

**STANDING COMMITTEE ON AGRICULTURE**  
**(2007-08)**

**FOURTEENTH LOK SABHA**

**MINISTRY OF AGRICULTURE**

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

**DEMANDS FOR GRANTS (2008-2009)**

**THIRTY EIGHTH REPORT**



**LOK SABHA SECRETARIAT**  
***NEW DELHI***

APRIL, 2008/CHAITRA, 1930 (Saka)

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Presented to Lok Sabha on 16.04.2008

Laid in Rajya Sabha on 16.04.2008



**LOK SABHA SECRETARIAT**

***NEW DELHI***

APRIL, 2008/CHAITRA, 1930 (Saka)

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**COMPOSITION OF THE STANDING COMMITTEE ON AGRICULTURE (2007-2008)**

**Prof. Ram Gopal Yadav – Chairman**

**MEMBERS**

**LOK SABHA**

2. Shri Ranen Barman
3. Shri Anil Basu
4. Shri Manoranjan Bhakta
5. Shri Girdhari Lal Bhargava
6. Shri Kuldeep Bishnoi
7. Shri Khagen Das
8. Shri Dharmendra
9. Shri Gadakh Tukaram Gangadhar
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18. Shri Y.S.Vivekananda Reddy
19. Shri Chandra Bhushan Singh
20. Shri M.P.Veerendrakumar
21. Shri Baleshwar Yadav

**RAJYA SABHA**

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- # 23. Dr. M.S. Gill
24. Smt. Mohsina Kidwai
25. Shri Vikram Verma
26. Shri Vinay Katiyar
- @27. Shri Sk. Khabir Uddin Ahmed
- @28. Shri Datta Meghe
29. Shri Sharad Anantrao Joshi
30. Shri M.Rajasekara Murthy
31. Prof. M.S.Swaminathan

# Ceased to be the member of this Committee due to his appointment as Minister of State (Independent charge) in the Council of Ministers w.e.f. 6.04.2008

@ Ceased to be the members of this Committee due to retirement from Rajya Sabha w.e.f. 02.04.2008

## SECRETARIAT

|    |                 |   |                            |
|----|-----------------|---|----------------------------|
| 1. | Shri S.K.Sharma | - | Additional Secretary       |
| 2. | Shri A.K.Singh  | - | Joint Secretary            |
| 3. | Shri Raj Kumar  | - | Deputy Secretary           |
| 4. | Shri N.S.Hooda  | - | Deputy Secretary           |
| 5. | Shri Anil Kumar | - | Senior Executive Assistant |

## PREFACE

I, the Chairman, Standing Committee on Agriculture, having been authorized by the Committee to submit the Report on their behalf, present this Thirty Eighth Report on the Demands for Grants (2008-2009) 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 17<sup>th</sup> March, 2008. 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 29<sup>th</sup> March 2008. Minutes of the sitting are placed at Appendix-I.

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

5. The Committee considered and adopted the report at their sitting held on 11<sup>th</sup> April 2008. Minutes of the sitting are placed at Appendix-II.

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

**NEW DELHI;**  
**11 April, 2008**  
**22 Chaitra, 1930 (Saka)**

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

## **PART – I**

### **CHAPTER – I**

#### **INTRODUCTORY**

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

1.2 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**

1.3 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.

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

- (i) The National Institutes/Deemed Universities are the well-developed Institutes with large infrastructure and facilities. These Institutes perform not only research functions but also carry out teaching and extension education activities. They also offer programmes leading to Master and Doctoral Degrees. These Institutes are quite broad-based in terms of networks and they have research stations spread over various parts of the country.
- (ii) The Central Institutes do not carry out teaching activities as they generally concentrate on research and wherever possible undertake some extension activities as well. Their main activity is research and a

number of them have research stations in other parts of the country also. The scientists of these institutes carry out research pertaining to the commodity or discipline for which these Central Institutes have been set up.

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

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

1.5 As per the Annual Report (2007-08) of the Department, the research set up of ICAR includes 48 Central Institutes, 5 National Bureaux, 12 Project Directorates, 32 National Research Centres and 76 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 41 State Agricultural Universities (SAUs), 1 Central Agricultural University, 4 Central Universities and 5 Deemed Universities by giving financial assistance in different forms.

#### **INTER-ORGANISATIONAL RELATIONSHIP/LINKAGES BETWEEN DARE AND ICAR**

1.6 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. 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.
- (iv) 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.
- (v) 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.
- (vi) National Research Projects being implemented with assistance from foreign governments are processed by the ICAR through DARE.
- (vii) 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.

## **FUNDING PATTERN FOLLOWED BY DARE/ICAR**

1.7 The Committee have been informed that ICAR units, i.e., National Institutes, National Research Centres(NRCs), Project Directorates(PDs), Deemed Universities (under the umbrella of ICAR), Bureaux and Krishi Vigyan Kendras are funded on 100 per cent basis. All India Coordinated Research Projects, are funded on sharing basis (ICAR share is 75% and State Govt. share 25%). The Council draws the grant from Govt. of India, Pay & Accounts Office, Ministry of Agriculture, New Delhi through DARE in 4 or 5 instalments as per the Monthly Expenditure Plan (MEP) for further remittance to the Institutes/National Research Centres / Project Directorates /All India Coordinated Research Projects / Krishi Vigyan Kendras including ICAR Hqrs. etc. The funds from the Council to the constituent units are remitted on quarterly basis. However, the first instalment of remittance of funds would be as per approved / sanctioned 'Vote on Account'. The last instalment of funds to the constituent units is remitted in Feb-March, in case the allocation is enhanced at RE stage. As regards the SAUs/KVKs/AICRPs, funds are remitted to them twice in a year i.e. on six monthly basis.

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

| <b>Sl. No.</b> | <b>Name of Subject Matter Division</b> | <b>No. of Schemes/ Institutes</b> | <b>Major Programmes/Thrusters</b>  |
|----------------|--|-----------------------------------|--|
| 1.             | Crop Sciences                          | 15                                | 1. Plant Genetic Resources<br>2. Food Crops and Plant Biotechnology<br>3. Forage Crops<br>4. Commercial Crops<br>5. Oilseeds<br>6. Plant Protection<br>7. Biotechnology<br>8. Seed Technology and Breeder Seed Production. |
| 2.             | Horticulture                           | 9                                 | 9. Fruits, Vegetables<br>10. Potato & Tuber Crops<br>11. Plantation Crops<br>12. Spices<br>13. Floriculture, Medicinal & Aromatic Plants<br>14. Post Harvest Management.   |

|     |  |           |   |
|-----|--|-----------|---|
| 3.  | Animal Sciences  | 14        | 15. Animal Genetic Resources<br>16. Conservation<br>17. Livestock Improvement<br>18. Livestock Products Technology; Animal Health                             |
| 4.  | Natural Resource Management                                      | 12        | 19. Soil Inventory<br>20. Soil Management<br>21. Nutrient Management<br>22. Water Management<br>23. Cropping Systems Research                                 |
| 5.  | Fisheries  | 6         | 24. Capture Fisheries<br>25. Culture Fisheries<br>26. Fish Genetic Resources<br>27. Harvest & Post Harvest Technology<br>28. Human Resource Development       |
| 6.  | Agricultural Extension   | 3         | 29. Krishi Vigyan Kendras<br>30. NRC for women in Agriculture<br>31. Publication Activities by DIPA   |
| 7.  | Agricultural Engineering   | 5         | 32. Farm Implements and Machinery<br>33. Post-Harvest Engineering & Technology<br>34. Energy Management in Agriculture<br>35. Irrigation Drainage Engineering |
| 8.  | Agricultural Education   | 2         | 36. Strengthening of SAUs and Development of Human Resources and Management   |
| 9.  | Economics, Statistics and Marketing                              | 1         | 37. Agricultural Policy Research, Statistical methods and Computer Application in Agriculture   |
| 10. | ICAR Headquarters including Externally Aided Projects/World Bank | 4         | 38. Governance, Externally-aided Project, namely, National Agricultural Innovative Project (World Bank aided) and Indo-US Knowledge Initiative                |
|     | <b>Total</b>   | <b>71</b> |   |

1.9 The activities proposed in the Outcome Budget 2008-09 of DARE/ICAR are aimed to consolidate the past research work and also to give a new direction to agricultural research and education in the country. Research programmes of various Schemes of the Council are planned to achieve 'sustainable and inclusive agricultural growth.' Activities of the two important schemes, viz. Basic and Strategic Research and National Agricultural Innovation Project will be further consolidated in 2008-09. The same strategy is followed for programmes of other regular Schemes of different SMDs. It is expected that research outputs generated during the year will increase knowledge stock, reduce production losses, improve product quality, and raise productivity etc. The dissemination of research outputs mediated through appropriate development interventions of other government departments will

conserve agricultural resource base, increase farm income and reduce drudgery farm women. The following will be main research thrusts during 2008-09.

|   |  |
|---|--|
| <ul style="list-style-type: none"> <li>• Enhancing Productivity and Profitability of Agriculture.</li> <li>• Improve Product Quality for Better Nutrition and Health.</li> <li>• Cost-effective Management of Biotic and Abiotic stresses.</li> <li>• Hybrid Technology for Higher Crop Yields.</li> <li>• Plant, Animal and Fish Biotechnology.</li> <li>• Assessing the Adaptability of Animals to Heat Stress and Physiological Responses Under Different Temperatures.</li> <li>• Biodiversity Characterization, Conservation and Utilization.</li> <li>• Development of Improved Crop Varieties and Augmentation of Seed and Planting material.</li> <li>• Development of Diagnostics And Immunoprophylactics for Various Diseases Using Biotech and Nanotech Tools; Development of Combo Vaccines.</li> </ul> | <ul style="list-style-type: none"> <li>• Vaccines, Diagnostics and Nutrition Management to Improve Animal and Fish Health.</li> <li>• Management of Inland Open Water Fishery Resources, including Hill Region.</li> <li>• Post-harvest Management of Farm Produce.</li> <li>• Increase Water, Nutrient and Energy Use Efficiency through Resource Conservation Technologies and Watershed Management.</li> <li>• Agricultural System Diversification and Value-Added Products.</li> <li>• Adaptation to Climatic Change; Management of Methane Emission through Dietary Manipulation for Animals.</li> <li>• Hitech Agriculture and Organic Farming.</li> <li>• Agricultural Policy Research; Application of Statistical Methods and Computer in Agriculture.</li> <li>• Demonstration of Frontline Technologies and Capacity Development of Farmers and Trainers.</li> </ul> |
|---|--|

**FINAL EVALUATION OF THE RECOMMENDATIONS OF THE COMMITTEE CONTAINED IN THEIR 28<sup>TH</sup> REPORT(14<sup>TH</sup> LOK SABHA) ON DFG (2007-08) OF MINISTRY OF AGRICULTURE (DARE)**

1.10 There were 11 recommendations in total made by the Committee on different subjects matter relating to Department of Agricultural Research & Education (DARE). Out of these five recommendations relating to (i) Decline in DARE/ICAR proposed /demanded allocation for XI Plan; (ii) Development of High Yielding Varieties and improved management practices; (iii) Need to augment dedicated Research, Education and Extension Activities of ICAR for agricultural growth rate; (iv) Need to find real and practical remedies for abiotic and biotic stresses by ICAR; and (v) Need to improve the functional status/shortage of staff in KVKs, were accepted by the Government for compliance.



1.11 Action Taken by Government on only one recommendation relating to Hormone -injected Milk Production and its effect on Human and Animal Health, was not to the satisfaction of the Committee and was reiterated for implementation.

1.12 Replies to the following five recommendations were of interim nature and Committee desired to have an early reply to these: (i) Need for allocation of DARE/ICAR outlay to a minimum of one per cent of AGDP for XIth Plan; (ii) Inadequate allocation in the 1st Year of XI Plan; (iii) Need to provide additional funding for Externally Aided Projects and World Bank Aided Projects, over and above the Budgeted Estimates of DARE; (iv) One Time Catch up Grant of Rs.1000 crore to DARE; and (v) Revamping of Slow Budgetary Process.

1.13 Further Action Taken replies of the Government to the recommendations which were reiterated by the Committee or the interim reply were received, have been received in the Committee Secretariat and the same will be laid on the Table of the House in this Budget Session itself.

## CHAPTER – II

### **DEMANDS FOR GRANTS OF THE DEPARTMENT OF AGRICULTURAL RESEARCH AND EDUCATION FOR THE YEAR 2008-09**

2.1 The Demands for Grants of the Department of Agricultural Research and Education (DARE) for the year 2008-09 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 2008-09, the Department has been allocated a total amount of Rs.2680.00 crore (Rs.1760.00 crore for Plan and Rs.920.00 crore for Non-Plan expenditure) on Revenue Account. Allocations made in 2007-08 and 2008-09 are indicated below:

| Major Head   | (Rs. in crore) |               |                |                 |               |                |                |               |                |
|--|----------------|---------------|----------------|-----------------|---------------|----------------|----------------|---------------|----------------|
|  | Budget 2007-08 |               |                | Revised 2007-08 |               |                | Budget 2008-09 |               |                |
|  | Plan           | Non-Plan      | Total          | Plan            | Non-Plan      | Total          | Plan           | Non-Plan      | Total          |
| 3451-Secretariat Economic Services (Salaries, Travel, Office Expenses, etc.)   | -              | 1.65          | 1.65           | -               | 1.65          | 1.65           | -              | 1.75          | 1.75           |
| 2415-Crop Husbandry, Soil & Water Conservation including Agro-Forestry, Animal Husbandry, Dairy Development Fisheries, Contributions to International Organizations, Assistance to CAU, Payment of net proceeds of Cess under APCA, 1940 | 1458.00        | 838.35        | 2296.35        | 1290.6          | 901.35        | 2191.95        | 1584.00        | 918.25        | 2502.25        |
| 2552-Lump-sum provision for projects/schemes in North Eastern Region & Sikkim  | 162.00         | -             | 162.00         | 143.40          | -             | 143.40         | 176.00         | -             | 176.00         |
| <b>TOTAL</b>   | <b>1620.00</b> | <b>840.00</b> | <b>2460.00</b> | <b>1434.00</b>  | <b>903.00</b> | <b>2337.00</b> | <b>1760.00</b> | <b>920.00</b> | <b>2680.00</b> |

2.3 The detailed Demands for Grants (2008-2009) of the Department were laid on the Table of the Houses (Parliament) on 17 March, 2008.

**ANALYSIS OF ALLOCATIONS MADE TO DARE/ICAR OUT OF THE TOTAL PLAN BUDGET OF THE GOVERNMENT OF INDIA DURING XTH & FIRST TWO YEARS OF THE XITH PLAN**

2.4 The Financial Growth of DARE / ICAR for different years of 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 0.52% to 0.61% during Xth Plan, being 0.53% during the terminal year 2006 – 07. During the first year (2007–08) of XIth Plan this percentage has been reduced to 0.51% and during 2008-09, it was further reduced to 0.47%.

(Rs. in crore)

| Plan / Year | Plan Outlay of DARE / ICAR | Total Central Plan Outlay of Country* | % of DARE w.r.to total Central Plan Outlay |
|-------------|----------------------------|---------------------------------------|--|
| X PLAN      |                            |                                       |  |
| 2002-03     | 775.00                     | 144037.80                             | 0.54                                       |
| 2003-04     | 775.00                     | 147892.60                             | 0.52                                       |
| 2004-05     | 1000.00                    | 162947.29                             | 0.61                                       |
| 2005-06     | 1150.00                    | 211253.49                             | 0.54                                       |
| 2006-07     | 1350.00                    | 254041.00                             | 0.53                                       |
| XI PLAN     |                            |                                       |  |
| 2007-08     | 1620.00                    | 319992.00                             | 0.51                                       |
| 2008-09     | 1760.00                    | 375485.00                             | 0.47                                       |

\* Source : website – [indiabudget.nic.in](http://indiabudget.nic.in) and planning commission

2.5 The Outlays (BE/RE), Actual Expenditure and Percentages in respect of DARE/ICAR w.r.t. the total Central Plan Outlay of the country from 2005-06 (Xth Plan) and 2007-08, 2008-09 (First two years of XI Plan) are as given in Table below:

**Analysis of Allocation (BE), actual RE and Expenditure of DARE/ICAR and its percentage out of Central Plan (BE/RE) outlay, during 2005-06 & 2006-07 of Xth Plan & First two years of XI Plan**

(Rs. in crore)

|   | 2005-06  | 2006-07   | 2007-08   | 2008-09   |           |
|---|--|-----------|-----------|-----------|-----------|
| a | Plan Outlay / BE for DARE / ICAR   | 1150.00   | 1350.00   | 1620.00   | 1760.00   |
| b | Actual RE for DARE / ICAR  | 1070.00   | 1430.00   | 1434.00   | --        |
| c | Actual Expenditure incurred by DARE / ICAR   | 1048.97   | 1368.03   | *         | --        |
| d | Total Plan Outlay / BE of Central Government   | 211253.49 | 254041.00 | 319992.00 | 375485.00 |
| e | Total Plan Outlay / RE of Central Government   | 205338.00 | 244229.00 | 292337.00 | --        |
| f | Percentage of Total Plan Outlay / BE provided to DARE Out of Central Government  | 0.54      | 0.53      | 0.51      | 0.47      |
| g | Percentage of Actual RE of DARE / ICAR out of total Plan Outlay / RE of Central Government                                 | 0.52      | 0.58      | 0.49      | ---       |
| 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 | 0.50      | 0.54      | *         |           |
|   | w. r. t RE   | 0.51      | 0.56      | *         |           |

Central Plan Outlays provided by Planning Commission / website [indiabudget.nic.in](http://indiabudget.nic.in)

\*Actual expenditure for 2007 – 08 yet to be accomplished.

2.6 It is observed from the above Table that during Tenth Plan, the percentage of DARE/ICAR's outlay BE w.r.t. Central Sector Plan outlay (BE) was 0.54(2005-06) and 0.53(2006-07) which further decreased to 0.51(2007-08) and 0.47(2008-09) in the first two years of XIth Plan. Percentage of Actual RE of DARE w.r.t. Central Plan RE was 0.52(2005-06), 0.58(2006-07) and 0.49(2007-08). Analysis of Expenditure shows further decline in percentage at RE, viz. 0.51(2005-06) and 0.56(2006-07). So, it is very evident from the above analysis that during these four years, i.e. 2005-

2009 the percentage share of DARE/ICAR w.r.t. Central Plan Outlay(BE) remained constantly low, ranging from 0.54 to 0.47 per cent.

2.7 When asked about the details regarding amount proposed by them in their budget proposals, amount allocated, amount actually given as RE, its percentage to AGDP, etc. during 2002-03 to 2008-09, the Department furnished the details as indicated below:-

| Year    | (Amount rupees in crore) |         |         |               |        |        |                  |         |   |  |  |
|---------|--------------------------|---------|---------|---------------|--------|--------|------------------|---------|---|--|--|
|         | Amt. Proposed            | Plan    |         | Non-Plan      |        |        | Total Allocation |         | Agricultural GDP (AGDP) at current prices | % age of DARE (BE) allocation w.r.t AGDP at Current Prices | %age of DARE's RE w.r.t AGDP at Current Prices |
|         |                          | BE      | RE      | Amt. Proposed | BE     | RE     | BE               | RE      |   |  |  |
| 2002-03 | 1500.00                  | 775.00  | 725.00  | 810.44        | 723.80 | 723.80 | 1498.80          | 1448.80 | 472060                                    | 0.32   | 0.31   |
| 2003-04 | 1500.00                  | 775.00  | 775.00  | 812.27        | 735.92 | 735.92 | 1510.92          | 1510.92 | 532342                                    | 0.28   | 0.28   |
| 2004-05 | 1800.00                  | 1000.00 | 900.00  | 795.09        | 753.31 | 775.00 | 1753.31          | 1675.00 | 552422                                    | 0.32   | 0.30   |
| 2005-06 | 1900.00                  | 1150.00 | 1070.00 | 805.07        | 792.00 | 830.00 | 1942.00          | 1900.00 | 615844                                    | 0.32   | 0.31   |
| 2006-07 | 2000.00                  | 1350.00 | 1430.00 | 837.00        | 810.00 | 846.00 | 2160.00          | 2276.00 | 695423                                    | 0.31   | 0.33   |
| 2007-08 | 1945.50                  | 1620.00 | 1434.00 | 856.00        | 840.00 | 903.00 | 2460.00          | 2337.00 | 754561*                                   | 0.33   | 0.31   |
| 2008-09 | 2646.79                  | 1760.00 | --      | 923.35        | 920.00 | --     | 2680.00          | --      | --  | --   | --   |

Source; Central Statistical Organisation (CSO)  
 AGDP figures include Agriculture, Forestry & Logging and Fishing  
 \*AGDP figures for 2007 – 08 are advance estimates  
 AGDP figures for 2008-09 are not projected/available - CSO

2.8 The percentage of increase in Plan and Non-Plan allocation made for 2008-09 over the year 2007-08 is reported to be 8.64 per cent and 9.52 per cent, respectively.

2.9 The Committee were keen to know from the Department as to where India stands with regard to amounts allocated for carrying out Plan and Non-Plan activities of Agricultural Research and Education and its percentage to Agriculture GDP among developed and developing countries during each of the last three years and in the year 2008-09. In reply, the Department stated as under:

'Recent comparable data for expenditure on agriculture R&D are not readily available. However, quick estimates show that India spent Rs 2680 crore in 2002-03, which was 0.55% of AgGDP. The expenditure rose to Rs

3535.7 crore in 2005-06, which is 0.62% of AgGDP. The total expenditure in 2006-07 is estimated to be Rs 4198.5 crore.

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

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

Note: Data are available for 2000 only.'

**REVIEW OF FINANCIAL OUTLAYS TO DARE/ICAR AND ALLOCATION/UTILIZATION OF FUNDS DURING THE TENTH PLAN AND FIRST TWO YEARS OF XITH PLAN**

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) and Rs.68 crore for Jammu Agriculture University against the proposal of Rs.16000 crore (including Rs.1000 crore as one time catch-up grant).

2.12 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.

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 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.

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

2.17 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).

2.18 The Committee noted that at RE 2006-07, the plan budget was enhanced from Rs.1350 crore to Rs.1430 crore (through Supplementary Demands of Grant 2006-07) in order to partly meet the additional funding commitment i.e. Rs.50 crore provided under the freshly approved component of “State of Agricultural Education in the Country in the context of the new challenges” and Rs.30 crore to Punjab Agricultural University as part of the Rs.100 crore special grant specially approved by the Government. The Actual Expenditure was Rs.1368.03 crore, that means, the Department failed to utilise Rs.61.97 crore out of the allocation of Rs.1430 crore in 2006-07 (RE).

2.19 Finally, the Committee have noted that against the Xth Plan outlay of Rs.5368 crore, the total of yearly allocations (through Annual Plans) comes to Rs.5050 crore. The individual year-wise break-up for the years 2002-03, 2003-04, 2004-05, 2005-06 and 2006-07 being Rs.775 crore, Rs.775 crore, Rs.1000 crore, Rs.1150 crore and Rs.1350 crore respectively. However, at the RE stage it was subjected to cut in the years of 2002-03, 2004-05 and 2005-06, the total allocation made through REs was Rs.4900 crore only. The utilization of Plan Expenditure with reference to RE during five years of Xth Plan in %age was 93.87%, 90.55%, 95.44%, 98.03% and 95.66% respectively. The overall average fund utilization for the entire Xth Plan period was 94.71% with respect to total allocation through Revised Estimates.

#### **XI PLAN FINANCIAL PROPOSALS OF DARE/ICAR**

2.20 The Committee noted that the Department of Agricultural Research and Education has been allocated Rs. 12,023 crore as the total XIth Plan outlay. During



the first two years of XIth Plan i.e. 2007–08 and 2008–09, the outlay of this Department was Rs.1,620 crore which was reduced to Rs.1,434 crore during 2007–08 against the proposal of Rs.1945.50 crore.

2.21 The Department was given Rs.1,760 crore during 2008–09 against the proposal of Rs.2646.79 crore.

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

2.23 When the Committee desired to know, whether this budgetary allocation of Rs.1760 crore for their Plan activities in 2008-09 was adequate enough and in consonance with the Government's declared intention to give priority to agricultural research, the Department replied as under:

“The Department welcomes the increase of Plan Budget from Rs.1,620.00 crore in 2007-2008 to Rs.1,760.00 crore in 2008-09. The Department prioritized its activities/ programmes to accommodate within this outlay.”

2.24 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 is over and above the annual added cost of inflation, the Department replied as under:

“The increase in the cost of inputs-machinery, raw-material, maintenance and other running research expenses - has been generally more than the annual inflation. However, the enhancement in Plan Outlay may be sufficient to cover annual inflationary cost. In real sense, the Budgetary Allocation may not allow the Department to address all research issues adequately and accordingly the Department is prioritizing its activities for optimum utilization of funds.”

2.25 The Department was asked to give reasons for reduced allocation of Rs.186.00 crore in 2007-08 at RE stage and also indicate whether the reduction has affected various Plan schemes. To this point, the Department replied as under:

“In the first year of the plan approval process takes some time. Therefore, the allocation in the first year is proportionately less, which is made- up in the subsequent years of Five Year Plan.”

2.26 On being asked about the efforts made or proposed to be made make to procure higher plan allocations or at least upto the level of their proposed allocations of Rs.2646.79 crore, rather than remaining satisfied with the very meager increase of 8.64% in their Plan BE (2008-09) from the BE(2007-08) as they have confirmed, “...in real sense, the Budgetary Allocation may not allow the Department to address all research issues adequately...”, the Department replied as under:

“The Department has been continuously making efforts at all levels for getting enhanced allocation.”

2.27 The adequate funding of National Agricultural Research System has always been emphasized by this Committee which has always been recommending an allocation equivalent to at least 1% of AGDP. Apart from this, the XI Plan Working Group on Agricultural Research and Education has also recommended that at least a sum of Rs.31,672 crore should be provided for the various sectors and State Agricultural Universities. In addition to this, the Externally Aided Projects/World Bank Aided Projects also need to be funded as per their approved programmes. During XIth Plan period no funds are proposed for one time catch up grant because the Planning Commission had not provided any fund during Xth Plan against the Department’s proposal of Rs.1000 crore for this purpose, though it was repeatedly emphasized by the Department. Moreover in accordance with the recent instructions, the critical repairs and maintenance upto 15% could be included in Plan budget during XIth Plan.

2.28 The Sector-wise Projections of proposed outlay for XIth Five Year Plan (2007-12) and first two years of XIth Plan (2007-08 & 2008-09) are given below:

| Name of the Sector  | XIth Plan Proposed Outlay | XIth Plan Outlay (2007-12) | (Rs. in crores) |                |                |                     |                |
|---|---------------------------|----------------------------|-----------------|----------------|----------------|---------------------|----------------|
|   |                           |                            | 2007-08         |                | 2008-09        |                     |                |
|   |                           |                            | Proposed Outlay | BE             | RE             | Proposed Allocation | BE             |
| CROP SCIENCE  | 1991.08                   | 1900.00                    | 341.55          | 310.00         | 240.50         | 410.93              | 315.00         |
| HORTICULTURE  | 702.52                    | 761.00                     | 148.70          | 70.00          | 75.60          | 130.75              | 90.00          |
| NATURAL RESOURCE MANAGEMENT   | 630.12                    | 730.00                     | 98.06           | 80.00          | 89.10          | 92.14               | 100.00         |
| AGRICULTURAL ENGINEERING  | 262.20                    | 300.00                     | 46.63           | 40.00          | 40.00          | 115.93              | 42.00          |
| ANIMAL SCIENCE  | 1074.99                   | 1075.00                    | 149.52          | 90.00          | 80.00          | 288.92              | 90.00          |
| FISHERIES   | 235.74                    | 400.00                     | 47.14           | 40.00          | 40.00          | 98.50               | 45.00          |
| AGRIL. ECO. & STATISTICS  | 26.05                     | 22.00                      | 4.51            | 4.00           | 4.00           | 7.54                | 4.00           |
| AGRICULTURAL EXTENSION  | 2300.00                   | 2100.00                    | 316.29          | 281.00         | 320.50         | 538.17              | 301.00         |
| AGRICULTURAL EDUCATION  | 2705.00                   | 2585.00                    | 289.51          | 312.00         | 361.00         | 491.40              | 350.00         |
| DARE + CENTRAL AGRICULTURAL UNIV. MANAGEMENT & INFORMATION SERVICES | 759.27                    | 560.00                     | 157.04          | 56.50          | 56.50          | 169.07              | 135.00         |
| NATIONAL FUND FOR BASIC AND STRATEGIC AGRICULTURE RESEARCH          | 85.00                     | 100.00                     | 16.80           | 37.50          | 21.00          | 18.10               | 15.00          |
| NATIONAL AGRICULTURAL INNOVATION PROJECT                            | 126.00                    | 100.00                     | 18.00           | 9.00           | 14.20          | 22.00               | 10.00          |
| INDO US KNOWLEDGE INITIATIVE  | 1178.43                   | 1090.00                    | 286.75          | 285.00         | 85.70          | 257.32              | 257.00         |
| PIPELINE PROJECTS   | 100.00                    | 50.00                      | 25.00           | 5.00           | 5.90           | 6.00                | 6.00           |
| <b>GRAND TOTAL</b>  | <b>12176.40</b>           | <b>12023.00</b>            | <b>1945.50</b>  | <b>1620.00</b> | <b>1434.00</b> | <b>2646.78</b>      | <b>1760.00</b> |

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

on Agricultural Research and Education in comparison to Xth Plan Working Group which recommended Rs.25000 crore for the same cause.

2.30 From the given Table for Sector-wise Projections for XIth Plan & its Ist two years, it is seen that allocations under different sectors/schemes is much less than the proposed one. In case of crop science against the proposed outlay of Rs.341.55 crore during 2007-08 the final allotment at RE stage was Rs.100 crore less. For 2008-09 against the proposal of Rs.410.93 crore, BE is only Rs.315.00 crore, 96 crore less. For agricultural Engineering in 2008-09 the allocation of Rs.42.00 crore is just 36% of the proposed outlay of Rs.115.93 crore.

For animal science against the proposals of Rs.149.52 crore for 2007-08, only 80 crore were sanctioned at RE stage and for 2008-09, against a proposal of Rs.288.92 crore, only Rs.90 crore have been allocated. Whereas the total of the XIth Plan is Rs.1075 crore how this amount will be utilised during XI Plan by sanctioning Rs.80 crore and Rs.90 crore per year. The Committee are unable to comprehend.

For Agricultural Extension Sector against the proposal of Rs.538.17 crore, only Rs.301 crore have been allocated for 2008-09.

For Central Universities and DARE against a proposal of Rs.169.07 crore, only 135 crore have been allocated for 2008-09. 100 crore has been allocated from only two Universities, as if, other Agricultural Universities do not require any assistance from the Department.

For National Fund for Basic and Strategic Agricultural Research against a proposal of Rs.22 crore, only Rs.10 crore have been allocated for 2008-09 and if Ist two years are totalled it is less than 25% of total allocation (Rs.100 crore for XI Plan).

For the Pipeline Projects, though Rs.250 crore have been sanctioned for the XI Plan period, however, not a single penny has been allocated during the 1st two years of this plan.

### **ONE TIME CATCH-UP GRANT**

2.31 The Committee have been 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.

2.32 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’.

2.33 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.”

2.34 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 explained its position as under:

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

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

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

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

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

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

2.38 During examining of the DFG (2008-09) of the Department, the Committee have asked as to whether the Department was satisfied with the guidelines of Planning Commission of October 2006, that the Department might also include 15% of Plan Budget for critical repairs and maintenance. To this point, the Department replied as under:

“The Department has been able to address the modernization of infrastructure and replacement of obsolete equipment to the extent possible through its annual plan allocation.”

When asked through a supplementary point as to what is meant by “....able to address the modernization of infrastructure and replacement of obsolete equipment to the extent possible through its annual plan allocation”, the Department replied as under:

“The Department emphasize that any genuine requirement of replacement of obsolete equipment / improvement in research facilities should be prioritized and addressed to providing adequate funds keeping in view the requirement as well as availability of fund.”



2.39 The Department was further asked as to what possible extent, it has been able to address the modernization of infrastructure and replacement of obsolete equipment through its annual plan allocation in each of their Institutes/NRCs/PDs/SAU-wise, during the last 3 years and how much work still remains to be done. To this point, the Department replied as under:

“The process of modernization of infrastructure and replacement of obsolete equipment was a part of the implementation of approved programmes / schemes and no separate budget line was made for the same. The process of modernization / replacement of obsolete equipment, etc. is a continuous process and is part of the SFC / EFC formulation. The process of XI plan SFCs/EFCs is still going-on. No separate budget has been allocated for this purpose by the Planning Commission, so no separate list of such items of modernization / replacement of obsolete equipment was determined by the department.”

On a point as to whether the Department is satisfied with the present system/arrangement in this regard or the need for one time catch up grant as per the latest estimation is required to be re-recommended more vigorously from the Department as well as the PSCA, the Department replied as under:

“Our fund requirements, based on activities and programmes, are projected in totality, thus need for catch up grant is also addressed in our projection.”

### **BUDGETING PROCEDURE AND PRACTICE**

2.40 As regards the Budgeting Procedure and Practice followed in the Department, the Committee have been informed that ‘A circular is issued to all the constituent units, i.e., Institutes/National Research Centres (NRC)/Project Directorates(PD)/Agricultural Scientist Recruitment Board (AGRB)/ Publication & Information Division/ICAR Head Quarters etc. sometime in the 2<sup>nd</sup> 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 1<sup>st</sup>/2<sup>nd</sup> 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 1<sup>st</sup>-2<sup>nd</sup> week of January. The Plan allocation (BE) of the next financial year is received from the Planning Commission sometime in the 1<sup>st</sup> week of February. In the meantime the Budget proposals received from the SMDs are scrutinized by the Plan Implementation & Monitoring (PIM)/Finance Division/Budget Section keeping in view the expenditure trend of the particular Institute/NRC/PD for the last 3 years and the justifications furnished for the demand and the overall allocation made by the Ministry of Finance in the RE/BE. On the basis of this exercise and keeping in view the final allocation the SMD-wise/Institute-wise allocation is decided and communicated to the Institute/NRC/PD concerned by the end of January or 1<sup>st</sup> week of February.'

2.41 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”.

2.42 In reply to a recommendation of the Committee in this regard, 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 this recommendation.

2.43 While examining DFG (2008-09) of the Department, the Committee asked about the same issue in the following format and the Department in their Reply furnished the desired information as under:

| Sl. No. | Item of Information   | Name of the SMD(s)  | Corresponding Date(s) of receiving | Corresponding Date(s) of sending |
|---------|---|---|------------------------------------|----------------------------------|
| 1       | The exact date(s) of issuing Circular to all constituent units for inviting proposals of RE (2007-08)/B.E. (2008-09)  | Finance Division Circular   |                                    | 17 <sup>th</sup> August, 2007    |
| 2       | The exact date(s) of receiving proposal of RE(2007-08) and BE(2008-09) by each of the Subject Matter Divisions (SMDs), separately, from various constituent units.                        | ICAR Headquarters does macro level monitoring. The Micro level monitoring is done by concerned Divisions. |                                    |                                  |
| 3       | The exact date(s) on which each of the SMDs, separately, completed their scrutiny of the proposals of RE/BE and sent to it to Budget Section with their recommendations for finalisation. |   | <b>R.E. (2007-08) Plan</b>         | <b>B.E. (2008-09) Plan</b>       |
|         |   | Crop Science  | 7.12.2007                          | 28.2.2008                        |
|         |   | Horticulture  | 4.12.2007                          | 18.2.2008                        |
|         |   | NRM   | 7.12.2007                          | 21.2.2008                        |
|         |   | Fisheries   | 3.12.2007                          | 26.2.2008                        |
|         |   | An. Science   | 3.12.2007                          | 21.2.2008                        |
|         |   | Engg.   | 6.12.2007                          | 20.2.2008                        |
|         |   | Education   | 4.12.2007                          | 28.2.2008                        |
|         |   | Extension   | 13.12.2007                         | 20.2.2008                        |
|         |   | ESM   | 6.12.2007                          | 26.2.2008                        |
|         |   | MIS   | 14.12.2007                         | 28.2.2008                        |

|    |   |   |   |   |
|----|---|---|---|---|
|    |   |   |   |   |
| 4  | The exact date(s) on which the Budget Section has sent, [SMD-wise(dates)] the Plan proposals to ADG (Plan Implementation Monitoring)                        | The dates of sending are as per SI.No.3, these are sent by SMD to ADG(PI&M) |   |   |
| 5  | The exact date(s) on which the Plan proposals (RE 2007-08/BE 2008-09) were received by ADG (PIM) SMD-wise from Budget Section.                              | -do-  |   |   |
| 6  | The exact date(s) on which the Plan allocation RE(2007-08)/BE(2008-09) of each of the SMDs, were firmed up by ADG(P/M) in consultation with SMDs concerned. | ADG(PI&M)   |   | 26.11.2007<br>(Tentative Sector-wise R.E. 2007-08)<br><br>8.1.2008 (R.E. 2007-08) |
| 7  | The exact date(s) on which the Non-Plan RE(2007-08)/BE (2008-09) proposals duly scrutinized by each of the SMDs were received in Budget Section.            | Director(Finance)   |   |   |
| 8  | The exact date of receiving Budget circular from MoF during (2007-08)   |   |   |   |
| 9  | The exact date(s) of sending statement of Budget Estimates (SBEs) to MoF  | Director(Finance)   |   | 12.2.2008   |
| 10 | The exact date of receiving Plan BE(2008-09) allocation ceilings by the Planning Commission   | No ceilings of allocations were intimated by Planning Commission            |   |   |
| 11 | The exact date of discussion held between FA (DARE) and the Secretary (Expr.) MoF on SBE.   |   | 19.11.2007  |   |
| 12 | The exact date(s) of receiving RE/BE allocation from MoF during (2007-08)   | Ministry of Finance   | 4.1.2008 (R.E. 2007-08) Plan and Non-Plan<br><br>4.1.2008 Non Plan B.E. 2008-09 |   |

|    |   |   |   |  |
|----|---|---|---|--|
| 13 | The exact date of receiving Plan BE (2008-09) from the Planning Commission  | Planning Commission   | 9.2.2008  |  |
| 14 | The exact date(s) on which the final allocation were decided SMD-wise and were communicated to each of the SMDs, separately                       | ADG(PI&M)   | 14.2.2008 (B.E. 2008-09)  |  |
| 15 | The exact date on which each of the Institute/NRC/PD concerned actually were communicated their RE(2007-08)/BE(2008-09) by their respective SMDs. | Crop Science<br>Horticulture<br>NRM<br>Fisheries<br>An. Science<br>Engg.<br>Education<br>Extension<br>ESM | <b>R.E. (2007-08)<br/>Plan</b><br>10.1.2008<br>10.1.2008<br>10.1.2008<br>11.1.2008<br>14.1.2008<br>10.1.2008<br>9/22.1.2008<br>21/25.1.2008<br>8.2.2008 |  |

2.44 The Department was also asked as to whether it is a fact that usually the Department suffers from procedural delays and very late release of funds from Ministry of Finance to the Department which hampers the quantity and quality of progress of various schemes/projects undertaken by the Department and suggest any meaningful changes in any of the existing procedure/practice relating to preparation of budgetary proposals and getting the actual allocations released from Ministry of Finance in time. To these points, the Department replied as under:

“There has been no procedural delay and the present procedure is working well.”

2.45 Observing from the above information, the Committee through a Supplementary point asked the Department as to whether this is the first time when “No ceilings of allocations were intimated by Planning Commission” as mentioned in their reply or usually Planning Commission has been intimating ceilings of allocations in the previous years. To this point, the Department replied as under:

“The ceilings of allocation under Plan 2008-09 were received from Planning Commission on 9.2.2008.”

2.46 Further, referring to Sl.Nos 11,13, 14 & 15 of the reply, the Department was asked as to why the Department has given misleading and incomplete information as the information given in Column 15, pertains to Column 14 as in Column 14 the exact dates on which final allocation (RE 2007-08 as well as BE 2008-09) were communicated to each of the SMDs, separately, have been asked and in Column 15 the exact dates on which each of the Institutes/NRCs/PDs concerned actually were communicated their RE/BE by their respective SMDs, have been asked but the Department seems to have deliberately hiding the correct information as is clear from their style of reply and was asked to provide correct dates under Column 14(for RE/BE) SMD-wise and under Column 15 exact dates when each of Institutes/NRC/PD were actually communicated their RE/BE by respective SMDs. To these points, the Department replied as under:

“In so far as the indicating SMD wise separate dates for communicating Plan BE 2008-09 is concerned, the ADG (PIM) vide letter dated 14-2-2008 had listed the SMD wise Plan BE 2008-09 and the copies of this letter were sent to all SMDs on the same date. Similarly, the SMD wise Plan RE 2007-08 was intimated to all the SMDs vide ADG - PIM's letter dated 8-1-2008. There were no separate dates for various SMDs in so far as communication of SMD wise Plan RE 2007-08 and Plan BE 2008-09 is concerned. In so far as intimating Institute/ NRC / PD wise communication of Plan BE 2008-09 is concerned, this was communicated by the department after an internal exercise, to all SMDs on 27.3.2008.”

2.47 The Committee further observed from the reply of the Department that in Sl.No.15 against Education and Extension (SMDs) two dates, namely, 9/22.1.2008 and 21/25.1.2008, respectively, have been mentioned while against other 7 SMDs only one date of receiving RE(2007-08) Plan have been mentioned and asked the Department to clarify the position in this regard and the Department replied as under:

“In so far as two dates of communication Plan RE 2007-08 by Extension Division is concerned, the 8 Zonal Coordinators of KVKs were communicated on 21-1-2008 whereas NRC Women in Agriculture, Directorate of Information and Publication in Agriculture and also AICRP Home Science were intimated on 25-1-2008. In the Education Division, it was intimated to all ADGs of the Division on 9-1-2008 to take further necessary action for

intimating to concerned universities which was done on 22-1-2008 to NAARM, Hyderabad.”

2.48 The Committee also noted that RE Plan & Non-Plan (2007-08) is shown to have been received from MoF on 4.1.2008 in SI.No.12, then, why ESM (SMD) was communicated RE (Plan) on 8.2.2008 (SI.No.15) by the Department, i.e., after 34 days of receiving the same from MoF. Similarly, Education & Extension (SMDs) have been communicated RE(Plan) after 18 and 21 days, respectively, from the date of receiving from MoF, viz., 4.1.2008, while 4 SMDs out of 9 mentioned in Column 15 have been communicated only after 6 days of receiving from MoF. Moreover, when actually each of the end-users institutes/NRCs/PDs, etc. have been communicated their respective REs (2007-08), the information has not been disclosed by the Department in appropriate Column. To these points, the Department replied as under:

“The SMD wise (including ESM, Plan RE 2007-08 was communicated on 8-1-2008 and not on 8-2-2008. Further, the ESM communicated to its Institutes on 8-2-2008. Similarly, the Education and Extension Divisions had intimated their Plan RE 2007-08 to respective institutes on the dates indicated in column no.4 of Serial No. 15. The SMD wise (including Education and Extension) Plan RE 2007-08 was communicated on 8-1-2008. The dates of communicating Institute wise Plan RE 2007-08 are given in column no. 4 of serial no.15.”

2.49 Through another supplementary point, the Committee pointed out to the Department that During Evidence of the Representatives of MoA(DARE), MoF and Planning Commission before the PSCA, held on 22.11.2001, the then, Secretary(DARE) has categorically pointed out about the procedural delays in receiving RE from MoF which did not allow the Department to utilize the scarce financial resources optimally and huge unspent amounts/balances remain. Similar, views/suggestions were extended by the Department in a written reply to the specific points raised by the Committee about the entire budgetary procedure and practices being followed by the Department and any meaningful change/remedies required to

be in place, while the Committee were examining DARE's DFG(2004-05), that the Department suffers from late release of funds from MoF and it would be better if REs are provided in the month of December or earlier. But ironically, now the Department in reply to similar points about the procedural budgetary delays and meaningful changes required, was stating as under:

“There has been no procedural delay and the present procedure is working well.”

In view of the above, the Department was asked to justify the above volte-face regarding budgetary procedural delays and meaningful changes required and whether it was an actual turnaround engineered by the Department or it was a vain attempt to deviate the Committees' attention from the actual problem. To these points, the Department stated as under:

“It is to clarify that the reply of the department pertains to the release of the funds to DARE/ICAR from the Principal Accounts Office. It is also stated that the department immediately initiates advance action in conveying Plan RE to the SMDs on the basis of pre-budget consultation involving Secretary(Expenditure) and FA(DARE). However, the figures of RE are confirmed on receipt of formal communication of MoF.”

### **INTRODUCTION OF ZERO BASED BUDGETING (ZBB) LEADING TO INTEGRATION OF PLAN SCHEMES OF ICAR**

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

2.51 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.



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. 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.

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. The integration/merger of plan schemes is done on the basic of commonality of objectives/mandate, location of the project and management aspects.

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

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

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

2.52 The Committee enquired about the latest total number of schemes including number of main schemes and number of sub-schemes, which are in operation during 2006-07, 2007-08 & 2008-09. To this point, the Department replied as under:

“In all, there are 71 main schemes which continued in 2006-07 and 2007-08; the number of sub schemes during 2006-07 was 179(including main schemes) and during 2007-08 these are 178 because the Externally Aided Project of ‘Indo-French Seabass Breeding and Culture, Chennai’ was terminated in 2007-08. In so far as the number of main schemes as well as sub schemes during 2008-09 is concerned, this would be determined after the process of XI Plan SFC/EFC is accomplished during this year.”

### **NEW SCHEMES PROPOSED TO BE INITIATED DURING THE ELEVENTH PLAN**

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

“The Eleventh Plan formulation/finalization is under way and competent approval forum would take necessary decisions.”

2.54 When asked about the competent approval forum referred to in the reply stated above, the Department replied as under:

“As per the Ministry of Finance’s latest “guidelines for formulation, appraisal and approval of Government Plan Funded Projects / Schemes to be made effective over the duration of XI Plan”; for any XI plan scheme / project the details of competent approval forum are given as: “Plan schemes / projects costing less than Rs. 15 crore could be considered for approval by Secretary of the Department i.e. without referring to SFC / EFC. Schemes costing Rs. 15 crore and above but less than Rs. 50 crore pertain to SFC, Rs. 50 crore and above but less than Rs. 150 crore pertain to EFC, Rs. 150 crore and above pertain to CCEA. In so far as the financial approval authority for the recommendations of the SFC/EFC/CCEA is concerned, for schemes costing Rs 15 crore and above but less than 75 crore is the Minister of the Department/Ministry, for schemes costing Rs 75 crore and above but less than Rs 150 crore the approving authority is Minister of the Department/Ministry as well as Finance Minister. For schemes costing Rs 150 crore and above, the approving authority is CCEA. The EFCs of scientific Departments like DARE / ICAR are chaired by the Secretary of the Department irrespective of the outlay of the EFC”. Here, the competent recommending forum in a particular case could be SFC / EFC and correspondingly the competent financial forum for approval of a particular scheme / project is Minister of the Ministry / Department and / or Finance Minister / CCEA.”

2.55 The Committee asked the Department to give all the procedural and stage-wise technical details/as well as differences in the terms, namely, “Eleventh Plan Formulation” and “Eleventh Plan Finalization” and, by when the “Eleventh Plan Formulation” was started and initiated by the Department and by when the process

of “Eleventh Plan Finalization” is likely to be completed. To these points, the Department stated as under:

“The Planning Commission had issued a circular on 13.11.2006 alongwith guiding points for the formulation of XIth Plan. The Department had submitted its XI Plan document to Planning Commission on 28.12.2006. In so far as the XIth Plan finalization is concerned, the Department has various constituent units in the form of institutes/national research centres/project directorates etc. spread all over the country and each one of them has to get approved its XI Plan proposal. The formulation of XI Plan proposals of various institutes/projects is in the advance stage of processing. So for 7 EFCs (these includes the 3 EFCs cleared as a follow-up action over the union budget announcement 2007-08 made by the Hon’ble Finance Minister)and 5 SFCs have already been cleared by these respective bodies. It is expected that the process of clearance of proposals of various institutes/projects of the Department will be cleared through the respective competent bodies like SFC/EFC/CCEA during the year 2008-09. The Planning Commission had communicated the XI Plan outlay of the Department of Rs.12023 crore on 11.9.2007.”

2.56 On a point that in case the proposed “Eleventh Plan Formulation” for DARE/ICAR has been initiated on or before, the Eleventh Plan started on 1st April, 2007, then, why the Department has not given the physical/financial details of new schemes proposed to be initiated by the Department(subject to the final approval of the competent forum) during the Eleventh Plan as had been asked for by the Committee. To this point, the Department replied as under:

“Through its XI Plan document, the Department had proposed new initiatives like Establishment of National Institute for Biotic Stress Management, Establishment of National Institute for Abiotic Stress Management, Establishment of National Institute of Biotechnology and Intellectual Property Management and Transfer/Commercialization of Agricultural Technologies. The first three have not yet been initiated and are at processing stage. The last one was not taken as a new scheme rather just up-gradation of the existing component of Intellectual Property Right under ICAR headquarters. This is the reason that these schemes were not shown as initiated in XI Plan.”

**APPROVAL OF STANDING FINANCE COMMITTEE(SFC) / EXPENDITURE FINANCE COMMITTEE(EFC) / CABINET COMMITTEE ON ECONOMIC AFFAIRS (CCEA) OF XI Plan SCHEMES**

2.57 The Committee wanted to know about the latest status of SFC/EFC/CCEA clearance, of each of the main Plan Schemes (with details of sub-schemes under

each of the main Plan Schemes) of DARE/ICAR for 11<sup>th</sup> Plan period and by when all the SFC/EFC/CCEA for the Eleventh Plan are likely to be cleared. To this point, the Department stated as under:

“So far 4 EFCs and 3 SFCs have been cleared and another 3 EFCs and 2 SFCs are scheduled to be considered during March 2008. In so far as the clearance of all other SFCs/EFCs/CCEA are concerned, all these are expected to be cleared during 2008-09.”

2.58 Through the supplementary point, the Department was again asked to furnish complete details of SFCs/EFCs/CCEAs, with details of present status/tentative schedule chalked out for clearance of the same during 2008-09, Sector-wise/SMD-wise in the given format, to which Department replied as under:

| Sl No | Name of the Sector/SMD (with name of Main Plan Scheme, sub-schemes under each Sector) | Total No. of SFC(s) | Total No. of EFC(s) * | Total No. of CCEA(s) | Present Status of clearance of each SFC/EFC/CCEA (with dates)                      | Tentative schedule of clearance of each SFC/EFC/CCEA (with dates) | Remarks, if any                    |
|-------|---|---------------------|-----------------------|----------------------|--|---|------------------------------------|
| 1.    | Crop Science  | 2                   | 13                    | 4                    |  | All cases in advance stage of processing                          | 1 circulated to appraisal agencies |
| 2.    | Horticulture  | 4                   | 05                    | 1                    |  | All cases in advance stage of processing                          | 2 circulated to appraisal agencies |
| 3.    | Natural Resource Management   | 6                   | 06                    | -                    |  | All cases in advance stage of processing                          | 2 circulated to appraisal agencies |
| 4.    | Agri. Engg.   | 3                   | 02                    | -                    | 1 SFC in respect of CIRCOT, Mumbai considered in the SFC meeting held on 28.3.2008 | All cases in advance stage of processing                          |                                    |

|     |   |               |                |            |  |  |                                    |
|-----|---|---------------|----------------|------------|--|--|------------------------------------|
| 5.  | Animal Science  | 7             | 07             | 1          | 1 SFC in respect of National Bureau of Animal Genetic Resources including Network on AGR considered in the SFC meeting held on 28.3.2008 | All cases in advance stage of processing(except 5 cases) |                                    |
| 6.  | Fisheries   | 2             | 04             | -          | All considered by respective SFCs/EFCs meetings  | All cases of SFCs/EFCs cleared                           | -                                  |
| 7.  | Agril. Statistics & Economics   | 1             | -              | -          |  | in advance stage of processing                           |                                    |
| 8.  | Agril.. Extension   | 2             | 01             | 1          | Directorate of Information & Publication (DIPA) on file approved   | All cases in advance stage of processing (except 1)      |                                    |
| 9.  | Agri. Education   | 2             | 01             | 1          |  | All cases in advance stage of processing                 | 1 circulated to appraisal agencies |
| 10. | Central Agricultural University, (CAU), Imphal<br><br>i. DARE   | -<br><br>1 ** | 01<br><br>-    | 1<br><br>- | Considered by EFC held on 28.3.2008 which will subsequently be considered by CCEA  |  |                                    |
| 11. | Strengthening and Modernization of ICAR Headquarters  | -             | 1              | -          |  | Under advance stage of processing                        | 1 circulated to appraisal agencies |
| 12. | Externally Aided Projects<br><br>National Agricultural Innovative Project (WB)<br><br>b. National Fund for Basic and Strategic Research |               | 1<br><br>1 *** | 1          | Already approved   | -do-   |                                    |

|     |                              |           |           |           |  |      |  |
|-----|------------------------------|-----------|-----------|-----------|--|------|--|
| 13. | Indo-Us Knowledge Initiative |           | 1         | -         |  | -do- |  |
|     | <b>Total</b>                 | <b>29</b> | <b>44</b> | <b>10</b> |  |      |  |

\* including CCEA cases

\*\* case of on-file approval

\*\*\* apart 71 main schemes

The above table is based on the tentative XI Plan earmarked outlay as ICAR Share only.

In addition to above, the Department have also considered/cleared the following SFC/EFC proposals:-

|                                       |   |   |
|---------------------------------------|---|---|
| 1st EFC held on 7.8.2007              | 1.Institution of Excellence of Tamil Nadu Agricultural University, Coimbatore   | Budget Announcement 2007-08                               |
|                                       | 2.Institution of Excellence of Govind Balabh Pant University of Agricultural & Technology, Pantnagar  |   |
| 2 <sup>nd</sup> EFC held on 11.9.2007 | Scaling up of Water Productivity in Agricultural for Livelihoods through Teaching cum Demonstration, Training of Trainers and Farmers   | Budget Announcement 2007-08                               |
| 1st SFC held on 27.12.2007            | Intellectual Property Management and Transfer/Commercialization of Agricultural Technology Scheme (up-scaling of existing component i.e. I.P.R. under ICAR Headquarters Scheme on MIs | Upgradation of existing IPR component of ICAR headquarter |

### **STATUS OF SURPLUS AMOUNTS LYING UNUSED IN BANKS**

2.59 The Committee desired to know whether any surplus amounts are lying in the Banks during each of the last three years and the reasons such amounts were lying unused. To this point, the Department replied as under:

“The year-wise closing balance for the last 3 years of X Plan is as under:

(Rs. in crores)

| Year    | Cash in hand   | Cash at Bank | Total  |
|---------|--|--------------|--------|
| 2004-05 | 1.85   | 524.94       | 526.79 |
| 2005-06 | 1.04   | 597.35       | 598.39 |
| 2006-07 | 1.13   | 586.76       | 587.89 |
| 2007-08 | <i>The closing balance for the year will be known after the financial year is over and the Annual accounts consolidated.</i> |              |        |

The Council has 114 accounting units spread all over the Country. Each unit is left with certain balance at the close of the financial year. The amount shown above is the total sum of all the constituent units including ICAR Hqrs. taken together. The closing balance includes funds remitted by the Council to the Institutes for the

salary of March to be paid in April during the next financial year; amount of internal resource generation not remitted to ICAR Hqrs.; amount of deposit schemes which is kept for incurring the expenditure on that scheme till it is over; funds received from contract research, consultancy, training etc.; earnest money deposits / security deposits; amount recovered from the salaries on account of loans & advances etc. to be remitted to other departments; recoveries of GPF to be remitted to the ICAR Hqrs. for credit to ICAR Provident Fund account and also the unspent balance of Govt. grant to be surrendered during the next financial year after finalization of Annual accounts.”

2.60 When asked whether the Department has thought of, and actually implemented, any remedial measures to avoid keeping unused amounts in the Bank as as been assured by the Department in previous years, they replied as under:

“During current financial year, the Council instructed all the constituent units to refund the unspent balance lying with them. The majority of the units have refunded the unspent balances as on 31.03.2007.

The closing balance of Rs. 587.89 crore as on 31-3-2007 includes accumulated unspent balance of Govt. grant of Rs. 66.85 crore pertaining to previous years and also Rs. 55.54 crore being unspent amount against the Govt. grant for the year 2006-07. These amounts have been refunded to the Govt. on 31.12.2007 and 12.9.2007 respectively. While the amount of internal resource generation will be used to supplement the non-plan requirement of the Council, recoveries from salaries will also be remitted as per rules. As a result of this, the closing balance at the end of 31.3.2008 will be reduced”.

2.61 The Committee have noted that the majority of the units are said to have refunded the unspent balances as on 31.3.2007 and asked about the details of those remaining constituent units who did not refund the unspent balances as on 31.3.2007 in spite of Council's instructions in this regard with reasons for non-compliance and further action taken against those constituent units by the Department. They also enquired about the reasons for not making any stipulated time limits and penal action rules for this perennial problem, so far as Rs.66.85 crore (previous years unspent balances and Rs.55.54 crore (2006-07) unspent balance was refunded on 31.12.2007 and 12.9.2007, respectively which amounts to gross mismanagement of scarce financial resources which if timely refunded can be put to better utilization by the Government. To these points, the Department replied as under:

“The units have been directed to refund the unspent balance lying with them as on 31.3.2007 by 15<sup>th</sup> April 2008. They have further been instructed to refund the unspent balance as on 31.3.2008 by 15<sup>th</sup> May 2008.”

**NUMBER OF EMPLOYEES IN POSITION AGAINST THE SANCTIONED STRENGTH IN DARE/ICAR**

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

| Sl. No. | Posts                        | Total Sanctioned Posts | Total Employees in position | Shortfall | Reasons / Remarks  |
|---------|------------------------------|------------------------|-----------------------------|-----------|--|
| 1       | <b><u>Scientific</u></b>     |                        |                             |           |  |
|         | 2005-06                      | 6428                   | 4609                        | 1819      |  |
|         | 2006-07                      | 6428                   | 4184                        | 2244      | Due to mass retirement on account of enhancement of the age of superannuation. |
|         | 2007-08*                     | 6428                   | 4501                        | 1927      |  |
| 2       | <b><u>Technical</u></b>      |                        |                             |           |  |
|         | 2005-06                      | 7952                   | 7355                        | 597       |  |
|         | 2006-07                      | 7893                   | 7119                        | 774       |  |
|         | 2007-08*                     | 7779                   | 7385                        | 394       |  |
| 3       | <b><u>Administrative</u></b> |                        |                             |           |  |
|         | 2005-06                      | 5103                   | 4705                        | 398       |  |
|         | 2006-07                      | 4814                   | 4355                        | 459       |  |
|         | 2007-08*                     | 4802                   | 4620                        | 182       |  |
| 4       | <b><u>Supporting</u></b>     |                        |                             |           |  |
|         | 2005-06                      | 10145                  | 9174                        | 971       |  |
|         | 2006-07                      | 9980                   | 8964                        | 1016      |  |
|         | 2007-08*                     | 9640                   | 8793                        | 847       |  |

\* As on 29.2.2008

2.63 The Committee desired to know that in pursuance of the Committee’s recommendations 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 and by when the Department is likely to achieve the required level of Scientific/Technical Work Force. To these points, the Department replied as under:

“Recruitment in the scientific cadre is a continuous process as (i) primarily the vacancies are caused due to selection of scientists on lateral entry basis to Senior positions within the system and (ii) due to superannuation/ voluntary retirement and resignations.



Subsequent to the last review, the ICAR through the Agricultural Scientist Recruitment Board (ASRB) has scheduled to conduct the Agriculture Research Service (ARS) Examination-2007 on 25.5.2008 for filling up 283 positions of scientists at the entry level in the pay scale of Rs. 8000-13500. Selections are made based on an annual All India Open Competitive written examination followed by viva-voce.

Further 53 selectees of the ARS - 2005 and 76 selectees of ARS-2006 are on extension of joining time for completion of their Ph.D. Thus these 129 selectees are likely to join in the near future within the next 6 months.

Presently 137 selectees of ARS - 2005 and 2006 are undergoing the Foundation Training at NAARM, Hyderabad and they shall be posted to various institutes as per operational requirements by the end of May, 2008.

Formal requisition for around 250 entry level scientists shall be forwarded shortly for the ARS-Examination 2008.

Thus by the end of this year 129 fresh additional selectees are likely to join in the entry level grade of scientist.

Further, 139 scientists have also been appointed in other higher scientific positions, (based on interview only) in various grades of Senior Scientist / Principal Scientist / Head of Division / Project Coordinator and other positions in Research Management Cadre.

The ASRB has also released advertisement for 286 positions in these grades and is in the process of releasing another advertisement shortly comprising of 255 positions.

The selection process is likely to be completed for all the above positions by the end of 2008.”

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

“The ICAR 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 resulting in reduction to the tune of around 2900 posts since 2000-01.”

2.65 The Department was also asked to give details of the impact of reduction in the work force as per Government's norms and how the ICAR was expected to achieve the optimum level of R&D progress with huge shortfall in scientific and technical staff strength. To this point, the Department replied:

“The new initiatives are managed by appropriate judicious re-deployment of the available scientific manpower. Recruitment action has now been accelerated for filling up all the vacant scientific positions. The Department ensures that its priorities/projects/schemes do not suffer by

optimum utilization of its manpower including redeployment/ need based outsourcing.”

2.66 The Parliamentary Standing Committee on Agriculture had a briefing meeting with the representatives of the Department on 6<sup>th</sup> February 2008. In reply to the point raised by the Hon'ble Chairman (AC) regarding the problems the Department is facing and the funds required by them to do the needful research for the nation, the Secretary (DARE) replied as under:

“Sir, before mentioning our requirements, I would like to express my personal gratitude to the hon. Chairman of the Committee. You might have forgotten or you might be remembering that on the floor of the House, during the last Budget session you had raised an issue of not filling up of the posts of scientists in ICAR. There was a blanket ban and if there were three vacancies, one was filled up and that also should not be more than one per cent of the cadre strength. I am not able to recollect that in the last 15 years any post of scientist was created and here again for the last six to seven years there was a ban. You may kindly recall that the hon. Finance Minister had said that in ICAR there is no ban. Taking that statement we have gone in for filling up of the positions. So I am expressing my gratitude. 200 scientists have already been recruited and advertisements for filling up of 300 scientists have been made and they are going to be recruited. The examination is due in the month of May. I am grateful for that. It is because money alone will not be able to make the difference until and unless we have the kind of human resource which is required to do the research. So, that was my one basic requirement.”

2.67 In view of the above statement, the Committee wanted to know as to how the Department is going to manage with the fresh recruitment of about 500 scientists with meagre Plan BE 2008-09 of Rs.1760 crore as the increase in Plan BE 2008-09 is only 8.64% moreover the Plan BE 2007-08 of Rs.1620 crore as the increase of 8.64% is not even the 50% of annual inflationary rate. To this point, the Department replied as under:

“Usually the salary of the staff including scientist of the institutions of DARE/ICAR is met from non-plan funding; hence no significant adverse effect is expected on this account.”

2.68 When asked as to why the Department has been failing year after year to convince the Planning Commission and MoF about their genuine requirement of

proposed funds and the performance data and other details the Department has presented before the Planning Commission/MoF to plead for the requirement of Rs.2646.79 crore as BE 2008-09 and what reply Planning Commission and MoF have given for reducing the Department's BE 2008-09 to Rs.1760 crore, the Department replied as under:

“As earlier intimated by Planning Commission, the Annual Plan allocations to various Departments/Ministries including DARE/ICAR are made on the basis of competing requirement out of a fixed total allocation received each year by them from Ministry of Finance.”

2.69 On a point, as to what is meant by “Competing requirement....” and why the DARE is unable to compete well to justify the need to be provided with BE/RE as per their proposed allocations every year in front of Planning Commission, the Department replied as under:

“The priority for allocating funds to different sectors is decided by Planning Commission.”

### **ROLE OF DARE/ICAR IN NATIONAL FOOD SECURITY MISSION**

2.70 The Committee noted that the National Food Security Mission a centrally sponsored scheme has been launched from 2007-08 with an objective to enhance the production of rice, wheat and pulses by 10, 8 and 2 million tones respectively during the 11<sup>th</sup> Plan period.

2.71 The nodal Department for National Food Security Mission is Department of Agriculture and Cooperation. The National Development Council (NDC) in its 53<sup>rd</sup> meeting held on 29.5.2007 adopted a resolution to launch a Food Security Mission. The Mission has three components viz. (a) National Food Security Mission – Rice; (b) National Food Security Mission – Wheat; and (c) National Food Security Mission – Pulses.

The objectives of the Mission are as under :

- a. Increasing production of rice, wheat and pulses through area expansion and productivity enhancement in a sustainable manner in the identified districts of the country.
- b. Restoring soil fertility, and productivity at the individual farm level;
- c. Creation of employment opportunities; and
- d. Enhancing farm level economy (i.e. farm profits) to restore confidence amongst the farmers.

The crop wise budget is as under:

| <b>Rs. in crore</b> |         |         |         |         |
|---------------------|---------|---------|---------|---------|
| Year                | Rice    | Wheat   | Pulses  | Total   |
| 2007-08             | 138.11  | 291.95  | 96.91   | 526.97  |
| 2008-09             | 387.59  | 345.25  | 285.93  | 1018.50 |
| 2009-10             | 409.90  | 396.25  | 287.18  | 1092.30 |
| 2010-11             | 476.59  | 415.05  | 286.43  | 1177.30 |
| 2011-12             | 551.49  | 231.25  | 283.43  | 1064.90 |
| Total               | 1962.87 | 1679.73 | 1239.88 | 4882.48 |

2.72 When enquired about the responsibility/role the DARE/ICAR has been entrusted with to enhance the production of rice, wheat and pulses by 10, 8 and 2 million tones respectively during 11<sup>th</sup> Plan period. The Department replied as under:

“ICAR is involved in providing technical backstopping in this project in terms of providing details about the newly released varieties/hybrids along with the production and protection technologies in implementation of this scheme. Further, ICAR is also involved in the production of breeder seed as per requirement. The Council has also been involved in various monitoring implementation Committees of the project.”

2.73 On a point whether DARE/ICAR has done any appropriate/sufficient financial and manpower allocations/modifications for their projects/relating to rice, wheat and pulses to achieve the envisaged/enhanced targets of production to justify/prove their sensitivity towards the responsibility entrusted upon them, they replied as under:

“The Council has provided sufficient funds for the schemes related to rice, wheat and pulses during the XI Plan. The comparative allocation of the schemes during X Plan and also first two years of XI Plan are as under:”

|  | X Plan allocation<br>(Rs. in Crore) | XI Plan allocation<br>for first two years<br>(Rs in Crore) |              |
|--|-------------------------------------|--|--------------|
|  | 2002-2007                           | 2007-08  | 2008-09      |
| Rice   | 57.33                               | 13.81  | 21.50        |
| Central Rice Research Institute, Cuttack<br>along with Dt. Of Rice Research and<br>AICRP on Rice |                                     |  |              |
| Wheat  | 36.91                               | 8.03   | 14.00        |
| Directorate of Wheat Research along with<br>AICRP  |                                     |  |              |
| Pulses   | 78.68                               | 15.31  | 25.17        |
| Indian Institute of Pulses Research along<br>with all AICRPs on Pulses                           |                                     |  |              |
| <b>Total (Rice + Wheat + Pulses)</b>   | <b>172.92</b>                       | <b>37.15</b>   | <b>60.67</b> |

2.74 When asked about the progress/achievement so far in this regard under the projects/schemes relating to rice, wheat and pulses respectively, the Department replied as under:

“The highlights of achievements of various schemes of Rice, Wheat and Pulses are as under:-

#### **RICE**

- Seven new rice hybrids namely RH-204, Suruchi-5402, Pant Sankar Dhan-3, Narendra Usar Sankar Dhan-3, DRRH-2, CRHR-5 and CRHR-7 with higher heterosis were released during the period 2002-2006. One of these was developed for saline/sodic soils of U.P.
- Using molecular markers three BLB resistance genes xa5, xa13 and Xa21 have been pyramided in the background of BPT-5204, Swarna, IR-64 and Pusa Basmati. Several of these lines are in National testing.
- Pusa Sugandh-2, Pusa Sugandh-3, Pusa Sugandh-5, Vasumati, Mugad Sugandh and the first superfine grained aromatic rice hybrid Pusa RH-10 were released for cultivation.

#### **Wheat**

- Diversification of rice-wheat system by introducing short duration crops like potato/ vegetables/ peas in between early rice and late sown wheat and introducing green manuring of green gram crop during the turn around period after wheat harvest have been found more remunerative and also helpful in increasing soil fertility. This also resulted in curtailing the problem of *Phalaris minor* weed.
- For the control of herbicide tolerant *Phalaris minor* population, sulfosulfuron 25g/ha., clodinafop 60g/ha. fenoxaprop 100 g/ha and pinoxaden 35 g/ha. were found effective. Sulfosulfuron 25 g/ha before or after first irrigation also controls grassy and broad leaves weeds.
- Varieties for timely soon, irrigated conditions (PDW 291), rainfed conditions (SKW 196, HI 8127) and Alkaline/ saline soil (NDB 1173) were released.

### **Pulses**

- Six varieties of chickpea, 8 varieties each of pigeonpea and mungbean, 3 of urdbean, 4 of fieldpea, 3 each of rajmash, lentil and arid legumes were developed suitable for different agro-ecological zones.
- First CMS based hybrid GTH-1 released for Gujarat and short duration varieties like mungbean (IPM 89-125), urdbean (WBU 109) and fieldpea (Adarsh and Vikas) have been developed.
- Rice-rajmash-mungbean for upland conditions and rice-wheat-mungbean under low land conditions proved more productive under crop intensification.
- An upgraded prototype of IIPR mini dal mill has been developed that avoids wear and tear.”

2.75 The Committee also wanted to know whether DARE/ICAR has identified their own shortcomings and other problems/bottlenecks coming in the way to achieve the set targets during the XIth Plan, especially for the rice, wheat and pulses along with the remedial measures/steps taken/to be taken by them to counter-effect the shortcomings/bottlenecks. To this point, the Department replied as under:

“DARE/ICAR has allotted sufficient funds to address various researchable issues related to rice, wheat and pulses during XI Plan. As a compliment to further augment the research infrastructure and programme, the DARE/ICAR has submitted a scheme under the National Food Security Mission entitled Mini Mission I – Wheat, Rice and Pulses for Rs.1130 crore to the Planning Commission. However, no additional allocation under this component was agreed to.”

2.76 Through a supplementary point, the Department was asked to mention the arguments Planning Commission has extended for not allocating an additional sum of Rs.1130 crore as has been submitted by the Department for Mini Mission-I – Wheat, Rice and Pulses and they replied as under:

“The Planning Commission’s reasoning was that more than Rs. 385 crores has already been provided for components related to ICAR and ICAR/DARE’s regular allocation itself should be able to take care of the requirement of National Food Security Mission (NFSM).“

### **ROLE OF DARE/ICAR IN RASHTRIYA KRISHI VIKAS YOJANA (RKVY)**

2.77 The Committee noted that the Rashtriya Krishi Vikas Yojana, a new scheme has been launched in 2007-08 with an outlay of Rs.25,000 crore for whole of XI Plan

Period for farm revival and aims at stepping up agricultural growth to 4 per cent in the 11<sup>th</sup> Plan by ensuring a holistic development of Agriculture and allied sectors. The main objectives of the scheme are to incentivise the states so as to increase public investment in Agriculture and allied sectors; to provide flexibility and autonomy to states in the process of planning and executing the schemes; to ensure the preparation of agriculture plans for the districts; to ensure that the local needs/crops/priorities are better reflected in the agricultural plans of the states; to achieve the goal of reducing the yield gaps in important crops, through focussed interventions; to maximize returns to the farmers in Agriculture and allied sectors; and to bring about quantifiable changes in the production and productivity of various components of Agriculture and allied sectors by addressing them in a holistic manner. These guidelines are applicable to all eligible States and Union Territories. The nodal Department for RKVY is Department of Agriculture and Cooperation.

2.78 The Committee have asked whether any role and responsibilities have been entrusted upon DARE/ICAR under RKVY by Government in recent times and whether DARE/ICAR has done any special financial/manpower allocations/modifications for implementation of RKVY. To this point, the Department replied as under:

“The Planning Commission have agreed to provide an additional sum of Rs 500 crore to cater to the needs for expansion of teaching facilities and enhancing research capability of SAUs in identified priority areas. This fund is to be used a complementary funding of proposal submitted by State Government/State Agriculture Universities for the above purpose including any time-bound research or proposal received from SAUs on strategic research. States and SAUs (through state) could avail of funds under RKVY to formulate such proposal.”

### **GROWTH RATE TREND**

2.79 Trend Growth rate in area, input use, credit and capital stock in agriculture during 1980-81 to 2003-04 (per cent/year) as under:

| Period                                 | 1980-81 to<br>1990-91 | 1990-91 to<br>1996-97 | 1996-97<br>to<br>2005-06 |
|--|-----------------------|-----------------------|--------------------------|
| Technology <sup>a</sup>                | 3.3                   | 2.8                   | 0.0                      |
| Public sector net fixed capital stock  | 3.9                   | 1.9                   | 1.4 <sup>b</sup>         |
| Gross irrigated area                   | 2.3                   | 2.6                   | 0.5 <sup>b</sup>         |
| Electricity consumed in agriculture    | 14.1                  | 9.4                   | -0.5 <sup>c</sup>        |
| Area under fruits and vegetables       | 5.6                   | 5.6                   | 2.7 <sup>c</sup>         |
| Private sector net fixed capital stock | 0.6                   | 2.2                   | 1.2 <sup>b</sup>         |
| Terms of trade                         | 0.2                   | 1.0                   | 1.7 <sup>b</sup>         |
| Total net fixed capital stock          | 2.0                   | 2.1                   | 1.3 <sup>b</sup>         |
| NPK use                                | 8.2                   | 2.5                   | 2.3                      |
| Credit supply                          | 3.7                   | 7.5                   | 14.4 <sup>b</sup>        |
| Total cropped area                     | 0.4                   | 0.4                   | -0.1                     |
| Net sown area                          | -0.1                  | 0.0                   | -0.2                     |
| Cropping intensity                     | 0.5                   | 0.4                   | 0.1                      |

<sup>a</sup> Yield potential of new varieties of paddy, rapeseed/mustard, groundnut, wheat, maize

<sup>b</sup> up to 2003-04.      <sup>c</sup> up to 2004-05

2.80 The Committee noted from the above table that yield potential of new varieties of paddy, rapeseed/mustard, groundnut, wheat, maize from 1996-97 to 2005-06 have been shown as 0.0 and asked the Department about the reasons for the same. To this point, the Department replied as under:

“The yield potential stated in the Economic Survey 2007-08 has aggregated the yields of staple food crops with oilseeds. Such estimates undermine the growth trends in the potential created. To cite an example of wheat, following table shows rising yield potential created as a result of improved varieties:

| Year | Potential yield (t/ha) |
|------|------------------------|
| 1980 | 4.6                    |
| 1985 | 4.7                    |
| 1990 | 4.9                    |
| 1994 | 5.1                    |
| 1995 | 5.4                    |
| 2004 | 7.0                    |

Source: Annual Reports (DWR, Karnal), various issues

Other arguments against the methodology of computing trend in technology are listed below:

- a. The yield is not always a proxy for technology. There are other important indicators of technology, namely enhancing quality, reducing energy requirement, saving inputs and costs, and raising profitability. Therefore, merely taking yield as an indicator of technology would be erroneous.



- b. Further, there are many determinants to realize the potential yield. Most important are related to enabling policies and institutional support (especially input and information delivery). These measures were not taken due care therefore the potential was not realized.
- c. It may also be recognized that research focus has also gradually shifted to marginal, fragile and disadvantageous areas, where potential is already lower than favourable and better endowed regions.”

2.81 On a point, what DARE/ICAR has been doing during 1996-97 to 2005-06 after spending crore of rupees of public money in the name of doing so called fruitful research on increasing yield potential of new varieties of major foodgrains, oilseeds and coarse grains, year after year and especially during the period mentioned above, the Department replied as under:

“Major thrusts of ICAR's crop improvement programmes have to increase yield potential, improve product quality and enhance tolerance to yield reducing factors. At the same time, efforts are made to develop associated crop management practices for realizing higher crop yields. Significant achievements have been made not in terms of increasing yield potential even in unfavourable production environments, but also improving grain quality and tolerance to yield reducers. For example, yield potential of wheat has increased 1.6 tonnes/ha during 1995-2004. Also more rice varieties and hybrids were released with fine grain quality, and maize hybrids with higher quality protein were developed. Investment on agricultural R&D has contributed significantly to improve country's food security and reduction in rural poverty. An independent study conducted by the International Food Policy Research has revealed that rates of return to investment in agricultural research in India are in excess of 50%.”

### **GROWTH IN AGRICULTURE**

2.82 The Committee enquired about the annual growth rate that has been envisaged for the Agriculture Gross Domestic Product (AGDP) during Tenth Plan and Eleventh Plan; year-wise and what has been actually achieved so far during Xth Plan and in the first year of XIth Plan, respectively. To this point, the Department replied as under:

“4 percent annual growth was targeted for X five year plan. Same is targeted for the XI plan period. But, the growth in agriculture was mere 2.5 percent during the X plan and only 2.6 percent in the first year of XI plan.”

2.83 When asked about the reasons for shortfall, if any, in achieving envisaged AGDP growth rate during Tenth Plan and first year of Eleventh Plan and remedial action taken so far, the Department replied as under:

“The reasons for low growth in agriculture were identified as: (i) moving of agriculture to marginal, difficult and fragile area; (ii) non-availability of quality seed and low seed replacement; (iii) imbalance use of macro nutrients; (iv) no focus on micro-nutrient; (v) non-availability of institutional credit. ICAR has stepped up breeder seed production; and demonstrated technologies that adoption of improved practices can lead to achieve higher growth rates. ICAR has also drew the attention of the government to strengthen input delivery mechanisms and create favourable policy so as to harness the potential of available technologies.”

2.84 On a point whether the annual AGDP growth rate envisaged and being achieved so far is sufficient/satisfactory enough to gradually lead the nation to meet the domestic as well as international demand for Agricultural Produces in the year 2020 and 2050, respectively for each of the Eleventh Plan year, the Department stated as under:

“The current growth rates in foodgrains are low to meet their projected demand by 2020 and 2050.”

2.85 When asked about the remedial steps taken by the Department, to achieve the desired and expected growth rate now onwards, they replied as under:

“Food Security Mission is an attempt in this direction to raise production of rice by 10 m tons, wheat by 8 million tons and pulses by 2 million tons by the end of XI plan. ICAR is providing technological backstopping to the Mission in achieving these targets.”

2.86 The Department was also asked to furnish annual population growth rate vis-à-vis annual foodgrains production growth rate as well as annual growth rate of crop agriculture, fisheries, forestry, Animal Husbandry and Dairying, during the last five years and they have furnished the data as under:

“Growth rates of population and production of different food commodities:

| <i>Year</i> | <i>Annual population growth rate (%)</i> | <i>Annual foodgrain production growth rate (%)</i> | <i>Annual crop agril. Growth (at 1999-00 pr)</i> | <i>Fisheries at 1999-00 pr</i> | <i>Forestry at 1999-00 pr</i> | <i>MMilkpr</i> | <i>Eggs</i> | <i>Meat</i> |
|-------------|--|--|--|--------------------------------|-------------------------------|----------------|-------------|-------------|
| 2003-04     | 1.71                                     | 21.92  | 9.83   | 3.57                           | -1.14                         | 2.29           | 1.99        | 3.26        |
| 2004-05     | 1.58                                     | -6.94  | 0.09   | 1.53                           | 1.57                          | 2.94           | 8.31        | 0.36        |
| 2005-06     | 1.56                                     | 5.14   | 5.8  | 4.06                           | 1.63                          | 7.0            | 2.11        | 3.97        |
| 2006-07     | 1.54                                     | 4.17   | 3.6*   | 4.5                            | NA                            | 3.91           | NA          | NA          |
| 2007-08     | 1.52                                     | 0.92   | 2.6*   | NA                             | NA                            | 1.09           | NA          | NA          |

\* includes allied sectors

2.87 On another point about the main reasons for these erratic fluctuations in annual growth rate of agriculture and how many of these factors, directly and indirectly, come under the work domain of DARE/ICAR and the solutions that have been envisaged by them to bring about the desired growth rate in the agrarian sector, which may be both positive and stable in wake of the biotic and abiotic stresses which are a recurring phenomenon every year, they replied as under:

“The main reasons for low and fluctuating growth in agriculture were (i) climate change which was reflected as changing rainfall pattern, erratic temperature; and (ii) non-availability of quality inputs in time.

ICAR has realized the importance of climate change in agriculture. Therefore, a mega program has been initiated in a network mode for adaptation and mitigation strategies in response of climate change. The program is addressing technological, institutional and policy response to adapt and/or mitigate climate change impact on agriculture.

With the change in climate, more biotic and abiotic stresses are emerging. DARE/ICAR is making continuous efforts to develop varieties (using gene pyramiding, allele mining, transfer of genes) which are resistant/tolerant to biotic and abiotic stresses and also the production and protection technologies to mitigate the problem including efficient use of nutrients, water and use of bio-control and integrate crop management.”

2.88 The Committee were keen to know from the Department as to why low yield per unit area across almost all crops has become a regular feature of Indian agriculture and by when India will come up closer/equal to international standards of yield and to this point, they replied as under:

“The magnitude of yield levels of different countries may not be comparable as these are determined by the length of growing season, input use (fertilizer, water, seed), adoption of improved and quality seeds, availability of irrigation and adoption of improved production and protection technologies.

Crop yield appear to be low in India because:

- (a) Indian agriculture is pre-dominantly rainfed ; 65% area is under rain-fed agriculture, and also there was an erratic pattern of rainfall.
- (b) Shorter period of crop growth due to latitude and seasonal differences in comparison to other countries
- (c) Lower fertilizer application per unit area
- (d) High incidence of insect and pests during *kharif* season which adversely affects the crop yield
- (e) Inefficiencies in use of irrigation water resources
- (f) Decline in total factor productivity and soil organic matter content in some regions; prevalence of drought or floods in some parts of the country
- (g) Less adoption of full packages of practices and quality seed of high yielding variety.

The following example will further help in clarifying this matter.

- Fertilizer application per hectare in China was 275 kg, as compared to only 105 kg in India during 2003-04 (FAI 2006). In Egypt, total NPK use was 402 kg/ha, in Bangladesh it was 167 kg/ha and in Japan it was 250 kg/ha in 2003-04.
- In India, rice is grown under diverse ecologies; out of the total 43.66 million ha rice area 52.3% is irrigated, 26.3% rain-fed lowland, 14.3% upland and the rest 7.1% flood prone. Accordingly, the average productivities in these diverse ecologies are 4.5 tons/ha under irrigated systems, 2.3 in rain-fed lowland, 1.4 in uplands and 2.1 in flood prone areas. This variation among the ecologies, which are not uniformly favorable, drastically reduces the average productivity. Rice productivity in states like Punjab during *kharif* (5.75 t per ha), Tamil Nadu (5.75 t per ha) and Andhra Pradesh (5.5 t per ha), during *rabi* are comparable to that of China (6.3 t per ha). Further in Indian conditions rice is followed by wheat in Punjab, and rice in AP and Tamil Nadu, as compared to other countries where it is taken a sole crop. In Punjab rice productivity is average figure for *basmati* and *non-basmati* type.
- In India spring wheat is grown which has a duration of nearly 5 months which is followed by another crop, while in UK winter wheat is grown which has a higher yield potential than the spring wheat. It is of longer duration (>9 months) and further no additional crop is taken after winter wheat crop.
- Average yield of maize in India is about 2 t/ha. In certain areas the yield levels range from 4-6 t/ha during winter season. Maize in India is grown in tropical environments and having short duration from 80 to 110 days in *kharif* and very less area with 160 days in winter season. Further maize is predominantly

grown on marginal soils with low inputs. In USA, France, Germany and even in China the crop is generally grown in temperate climate with high input and longer duration.

2.89 When asked whether it is not the mandate of DARE/ICAR to develop technologies & techniques to increase yield per unit area for all the crops through their R&D activities and whether they have fulfilled their responsibility to the satisfactory level, the Department replied as under:

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

The ICAR-SAU system has developed several new varieties / hybrids, crop production and protection technology, which have potential to increase the productivity. The appreciable yield increases have been demonstrated in major crops in farmers field i.e. an yield gap of 20 to 104% in case of wheat and 17 to 222% in rice in some states depending upon agro-ecologies could be bridged by using the improved varieties and package of practices on farmers field.

Realisation of yield potential apart from technology depends on various factors such as timely and adequate availability of inputs, policy environment and other support services. The Department is engaged in augmenting the yield levels, besides improving quality, reducing use of energy, saving inputs and cost.”

### **R&D ON POST HARVEST LOSSES OF AGRARIAN PRODUCES**

2.90 The Committee noted that India’s agricultural production base is quite strong but at the same time wastage of agricultural produce is massive. Processing level is very low i.e. around 2% for fruits & vegetables, 26% for marine, 6% for poultry and 20% for buffalo meat, as against 60-70% in developed countries.

2.91 In this connection, the Department was asked to state the schemes being implemented by ICAR to check the Post Harvest losses, the allocation made and expenditure incurred alongwith shortfall during each of the last five years, year-wise and they have replied as under:

“Considering the necessity of reducing post harvest losses and post harvest processing for value addition and by-products utilization in the production catchments for increasing the income of farm-families and employment opportunities in rural sector, ICAR has effected a quantum

strengthening of its post harvest management and value addition programmes:

The following Plan schemes mainly relate to the post harvest activities (apart from these other commodity based institutes also have component of post harvest technology) and their details of the budget allocation and expenditure is given as under

(Rs in lakh)

|  | Allocations (Xth Plan) |         |         |         |         | Expenditure (Xth Plan) |         |         |         |         |
|--|------------------------|---------|---------|---------|---------|------------------------|---------|---------|---------|---------|
|  | 2002-03                | 2003-04 | 2004-05 | 2005-06 | 2006-07 | 2002-03                | 2003-04 | 2004-05 | 2005-06 | 2006-07 |
| Central Institute of Post harvest & Engineering Technology, Ludhiana | 167.00                 | 335.00  | 320.00  | 345.31  | 492.56  | 134.62                 | 129.62  | 315.44  | 343.63  | 486.23  |
| Shortfall  | 32.38                  | 205.38  | 4.56    | 1.68    | 6.33    |                        |         |         |         |         |
| Central Institute of Fisheries Technology, Kochi                     | 332.00                 | 350.00  | 523.00  | 573.00  | 454.45  | 246.23                 | 347.93  | 502.28  | 572.93  | 437.45  |
| Shortfall  | 85.77                  | 2.07    | 20.72   | 0.07    | 17      |                        |         |         |         |         |
| National Research Centre on Meat, Hyderabad                          | 175.00                 | 200.00  | 150.00  | 349.00  | 336.37  | 52.61                  | 226.00  | 149.72  | 348.89  | 336.35  |
| Shortfall  | 122.39                 | -26     | 0.28    | 0.11    | 0.02    |                        |         |         |         |         |
| AICRP PHT  | 321.50                 | 299.00  | 677.00  | 809.35  | 1253.14 | 291.51                 | 290.68  | 695.48  | 809.35  | 1253.14 |
| Shortfall  | 29.99                  | 8.32    | 18.48   | 0       | 0       |                        |         |         |         |         |

From above figures it is evident that adequate funds were provide to these schemes however some shortfall was there as indicated above.

2.92 When asked to state the quantum of post harvest losses and value of such wastages thereof in Rupees regarding, (a). grains (b). Pulses (c). fruits (d).vegetables (e) floriculture (f).fish (g)dairying (milk) (h)Meat (J)Poultry, (k). Medicinal and aromatic plants since last five years, year-wise; State-wise/UT-wise, the Department replied as under:

At present, no authoritative estimates of post harvest losses in various agricultural livestock and fisheries sectors are available. However, on the basis of the general post harvest loss estimates available with the ICAR, the extent of annual post harvest losses in various commodities alongwith their estimates in rupees are as follows:

- For grains the losses are about 10% value at Rs 16500 crore
- For pulses the losses are about 15% values at Rs 2000 core
- For fruits the losses are about 30% valued at Rs 13600 crore
- For vegetables the losses are about 30% valued at Rs 14100 crore

- e. For floriculture the losses are about 40% valued at Rs 400 crore
- f. For livestock and fisheries produce the losses are valued at Rs 8400 crore.

2.93 On a point what DARE/ICAR has been doing so far/plan to do in curbing the massive post harvest losses to agricultural produces of thousands of crore of rupees every year, they replied as under:

“The ICAR continues to develop new technologies for checking post harvest losses and for value addition activities in the production catchments. The major emphasis during the 11<sup>th</sup> Plan period is to demonstrate the post harvest technologies in the production catchments through the setting up of agro-processing centres and promoting entrepreneurships. The institutes as well as the AICRP on PHT centres will endeavour during the 11<sup>th</sup> Plan period to work with KVKs and Department of Agriculture and Cooperation (Ministry of Agriculture, GOI) to provide training to prospective entrepreneurs, trainers and line department personnel and work with the entrepreneurs in setting up the agro-processing enterprises as knowledge partners to ensure the success of such enterprises.”

#### **NEED TO POPULARISE R&D SUPPORT FROM ICAR TO IDENTIFY SYNTHETIC MILK**

2.94 The Committee in their Recommendation No. 11 of Second Report & Sixth Action Taken Report (2004-05) on DFG (2004-05) of MoA (DARE) have noted with anguish that no action worthwhile seems to have been taken on their specific recommendation to promote and popularize the research in detecting synthetic/adulterated milk and to produce a self-help/low cost diagnostic kit affordable by the common man.

2.95 The Department in their further action taken reply on 15.06.2005 on Sixth Action Taken Report (2004-05) has stated that efforts are also being made to develop low-cost technology kit affordable for the common man.

2.96 While examining the DFG(2008-09) of the Department, the Committee wanted to be apprised of the latest status of the issue and asked that since 15.06.2005, whether the self-help/low cost diagnostic kit has been developed so far for the use of the common man to detect synthetic/adulterated milk as has been assured by the

Department in their further action taken replies. To this point, the Department replied as under:

“The institute (NDRI- Karnal) has developed simple Platform test for detection of synthetic milk since 15-06-2005. This is a color based test and detects presence of detergent, which is used as one of the ingredient in preparation of synthetic milk. The test results are available in 5-10 min. The adulteration of milk with 2-3% ‘synthetic milk’ can be detected. This single test is sufficient to detect presence of synthetic milk. The test uses cheap chemicals and cost of chemical per test will be around Rs.2/-. Transfer of Technology of this test is assigned to National Research and Development Corporation (a Govt. of India Enterprise), New Delhi-110048 and is under consideration to be purchased by Mother Dairy, Delhi.”

2.97 When asked what DARE/ICAR has done till date to promote and popularize their research in detecting synthetic/adulterated milk, they replied as under:

“NDRI- Karnal has developed kit for detection of 12 different adulterants and is on sale. Kit is available for Rs.5000/- for any six adulterants. Each reagent for individual adulterants is sufficient for 50 to 100 milk samples. Popularization of kit is done through exhibits in conferences and Kisan Mela.”

2.98 Through a supplementary point, the Committee asked the Department to give details of simple ‘Platform Test’ developed by NDRI, Karnal, for detection of synthetic milk by a common man and what are the ‘Cheap Chemicals’ referred to in their reply in this regard. To these points, the Department stated as under:

“The platform test uses one organic solvent and one aqueous dye solution. These two solutions are added to milk and contents mixed thoroughly. Two layers are formed. If blue colour is more intense in lower layer than upper layer, it shows the presence of “detergent”/”Synthetic Milk” in milk.

One of the chemical is organic solvent while the other is a dye solution. These chemicals are commercially available and the cost of these chemicals per test will be around Rs. 2/-. Since, a patent for the process has been applied, names of the solvent and the dye are not mentioned.”

2.99 When asked why the Department has been giving incomplete, vague/false replies w.r.t. developing low-cost/economic version/self-help diagnostic kit out of the already developed diagnostic kit by NDRI, Karnal, then (3 years back) costing Rs.8600/- for all the 12 adulterants, and sufficient for about 75 tests and the failure of



the Department to produce and provide a self-help low-cost economic version of the already developed diagnostic kit for identifying synthetic milk (now costing Rs.10,000/- for 12 adulterants) on the lines of Diabetic Kit, Pregnancy Kit, etc. for the use of the common man as has been repeatedly recommended by the PSCA, they replied as under:

“The Department has given factually correct reply, which is clarified below:-

- a. The cost of 12 adulterants is Rs. 8600.00 only as below

|   |             |
|---|-------------|
| Cost of 6 adulterants is                      | Rs. 5000.00 |
| Cost of 6 additional adulterants @ Rs 600X6 = | Rs 3600.00  |
| Total   | Rs 8600.00  |
  
- b. A single test for detection of multiple adulterants could not be developed in the line of pregnancy kit because of complexity of adulteration in milk.”

**SOME OF THE ISSUES RAISED DURING ORAL EVIDENCE HELD ON 29.03.2008**

2.100 During Evidence, various issues/points were raised by Chairman/members of the Committee. Some of the important issues which the Department should take up as food for thought for furthering the cause of research and education in Agricultural and Allied Sectors in India.

- (i) that the Committee felt that ICAR is a prime agency in-charge of technology development, however, there is technology fatigue in the country, stagnation and decline in yield and productivity, time lag in transfer of developed technologies to the field;
- (ii) that there is need to set up a high-level Committee of Scientists and practicing farmers who have really accomplished something in the field, from different parts of the country to overcome technology fatigue and agrarian crisis the country is facing;
- (iii) ICAR must strive for income orientation to farming, to maximise the income pr units of labour, water, land and capital, the four pillars of agriculture;

- (iv) that there is need to maximise the farm productivity income of the small farmers as 80% of 105 million operational holdings are one hectare and below;
- (v) that there is need to have crop system and farming system research;
- (vi) that there is need to develop cost effective feed and fodder for the livestock. There is need to grow quality protein maize, the poultry industry is suffering due to high cost of maize.
- (vii) that there is need to undertake an effective programme on Rural System Research (RSR) for Post Harvest Technology, agro-processing and value addition at the village level itself, by ICAR looking at the on-farm and non-farm employment in its totality to create multiple sources of income to landless labourers as well as small farmers to bring out their families out of poverty;
- (viii) that there is need to have a post harvest technology wing in every Krishi Vigyan Kendra, the KVKs should become Krishi aur Udyog Vigyan Kendras;
- (ix) that there is need to establish strong linkage between research and extension by locating Agriculture Technology Management Agency (ATMA) in the KVKs in order to remove the existing wide gap in time and space in relation to transfer of technology;
- (x) that there is a need for ICAR to instruct all their Institutes and Universities that in their publications – when an Agronomist publishes a paper or a variety is going to be released or approved – there should be a double column, namely, yield per hectare and net income per hectare;
- (xi) that there is need to enlarge the mandate of National Bureau of Animal Genetic Resources (NBAGR) by providing them about 100 hectares of

land in every State to allow them to maintain the fastly disappearing pure breed such as *Rathi* cow of Rajasthan or *Badavari* and *Murra* buffaloes and pedigrees/local breeds which are adopted to local conditions and important for the future;

- (xii) that there is need to develop better post harvest technologies and varieties which are good for processing and value-addition;
- (xiii) that it is important to give some pro-small farmer and pro-women orientation to technology development and dissemination;
- (xiv) that there is need to take up a programme of micro-nutrients demonstrations by the Horticulture Department of ICAR with the help of nutritionists, particularly in malnutrition hotspots/areas to have horticulture remedy for a nutritional malady;
- (xv) With regard to bio-security, either Bhopal or some other institute should become the National Centre for Agricultural Bio-security and it should be strengthened. We should have a network of institutes, a single institution will not be enough. We should have them in all the major agro-climatic regions in the hub and spoke model;
- (xvi) the other facility badly required is an off-shore quarantine Islands such as in Lakshadweep Islands or Andaman & Nicobar Islands where no human being reside, where we can have absolutely safe testing facility.
- (xvii) That there is need to have exclusive KVKs on Fisheries for imparting the latest technical training skills on the basis of learning by doing, to the local fishermen from capturing to consumption;
- (xviii) that there is need to appoint a technical group by ICAR to look into the ways and methods of operationalisation of the concept of every agriculture scholar imparted education at an Agricultural University, becoming an entrepreneur;

- (xix) that water scarcity in the country is going to be biggest challenge in near future and there is need to develop biotic and abiotic (heat-resistant) seeds requiring less water to germinate in wake of Global Climate Change;
- (xx) that there is need to do research to check white flies disease in sugarcane as this disease does not encourage the producers to adopt the technology/inputs to enhance the productivity/yield of sugarcane from the present level;
- (xxi) that there is need to produce small size potato seeds costing less;
- (xxii) that there is need to organize frequent Krishi Vigyan Melas at District level;
- (xxiii) that there is need to find remedies for diseases of Honeybees in HP & Uttrakhand;
- (xxiv) that there is need to train farmers of disaster-prone areas;
- (xxv) that there is a dire need to restart teaching agriculture and animal husbandry as subjects in schools and colleges from class VIII onwards to attract the youth towards these sectors of economy;
- (xxvi) that there is need to take research to small farmers through Seminars/Workshop/Orientation programmes to be conducted by agricultural universities/colleges at regular intervals;
- (xxvii) A small technical group should be appointed by ICAR to revamp the syllabus and restructure the agri-clinics and agri-business centres. Home Science Colleges should be involved in a much more intensive way in this area apart from veterinary and fishery science. Integrate MBA ingredients in the Agricultural Universities itself so that business and technology can go together;

- (xxviii) We should take care the financial and technical needs of mother institutions such as IARI and Agricultural Universities. The Department should immediately provide Rs.100.00 crore to the IARI, New Delhi during 2008-09 for improving farm infrastructure with reference to irrigation. As research and education are expensive for that the Government should develop a corpus of Rs.1000 crore or more from which a need based investment can be done;
- (xxix) The State Agricultural Universities should not be fragmented into agriculture, animal husbandry, fisheries and horticulture, etc. rather they should work for the farming system as a whole. ICAR should also coordinate with other Departments of the Government of India to collect and disseminate knowledge of its research in different agricultural fields to them for holistic development of agriculture and allied sectors, so as to focus on more jobs, income security and work security and people's livelihood in rural agri-system;
- (xxx) As water table is going down and irrigation facilities are dwindling, ICAR should focus their research on developing seeds which are water-resistant, weed resistant and of high yield variety;
- (xxxi) The climate change should be taken up as a challenge to develop new varieties of wheat, rice, pulses, oilseeds and horticulture crops. The Agricultural universities should be given more financial help to do research in this direction;
- (xxxii) KVK should work as mini research cum extension institute which may directly be connected with the farmers of the area;
- (xxxiii) KVKs and Agricultural Technology Management Agency should coordinate to disseminate knowledge about latest agricultural technology and research to the farmers of that area; and

(xxxiv)that there is need to establish a Central/Regional Research Institute of Temperate Horticulture, in addition to the already existing Institute at Srinagar (J&K), to cater to the problems of the farmers cultivating horticultural crops at the height of 3000 feet to 5000 feet in Utrakhand/HP and other hilly areas as 12% of the total crop area is lying in Himalayan Region and not more than 2% of the same has been tapped so far.

## **PART II**

### **RECOMMENDATIONS/OBSERVATIONS**

#### **Recommendation No. 1**

##### **Need for increasing DARE's allocation equivalent to 1 to 2 percent of AGDP**

The Committee note that the Department of Agricultural Research and Education has been allocated Rs.12,023 crore as the total XI Plan outlay against the proposed XI Plan outlay of Rs.12,176.40 crore. The proposed outlay for the XI Plan is even Rs.3,823.60 crore less than the outlay proposed by them for the X Plan which was Rs.16,000 crore. The Planning Commission's constituted XI Plan Working Group on Agricultural Research and Education has proposed an outlay of Rs.31,672 crore for DARE/ICAR.

The Committee have always been requesting year after year for an increase in the allocation equivalent to 1 to 2 per cent of agricultural GDP for the conduct of research in this most important sector but the request seems to have fallen on deaf ears. The Committee are pained to observe that the Planning Commission and the Ministry of Finance have not so far given any proper attention to the recommendations of the Parliamentary Standing Committee on Agriculture in this regard.

The Committee, therefore, strongly and in unequivocal terms recommend that the Planning Commission must provide higher allocation equivalent to 1 to 2 percent of AGDP as recommended by them in their earlier Reports. However, this must be accompanied by accountability in terms of practical results of value to overcome the prevailing technology fatigue. Additional Funds may be earmarked for the suggestions made by the Committee in this Report from page number 58 to 63.

## Recommendation No. 2

### Insufficient allocation to DARE in 2008-09

The Committee note that the Department is given Rs.1,760 crore during 2008–09 against the proposal of Rs.2646.79 crore. The outlay of this Department during 2007-08 was Rs.1,620 crore against the proposal of Rs.1,945.50 crore. The percentage of increase in Plan allocation made for 2008-09 over the year 2007-08 is 8.64 per cent.

The Committee also note that the increase in the cost of inputs-machinery, raw-material, maintenance and other running research expenses - has been generally more than the annual inflation. In real sense, the Budgetary Allocation may not allow the Department to address all research issues adequately as has been confirmed by the Department.

In Committee's opinion, the required real break-through for increasing the agricultural production and productivity to achieve the set targets of agro-socio-economic development during the XI Plan can only be achieved by actual agrarian research work and by the quickest possible dissemination of relevant information to the people engaged in agriculture and allied activities. Therefore, the proposed targets of agro-socio-economic development should be directly proportionate to the plan outlay for research and educational activities of DARE/ICAR. But, unfortunately, the right proportion between these two factors is not visible in the funds allocated to DARE/ICAR and the Committee strongly feel that positively upward investment in agrarian R&D of ICAR is most essential requirement, if the proposed growth target are to be achieved in time.

The Committee, therefore, strongly recommend that the DARE/ICAR should be provided with Rs.2646.79 crore by the Planning Commission and the Ministry of Finance for the year 2008-09 as per their original proposal.



### **Recommendation No. 3**

#### **Urgent Need to provide the Status of Non-lapsable Funds to Budgetary Allocations of DARE/ICAR**

The Committee note that the Central Non-lapsable Fund Pool was created by the Government for the welfare of the North-Eastern States. All the Ministries/Departments were directed to earmark 10% of their respective allocation under the Major Head 2552 – lump sum provision for projects/schemes in NE & Sikkim, every year and the unspent amount under this Major Head does not lapse at the end of the financial year and remains available for its usage for the same cause.

The Committee are of the considered view that this special treatment/privilege given to North-Eastern States & Sikkim should be extended to all the schemes/projects of DARE/ICAR being implemented in other States/UTs as the similar agro-socio-economic and climatic conditions and topography of agricultural land existing in North-Eastern States, also exist in most of the other States/UTs.

The Committee strongly recommend that since 70% of our country's population is directly engaged in agricultural & allied activities and produce the food for themselves and for other 30% population, therefore, the Government and their appraisal agencies should implement the non-lapsable fund strategy for DARE/ICAR from this year onward, for anything can wait but agriculture cannot wait for want of adequate funds and extending this provision to DARE/ICAR is going to be a real breakthrough in finding a remedy for a perennial vicious imbalance of demand and supply of funds in which every year more funds required/demanded by the Department but less funds are allocated by the Planning Commission/Ministry of Finance.

#### **Recommendation No. 4**

##### **Delays in Releasing of RE/BE by the Department to their respective Institutes/NRCs/PDs**

The Committee note that RE Plan & Non-Plan (2007-08) is reported to have been received from MoF on 4.1.2008. ESM (SMD) was communicated RE (Plan) on 8.2.2008 by the Department, i.e., after 34 days of receiving the same from MoF. Similarly, Education and Extension (SMDs) have been communicated RE(Plan) after 18 and 21 days, respectively, from the date of receiving from MoF, viz., 4.1.2008, while 4 SMDs out of 9, have been communicated only after 6 days of receiving from MoF.

The Committee note that during Evidence of the Representatives of MoA(DARE), MoF and Planning Commission before this Committee, held on 22.11.2001, the then, Secretary(DARE) had categorically pointed out about the procedural delays in receiving RE from MoF which did not allow the Department to utilize the scarce financial resources optimally and huge unspent amounts/balances remain. Similar views/suggestions were extended by the Department in a written reply to the specific points raised by the Committee about the entire budgetary procedure and practices being followed by the Department and if any meaningful change/remedies required to be in place. But ironically, now the Department in reply to similar points about the procedural budgetary delays stated that “there has been no procedural delay and the present procedure is working well.”

The Committee are of the view that the above volte-face regarding budgetary procedural delays and meaningful changes required, is an actual turnaround engineered by the Department in a vain attempt to deviate the Committees' attention from the actual problem of late releasing of funds from MoF

or the Department to the actual end-users, i.e., concerned institutes/NRCs/PDs of ICAR.

The Committee, therefore, deplore the tendency of the Department to give hollow assurances every year that they have been making best efforts to make the RE/BE funds available to the concerned institutes within a week rather they are taking about 34 days time to make the RE available to the respective institutes.

The Committee strongly recommend that the Department should take less than a week's time to release the funds to all the concerned institutes/NRCs/PDs from the date of receipt of funds from MoF for optimal utilisation of the scarce funds by the concerned institutes.

## Recommendation No. 5

### Denial of necessary wherewithal for setting up state-of-the-art facilities to meet the emerging new challenges

The Committee have been informed that the DARE/ICAR has a number of institutions/laboratories, which are more than thirty 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 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.

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

The Committee note that the Department's fund requirements, based on activities and programmes, are said to be projected in totality, thus need for catch up grant is also addressed in their projection, however, there is a pronounced gap of Rs.886.79 crore between the projected/proposed amount by DARE/ICAR and the amount allocated to them by the Planning

**Commission/Ministry of Finance. The Department has proposed/projected an amount of Rs.2646.79 crore and they got Rs.1760.00 crore as BE 2008-09.**

**The Committee are of the considered view that denial of long-felt and essentially needed One-Time Catch up grant to DARE has hamstrung our agricultural research institutes and their R&D activities as the output could have been much better in case their projected requirement of Rs.1000 crore during Xth Plan was provided to them for replacement of old machinery and equipment and for setting up state-of-the-art facilities to meet the emerging new challenges.**

**The Committee strongly deplore the tendency of the Planning Commission and the Ministry of Finance for imposing drastic cuts as high as upto 35 to 40 per cent on the amount projected/demanded by the Department as per their pressing needs as in the instant case, the denial of Rs.886.79 crore during 2008-09 will not allow the Department to address the needs to be fulfilled from one time catch-up grant out of Rs.1760.00 crore allocated to them as BE 2008-09.**

**The Committee desire a clarification from the Planning Commission as to how they can expect the Department to follow the Guidelines of the Planning Commission that in the Plan Budget critical repair and maintenance upto 15% of the Plan budgetary support can be included by the Government and on the other hand, they themselves have imposed a cut of about 35% or so on the projected/proposed amount of the Department year after year.**

**The Committee strongly recommend that the Planning Commission and the Ministry of Finance should provide much needed one time catch up grant as per the latest requirement during the XIth Plan or at least provide Rs.886.79 crore more to the Department during 2008-09 so that the projected need for catch up grant which was addressed in their projected amount of Rs.2646.79**

crore, is granted to them. Immediately, in the Budget of 2008-09 itself, an additional sum of Rs.100.00 crore may be provided to IARI, New Delhi, particularly for improving farm infrastructure with reference to irrigation.

### Recommendation No. 6

#### The Planning Commission disagreed to provide Rs.1130 crore to DARE/ICAR under the National Food Security Mission (NFSM)

The Committee note that the National Food Security Mission a centrally sponsored scheme has been launched from 2007-08 with an objective to enhance the production of rice, wheat and pulses by 10, 8 and 2 million tones respectively during the 11<sup>th</sup> Plan period.

ICAR is involved in providing technical backstopping in this project in terms of providing details about the newly released varieties/hybrids along with the production and protection technologies in implementation of this scheme. Further, ICAR is also involved in the production of breeder seed as per requirement. The Council has also been involved in various monitoring implementation Committees of the project.

Although DARE/ICAR has allotted sufficient funds to address various researchable issues related to rice, wheat and pulses during XI Plan, as a compliment to further augment the research infrastructure and programme, they have submitted a scheme under the National Food Security Mission entitled Mini Mission I – Wheat, Rice and Pulses for Rs.1130 crore to the Planning Commission. However, no additional allocation under this component was agreed to.

The Planning Commission's reasoning for not agreeing to the Department's demand was that more than Rs. 385 crores has already been provided for components related to ICAR and ICAR/DARE's regular allocation which itself should be able to take care of the requirement of National Food Security Mission (NFSM).

The Committee again strongly deplore the tendency of the Planning Commission to give hollow promises year after year that the proposals/initiatives of the Department in the form of SFC/EFC/CCEA would be considered favourable to provide need based allocation. As in the instant case, the DARE/ICAR has submitted a scheme under the NFSM entitled Mini Mission I – Wheat, Rice and Pulses for Rs.1130 crore to the Planning Commission and in turn, rather than favourably considering the scheme, the Planning Commission has extended the reason for not agreeing to it.

The Committee are unable to comprehend as to why the Planning Commission is determined to deter the desired and required better pace of agrarian R&D for which the ICAR has been entrusted with the responsibility. Moreover, expectations of the millions of people from DARE/ICAR to usher India into a Second Green Revolution by providing total food, feed and fodder security for the present and future times will continue to lurk in the dark for want of favourable consideration by the Planning Commission/Ministry of Finance of the schemes/initiatives submitted by DARE/ICAR.

The Committee, therefore, strongly recommend that ICAR should be provided the additional amount of Rs.1130 crore for their scheme entitled Mini Mission I – Wheat, Rice and Pulses under NFSM in the overall interest of the nation's food security.



### **Recommendation No. 7**

#### **Urgent need to set up a high-level committee of scientists and practising farmers**

The Committee are of the opinion that technology has been and will be the prime mover of change not only in our country, but everywhere in the world.

The Committee note that the nation is passing through technology fatigue, stagnation and decline in productivity/yield and a number of related issues are bracketing India into agrarian crisis which the nation can ill-afford to neglect merely for want of adequate timely action from DARE/ICAR.

The Committee, therefore, recommend that the Prime Minister as head of Agriculture Coordination Committee and Union Minister of Agriculture being President of ICAR should set up a High-level Committee of Scientists and practising farmers from different parts of the country to suggest methods of overcoming their problems, technology fatigue, to bridge the gap between potential and actual yield and agrarian crisis the country is facing. The Committee further recommend that Special Cadre of Agriculture Scientists for Agricultural Research in North Eastern States including Sikkim may be created so that the Research Institute of ICAR in that area do not suffer from the malady of shortage of scientists.

## **Recommendation No. 8**

### **Need to undertake an effective Programme on Rural System Research (RSR) by ICAR**

The Committee note that the National Farmers Policy has a number of commitments as far as agricultural research and education is concerned and the first one is to make the farming income oriented.

The Committee desire that DARE/ICAR should seriously ponder upon the ways and means to maximise the income per units of labour, water, land and capital, the four pillars of agriculture. ICAR should also develop the right strategy to help improve the farm productivity income of the small farmers for the reason that over 80 per cent of our 105 million operational holdings are one hectare and below.

The Committee further recommend that apart from cropping system research and farming system research, ICAR should also undertake an effective programme on the Rural System Research (RSR) which looks at the on-farm and non-farm employment in its totality as the Chinese have done in a very effective way. The RSR programme should concentrate at post harvest technology, agro-processing and value addition at the village level itself and not sending the raw materials to the city, but making jobs available in the village itself in order to provide additional sources of income to both, landless labourers as well as small farmers and their family to bring them out of vicious circle of poverty.

## **Recommendation No. 9**

### **Need to develop low cost and good quality Feed and Fodder for the Livestock through R&D**

The Committee note that livestock has the most important contribution in the country's economy as well as in the livelihood of million of Indian farmers and their families. The most important input for the existence of the livestock is feed and fodder. The poultry industry is sufferings due to high cost of maize. Similarly, low availability of good quality feed and fodder and its high cost have been noticed throughout the country.

The Committee, therefore, recommend that ICAR should pay due attention to this issue and do the needful R&D to bring out good quality and low cost feed and fodder for all kinds of the livestock of the nation including animal, poultry and fisheries.

## **Recommendation No. 10**

### **Need for conversion of Krishi Vigyan Kendras (KVKs) into Krishi and Udyog Vigyan Kendras (KUVKs)**

The Committee note that there is growing mismatch between agrarian production and post harvest technologies. Although ICAR has some post harvest technology institutes, the weakness that is felt in villages is the post harvest operation, that is, to provide complete range of threshing, processing and value addition to primary products implements and techniques at the village level.

The Committee, therefore, recommend that ICAR should have a post harvest technology wing in every Krishi Vigyan Kendra and KVKs should become a model Krishi Udyog Vigyan Kendras in the country and National Agriculture Innovative Project should be implemented through KVKs and Agriculture Technology Management Agencies at district levels.

## **Recommendation No. 11**

### **National Bureau of Animal Genetic Resources (NBAGR) to maintain and preserve fastly disappearing pure material and pedigrees/local breeds**

The Committee note that ICAR has been pioneer in genetic resources, conservation and management. But in the area of animal genetic resources, a lot of very good materials are being lost. Unlike National Bureau of Plant Genetic Resources (NBPGR), the National Bureau of Animal Genetic Resources (NBAGR) does not maintain animals; they only have a database on animals as the maintenance of the pure materials and the pedigrees, etc. are left to individual farmers or sometimes to the State Governments.

The Committee, therefore, recommend that NBAGR should be provided about 100 hectares of land and facilities in every State to allow them to maintain and preserve the fastly disappearing pure materials such as *Rathi* breed in Suratgarh (Rajasthan), *Badavari* buffalo breed, *Ongole* and *Nellore* breed and maintain local breeds, etc. which are important for the future and are adapted to local conditions. NBAGR may accordingly enlarge their mandate to incorporate maintenance and preservation of the pure material/local breeds.

## **Recommendation No. 12**

### **ICAR to have Authoritative Estimates of Agrarian Post Harvest Losses and develop better Post Harvest Technologies and Varieties for Processing and Value-addition**

The Committee note that India's agricultural production base is quite strong but at the same time wastage of agricultural produce is massive. Processing level is very low i.e. around 2% for fruits & vegetables, 26% for marine, 6% for poultry and 20% for buffalo meat, as against 60-70% in developed countries.

The Committee also note with heavy heart that at present, no authoritative estimates of post harvest losses in various agricultural livestock and fisheries sectors are available. However, on the basis of the general post harvest loss estimates available with the ICAR, the extent of annual post harvest losses in various commodities alongwith their estimates in rupees are as follows:

- a. For grains the losses are about 10% value at Rs 16500 crore
- b. For pulses the losses are about 15% values at Rs 2000 core
- c. For fruits the losses are about 30% valued at Rs 13600 crore
- d. For vegetables the losses are about 30% valued at Rs 14100 crore
- e. For floriculture the losses are about 40% valued at Rs 400 crore
- f. For livestock and fisheries produce the losses are valued at Rs 8400 crore.

The Committee are deeply perturbed to note that even after existence of many decades, DARE/ICAR have no authoritative estimates of Post Harvest losses till date. The Committee have no choice but to remind the DARE to go through the Appendix I of their Annual Report 2007-08 at page 147 regarding

the GoI (Allocation of Business) Rules, the Second Schedule (Rule 3), and especially refer to item at Sl.No.14 under Part III which states, “Enquiries and Statistics for the purpose of any subjects allotted to this Department”. Having no authoritative estimates/statistics of Post Harvest Losses of agrarian and allied sector produces even after more than 50 years of existence in case of DARE/ICAR, speaks volumes about the irresponsible manner the DARE/ICAR are fulfilling their mandatory responsibilities.

The Committee, therefore, strongly recommend that the DARE/ICAR should not allow any lackadaisical tendencies to undermine their nodal and apex stature at national level and should take immediate steps to collect, compile and analyse data at the earliest at national level, state-wise/UT-wise, in order to have better Planning and R&D to stop wastage of about Rs.55000 crore per annum. The Committee opine that this would also help the concerned Ministries/Departments/Agencies entrusted to develop appropriate technologies and modern storage facilities, area-wise, to prevent the available/avoidable waste. Unless this is done, and the desired post harvest technologies developed and implemented to plug the gaping hole in the basket of agrarian and allied sector produces, all the efforts made by the ICAR to increase productivity and production of agrarian and allied produces will not bear the desired result. The Committee also recommend that ICAR should pay due attention in addressing the problem of non-availability of varieties which are good for processing and value addition as it is high time to have more and more food, fruits and vegetables processed to curb the severe post harvest losses of agrarian produces. To end the prevailing mismatch between production and post harvest technology, the Committee recommend the large number of lab to land demonstrations to familiarise the farming community to agro-processing and value addition, etc.

### **Recommendation No. 13**

#### **Need for operationalisation of the concept of every Agriculture Scholar becoming an Entrepreneur**

The Committee note that the main aim of Agricultural Universities is to impart education and ensure that every scholar and entrepreneur has the ability to go into entrepreneurship. Self-employment opportunities for an agricultural graduate are minimal as these days many of them have to appear for the IAS or IPS examination or study MBA afterwards to get job in Banks/Administration. The Agriculture and Animal Husbandry subjects should be restarted teaching at schools and colleges. In Punjab and Haryana, these subjects used to be taught till late 70s.

The Committee opine that young people will join the agriculture and allied sector only if it becomes economically rewarding and diversified. Home Science colleges should be involved in much more intensive way in this area apart from veterinary and fishery science.

The Committee, therefore, strongly recommend that ICAR should appoint a technical group to look into the ways and methods of operationalisation of the concept of every agriculture scholar becoming an entrepreneur. This technical group may consider revamping the syllabus of agriculture, restructuring the agri. clinics and agri. business centres meant for providing self-employment opportunities for agricultural graduates, integrating MBA ingredients in the Agricultural University itself so that business and agriculture technology can go together. Every State Agricultural University should set up a Placement Cell for self-employment (Agri-Clinic/Agri-Business) of their agricultural graduates/scholars for familiarising them with opportunities for gainful remunerations.



#### **Recommendation No. 14**

##### **Horticulture Department of ICAR should initiate a Programme on Micro- Nutrients/Vitamins Demonstrations**

The Committee note that in developing nation like India there is large amount of micro-nutrient deficiencies in human beings, known in technical parlance as 'hidden hunger'. In the opinion of the Committee, one of the best methods of removing 'hidden hunger' is through the horticulture approach as consumption of horticulture produces has the triple advantage of getting micro-nutrients, vitamins as well as calories.

The Committee, therefore, strongly recommend that there should be a well qualified nutritional expert in the horticulture Division of ICAR who could attend to these issues. The Committee also recommend that Horticulture Department of ICAR should take up a programme on micro-nutrients/vitamins demonstration, particularly, in malnutrition hotspots/areas to have horticulture remedy for a nutritional malady.

### **Recommendation No. 15**

#### **Need to fill the vast gap between Research and Extension Activities of ICAR**

The Committee note that there has always been a huge gap between the research of ICAR and transfer of researched technology to the farmers/ stakeholders resulting in low productivity and production and consequent low income of the farmers.

The Committee, therefore, recommend that DARE/ICAR must look into the ways to establish the strong linkage between Research and Extension by integrating Agriculture Technology Management Agency (ATMA – under DAC) with Krishi Vigyan Kendras (KVKs) so that there is no gap in time and space in relation to transfer of technology and to give the desired boost to productivity and improvement in the income of farmers.

## **Recommendation No. 16**

### **Incorporation of yield /income per hectare columns in all the publications of ICAR and their Institutes/Universities.**

The Committee note that usually a farmer is able to tell the total quantity of his produce but he may not be able to tell at what cost or whether the crop was viable for him or not because he does not have much knowledge of costing/cropping system.

The Committee feel that this kind of ignorance put the small and marginal farmers into a series of debts and depths of poverty and jeopardise his very existence.

The Committee, therefore, recommend that there is a need for ICAR to instruct all their Institutes and Universities that in their publications, when an Agronomist publishes a paper or when a variety is going to be released or approved, there should invariably be a double column, namely, yield per hectare and income per hectare to enable all the farmers to be aware of the economy of their crops.

### **Recommendation No. 17**

#### **Need to do Research to check White Flies Disease in Sugarcane**

The Committee note that the farmers in Uttar Pradesh, especially of Lucknow and nearby areas who have been growing sugarcane have experienced stagnation in sugarcane production and productivity for the last so many years and all their efforts to increase the production leads to generation/outbreak of White Flies disease in sugarcane.

The Committee, therefore, recommend that ICAR should examine the issue and do the needful research to eliminate White Flies disease in sugarcane in a time bound manner and the Committee may be informed about the action taken at their earliest.

### **Recommendation No. 18**

#### **Need to do Research on developing smaller size of Potato Seeds**

The Committee note that farmers of other States who bring potatoes from Himachal Pradesh use the potatoes for sowing by cutting it into half and planting germinating portion. This traditional way of sowing half of the potato, increase the quantum and weight of the seeds required. The Committee feel that if the needful research could be undertaken by ICAR to reduce the size of the potato seeds and any success in this project would certainly reduce the seed cost owing to increase in the number of smaller potato seeds per quintal.

The Committee, therefore, recommend that ICAR should undertake this project on developing smaller size of potato seeds and they should be informed of the action taken at the earliest. In addition, research and development of True Potato Seed (TPS) technology should be intensified.

### **Recommendation No. 19**

#### **Need for Greater Inter- Ministerial Coordination for uplifting Indian Agriculture**

The Committee are well aware that the overall welfare, prosperity and growth of Farmers and Agriculture & 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 and recommend 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 of Indian farming community.

## Recommendation No. 20

### In-action of DARE/ICAR to produce self-help, smaller version of Synthetic/Adulterated Milk Detection Kit for use of the Common Man

The Committee in their Recommendation No. 11 of Second Report & Sixth Action Taken Report (2004-05) on DFG (2004-05) of MoA (DARE) have noted with anguish that no action worthwhile seems to have been taken on their specific recommendation to promote and popularise the research in detecting synthetic/adulterated milk and to produce a self-help/low cost diagnostic kit affordable by the common man/consumers of milk.

While examining the DFG(2008-09) of the Department, the Committee enquired that the latest status of the issue regarding development of the self-help/low cost diagnostic kit for the use of the common man and were apprised that NDRI- Karnal has developed simple Platform test for detection of synthetic milk since 15-06-2005. This is a colour based test and detects presence of detergent, which is used as one of the ingredient in preparation of synthetic milk. The test results are available in 5-10 minutes. The adulteration of milk with 2-3% 'synthetic milk' can be detected. This single test is sufficient to detect presence of synthetic milk. The test uses cheap chemicals and cost of chemical per test will be around Rs.2/-. Since, a patent for the process has been applied, names of the solvent and the dye are not mentioned. Transfer of Technology of this test is assigned to National Research and Development Corporation (a Govt. of India Enterprise), New Delhi and is under consideration to be purchased by Mother Dairy.

In response to a point as to what DARE/ICAR has done till date to promote and popularize their research in detecting synthetic/adulterated milk, the Committee were informed that NDRI- Karnal has developed kit for detection of 12 different adulterants and is on sale. Kit is available for Rs.5000/- for any

six adulterants. Each reagent for individual adulterants is sufficient for 50 to 100 milk samples. Popularization of kit is done through exhibits in conferences and Kisan Mela.

The Committee strongly deplore and take a serious view of the tendency of the Department in totally sidelining and deliberately ignoring the crux of the recommendation of the Parliamentary Committee on Agriculture, As a matter of fact the Department has been giving incomplete, vague and false assurances year after year, especially w.r.t. producing self-help smaller and economy version of the diagnostic kit presently costing Rs.8600/- for identifying 12 common adulterants in milk and make all out efforts to popularise their low priced smaller version of the Diagnostic Kits which can be gainfully used by the common man.

The Committee are dissatisfied with the in-action of the Department in this regard as it is evident from their statements of action so far that neither the Department has produced a self-help, smaller and economy version of the already produced kit for gainful use of a common man nor they have made all out efforts to popularise the same till date. The Kit they have been popularising through exhibits in conferences and Kisan Mela is the older/original version of the Kit and not the smaller and economic version of the original Kit recommended by the Committee. Moreover, the common man does not go to conferences and Kisan Mela. Thus, the Department has failed to fulfil their own hollow promise that they were making efforts to develop low-cost technology kit affordable for the common man.

Similarly, the action of transfer of technology of simple platform test for detection adulterated milk with 2-3% of synthetic milk has been assigned to NRDC and said to be under consideration for purchase by 'Mother Dairy', Delhi, is going to benefit Mother Dairy and other such bulk producers/sellers of



**milk only and not the common man as he will not be able to make use of the Platform Test himself in order to know whether the milk he and his beloved family members are consuming is good or bad to drink.**

**The Committee are of the view that the Department is deliberately avoiding to produce the smaller and economy version of the diagnostic kit for the use of the common man for the reason that they are not ready to face the truth about the evil of synthetic/adulterated milk that has grown to enormous proportion. In case the actual data regarding availability of pure milk and synthetic/adulterated milk are researched and made available to public, then, the number one position in milk production, India is enjoying and DARE/ICAR claims to bag the credit for the same, will prove to be nothing but a tragic unhealthy illusion/eye-wash.**

**The Committee, therefore, strongly recommend that the DARE/ICAR should immediately take action in this regard and come out with a self-help, smaller and economic versions of the diagnostic kits for all the 12 common milk adulterants with a test carrying capacity ranging from 1, 2, 3, 4, 5 and 10 tests per reagent/solvent for the use of the common man and the same kits should be made available for sale at all the Mother Dairy Milk/Vegetable Booths as well as Delhi Milk Scheme Booths/Chemist shops and also in other States/UTs. Unless, this is done, the problem of synthetic/adulterated milk will continue to grow further and ruin the health of every milk and milk products consumer in India and the dream of healthy India will never become a reality.**

## Recommendation No. 21

### Some Other Issues Related to ICAR

The Committee feel (a) that there is need to organize frequent Krishi Vigyan Melas at District level; (b) that there is need to find remedies for diseases of Honeybees in HP & Uttrakhand; (c) that there is need to train farmers of disaster-prone areas; (d) that there is a dire need to restart teaching agriculture and animal husbandry as subjects in schools and colleges from class VIII onwards to attract the youth towards these sectors of economy; (e) that there is need to take research to small farmers through extension programmes, such as Seminars/Workshop/Orientation programmes to be conducted by agricultural universities/colleges at regular intervals;(f) that there is need to have exclusive KVKs on Fisheries for imparting the latest technical training skills on the basis of learning by doing, to the local fishermen from capture to consumption and processing; (g) that water scarcity in the country is going to be the biggest challenge in near future and there is need to develop biotic and abiotic (heat-resistant) seeds requiring less water to germinate in wake of Global Climate Change; (h) with regard to bio-security, either Bhopal or some other institute should become the National Centre for Agricultural Bio-security and it should be strengthened. We should have a network of institutes, a single institution will not be enough. We should have them in all the major agro-climatic regions in the hub and spoke model; (i) the other facility badly required is an off-shore quarantine Islands such as in Lakshadweep Islands or Andaman & Nicobar Islands where no human being reside, where we can have absolutely safe testing facility; (j) we should take care the financial and technical needs of mother institutions such as IARI and Agricultural Universities. The Department should immediately provide Rs.100.00 crore to IARI, New Delhi during 2008-09 for improving farm

infrastructure with reference to irrigation. As research and education are expensive, the Government should develop a corpus of Rs.1000 crore or more from which a need based investment can be done; (k) the State Agricultural Universities should not be fragmented into agriculture, animal husbandry, fisheries and horticulture, etc. rather they should work for the farming system as a whole. ICAR should also coordinate with other Departments of the Government of India to collect and disseminate knowledge of its research in different agricultural fields to them for holistic development of agriculture and allied sectors, so as to focus on more jobs, income security and work security and people's livelihood in rural agri-system; (l) as water table is going down and irrigation facilities are dwindling, ICAR should focus their research on developing seeds which are water-resistant, weed resistant and of high yield variety; (m) the climate change should be taken up as a challenge to develop new varieties of wheat, rice, pulses, oilseeds and horticulture crops. The Agricultural universities should be given more financial help to do research in this direction; (n) KVK should work as mini research cum extension institute which may directly be connected with the farmers of the area; (o) KVKs and Agricultural Technology Management Agency should coordinate to disseminate knowledge about latest agricultural technology and research to the farmers of that area; and (p) that there is need to establish a Central/Regional Research Institute of Temperate Horticulture, in addition to the already existing Institute at Srinagar (J&K), to cater to the problems of the farmers cultivating horticultural crops at the height of 3000 feet to 5000 feet in Uttrakhand/HP and other hilly areas as 12% of the total crop area is lying in Himalayan Region and not more than 2% of the same has been tapped so far.

**The Committee, therefore, recommend the Department to examine all the issues mentioned above and apprise the Committee about the action taken in this regard at their earliest.**

**NEW DELHI;  
11 April, 2008  
22 Chaitra, 1930(Saka)**

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

## **Appendix – I**

**(Vide Para 3 of the Preface of this Report)**

### **MINUTES OF THE EIGHTH SITTING OF THE STANDING COMMITTEE ON AGRICULTURE HELD ON SATURDAY, THE 29<sup>TH</sup> MARCH, 2008 AT 1500 HRS. IN COMMITTEE ROOM NO. 'D', GROUND FLOOR, PARLIAMENT HOUSE ANNEXE, NEW DELHI**

The Committee sat from 1500 hrs. to 1720 hrs.

#### **PRESENT**

Prof. Ram Gopal Yadav – Chairman

#### **MEMBERS**

##### **LOK SABHA**

2. Shri Ranen Barman
3. Smt. Kalpana Ramesh Narhire
4. Shri Prabodh Panda
5. Shri Y.S.Vivekananda Reddy

##### **RAJYA SABHA**

6. Shri Harish Rawat
7. Shri Vikram Verma
8. Shri Sk. Khabir Uddin Ahmed
9. Shri M.Rajasekara Murthy
10. Shri M.S.Swaminathan

#### **SECRETARIAT**

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

## WITNESSES

| <b>Sl. No.</b> | <b><u>Name</u></b>   | <b><u>Designation</u></b>                            |
|----------------|----------------------|--|
| 1.             | Dr. Mangala Rai      | Secretary (DARE) & Director General (ICAR)           |
| 2.             | Sh. A.K.Upadhyay     | Addl. Secretary (DARE) & Secretary (ICAR)            |
| 3.             | Sh. B.A. Koutinho    | Addl. Secretary & Financial Adviser (DARE/ICAR)      |
| 4.             | Dr. P.Das            | Deputy Director General (Agril. Extension)           |
| 5.             | Dr. S.Ayyappan       | Deputy Director General (Fisheries & Animal Science) |
| 6.             | Dr. Nawab Ali        | Deputy Director General (Engineering)                |
| 7.             | Dr. S.P.Tiwari       | Deputy Director General (Education)                  |
| 8.             | Dr. H.P.Singh        | Deputy Director General (Horticulture)               |
| 9.             | Dr. P.L. Gautam      | Deputy Director General (CS)                         |
| 10.            | Dr. K.M. Bujarbaruah | Deputy Director General (AS)                         |
| 11.            | Dr. A.K. Singh       | Deputy Director General (NRM)                        |
| 12.            | Dr. Mruthyunjaya     | National Director (NAIP)                             |
| 13.            | Dr. K.S.Khokhar      | Assistant Director General (PIM)                     |

At the outset, the Chairman 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 (2008-09) of DARE/ICAR. The Chairman drew attention to Direction 55(1) of the 'Directions by the Speaker' regarding treating the entire proceedings of the sitting confidential till the Report of the Committee is presented to the Parliament. He also requested the Secretary to introduce his colleagues.

2. After introduction of the officials, the Secretary gave a brief overview of the budgetary allocation for the year 2008-09 and also highlighted the activities/achievements made by the Department during the year.

3. The Chairman and Members of the Committee raised several queries regarding technology fatigue, stagnation and decline in yield and productivity, time lag in transfer of developed technologies to the field, need to set up a high-level Committee of Scientists and practicing farmers from different parts of the country to overcome technology fatigue and agrarian crisis the country is facing, need to maximise the farm productivity income of the small farmers. The representatives of the Department replied to some of the queries raised by the Members and assured to send written information on rest of the issues.

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

5. The witnesses then withdrew.

*The Committee then adjourned.*

## **Appendix – II**

**(Vide Para 5 of the Preface of this Report)**

**MINUTES OF THE ELEVENTH SITTING OF THE STANDING COMMITTEE ON AGRICULTURE HELD ON FRIDAY, THE 11<sup>TH</sup> APRIL, 2008 AT 1100 HRS. IN COMMITTEE ROOM NO. 'C', GROUND FLOOR, PARLIAMENT HOUSE ANNEXE, NEW DELHI**

The Committee sat from 1100 hrs. to 1325 hrs.

### **PRESENT**

Prof. Ram Gopal Yadav – Chairman

### **MEMBERS**

#### **LOK SABHA**

2. Shri Ranen Barman
3. Shri Anil Basu
4. Shri Girdhari Lal Bhargava
5. Shri Khagen Das
6. Shri Deepender Singh Hooda
7. Shri Prabodh Panda
8. Shri Raosaheb Danve Patil
9. Smt. Rupatai Diliprao Nilangekar Patil

#### **RAJYA SABHA**

10. Shri Harish Rawat
11. Smt. Mohsina Kidwai
12. Shri Vikram Verma
13. Shri Vinay Katiyar
14. Shri Sharad Anantrao Joshi
15. Shri M. Rajasekara Murthy
16. Prof. M.S. Swaminathan



## SECRETARIAT

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

At the outset, the Chairman welcomed the Members. Thereafter, the Committee took up for consideration the Draft Reports on Demands for Grants (2008-09) 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 some 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 (2008-09) and present them to the House on a date and time convenient to him.

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

*The Committee then adjourned*