
Accreditation	2.00
Emeritus Scientist Schemes	7.25
Centre of Advance Studies	13.00
University Level Text Books	0.25
Establishment of Jammu University	68.00
AHRD Spill Overs	0.32
Niche Area (Centre of Excellence)	100.00
Total	700.12
AICRP Home Science	19.72
Grand Total (ICAR Share)	719.84
State Share	83.91

Date of EFC held	23.2.2004 & 22.3.2004 (23rd & 27th EFC)
Date of Agenda Note submitted to Cabinet Secretariat	10.12.2004 (Ist time)
Agenda Note returned to Deptt. for Rectification/revision	17.12.2004
Modified Agenda Note submitted to Cabinet Secretariat	29.12.2004
Deferred in the CCEA meeting	13.1.2005
Again re-submitted to Cabinet Secretariat	17.3.2005
CCEA Approved	29.3.2005

4. Directorate on Oilseed Research, Hyderabad comprising sub schemes

Main Schemes and Sub Schemes	Approved by the EFC/CCEA (ICAR Share) (Rs in crore)
Directorate of Oilseed Research, Hyderabad	9.64
AICRP on Sunflower, Safflower, Castor Hyderabad	17.25
NRC Groundnut Junagarh	8.79
AICRP Groundnut, Junagarh	13.61
NRC Rapeseed & Mustard, Bharatpur	8.59
AICRP on Rapeseed & Mustard, Bharatpur	17.10
NRC Soybean, Indore	7.72
AICRP on Soybean, Indore	9.54
AICRP on Sesame and Niger, Jabalpur	11.36
AICRP on Linseed, Kanpur	9.68
Total (ICAR Share)	113.28
Total State Share	23.17

Date of EFC held	8.1.2004 (21st EFC)
Date of Agenda Note submitted to Cabinet Secretariat	15.2.2005 (Ist time)
Modified Agenda Note submitted to Cabinet Secretariat	26.4.2005
CCEA Approved	4.5.2005

5. Indian Agricultural Research Institute comprising sub schemes

Main Schemes and Sub Schemes	Approved by the EFC/CCEA (ICAR Share) (Rs in crore)
Indian Agricultural Research Institute, New Delhi	60.25
NRC Integrated pest Management, New Delhi	4.36
NRC on Plant Biotechnology, New Delhi	16.43
Directorate of Maize Research, New Delhi	13.79
AICRP on Maize, New Delhi	19.65
AICRP Floriculture, New Delhi	6.28
Network on Pesticide Residue, New Delhi	12.11
AICRP on Nematodes, New Delhi	7.94
Network Project on Transgenics in Crops, New Delhi	32.86
Network Project on Insect Biosystematics, New Delhi	8.22
Total (ICAR Share)	181.89
State Share	14.25

Date of EFC held	26.2.2004 & 22.3.2004 (26th & 27th EFC)
Date of Agenda Note submitted to Cabinet Secretariat	15.2.2005 (Ist time)

Agenda Note returned to Deptt. for Rectification/revision/obtaining comments of DST	22.2.2005
Modified Agenda Note submitted to Cabinet Secretariat	3.5.2005
CCEA Approved	11.5.2005

6. **Seed Production in Agricultural Crops and Fisheries (New Activity)**

Amount Approved by EFC/CCEA	Rs 198.90 crore
Date of EFC held	4.8.2005 (28th EFC)
Date of Agenda Note submitted to Cabinet Secretariat	13.12.2005
CCEA Approved	29.12.2005”

2.40 When asked about the rationale in getting the Plan schemes approved which are meant to be operational in all the five years of a Plan, after expiry of 3 to 4 years for implementation, the Department replied as under:

“The exercise on Zero Based Budgeting(ZBB) was undertaken in conformity with the directions of Government of India in consultation with Planning Commission. Although the outlays of some of the schemes exceeded Rs 100 crore because of merger/clubbing of plan schemes, however, the Department had to handle less number of SFC/EFC which reduced the work load.”

2.41 The Committee sought the reaction of the Department in case they would like to learn from the past and take advance/timely action to prepare their 11th Plan SFC/EFC as the current

financial year is the terminal year for the 10th Plan, so that all the main schemes with sub-schemes are implemented in the very first year of the 11th Plan without making these schemes suffer for going through the long procedure of getting SFC/EFC/CCEA clearances for 2 to 4 years. To this point, the Department reacted as under:

“The Department has noted the essence of the suggestions made by the Committee and would endeavor to implement the same. However, the preparation of XIth Plan SFC/EFC proposals would depend on many pre-requisites such as constitution and subsequent recommendations of the XIth Plan Working Group; finalization of the Approach Paper to XIth Plan by Planning Commission and other related instructions; the communication of XIth Plan outlay of the Department; in-principle approvals of the new initiatives by the Planning Commission etc.”

Agricultural Research through National Fund for Strategic Agricultural Research

2.42 The Committee noted that The Finance Minister in his Budget speech on 28.02.2005 had said, “Agricultural Research has a vital role to play in the strategy for reviving and encouraging diversification. Our agricultural universities and research institutions have done good work in the past and now need to be strengthened and modernized. A Task Force headed by Dr. M.S. Swaminathan had recommended the creation of a National Fund for Strategic Agricultural Research (NFSAR). I am happy to announce an initial provision of Rs. 50 crore for operationalising this fund.” The Department was asked to furnish the broad details about the Fund created, the time schedule for its operation, etc. and whether the existing research work/project under the DARE/State Agricultural University etc. and scientists working would be

a part of this new Fund to avoid double expenditure for same work/research. To these points, the Department replied as under:

“The national fund for basic and strategic research in agricultural sciences is created for strengthening basic and strategic research for development of technologies in enhancing the efficiency and effectiveness of Indian agriculture. The time schedule of the fund is 2005 – 06 and 2006 – 07 of the 10th Five Year Plan and likely to continue during the 11th Five Year Plan.

The existing research work/project under the DARE/State Agricultural University etc. and scientists working would be a part of this new Fund to avoid double expenditure for same work/research.”

The Committee noted that Rs. 0.50 crore were allocated in 2005-06 for National Board for Strategic Research but at RE stage, the allocation has been reduced to Rs. 0.25 crore. When asked about the reasons for the same, the Department replied:

“Since the national fund is a new concept, open to all and totally competitive, it took time to get the necessary guidance from the wide range of expertise including Planning Commission and Finance Ministry before formulating the modalities of operating the fund. It was finally decided that an Empowered Committee with very eminent scientists would best serve the purpose of operating and managing the fund. The EFC meeting for the Fund was conducted on 1st Feb. 2006. The first meeting of the EC was held on 23 March 2006. Thus, it was obvious that the funds allocated in the BE for the year 2005-06 could not be used and as such the RE was revised to Rs. 25 lakh. The BE for the year 2006-07 has been kept at Rs. 50 crore because the Fund will be fully

functional in the year 2006-07. The first advertisement calling for proposals for projects was published very widely on 27 March 2006.”

Status of Implementation of Schemes/Projects of DARE/ICAR meant for North East States

2.43 The Department was asked to give the details of the various schemes/Projects of DARE/ICAR meant for NE States and their status of implementation during each of the last five years. To these points, the Department replied:

“The NEH region comprising Arunachal Pradesh, Assam, Meghalaya, Nagaland, Manipur, Tripura, Mizoram and Sikkim is spread over 26,000 km² area, making a home for about 40 million people. The region covering north-eastern and eastern Himalayan ranges falls under high rainfall zone with subtropical to alpine type climate. About 77% area is under forest encompassing broad leaf, coniferous and bamboo type. The agricultural lands occupying about 15% area are used for raising a variety of cereal, pulse and oilseed, horticulture and plantation crops. With no major industries, the economy of the region is basically agrarian. About 82% population depends for its livelihood on agricultural and allied sectors. But, the agricultural productivity of the region is still very low due to poor soils resource, monocropping, insignificant use of improved production inputs (High yielding crop varieties/livestock and fertilisers), poor water management, lack of mechanization, absence of food processing /value addition and poor market infrastructure etc. The region produces 5.8 million tonnes of food grains against the requirement of about 7.5 million tonnes. The per capita availability of milk, meat, eggs and fish per annum is only 31.5 litres, 9.4 kg, 33.5 nos. and 4.1 kg. respectively. The low

productivity is one of the major factors for the continued economic and social backwardness in the region.

The DARE/ICAR has initiated several research and development endeavours by opening ICAR Institutes/SAUs to remove prevailing production constraints and bring out all-round development of agriculture and allied sector in the region. The focus of the research is on development of situation specific farming system models integrating cereal/horticulture/agroforestry/plantation crops with livestock (piggery, rabbitry, backyard poultry, duckery, mithun), fisheries/aquaculture and several other agri-enterprises like mushroom production, apiculture, bamboo based products including edible bamboo. With plenty of run-off in the region, the water harvesting assumes special significance for augmenting irrigation and development of fishery/aquaculture in the stored water. The soils of the region are acidic in nature which limit crop yields due to severe deficiencies as well as toxicities of certain nutrients. Liming along with adequate fertiliser use has a potential to double the productivity of the crops. About 1.3 million ha prone to severe soil erosion (Soil loss rates of 40-80 tonnes/ ha/ year), especially under shifting cultivation need to be rehabilitated.

With abundant rainfall and sub tropical to temperate climates, the region is ideal for development of horticulture sector. Various fresh and processed horticultural products (fruits, spices, medicinal and aromatic produce, edible bamboo, flowers, orchids and cacti etc.) have a great export potential. The region is also most ideal for organic farming. The total area under horticulture presently is 3.1 % of the total area of the region. The productivity level is below the national average. The important fruit crops are banana, citrus, pineapple, papaya, litchi, apple, guava, passion fruit, mango and kiwi etc. The

vegetable cultivation is limited in the region. There is still need for greater R&D efforts to boost horticultural production in the region.

Salient Research Achievements :

- Developed integrated agri-horti-silvi-duckery-fishery, rice-fish and pig-cum-fish farming system models and demonstrated on watershed basis.
- Developed a three-tier system with trees on upper ridges, horticulture crops in the middle portion and agricultural crops in the lower portion of the hill slopes as an ideal alternative system to *jhuming* cultivation.
- Developed technology package for amelioration of acid soils through liming along with adequate use of fertilizers.
- Developed and released improved crop varieties for higher yields and disease/insect-pest resistance of rice(12), maize (4), wheat, barley, oilseeds, pulses, forages & groundnut.
- Around 3,000 germplasms of different crops collected and conserved.
- Developed and released improved varieties of fruits, vegetables, spices, plantation and floriculture crops.
- Technology developed for oyster mushroom production for raising farmers' income.
- Disease free planting material produced through tissue culture and other production techniques for distribution among farmers.
- Soft wood grafting in khasi mandarin standardized with >90 % success rate.
- Technology package developed to rejuvenate declined citrus orchards

- Promoted large cardamom-and black pepper-based agroforestry models.
- Various farm tools and machineries developed suiting to hill agriculture.
- Diagnostics against gastro-intestinal parasites of livestock developed.
- Developed vaccines for control of dreaded cattle diseases.
- Developed feeding systems using locally available feeds and forages for poultry, goats, rabbits and pigs.
- Artificial insemination in Yak used for the first time.
- Technology for making cottage cheese, dahi, acido-whey and lassi from Yak milk and Yak meat-cutlets standardized.
- Pig farming popularised in NEH region under Jai Vigyan Project.
- Veterinary services provided to the yak herdsman as well as to the other animals.
- Package of practices developed for economic mithun rearing and demonstration.
- Developed PCR-based diagnostic protocols for animal diseases.
- DNA and RAPD marker studies carried out on Yaks.
- A comprehensive technology package for rearing broiler rabbits was developed and transferred to farming community.
- Developed skill of people in breeding and culture of fish/shellfish/masheer/trout
- Technology for enhancement of fish productivity and production in open waters such as lakes and beels, including pen culture standardised.
- Designed and fabricated resource specific fishing boats and nets suitable for NEH region.
- Value added fish products developed.

- Cost effective package of practice for commercial production of exotic ornamental fishes like Gold fish and Platty developed.”

2.44 When asked about the 10% of the Plan Budget allocated for the Schemes of DARE/ICAR meant for NE States have been fully utilized during each year of the 10th Plan, the Department stated as under:

“The Department is making a lump sum allocation of 10% for incurring expenditure in North Eastern States for the Plan schemes being implemented in those regions. The main institutes located in NE Region are:

- ICAR Research Complex for NEH Region, Barapani
- NRC Yak
- NRC Mithun
- NRC Orchids
- NRC Pig.
- Central Agriculture University with its constituent colleges in different states
- Assam Agriculture University, Jorhat with its constituent colleges

The 10% allocations and funds drawn in respect of North-Eastern Region during the year 2002-03 to 2005-06 under Plan are as under:

<i>(Rs. in Crores)</i>		
Year	Amount of 10% Plan allocation	Grants Drawn
2002-03	72.50	57.50
2003-04	77.50	69.65
2004-05	90.00	71.89
2005-06	107.00	107.00

2.45 Through a supplementary point the Department was again asked to give reasons for not utilizing 10% of plan funds allocated for NEH region during each of the four years of the Xth Plan? Please give specific reasons for the shortfall in achieving the financial targets, year-wise, during each year of the Xth plan. Department in their reply stated:

“The table given below indicate that the quantum of funds drawn by the Department for North East region are increasing progressively. In the Year 2005-06, 100% funds for North East have been drawn and it is estimated that the expenditure will be satisfactory. The Department is putting all out efforts to utilize 10% of its plan allocations for NEH Region, however, being a scientific Department, it has its own limitations in terms of the number of Plan schemes being implemented in the North East, coupled with general law and order situation/disturbed conditions/local problems.

(Rs. in Crores)

Year	Amount of 10% Plan allocation	Grants Drawn
2002-03	72.50	57.50
2003-04	77.50	69.65
2004-05	90.00	71.89
2005-06	107.00	107.00

”

Role of DARE/ICAR to bring in the Second Green Revolution

2.46 The Committee keenly enquired as to whether India need a second Green Revolution and by when people can expect a major breakthrough for the same by Indian Agricultural Scientists along with details of any plan of action to usher India into the Second Green Revolution. To these points, the Department replied as under:

“India is one of the success stories of the Green Revolution which began with the identification and introgression of dwarfing genes into traditional wheat and rice cultivars resulting into development of a number of high yielding semi-dwarf varieties of wheat and rice. They were also non-lodging, photoperiod insensitive, fertilizer and other input responsive. The adoption of these varieties on a large scale enhanced the production and productivity of wheat and rice and made the country self-sufficient in food.

The introduction of the first modern varieties (MVs) 'Kalyansona' of wheat in 1967 and 'Jaya' of rice in 1968 kicked off the beginning of green revolution (GR) in India. Since then, about 3200 MVs of different food, fodder, fiber, and horticulture crops were released-primarily from the public sector research and development system - over the past 40 years of the green revolution period. The favorable public policy support - largely centered on rice and wheat - in the form of price and market support, input subsidy, etc., besides the access of the suitable MVs in the 1960s and 1970s induced the farmers to invest more land, labour and capital resources for the extensive and intensive cultivation of rice and wheat particularly in the irrigated environments. The phenomenal increases in the yield of rice and wheat crops are the chief sources of increased foodgrain production over the past 40 years of the green revolution (GR) period.

In wheat, more than 300 varieties are released. The wheat variety PBW343 released during mid-nineties further facilitated in enhancement of production and productivity. This variety presently covers more than 5 million/ha in North Western & North Eastern plain zone areas. This dramatic increase in wheat production, heralded as Green Revolution, had transformed the country's food security and agricultural economy.

National average of wheat yield had increased from about 1 ton per hectare in the early 1960s to nearly 2.71 tons per ha during 2003-2004.

In rice, a large number of semi dwarf varieties with high yield and tolerance to stresses have been developed and popularized between 1965-75. This resulted into enhancement in rice productivity from 668 kg/ha to 1235 kg/h in 1975-76. Further improvement in plant type suitable for various eco-systems and incorporation of resistance against biotic and abiotic stresses further enhanced the rice productivity to 2051kg/ha during 2003-04. More than 750 rice varieties have been released. Rice hybrids are also contributing for higher production with the advantage of 1- 1.5 t/ha over the varieties.

However, the First Green Revolution generally missed the less resource endowed rainfed areas. One of the most important aspects of First Green Revolution was pursuing intensive agriculture leading to substantial natural resource degradation particularly soil and water. There is a general fatigue of the Green Revolution areas/pockets leading to deceleration in the rate of growth of total factor productivity.

The Committee were further informed by the Department that the country needs the Second Green Revolution that would benefit small and marginal farmers in rain-fed and drought prone regions besides addressing the second generation problems of intensive irrigated agriculture. These technologies need to address: a. integration of crops, horticulture, animal science and fisheries in holistic manner; b. enhancement in agricultural productivity; c. increasing the use efficiency of nutrient, energy and water; d. promotion of labour using efficient and relevant technologies in-farm/ non-farm business; e. application of science and bio-technology to the improvement of seeds.

In order to enhance the income and profitability of the farmers, there is strong need to promote the agriculture in a holistic manner. This includes the integration of crops, horticulture, livestock, fisheries, poultry and processing etc. The second green revolution requires enhanced investment in agricultural research and development in the key areas and also policy support, marketing, processing etc.

Important thrust research areas during the second green revolution are: development of superior varieties /hybrid of different crops with high yield and resistance to biotic and abiotic stresses, promotion of hybrid technology, resource conservation technologies to reduce the cost of cultivation and maximize profit for the farmers, Efficient genotypes for different traits, water use efficiency, protected agriculture, short duration varieties of crops particularly maize, pulses, oilseeds, pearl millet, sorghum as well as vegetables/flowers etc. need special emphasis. Integrated management of nutrient to improve its production capacity will be essential for sustainable agriculture. Enhancing availability of quality seeds and planting material would be essential. Diversification of crops is key to ensure the sustainability and profitability in Agriculture along with integrated farming.

The focus of research will include: a. Productivity increases with eco-efficiency; b. developing agro-products and varieties on the basis of consumer preference; c. Improving use efficiency of all agricultural inputs; d. Integrated water management and conjunctive use of water; e. Integrated Nutrient Management; f. Integrated Pest Management; g. Conserving disappearing food or reducing post-harvest losses; h. Expanding food basket; and i. Socio-economic Research to identify constraints in technology adoption.

The Department further elaborated on the issue as under:

“For enhancing the productivity under the rain-fed conditions, millets as a group offer great opportunity. Realizing the nutrient composition of these grains, they are now considered as nutri-cereals (nutritious grains). These crops are grown in diverse soils, varying rainfall regimes and in areas widely differing in thermo and photoperiods. The resilience exhibited by these crops is helpful in their adjustment to different kinds of ecological niches and have made them quite indispensable to rain-fed, tribal and hill agriculture where crops substitution is difficult. It is important to enhance production and productivity of these crops to ensure food and nutritional security. Being eco-friendly crops, they are suitable for fragile and vulnerable ecosystems and regarded as preferred crops for sustainable and green agriculture. The promotion of these crops can lead to Efficient Natural Resources Management and holistic approach in sustaining precious agro-biodiversity.

The development and refinement of seed production technology and enhanced production of breeders seed will facilitate in higher availability of quality seed to the farmers. A project on seed production in agricultural crops and fisheries has been sanctioned for two years (2005-07) during Xth Plan with an outlay of Rs.198.89 crore which will help in enhancing breeder seed production, planting material in quality seed production. It will also facilitate the fisheries seed production. Ultimately it will facilitate higher production of quality seeds-foundation and certified seeds.

New initiatives like National Fund for Basic and Strategic Research, likely launching of National Agricultural Innovation Project, Indo-US Knowledge Initiative etc.

are likely to help in this direction. Researches in genomics, transgenics, integrated pest management, production to consumption system research etc. are steps taken for realizing second green revolution.

New challenges have also emerged meanwhile coinciding with globalization efforts and WTO regime. Thus, the market and trade context has become equally important for success in farming. Along with new challenges, greater opportunities are also visible for harnessing new sciences like bio-technology, nano-technology, information and communication technology etc. In the context of useful lessons learnt from the First Green Revolution and the challenges and opportunities visible now, second green revolution need to be carefully planned and executed.”

2.47 The Committee noted that the Department in their reply above have stated that “..... second green revolution need to be carefully planned and executed”. The Committee felt that the useful lessons/shortcomings of the first Green Revolution which the Department has referred to in their reply have been very well known/visible to the Department as well as to all the stakeholders in Indian Agricultural scenario for the past more than 10 years. The Committee, therefore, were keen to know as to why the Department has failed till date to chalk out/has not prepared any plan of action so far to combat/tackle the problems/shortcomings of the first Green Revolution as these problems are very well know to them for the last more than 10 years and in case the Department has fixed any time limit as to by when they will be ready with concrete plan of action for the Second Green Revolution/Evergreen Revolution taking into account all the aspects involved. To these points the Department stated as under:

“The Department of Agricultural Research and Education/Indian Council of Agricultural Research is fully seized of the researchable issues to combat/tackle the

problems/shortcomings of the first green revolution and also developed the technologies to meet the research need of second green revolution. Greater emphasis has been given for development of high yielding varieties and hybrids for enhancing the productivity of various crops. The recent wheat varieties such as PBW343 and PBW502 have the potential of producing 5 to 5.5 ton per hectares. Similarly, the rice hybrids such as KRH2 has potential to produce about 6.5 ton per hectare. For enhancing the export of Basmati rice, first super fine Basmati rice hybrid PUSA RH10 has been released. To tackle the Salinity, CSR30 a super fine rice has been developed. For enhancing the nutritional quality, Shaktiman 1, Shaktiman 2, Shaktiman 3, quality protein maize hybrids with yield potential of more than five tons have been developed. For enhancing the productivity of rainfed areas, a number of varieties/hybrids which perform well have been developed in case of rice, wheat, pearl millet, Sorghum, Small Millets and other crops.

For increasing the profitability and input use efficiency, the resource conservation technology such as Zero tillage, which saves about Rs.2500/- per hectare is being popularized. Similarly, furrow irrigated raised bed system technology saves around 25% of water. In crop diversification options under rice wheat system, pigeon pea-wheat/rice pea, wheat /rice potato wheat and Green gram are evolved. The appropriate cropping system are also available for different areas to enhance the cropping intensity. Integrated nutrient management including use of green manuring, farmyard manure, biofertilizers are suggested to improve the soil health. Similarly integrated pest management including the use of bio agents are developed for safety of environment. Integration of crops, horticulture, livestock and fisheries models have also been developed.

The seed production technology in various crop and hybrids have been developed and refined. The demand of breeder seed of indented varieties have been fully met with by producing more than 75,000 q. of breeder seed. A project on seed production in agricultural crops and fisheries has been sanctioned for two years during Xth Plan with an outlay of Rs. 198.89 crore which will help in enhancing breeder seed production and quality planting material. It will also facilitate the fisheries seed production.

New initiatives like National Fund for Basic and Strategic Research and launching of National Agricultural Innovation Project, Indo-UK knowledge initiatives will further facilitate in enhancing the research capability and technology development in newer areas. The Initiatives have also been taken to develop the transgenics in various crops insulated with resistance to biotic and abiotic stresses. For this purpose, a project for Rs. 32.85 crore have been launched during Xth Plan.

DARE/ICAR has generated the relevant technologies to usher the second green revolution. However, proactive role on the part all other stakeholders is called for. For successful Second Green Revolution, the policy initiatives such as ensuring the timely availability of inputs such as quality seeds, water, fertilizers/other agri. chemicals, marketing and appropriate price support, value addition, and development of agro processing industries, appropriate storage, extension services, credit availability, development of irrigation and appropriate water harvesting structures etc. will be required.”

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

2.48 The Committee were apprised that the position of employees in position as given in the Annual Reports of the DARE/ICAR are as below:-

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

*As on 30th Sept. of previous year

2.49 When asked as to 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 replied as under:

“The Department has been implementing the Government's orders / norms of reducing the number of employees by 2% every year in all other categories (except in the scientific category) under direct recruitment quota.”

2.50 The Committee wanted to know that in pursuance of the Committee's recommendation No. 6 and Recommendation No. 9 of 10th Report (2005-06) and Recommendation No. 6 of 2nd Report (2004-2005) regarding urgency to fill all the vacancies in ICAR, and removing all the

restrictions 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 the Department replied as under:

“Presently, recruitment action is in various stages of process in the Agricultural Scientists' Recruitment Board (ASRB) for about 575 positions in different grades. Steps have been initiated to get the remaining vacancies in the scientific cadre advertised and filled up on top priority.”

2.51 Through a supplementary reply, the Committee were further apprised about the latest position/status of the issue of getting the restrictions removed by the Ministry of Finance and Department of Personnel and Training on filling up all the vacancies/recruitment under scientific categories of ICAR as under:

“The instructions of DOPT dated 16.5.2001 specifies that about 3% of staff retires every year and by reducing the manpower intake by 2% per annum a reduction of 10% in 5 years can be achieved. The Department has accordingly implemented the provisions of this order by limiting direct recruitment to 1/3rd of direct recruitment vacancies arising in a year from 2001 onwards subject to a further ceiling that this does not exceed 1% of the total sanctioned strength of the Department. The last such restriction was meant for the vacancies arising in the year 2005-06.

The Department shall fill up all subsequent vacancies on top priority basis.

Regarding the scientific category the Hon'ble Finance Minister has clarified during the general budget discussions concerning demands for grants for the Ministry of Agriculture on 14.3.2006 that the scientific positions are exempted from these

restrictions. Accordingly action has been initiated to get the vacancies in the scientific cadre advertised and filled up.”

2.52 When asked about the impact of reduction in the work force as per Government’s norms with particular reference to highly technical and scientific manpower, the Department replied as under:

“Earlier the new initiatives were managed by redeployment of the available scientific manpower. Recruitment action has been initiated for filling up all the vacant positions on regular basis in the scientific category.”

Agricultural Extension

2.53 The BE, RE & Anticipated Expenditure 2005-06 and BE 2006-07 have been observed for the schemes under AE sector as under:

Major Head 2415 (Rs. in lakh)

Sl. No.	Name of the Scheme	BE 2005-06	RE & Anticipated Expenditure 2005-06	Shortfall/ Excess	BE 2006-07
1.	Krishi Vigyan Kendras (New + Old)	24331.00	24836.64	(+)505.64	26782.00

The Department was asked to furnish detailed bifurcation of the specific amounts meant for New and Old KVKs respectively out of Rs. 26782.00 lakh allocated in BE 2006-07. To this point the Department replied as under:

“The Government has approved for establishment of 578 KVKs during Xth Plan, of which 524 have been sanctioned till 30th March 2006. Rs 26782.00 lakh include continuation of 524 KVKs and establishment of 54 new KVKs during 2006-07. A

number of Site Selection Committees are in the process of examining the logistics for establishment of new KVKs.”

2.54 When asked about the excess expenditure of Rs. 505.64 lakh that have been incurred on KVKs than the BE (2005-06), the Department stated as under:

“The additional funds were allocated for providing approved infrastructural facilities to the KVKs established during the year as well as implementing the approved activities of the KVK.”

2.55 On the points about the new KVKs included in this outlay of 2006-07 and the latest/updated position with regard to (a) fully functional; (b) semi/partially functional; (c) Non-functional KVKs in the country, the Department replied as under:

“It is proposed to sanction 54 new KVKs during 2006-07. Besides provision has also been made for one KVK in each of 10 newly created districts, the proposal for which has been submitted to the appraisal agencies before its submission to CCEA. The proposal for establishment of KVK in one newly created district of Bihar (Arwal) has also been received.

There were six non functional KVKs; four of which namely KVK, Burdwan (West Bengal), KVK, Virudhunagar (Tamil Nadu), KVK, Jahanabad (Bihar) and KVK, Kolar (Karnataka) have been made functional. The other two KVKs are KVK, Kathua (Jammu & Kashmir) and KVK Vidisha (Madhya Pradesh). The KVK, Kathua has been ordered to be transferred to the Sher-E- Kashmir University of Agricultural Sciences and Technology, Jammu. The University is yet to submit the required papers. The issue of transfer of KVK at Vidisha to Jawahar Lal Nehru Krishi Vishwavidyalaya is subjudice. A KVK at Sant Ravidas Nagar (UP) under Allahabad Agricultural Research Institute

Allahabad has been recently closed down following withdrawal of land allotted earlier by the Collector, and reluctance of the Organization to follow the guidelines. The remaining KVKs are functional.

PART II
RECOMMENDATIONS/OBSERVATIONS

Recommendation No. 1

Urgent Need for increasing DARE/ICAR Outlay to at least 1 per cent of AGDP

The Committee note that the Planning Commission had constituted the Tenth Plan Working Group for the Department of Agricultural Research and Education (DARE) and the Working Group had recommended that the DARE should be provided one per cent of the Gross Domestic Product of Agriculture and Allied Sector (AGDP) which amounted to approximately Rs. 25,000 crore at that time. As a matter of fact, this recommendation of the Tenth Plan Working Group for DARE was in tune with the often repeated recommendation of the Parliamentary Standing Committee on Agriculture as well as the Ninth Plan Working Group for DARE which had recommended that DARE should be provided at least one per cent of AGDP initially, with a gradual increase up to two per cent of AGDP in subsequent years. Against the most needed minimum one per cent of AGDP outlay, the Department had proposed a minimum requirement of Rs. 15,000 crore, plus a one time catch up grant of Rs. 1,000 crore for the Tenth Plan. However, the Planning Commission approved an amount of only Rs. 4,868 crore, which was subsequently raised to Rs. 5,368 crore by providing Rs. 500 crore for setting up new Krishi Vigyan Kendras (KVKs).

The Committee note that Sri Lanka and Latin American countries spend 0.81 per cent and 0.98 per cent of AGDP on Agricultural Research, respectively. Astonishingly, in comparison to some of the leading industrialized countries whose spending on

agricultural research ranges between 2.45 per cent and 4.02 per cent of AGDP, India's spending on agricultural R&D ranged between 0.17 and 0.32 per cent during the last one decade which was even less than the average of all the developing countries.

The Committee are unable to comprehend the constraints of the Planning Commission why they could not earmark adequate resources for DARE based on the recommendations of its own Working Group during the Ninth and Tenth Plans and the recommendation of the Parliamentary Standing Committee on Agriculture to increase the Tenth Plan outlay to at least one per cent of AGDP for the DARE which should be gradually increased to 2% of AGDP as has been happening in the case of agriculturally advance Countries. Considering the role of an applied research-based Department like DARE and its potential to accelerate the growth of agriculture and allied sectors, the Committee hope that the Government will earmark higher outlays for the Department in accordance with its declared commitment to accord priority to agriculture and the allied sectors so that India emerges a stronger, and gradually the strongest, global player in the field of agricultural produces and exports. The Committee would also like to know from the Government/Planning Commission that how they can expect DARE/ICAR to usher India into the long awaited Second Green Revolution and make India self-reliant in all agrarian and allied produces, so as to feed the ever growing population for decades to come with too meager public funding of about 0.3% AGDP?

However, the Committee are of the opinion that in view of the continuous funds constraints for the R&D activities of DARE/ICAR, instead of always depending upon Government funding for their agrarian and allied research institutions, DARE/ICAR may consider the Mashelkar Committee formula for being financially self-reliant in running in their R&D activities by earning from their research work. DARE/ICAR may also consider the option of taking loans from public/private financial institutions which may be repaid from the earnings of their research work. This will fill up the gap of low budgetary grants from the Government.

Recommendation No. 2**Insufficient allocation to DARE/ICAR in 2006-2007**

The Committee note that the Department proposed an outlay of Rs. 2,000 crore for 2006-07 but has been allocated only Rs. 1,350 crore. Obviously, the reduced allocation by Rs. 750 crore will hamper the functioning of the Department, particularly in vital research areas. The Department has put up an additional demand of Rs. 5,000 crore for the Tenth Plan to address the research and developmental aspects related to enhancement of productivity, input use, efficiency, modernization of infrastructure and centres of excellence in State Agricultural Universities (SAUs). For the year 2006-07 also the Department had taken up the issue at the highest level seeking additional funds for priority areas.

The Committee are of the considered view that addressing of all the important areas of agricultural research, development and education, practically require huge and well planned funding. Unfortunately, the Planning Commission and the Ministry of Finance seem to have been ignoring the genuine and pressing demands of the DARE/ICAR to provide higher amount of public funding than being provided at present for the R&D activities of the DARE/ICAR to prove their talent. This will give them encouragement to put in more dedicated efforts in making new strides in the Agriculture sector and the benefits of which only reach to the common people of the country.

The Committee, therefore, strongly recommend that the Planning Commission and the Ministry of Finance should reconsider the genuine requirement of funds for DARE/ICAR during the terminal year of the Tenth Plan as an additionality over and

above Rs. 5,368 crore already allocated for this Plan. The Committee also recommend that for the year 2006-07, as part of Department's proposal of Rs. 2000 crore, as discussed earlier, Rs. 750 crore should be provided at RE stage to the Department in addition to the BE of Rs. 1,350 crore already provided, so that the research and educational activities of the Department get a real thrust and impetus in the emerging global agrarian scenario.

Recommendation No. 3**Entire Budgetary Process requires Reformative Changes**

While examining DFG (2006-07) of the DARE, the Committee again looked into the actual implementation aspect of the recommendation No. 5 and recommendation No. 4 of their 2nd Report (2004-05) and 10th Report (2004-05) (14th Lok Sabha) respectively. There were two aspects of these recommendations, i.e., the first aspect was that the Planning Commission and Ministry of Finance should be able to clear and convey/make available RE/BE grants/funds to the concerned Department sometime in the month of December or little earlier every year by reforming the tardy Budgetary Process. And, the second aspect was that as soon as the concerned Department has been conveyed/provided the funds it should be able to convey the same to the concerned institutes/divisions immediately and expeditiously in the month of December or a little earlier so that the institutes/divisions have sufficient time at their disposal for the optimum utilization of the scarce public funding provided to them for the ultimate welfare of the nation.

The Department in its Action Taken Reply on the Second Report of the Committee has stated that “the recommendation of the Parliamentary Standing Committee on Agriculture is valuable. The above recommendation of the Committee was forwarded to Ministry of Finance and Planning Commission. The Ministry of Finance has intimated that they have noted the recommendation and that all efforts will be made by them to comply with the recommendation. The Planning Commission also communicated that the budget allocations for the ongoing schemes/projects are being made on the basis of

approved Annual Plan outlays, which allows a degree of certainty about the availability of funds to the Department and its lower formation.”

The Department in its Action Taken Reply on the Tenth Report of the Committee has stated, “the recommendation of the Committee for streamlining the budgetary process for ensuring that the final Plan and Non-Plan allocations are conveyed to the concerned Institutes/Divisions by the month of December every year, was referred to Planning Commission and Ministry of Finance. The Planning Commission responded that it will support any step that may speed up the budgetary process’. The Ministry of Finance responded that ‘As far as the Budgetary process is concerned, pre-budget meetings are held during October and November to finalize ceilings after taking into consideration the expenditure trend till September. Subsequently, the ceilings for RE (both Plan and Non-Plan) for the current year and BE (Non-Plan) for the next year are communicated to the respective Ministries towards the end of December and latest by 1st week of January. It is the endeavor of Ministry of Finance that ceilings be communicated at the earliest so that the Ministries are able to utilize their funds in an optimal manner’.

In the light of the recommendation of the Committee, the Department would take expeditious steps to distribute and communicate the allocated funds on the receipt of Plan and Non-Plan budgetary communication from Planning Commission/Ministry of Finance.”

The Committee are, 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 is in contradiction to the crux of the recommendations of the Committee in this regard but also is 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.

The Committee are still sanguine that if all the three parties, namely, the Department, Planning Commission and the Ministry of Finance sit together and seriously resolve to bring in positive reformative changes in the entire tardy budgetary process, then only they will actually be successful in bringing in positive and definite reforms in this regard.

The Committee, therefore, once again emphatically urge the Planning Commission/Ministry of Finance/Department to seriously consider the recommendation of the Committee about the importance of the need to reform the entire tardy budgetary process to the extent that the Planning Commission/Ministry of Finance provide RE funds to the concerned Institutes/Divisions within the Department in the month of December or little earlier every year for optimal utilization of scarcely available financial resources/public money by the concerned Department.

Recommendation No. 4**Unsatisfactory performance/functioning of Krishi Vigyan Kendras (KVKs)**

The Committee note that DARE/ICAR are doing their best to achieve the long awaited target of opening/having at least one Krishi Vigyan Kendra (KVK) in each of the rural District of India. As there are 575 rural districts in India and so far DARE/ICAR has already sanctioned/opened 524 KVKs in various rural districts. The remaining 54 rural districts are planned to be covered during 2006-07.

The Committee also note that whenever the Department was asked to give the details of fully functional/semi or partially functional/non-functional KVKs already opened by the Department, the Department has always made very high claims about the full functionality of all the KVKs except for 6 KVKs which have been declared non-functional and efforts are said to be made to make them functional again by entrusting these to some other better agencies/organizations.

The Committee are of the firm opinion that the ground reality is different from the high claims made by the Department in respect of fully functional KVKs, as many of the KVKs sanctioned/opened 2 to 5 years ago, and even earlier, in many States of the country, are reported to be sanctioned and fully-functional on papers only and for all practical purposes, those KVKs are far away from the desired fully-functional status in terms of their infrastructure, scientific and technical manpower, equipment and other required facilities and satisfactory output/performance, etc.

The Committee, therefore, once again not only recommend to the Department to complete the target of having at least one KVK in all the rural districts of India but also

unanimously urge the Department to have a serious look into the issues of malfunctioning/unsatisfactory functioning of many KVKs especially in Bihar, Uttar Pradesh, Maharashtra, North East Region, J&K-Leh region, Himachal Pradesh, Madhya Pradesh and other States, as have been repeatedly brought to the notice of the Department by the elected representatives of the people, i.e. Members of Parliament and Members of the Parliamentary Standing Committee on Agriculture during Committee meeting held on 12.04.2006 and also during such meetings held in the previous years.

The Committee hope that the Department would pay special attention to these issues and for this purpose, may create a special task force with the task of surveying and reviewing the actual/ground-level reality functional status of each of the KVKs opened so far and submit its Report to the Department to enable them to furnish the same to the Committee within 6 months from the date of presentation of this Report to the Parliament.

Recommendation No. 5**Planning Commission has been ignoring the Genuine Requirement of One-Time Catch Up Grant of DARE/ICAR**

The Committee note that the DARE has a number of institutions/laboratories, which are more than twenty years old. In order to have excellent academic standards in the 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, one time catch up grant to meet the critical need for upgrading laboratory equipment, pilot plants, farm and laboratory facilities, class rooms and audio visual facilities in these institutions.

The Committee also note that during the Eighth Plan Period, Planning Commission did not provide any catch up grant. During the Ninth Plan, the Planning Commission had communicated a total outlay of Rs. 3,376.95 crore including Externally Aided Projects (EAPs) out of which Rs. 400 crore was indicated as one time catch-up grant but 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 2001-02 respectively for the purpose.

Committee have further been apprised that 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 up to a maximum of 20 per cent of

their respective Plan; during 2000-2001 this percentage limit was raised to 30 per cent and for 2001-2002, 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 requirements. For State Agricultural Universities (SAUs), these percentages were 30 per cent for 1999-2000, 40 per cent for 2000-01 and for 2001-02 it was allowed at par with institutes.

However, the decision of the Department regarding earmarked 20, 30 or 40% of the budget during 1999-2000 to 2001-02 (end of the Ninth Plan) was not found feasibly practical and could not be implemented by any Institute/SAU and thus remained only on paper.

With no solution in hand and unable to comply with the direction of the Planning Commission to spend all the required amounts from their annual plans for changing the old age infrastructure for research system to the latest state-of-the-art infrastructure and research system, 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 made any provision for the same in 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 but 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.

The Committee take 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 are 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 desire 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 is resolved in favour of the DARE/ICAR.

The Committee, further, unanimously opine that unless the Government is actually willing and come forward to support DARE/ICAR with this direly needed One-Time Catch-Up grant to change the obsolete equipments, age old infrastructure, including laboratories and other related research facilities, as the Scientists and Researchers of ICAR and all their related institutes/SAUs will continue to suffer for want of latest state-of-the-art equipments and research infrastructure/laboratories as this change over from old to new technology requires additional funding.

The Committee also feel that although the Government and the people have great expectations from our agricultural scientists to usher India into Second Green Revolution and to achieve major breakthroughs in finding out solutions for problems faced by farmers and people engaged in agrarian and allied sectors apart from bringing total food and fodder security and overall prosperity and growth, yet the fulfillment of these great expectations will not be possible unless the Government provide the much desired and

direly needed funds and incentives to ICAR to make it a real apex organization and the hub of the most talented scientists of the nation.

The Committee once again strongly urge 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.

Recommendation No. 6**Suffering of Plan Schemes of DARE/ICAR owing to 3 to 4 years time taken in SFC/EFC/CCEA Approval**

The Committee note that as a follow up of directives of the Government of India, the Department in consultation with Planning Commission applied Zero Base Budgeting (ZBB) scrutiny to all Plan schemes for their continuation in Tenth Plan with the Primary objective of reducing the number of Plan Schemes for expeditious Clearance of Tenth Five Year Plan proposals. In this exercise, original 235 Plan projects, viz. ICAR Institutes, National Research Centres (NRCs), Project Directorates (PDs), (All India Coordinated Research Projects) AICRPs etc. have been brought together/integrated into 71 main Plan projects. Out of 71 major Plan Schemes, 25 Plan Schemes were approved by the Standing Finance Committee (SFC) and 46 Plan Schemes were approved by the Expenditure Finance Committee (EFC).

As per the instructions issued by the Department of Expenditure, Ministry of Finance, Plan Schemes/projects costing up to Rs.5 crore could be considered for approval by the Department itself, i.e. without referring to SFC/EFC. Schemes costing more than Rs.5 crore and less than Rs.25 crore pertain to SFC, Rs.25 crore and above but less than Rs. 100 crore pertain to EFC, Rs.100 crore pertain to main EFC and those Rs.200 crore and above to Public Investment/ main EFC. The respective jurisdiction with respect to SFC/EFC/CCEA is determined on the basis of total cost of the main project schemes including its sub-schemes for the entire five-year plan. Any scheme costing Rs.100 crore and above requires approval of Cabinet Committee on Economic Affairs (CCEA).

The Committee observe that the primary objective of reducing the number of 235 plan schemes into 71 main schemes for expeditious clearance, have been defeated to a large extent as the Department took about 14 months' time, i.e. from April 2002 to May 2003, for preparation of their SFC/EFC/CCEA proposals. In another 10 months, i.e. from May 2003 to March 2004, SFC/EFC clearance was obtained and for 6 main schemes, comprising 33 sub-schemes, costing more than Rs. 100.00 crore, requiring CCEA clearance/approval, time taken for submitting Agenda Note to Cabinet Secretariat ranged between 3 months 11 days to 13 months 7 days, and for taking CCEA final approval, time ranging between 8 days to 4 months, that means, in all, another 14 months time, i.e. March 2004 to May 2005 were taken for CCEA approval for 5 main schemes and in 1 main schemes said to be new activity, the CCEA approval came in as late as December, 2005.

The Committee, therefore, express their serious concern over such inordinate delays in which about 2 to 4 years' precious time out of total 5 years period has been wasted in getting and providing SFC/EFC/CCEA clearance to the Plan Schemes of the Tenth Five Year Plan which will come to an end on 31 March 2007 viz. after another 10 months.

The Committee see no justification in such a situation wherein many schemes/plan projects of the Department have an outlay for a period of 5 years mentioned on paper only but actually cannot be utilised on their major work of planned activities for a period of 2 to 4 years out of a total 5 year Plan period, till the approval of SFC/EFC/CCEA remains pending. The Committee urge the Department as well as the concerned Appraisal Agencies to seriously introspect over the delays, which are so detrimental for the progressive functioning of a Department like DARE/ICAR.

The Committee also desire that serious and well contemplated steps should be taken well in time by the Department/Planning Commission/Ministry of Finance/CCEA to avoid any such recurrences in the forthcoming five year plans and a limited stipulated time frame should be fixed for each step and stage involved in the entire Budgetary exercise for the Department as well as for the Planning Commission and SFC/EFC/CCEA approval.

Recommendation No. 7

Urgent Need for Greater Inter-Ministerial Coordination among all the Ministries/Departments related to/Responsible for uplifting Indian Agriculture

The Committee are well aware that the overall welfare, prosperity and growth of Farmers and Agriculture and allied sectors is dependent on many factors put together such as, water, power (electricity) for irrigation, financial credit, good quality seeds, good quality fertilizers and pesticides, efficient tools and machinery, availability of latest technology, roads and transportation facilities, storage and marketing facilities, etc.

The Committee are of unanimous view that since all these factors are directly related to the jurisdiction of many Ministries/Departments of Government of India, it would be more than essential for all these Ministries/Departments to have the best of ever growing inter-ministerial coordination among themselves with a single-minded zeal to achieve the same objective/goal of agrarian growth and prosperity.

The Committee, therefore, unanimously and emphatically urge all the Ministries/Departments concerned/responsible for the overall welfare, prosperity of Indian farmers and growth of agriculture and allied sectors to have the best possible and regular inter-ministerial coordination with each other, so that the desired and coveted goal of agrarian growth/prosperity can be achieved in a better way.

Recommendation No. 8**DARE/ICAR lagging behind to bring in the much awaited Second Green Revolution in the Country**

The Committee note that the First Green Revolution generally missed the less resource endowed rainfed areas. One of the most important aspects of First Green Revolution was pursuing intensive agriculture leading to substantial natural resource degradation particularly soil and water. There is a general fatigue of the Green Revolution areas/pockets leading to deceleration in the rate of growth of total factor productivity.

The Committee observe that the country needs the Second Green Revolution that would benefit small and marginal farmers in rain-fed and drought prone regions besides addressing the second generation problems of intensive irrigated agriculture. The Committee strongly feel that the focus of the research conducted by DARE/ICAR should include interalia:

(i) enhancement in agricultural productivity; (ii) integration of crops, horticulture, animal science and fisheries in holistic manner; (iii) increasing the use efficiency of nutrient, energy and water; (iv) improving use/efficiency of all agricultural inputs; (v) integrated pest management; (vi) application of science and bio-technology to the improvement of seeds; (vii) Conserving disappearing food or reducing post-harvest losses; (viii) promotion of labour using efficient and relevant technologies in-farm/non-farm business; (ix) Expanding food basket; and (x) Socio-economic Research to identify constraints in technology adoption.

The Committee being well aware of the Ground realities, are not satisfied with the high claims made by DARE/ICAR, that they have generated the relevant technologies to usher the second green revolution and feel that for successful Second Green Revolution, the policy initiatives such as ensuring the timely availability of inputs such as quality seeds, water, fertilizers/other agri. chemicals, marketing and appropriate price support, value addition, and development of agro processing industries, appropriate storage, extension services, credit availability, development of irrigation and appropriate water harvesting structures, enhanced investment, proactive role on the part of all the stakeholders; etc. will be required.

The Committee, therefore, emphatically recommend that DARE/ICAR being the apex nodal agency/Council responsible for R&D in agrarian and allied sectors must do the needful, not only to tackle/combat with the shortcomings/problems of the First Green Revolution but also to address the issues observed above on top priority, in order to bring much needed and awaited Second Green Revolution/Evergreen Revolution to the nation.

Recommendation No. 9**DARE/ICAR to take Urgent Action to Enhance Productivity of Foodgrains, especially
Wheat**

The Committee were informed during the oral Evidence by the Secretary (DAC) that it has been observed that in all the major wheat growing States, the production of Wheat is stagnant and the overall wheat production is not going up from 71 and 72 m.t. She further stated that this production level is a very slim line because if we look at our evergrowing demand and per capita consumption, it is very uncomfortable position as to where the wheat is going to come from. Our buffers are completely depleted. It is also a fact that we do not have much in store and for wheat, it is certainly a very anxious situation for the country. Five lakh metric tones of wheat already being imported from Australia and Ministry of Agriculture (Department of Agriculture & Cooperation) is also thinking to import another 30 lakh metric tones of wheat. She further added critically that inspite of the fact that about 26 plus million hectare area is under wheat cultivation and this year about 2-3 lakh m.h. area has also come under wheat cultivation, area is not so much of a problem but productivity is really becoming an issue and is a matter of serious concern and DARE/ICAR has to do something about it.

The Committee have the similar observations as reflected by Secretary, Ministry of Agriculture (Department of Agriculture & Cooperation) and are fully aware about the stagnant/low/fluctuating productivity level of foodgrains, especially, wheat and pulses and therefore, strongly urge the DARE/ICAR to interact with Secretary, Ministry of Agriculture (Department of Agriculture & Cooperation) on these issues/suggestions they might have to share to increase the wheat production in the country and do all the needful

to rejuvenate their (ICAR) entire team of Scientists to do more hard work with more dedication to increase the productivity of foodgrains especially wheat, pulses, coarse grains and also fodder etc. not only to make India self-reliant in foodgrains and agrarian products but also to help the country to save precious and scarce foreign exchange/public money being spent on importing wheat and other agrarian produces.

NEW DELHI;
18 May, 2006
28 Vaisakha, 1928 (Saka)

PROF. RAM GOPAL YADAV
Chairman,
Standing Committee on Agriculture

MINUTES OF THE TENTH SITTING OF THE STANDING COMMITTEE ON AGRICULTURE HELD ON WEDNESDAY, THE 12TH APRIL, 2006 AT 1100 HRS. IN ROOM, 'D', GROUND FLOOR, PARLIAMENT HOUSE ANNEXE, NEW DELHI

The Committee sat from 1100 hrs. to 1300 hrs.

PRESENT

Prof. Ram Gopal Yadav – Chairman

MEMBERS

LOK SABHA

2. Shri Hiten Barman
3. Shri Girdhari Lal Bhargava
4. Shri Khagen Das
5. Shri Sharanjit Singh Dhillon
6. Shri Raghunath Jha
7. Smt. Rupatai D. Patil Nilangekar
8. Shri M.P. Veerendra Kumar
9. Shri Deepender Singh Hooda

RAJYA SABHA

10. Smt. Mohsina Kidwai
11. Shri Harish Rawat
12. Dr.M.S.Gill
13. Shri Pyarelal Khandelwal
14. Shri Sk. Khabir Uddin Ahmed
15. Shri Bhagwati Singh
16. Shri Datta Meghe
17. Shri Sharad Anantrao Joshi

SECRETARIAT

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|----|-------------------|---|------------------|
| 1. | Shri A.K.Singh | - | Joint Secretary |
| 2. | Shri Hardev Singh | - | Deputy Secretary |
| 3. | Shri N.S.Hooda | - | Under Secretary |

WITNESSES

- | | | |
|-----|-------------------|---|
| 1. | Dr. Mangala Rai | Secretary (DARE) & Director General (ICAR) |
| 2. | Smt. Sushama Nath | Addl. Secretary (DARE) & Secretary (ICAR) |
| 3. | Dr. Rita Sharma | Addl. Secretary & Financial Adviser (DARE/ICAR) |
| 4. | Dr. G. Kalloo | Deputy Director General (Crop Science & Horticulture), ICAR |
| 5. | Dr. P. Das | Deputy Director General (Agril. Extension), ICAR |
| 6. | Dr. J.S. Samra | Deputy Director General (NRM), ICAR |
| 7. | Dr. S. Ayappan | Deputy Director General (Fy.), ICAR |
| 8. | Dr. V.K. Taneja | Deputy Director General (Animal Science), ICAR |
| 9. | Dr. Nawab Ali | Deputy Director General (Engineering), ICAR |
| 10. | Dr. Mruthyunjaya | Deputy Director General (Education), ICAR |
| 11. | Dr. K.S. Khokhar | Assistant Director General (PIM), ICAR |

At the outset, the Chairman Standing Committee on Agriculture 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 (2006-2007) of DARE/ICAR. The Chairman drew attention to Direction 55(1) of the Directions of 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.

2. After introduction of the officials, the Secretary gave a brief overview of the budgetary allocation for the year 2006-2007 and also highlighted the activities/achievements made by the Department during the year, particularly with regard to initiating Project worth Rs. 200 crore on seeds, saplings and planting materials; National Agriculture Innovation Project; Indo-US knowledge initiative; Project on Micro Organisms; Research being carried on to develop Bird Flu Vaccine; Horticulture Mission; KVKs; developing 70 new varieties of different crops; honey bee research; impact of implementing conservation agriculture; inland aqua culture, etc.

3. The Chairman and Members of the Committee raised several queries regarding bridging the gap between the laboratory and the field; on KVKs; Indo-US knowledge initiative; need for research on causes of farmers' suicide; on vacancies of scientists in ICAR; on better inter-ministerial coordination among the ministries related to the development of agriculture and farmers; need for finding out ways to

check delays in SFC/EFC/CCEA approval for the Projects meant for DARE/ICAR, etc. The representatives of the Ministry replied to the queries one by one and assured to send the desired material/CDs on various schemes of the Department.

4. A copy of the verbatim proceedings has been kept.

The witnesses then withdrew

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

MINUTES OF THE FOURTEENTH SITTING OF THE STANDING COMMITTEE ON AGRICULTURE HELD ON TUESDAY, THE 2ND MAY, 2006 AT 1100 HRS. IN ROOM, 'D', GROUND FLOOR, PARLIAMENT HOUSE ANNEXE, NEW DELHI

The Committee sat from 1100 hrs. to 1255 hrs.

PRESENT

Prof. Ram Gopal Yadav – Chairman

MEMBERS

LOK SABHA

2. Shri Girdhari Lal Bhargava
3. Smt. Rupatai D. Patil Nilangekar
4. Shri Y.S.Vivekananda Reddy

RAJYA SABHA

5. Smt. Mohsina Kidwai
6. Dr.M.S.Gill
7. Shri Sk. Khabir Uddin Ahmed
8. Shri Bashistha Narain Singh

SECRETARIAT

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|----|-------------------|---|------------------|
| 1. | Shri A.K.Singh | - | Joint Secretary |
| 2. | Shri Hardev Singh | - | Deputy Secretary |
| 3. | Shri N.S.Hooda | - | Under Secretary |

WITNESSES**Ministry of Agriculture (Department of Agriculture and Cooperation)**

S.NO.	Name	Designation
1.	Smt. Radha Singh	Secretary (Department of Agriculture & Cooperation)
2.	Shri Prem Prakash Mathur	Additional Secretary & FA
3.	Dr. S.M. Jharwal	Principal Adviser
4.	Shri S.L. Bhatt	Joint Secretary
5.	Shri S.R.K Varshney	Director

Ministry of Agriculture (Department of Agricultural Research and Education)

S.NO.	Name	Designation
1.	Dr. Mangala Rai	Secretary (DARE) & DG (ICAR)
2.	Smt. Sushama Nath	Addl. Secretary, (DARE) & Secretary (ICAR)
3.	Dr. Rita Sharma	Addl. Secretary & FA (DARE/ICAR)
4.	Dr. P.Das	Deputy Director General (Agril. Extension)

Ministry of Agriculture (Department of Animal Husbandry Dairying and Fisheries)

S.NO.	Name	Designation
1.	Shri P.M.A. Hakeem	Secretary (Animal Husbandry Dairying & Fisheries)
2.	Smt Neerja Rajkumar	Joint Secretary (C&DD)
3.	Shri Ajay Bhattacharya	Joint Secretary (FY)
4.	Shri Arvind Kaushal	Joint Secretary (P&F)

Ministry of Commerce and Industry (Department of Commerce)

S.NO.	Name	Designation
1.	Shri Jayant Dasgupta	Joint Secretary
2.	Shri Mohan Kumar	Chairman, MPEDA
3.	Shri K.S.Money	Chairman, APEDA

Planning Commission

S.NO.	Name	Designation
1.	Shri Rajeeva Ratna Shah	Member Secretary
2.	Dr. Pronab Sen	Pr. Adviser
3.	Dr. V.V. Sadamate	Adviser (Agriculture)

Ministry of Finance

S.NO.	Name	Designation
1.	Dr. Adarsh Kishore	FS & Secy (Exp.)
2.	Shri Ashok Chawla	Additional Secretary (Department of Economic Affairs)

At the outset, the Chairman, welcomed the Members of the Committee and representatives of the Ministry of Agriculture (Department of Agriculture and Cooperation, Department of Agricultural Research and Education and Department of Animal Husbandry, Dairying and Fisheries), Ministry of Finance, Ministry of Commerce & Industry and Ministry of Consumer Affairs, Food and Public Distribution and Planning Commission to the sitting of the Committee and read out the contents of Direction 55 (1) of Directions by the Speaker. Thereafter, the Chairman requested the representatives of respective Ministries to introduce themselves to the Committee.

2. After the introductions, the Committee took up for examination the schemes of the Ministry of Agriculture pending sanction/implementation at various stages and other related issues which could be sorted out by the aforesaid Ministries in a coordinated way. The Members raised clarificatory queries relating to late approval or sanctions of the new schemes by Planning Commission or Ministry of Finance, as the case may be. Some of the queries were answered by the representatives of the respective Ministries and Planning Commission. The Chairman directed them to send the written replies to the queries which could not be resolved during evidence.

3. On the issue of the import of wheat, to fill up the gap in the buffer stock, the Committee decided to call the representatives of Ministry of Agriculture alongwith the Ministry of

Consumer Affairs, Food and Public Distribution, Ministry of Commerce & Industry and also the Chairman of Food Cooperation of India (FCI) and the Chairman of State Trading Cooperation (STC) on 03.05.2006.

4. The witnesses then withdrew.
5. A verbatim record of the proceedings of the sitting has been kept.

The Committee then adjourned.

MINUTES OF THE SEVENTEENTH SITTING OF THE STANDING COMMITTEE ON AGRICULTURE HELD ON THURSDAY, THE 18 MAY, 2006 AT 1100 HRS. IN COMMITTEE ROOM '139', FIRST FLOOR, PARLIAMENT HOUSE ANNEXE, NEW DELHI

The Committee sat from 1500 hrs.

PRESENT

Prof. Ram Gopal Yadav – Chairman

MEMBERS

LOK SABHA

2. Shri Girdhari Lal Bhargava
3. Shri Hiten Barman
4. Shri Khagen Das
5. Shri Raghunath Jha
6. Shri Sippiparai Ravichandran
7. Shri K.J.S.P. Reddy
8. Shri Y.S.Vivekananda Reddy

RAJYA SABHA

9. Shri Harish Rawat
10. Shri Sk. Khabir Uddin Ahmed
11. Shri Sharad Anantrao Joshi

SECRETARIAT

- | | | | |
|----|-------------------|---|------------------|
| 1. | Shri A.K.Singh | - | Joint Secretary |
| 2. | Shri Hardev Singh | - | Deputy Secretary |
| 3. | Shri N.S.Hooda | - | Under Secretary |

At the outset, the Chairman welcomed the Members. Thereafter, the Committee took up for consideration the Draft Reports on Demands for Grants (2006-07) 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 (2006-07) 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 also placed on record their appreciation of the strenuous efforts put in by the officers and staff of the Agriculture Committee Branch for reflecting Committee's concerns and observations in the draft reports.

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