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**STANDING COMMITTEE ON AGRICULTURE**  
**(2006-2007)**

**FOURTEENTH LOK SABHA**

**MINISTRY OF AGRICULTURE**

(DEPARTMENT OF AGRICULTURAL RESEARCH AND EDUCATION)

**DEMANDS FOR GRANTS (2006-07)**

**{Action Taken by the Government on the Recommendations/  
Observations contained in the Nineteenth Report of the  
Standing Committee on Agriculture (2005-2006)}**

**FOURTEENTH REPORT**



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

March, 2007/Phalguna, 1928 (Saka)

**TWENTY FOURTH REPORT**

**STANDING COMMITTEE ON AGRICULTURE  
(2006-2007)**

**(FOURTEENTH LOK SABHA)**

**MINISTRY OF AGRICULTURE (DEPARTMENT OF AGRICULTURAL RESEARCH  
AND EDUCATION)**

**DEMANDS FOR GRANTS (2006-2007)**

**[Action Taken by the Government on the  
Recommendations/Observations contained in the Nineteenth Report  
of the Standing Committee on Agriculture (2005-2006)**

Presented to Lok Sabha on --.03.2007

Laid in Rajya Sabha on --.03.2007



**LOK SABHA SECRETARIAT**

***NEW DELHI***

March, 2007/Phalguna, 1928 (Saka)

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

**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 GadakhTukaram Gangadhar
10. Shri Deepender Singh Hooda
11. Shri Hari Rama Jogaiah
12. Shri Mahendra Prasad Nishad
13. Shri Prabodh Panda
14. Smt. Rupatai Diliprao Patil Nilangekar
15. Shri K.J.S.P. Reddy
16. Shri Y.S. Vivekananda Reddy
17. Shri Chandra Bhushan Singh
18. Shri M.P. Veerendra Kumar
19. \* Shri Raosaheb Danve Patil
20. # Shri Baleshwar Yadav
21. + Smt. Kalpana Ramesh Narhire

**RAJYA SABHA**

22. Shri Harish Rawat
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 Debabrata Biswas
30. Shri Sharad Anantrao Joshi
31. Shri M. Rajasekara Murthy

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\* Shri Raosaheb Danve Patil has been nominated to this Committee Vice Smt. Bhavana P.Gawali, who has been nominated to Committee on Health and Family Welfare w.e.f. 31.8.2006 Vide LS Bulletin Part-II, Para No.2847, dated 31.8.2006.

# Shri Baleshwar Yadav has been nominated to this Committee on 8.9.2006 Vide LS Bulletin Part-II, Para No. 2863 dated 8.9.2006.

+ Smt. Kalpana Ramesh Narhire has been nominated to this Committee on 25.9.2006 Vide LS Bulletin Part-II, dated 25.9.2006.

## SECRETARIAT

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

## INTRODUCTION

I, the Chairman, Standing Committee on Agriculture, [2006-2007] having been authorized by the Committee to submit the Report on their behalf, present this Twenty Fourth Report on Action Taken by the Government on the Recommendations/Observations contained in the Nineteenth Report of the Standing Committee on Agriculture (2005-2006) (Fourteenth Lok Sabha) on Demands for Grants of the Ministry of Agriculture (Department of Agricultural Research and Education) for the year 2006-2007.

2. The Nineteenth Report of the Standing Committee on Agriculture (2005-2006) on Demands for Grants (2006-2007) of the Ministry of Agriculture (Department of Agricultural Research and Education) was presented to Lok Sabha on 19.5.2006 and laid in Rajya Sabha on the same day. The Ministry of Agriculture (Department of Agricultural Research and Education) was requested to furnish action taken replies of the Government to the recommendations contained in the Nineteenth Report. The replies of the Government to all the recommendations contained in the Report were received.

3. The Committee considered the action taken replies furnished by the Government at their sitting held on 8.3.2007, approved the draft comments and adopted the Twenty Fourth Report. Minutes of the sitting are placed at Appendix I.

4. An analysis of the Action Taken by the Government on the recommendations/observations contained in the Nineteenth Report (14<sup>th</sup> Lok Sabha) of the Committee is given in Appendix-II.

**NEW DELHI;**  
**8 March, 2007**  
**17 Phalgun, 1928 (Saka)**

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

## APPENDIX II

(Vide Para 4 of Introduction of the Report)

### ANALYSIS OF ACTION TAKEN BY GOVERNMENT ON THE NINETEENTH REPORT OF STANDING COMMITTEE ON AGRICULTURE (14<sup>TH</sup> LOK SABHA)

(i)	Total number of Recommendations	9
(ii)	Recommendations/Observations which have been Accepted by the Government	
	Serial Nos. 1, 2, 4 and 7	
	Total	4
	Percentage	44.45%
(iii)	Recommendations/Observations which the Committee Do not desire to pursue in view of the Government's replies	
	Serial No. NIL	
	Total	NIL
	Percentage	0%
(iv)	Recommendations/Observations in respect of which replies of the Government have not been accepted by the Committee	
	Serial Nos. 8 and 9	
	Total	2
	Percentage	22.22%
(v)	Recommendations/Observations in respect of which Final replies of the Government are still awaited	
	Serial Nos. 3, 5 and 6	
	Total	3
	Percentage	33.33%



## **CHAPTER I**

### **Report**

This Report of the Committee on Agriculture deals with the action taken by the Government on the recommendations contained in the Nineteenth Report (Fourteenth Lok Sabha) of the Standing Committee on Agriculture (2005-2006) on Demands for Grants (2006-2007) of the Ministry of Agriculture (Department of Agricultural Research & Education) which was presented to the Lok Sabha and laid in the Rajya Sabha on 19.05.2006.

1.2 The Action taken replies have been received from the Ministry of Agriculture (Department of Agricultural Research & Education) in respect of all the 9 recommendations contained in the Report. These have been categorised as under:

- (i) Recommendations/Observations that have been accepted by the Government (Chapter II of the Report)

Recommendation Sl. Nos. 1, 2, 4 and 7 (Total-4)

- (ii) Recommendations/Observations which the Committee do not desire to pursue in view of the Government's action taken reply (Chapter III of the Report) - NIL

- (iii) Recommendations/Observations in respect of which action taken replies of the Government have not been accepted by the Committee (Chapter IV of the Report)

Recommendation Sl. Nos. 8 and 9 (Total-2)

- (iv) Recommendations/Observations in respect of which final replies of the Government are still awaited. (Chapter V)

Recommendation Sl. Nos. 3,5 and 6 (Total-3)

1.3 The Committee will now deal with the action taken by the Government on all of their 9 recommendations.

## **Recommendation No. 1**

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

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

The Committee also noted that Sri Lanka and Latin American countries spend 0.81 per cent and 0.98 per cent of AGDP on Agricultural Research, respectively. Astonishingly, in comparison to some of the leading industrialized countries whose spending on agricultural research ranges between 2.45 per cent and 4.02 per cent of AGDP, India's spending on agricultural R&D ranged between 0.17 and 0.32 per cent during the last one decade which was even less than the average of all the developing countries.

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

However, the Committee were of the opinion that in view of the continuous funds constraints for the R&D activities of DARE/ICAR, instead of always depending upon

Government funding for their agrarian and allied research institutions, DARE/ICAR might consider the Mashelkar Committee formula for being financially self-reliant in running in their R&D activities by earning from their research work. DARE/ICAR might also consider the option of taking loans from public/private financial institutions, which might be repaid from the earnings of their research work. This would fill up the gap of low budgetary grants from the Government.

### **Reply of the Government**

1.5 The Government in its action taken reply have stated that the Indian Agriculture has already entered into an era of WTO regime and globalization. Mashelkar Committee's recommendations on "Alternative Models for ICAR to pursue research on commercial lines" have been considered. Accordingly, ICAR's draft guidelines on "Intellectual Property Management and Technology Transfer / Commercialization" were prepared and suggestions / comments invited to refine them further. Steps have also been initiated to further enhance multi-lateral and bi-lateral resource generation. Since the Xth Plan is in its last year, the resources available with the Department would be made use of to optimize research output and bring the programmes to a logical conclusion. However, the XIth Plan Working Group has already been constituted by Planning Commission to critically review the agricultural research and education in a holistic way and give its recommendations.

### **Comments of the Committee**

**1.6 The Committee would like to be apprised of (i) the detailed ICAR's draft guidelines on "Intellectual Property Management and Technology Transfer/Commercialisation" and the suggestions/comments invited/received from various sources to refine those guidelines further; and (ii) the details of steps initiated by ICAR to further enhance multi-lateral and bi-lateral resource generation along with the details of outcome of (i) and (ii) mentioned above, within a month from the date of presentation of this Report to the Parliament.**

### **Recommendation No. 2**

#### *Insufficient allocation to DARE/ICAR in 2006-2007*

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

The Committee were of the considered view that addressing of all the important areas of agricultural research, development and education, practically require huge and

well planned funding. Unfortunately, the Planning Commission and the Ministry of Finance seemed to have been ignoring the genuine and pressing demands of the DARE/ICAR to provide higher amount of public funding than being provided at present for the R&D activities of the DARE/ICAR to prove their talent. This will give them encouragement to put in more dedicated efforts in making new strides in the Agriculture sector and the benefits of which only reach to the common people of the country.

The Committee, therefore, strongly recommended that the Planning Commission and the Ministry of Finance should reconsider the genuine requirement of funds for DARE/ICAR during the terminal year of the Tenth Plan as an additionality over and above Rs. 5,368 crore already allocated for this Plan. The Committee also recommended that for the year 2006-07, as part of Department's proposal of Rs. 2000 crore, as discussed earlier, Rs. 650 crore should be provided at RE stage to the Department in addition to the BE of Rs. 1,350 crore already provided, so that the research and educational activities of the Department could get a real thrust and impetus in the emerging global agrarian scenario.

### **Reply of the Government**

1.8 The Government in its action taken reply have stated that the recommendation of the Committee has already been forwarded to Ministry of Finance, which communicates RE budget of the Department. The Department made a request to Planning Commission at the highest level seeking additional allocation to meet demands of important initiatives. The Planning Commission responded that uncovered additionalities and other requirements would be considered for augmentation at RE/Supplementary stage.

### **Comments of the Committee**

**1.9 The Committee would like to be apprised of the details of the request made by the Department to the Planning Commission seeking additional allocation to meet demands of important initiatives and the outcome of the assurance given by the Planning Commission for augmentation of funds at RE/Supplementary stage within a month from the date when RE are communicated to the Department.**

### **Recommendation No. 3**

*Entire Budgetary Process requires Reformative Changes*

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

institutes/divisions immediately and expeditiously in the month of December or a little earlier so that the institutes/divisions have sufficient time at their disposal for the optimum utilization of the scarce public funding provided to them for the ultimate welfare of the nation.

The Department in its Action Taken Reply on the Second Report of the Committee had stated that “the recommendation of the Parliamentary Standing Committee on Agriculture is valuable. The above recommendation of the Committee was forwarded to Ministry of Finance and Planning Commission. The Ministry of Finance has intimated that they have noted the recommendation and that all efforts will be made by them to comply with the recommendation. The Planning Commission also communicated that the budget allocations for the ongoing schemes/projects are being made on the basis of approved Annual Plan outlays, which allows a degree of certainty about the availability of funds to the Department and its lower formation.”

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

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

The Committee were, however, perturbed to note that the RE (2004-05) and RE (2005-06) allocations were received from the Ministry of Finance on 3rd January 2005 and 16 January, 2006 respectively, which not only was in contradiction to the crux of the recommendations of the Committee in this regard but also was in contradiction to the repeated positive assurances given by the Department/Planning Commission/Ministry of Finance in this matter. Evidently, for all practical purposes, all the three major parties involved in the entire budgetary process, namely, the Department, Planning Commission and the Ministry of Finance have failed to bring about any positive change or reform in their entire budgetary process during 2004-2005 and 2005-2006 despite their assurances.

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

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

### **Reply of the Government**

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

### **Comments of the Committee**

**1.12 The Committee note from the reply of the Government that the Department would utilize the opportunity at finalization of RE 2006-07, wherein the representatives of Ministry of Finance and Planning Commission participate, to plead for reformative changes to be made in the entire tardy budgetary process.**

**The Committee would like to be apprised of the final outcome of the pleading made by the Department in this regard.**

### **Recommendation No. 4**

#### ***Unsatisfactory performance/functioning of Krishi Vigyan Kendras (KVKs)***

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

The Committee also noted that whenever the Department was asked to give the details of fully functional/semi or partially functional/non-functional KVKs already opened by the Department, the Department has always made very high claims about the full functionality of all the KVKs except for 6 KVKs which have been declared non-

functional and efforts are said to be made to make them functional again by entrusting these to some other better agencies/organizations.

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

The Committee, therefore, once again not only recommended to the Department to complete the target of having at least one KVK in all the rural districts of India but also unanimously urged the Department to have a serious look into the issues of malfunctioning/ unsatisfactory functioning of many KVKs especially in Bihar, Uttar Pradesh, Maharashtra, North East Region, J&K-Leh region, Himachal Pradesh, Madhya Pradesh and other States, as have been repeatedly brought to the notice of the Department by the elected representatives of the people, i.e. Members of Parliament and Members of the Parliamentary Standing Committee on Agriculture during Committee meeting held on 12.04.2006 and also during such meetings held in the previous years.

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

### **Reply of the Government**

1.14 The Government in its action taken reply have stated that the Department was fully seized of the constraints faced by the KVKs. The Department was endeavoring to meet the target of having one KVK in each of the rural districts of India by the end of March, 2007. Till date, 537 KVKs have been sanctioned. Establishment and effective operation of KVK requires adequate infrastructure development, recruitment of scientific and technical manpower, procurement of equipment, and creation of the required farm and lab facilities.

The Department has initiated a number of measures for further improvement of KVK, which includes :

- (i) A Quinquennial Review Team under the Chairmanship of Shri J.N.L. Srivastava, former Secretary, Department of Agriculture and Cooperation to review the functioning of the KVKs and suggest measures for enhancing their efficiency. The first meeting of the Committee was held on 31.7.2006. The Committee is expected to give its report within 6 months.

- (ii) It has been decided to link each SAU with the KVKs in its area of operation for knowledge empowerment, technological backstopping and overseeing their activities.
- (iii) All the host organizations (SAUs, ICAR Institutes, NGOs, other Organizations) have been requested for filling up the vacant posts.
- (iv) Quarterly monitoring of the activities of the KVKs against its annual target are being regularly undertaken.
- (v) Monitoring the progress of implementations of action plan by the Scientific Advisory Committee of each KVK to ensure the fulfillment of the mandate vested in each of the KVKs.

### **Comments of the Committee**

**1.15 The Committee would like to be apprised of the outcome of the measures initiated by the Department for further improvement of KVKs as mentioned from (i) to (v) in their Action Taken Reply to the recommendation No. 4 of the 19<sup>th</sup> Report of the Committee (2005-06), within 3 months time from the presentation of this Report to the Parliament.**

The Committee also refer to the further action taken replies of the Department to the Comments of the Committee contained in their 14<sup>th</sup> Report (2005-06) based on 10<sup>th</sup> Report (2004-05) wherein on the recommendation of the Committee, the Department had proposed the following time schedule/frame to take action on the complaints received by them and recommend some modifications/revision in the proposed time schedule for conducting various activities involved in taking final action by the competent authorities on the fact finding enquiry report.

The Committee are of the opinion that the time schedule proposed by the Department is too long and should be reduced, as indicated below, for expeditious action on the complaints.

<b>Activity</b>	<b>Proposed time schedule by the Department</b>	<b>Time schedule recommended by the Parliamentary Standing Committee on Agriculture</b>
<b>Initiating a fact finding enquiry</b>	<b>Within 30 days from the date of receipt of the complaint in case there is a prima facie case for conducting a fact-finding enquiry.</b>	<b>Within 15 days from the date of receipt of the complaint in case there is a prima facie case for conducting a fact finding enquiry.</b>
<b>Submitting the report by the fact finding Committee</b>	<b>Three months from the date of constitution of the fact-finding Committee.</b>	<b>45 days from the date of constitution of the fact-finding Committee.</b>
<b>Final action taken by the competent authorities on that report.</b>	<b>Two months from the date of submission of the report.</b>	<b>One month from the date of submission of the report.</b>



## **Recommendation No. 5**

### ***Planning Commission has been ignoring the Genuine Requirement of One-Time Catch Up Grant of DARE/ICAR***

1.16 The Committee noted that the DARE has a number of institutions/laboratories, which were more than twenty years old. In order to have excellent academic standards in the State Agricultural Universities and to have globally competitive research working environment, the Eighth Plan and Ninth Plan Working Groups had recommended Rs.300 crore and Rs. 500 crore respectively, one time catch up grant to meet the critical need for upgrading laboratory equipment, pilot plants, farm and laboratory facilities, class rooms and audio visual facilities in these institutions.

The Committee also noted that during the Eighth Plan Period, Planning Commission did not provide any catch up grant. During the Ninth Plan, the Planning Commission had communicated a total outlay of Rs. 3,376.95 crore including Externally Aided Projects (EAPs) out of which Rs. 400 crore was indicated as one time catch-up grant but no separate allocations were made for catch up grant, though the Department had proposed an allocation of Rs.100 crore, Rs.200 crore, Rs. 250 crore and Rs.306.81 crore for the year 1998-99, 1999-2000, 2000-2001 and 2001-02 respectively for the purpose.

Committee had further been apprised that Planning Commission had communicated that the amounts indicated for annual plans, also included the amount for one time catch-up grant, i.e., the Department could meet its requirement of catch up grant out of their Annual Plan budgets only. Accordingly, the Department had taken a decision in the year 1999-2000 that the Institutes could spend up to a maximum of 20 per cent of their respective Plan; during 2000-2001 that percentage limit was raised to 30 per cent and for 2001-2002, it was decided that the Institutes could incur expenditure under one time catch up grant to the extent to which they could spare the money after meeting their other essential research requirements. For State Agricultural Universities (SAUs), these percentages were 30 per cent for 1999-2000, 40 per cent for 2000-01 and for 2001-02 it was allowed at par with institutes.

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

With no solution in hand and unable to comply with the direction of the Planning Commission to spend all the required amounts from their annual plans for changing the old age infrastructure for research system to the latest state-of-the-art infrastructure and research system, the Department projected a requirement of Rs. 1000 crore as One Time Catch up Grant for the entire Tenth Plan Period. The Planning Commission did not make any provision for the same in the Tenth Plan outlay of the Department, which was pegged at Rs. 5368 crore. Thereafter, the Department consistently proposed a requirement of Rs. 200 crore as Catch up Grant in each year i.e. 2002-03, 2003-04 and 2004-05 but the response of the Planning Commission to these proposals was *'the catch up grant which was meant for upgrading the research facility of ICAR's institutions had already been taken care of while approving the proposals during Tenth Five Year Plan'*. Due to the

clear-cut stand taken by Planning Commission on this issue, the Department did not pursue the matter further.

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

The Committee also felt that although the Government and the people have great expectations from our agricultural scientists to usher India into Second Green Revolution and to achieve major breakthroughs in finding out solutions for problems faced by farmers and people engaged in agrarian and allied sectors apart from bringing total food and fodder security and overall prosperity and growth, yet the fulfillment of these great expectations would not be possible unless the Government provide the much desired and direly needed funds and incentives to ICAR to make it a real apex organization and the hub of the most talented scientists of the nation.

The Committee once again strongly 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.

### **Reply of the Government**

1.17 The Government in its action taken reply have stated that the Recommendations have been sent to Planning Commission and Ministry of Finance. The Government have approved an allocation of Rs.200 crore, in June, 2006, to strengthen agricultural education in the country, over and above Rs. 720 crore provided earlier for the Xth Plan period. Further, the Government have also approved another Rs. 200 crore approximately for development of seed infrastructure in SAUs/ ICAR which would ensure the availability of quality seed, planting material and fish seed beside generating internal resource.

## Comments of the Committee

**1.18 The Committee would like to be apprised of the pursuing efforts made by the Department and final response of the Planning Commission and Ministry of Finance with regard to the recommendation of the Committee regarding one time catch up grant of Rs. 1000 crore over and above the annual allocations to ICAR.**

### **Recommendation No. 6**

#### ***Suffering of Plan Schemes of DARE/ICAR owing to 3 to 4 years time taken in SFC/EFC/CCEA Approval***

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

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

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

The Committee, therefore, expressed their serious concern over such inordinate delays in which about 2 to 4 years' precious time out of total 5 years period has been

wasted in getting and providing SFC/EFC/CCEA clearance to the Plan Schemes of the Tenth Five Year Plan which will come to an end on 31 March 2007 viz. after another 10 months.

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

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

### **Reply of the Government**

1.20 The Government in its action taken reply have stated that the recommendation of the Committee has been sent to appraisal agencies viz. Ministry of Finance and Planning Commission. The preparation of XIth Plan SFC/EFC proposal would depend on many pre-requisites such as constitution and subsequent recommendations of the XIth Plan Working Group; finalization of the Approach Paper to XIth Plan by Planning Commission and other related instructions; the communication of XIth Plan outlay of the Department; in-principle approval of the new initiatives by the Planning Commission etc. Thus, this is a long process of getting cleared the SFC/EFC proposals, however, the Department will put its maximum efforts to get the SFC/EFC/CCEA proposals cleared on expeditious basis.

### **Comments of the Committee**

1.21 **The Committee note from the reply of the Government that although the process of getting the SFC/EFC proposals cleared is a long one, however, the Department would put its maximum efforts to get the SFC/EFC/CCEA proposals cleared on expeditious basis.**

**The Committee would like to be apprised of the positive outcome of the efforts made by the Department in this regard.**

### **Recommendation No. 7**

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

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

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

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

### **Reply of the Government**

1.23 The Government in its action taken reply have stated that the Government have constituted the Agricultural Coordination Committee under the Chairmanship of Prime Minister and Minister of Agriculture, Group of concerned Ministers as Members including Deputy Chairman, Planning Commission, Chairman, National Commission on Farmers, to evolve a systematic approach to Policy formulation in all issues pertaining to agriculture and to promote inter-sectoral and inter-departmental coordination in planning and implementation.

Since the issues raised above, are developmental in nature and the Department of Agriculture and Cooperation is the Nodal/ Developmental Department in Agriculture Ministry, the DAC would need to refer these issues to the above said Agricultural Coordination Committee.

### **Comments of the Committee**

**1.24 The Committee are of the view that the issues to be referred to the Agricultural Coordination Committee constituted by the Government to promote inter-sectoral and inter-departmental coordination in planning and implementation, should be referred to the Agricultural Coordination Committee without any further delay so that goal of agrarian growth/prosperity can be achieved in a given time frame. The Committee would appreciate if they are also apprised periodically of the issues discussed in the Agricultural Coordination Committee and the final outcome of such discussions.**

### **Recommendation No. 8**

***DARE/ICAR lagging behind to bring in the much awaited Second Green Revolution in the Country***

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

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

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

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

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

**Reply of the Government**

1.26 The Government in its action taken reply have stated that the Department has initiated a few network projects, which deal with basic and strategic research. The research findings of these projects will help in developing new crop varieties / hybrids,

methodologies and technologies to improve yield from the current level and bring in stability in agricultural production.

Sustainability of Agriculture and improving the profitability and competitiveness of the Indian farmer is the major focus of research under the Indian Council of Agricultural Research (ICAR). This includes development of hybrids and high yielding varieties alongwith associated production and protection technology, improving soil health and enhancing input use efficiency. Recently, ICAR has launched the National Agricultural Innovative Project with an outlay of about Rs. 1200 crores. Further, a project on “Seed Production in Agricultural Crops and Fisheries” with an outlay of Rs. 198.89 crores is in operation to enhance the production of quality seeds, planting materials etc. For development of transgenics in crops, initiatives have been taken through launching a Network Project with an outlay of Rs. 32.85 crores. Efforts has also been made for conducting basic and strategic research through a number of network projects such as gene pyramiding, molecular breeding, diagnostics etc. In addition, a National Fund for basic and strategic research in agricultural sciences to build capacity and for supporting research has also been launched.

Breeder Seed Production is the mandate of ICAR, which is being produced through different centres at ICAR Institutes and State Agricultural universities. It is a demand driven process where different States are submitting their indent to Department of Agriculture and Cooperation after compilation, which is being forwarded to ICAR for production of breeder seed of different crops. The breeder seed is used to produce foundation seed then certified seed which is being supplied to the farmers. The statement of breeder seed produced during last 5 years is given below:-

(qtls)

<b>S.No.</b>	<b>Year</b>	<b>Indent</b>	<b>Production</b>
1.	2000-01	23983.80	23793.27
2.	2001-02	22670.51	30643.67
3.	2002-03	26140.26	30670.98
4.	2003-04	25316.80	40228.86
5.	2004-05	29491.75	43413.05

In addition to above, more than 10,000 quintals breeder seed is produced yearly for State released Varieties directly by centres as per indent of their respective States.

### **Comments of the Committee**

**1.27 The Committee are not satisfied with the reply of the Department and strongly reiterate their earlier recommendation that DARE/ICAR being the apex nodal agency/council responsible for R&D in agrarian and allied sectors must do the needful, not only to tackle/combat the shortcomings / problems of the First Green Revolution but also to address the issues observed in their original Recommendation on top priority, in order to bring the much needed and awaited Second Green Revolution/Evergreen Revolution to the nation.**

### **Recommendation No. 9**

#### ***DARE/ICAR to take Urgent Action to Enhance Productivity of Foodgrains, especially Wheat***

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

The Committee had the similar observations as reflected by Secretary, Ministry of Agriculture (Department of Agriculture & Cooperation) and were fully aware about the stagnant/low/fluctuating productivity level of foodgrains, especially, wheat and pulses and therefore, strongly urged the DARE/ICAR to interact with Secretary, Ministry of Agriculture (Department of Agriculture & Cooperation) on these issues/suggestions they might have to share to increase the wheat production in the country and do all the needful to rejuvenate their (ICAR) entire team of Scientists to do more hard work with more dedication to increase the productivity of foodgrains especially wheat, pulses, coarse grains and also fodder etc. not only to make India self-reliant in foodgrains and agrarian products but also to help the country to save precious and scarce foreign exchange/public money being spent on importing wheat and other agrarian produces.

### **Reply of the Government**

1.29 The Government in its action taken reply have stated that the wheat production and productivity peaked during 1999-2000 being 76.37 million tonnes and 27.78 quintals



per hectare. Since then, the production could not reach the same level and fluctuated around 70-72 million tonnes, although the productivity level was around 27 quintals per hectare. The area under wheat cultivation during 1999-2000 was 27.49 million hectares and declined by about 1 million hectares since then. The stagnant production and productivity could be attributed to late sowing, rising temperature, deteriorating soil health including low carbon content and organic matter, imbalanced use of fertilizers, declining factor productivity, etc. Among various States, imbalanced use of fertilizer is highest in the States of Haryana and Punjab and multiple nutrient both major and minor deficiencies are appearing due to repeated cultivation of rice and wheat in rotation and non-adoption of Integrated Plant Nutrient Management System. Nitrogen phosphorus and potash are required to be given in a 4:2:1 ratio. But in certain part of these two States, it is almost 35:9:1. The micro-nutrients, the deficiency of which occurs particularly in those areas where crop intensity is very high. The farmers have to add more fertilizers inputs for attaining the yield level of 1990s indicating a decline in total factor productivity. Similarly, the carbon content in the soil has gone very low and the organics are not being applied. The burning of agro waste and residues is also adding to the problem and consequently, the soil health is adversely affected. The rotation of crops followed in a particular area also have a bearing on the production. Hence massive extension efforts and appropriate input support is considered vital.

Indian Council of Agricultural Research (ICAR) has developed a number of high yielding varieties suitable for different agro-climatic regions. Some of the important and popular varieties are: PBW 343, PBW502, Raj 3765, HD2733, WH 283, WH 542. Varieties for late sown division has also been developed such as PBW-373 UP 2338, UP 245, Raj 3077, Raj 3765, HW2025. For enhancing production and productivities in rainfed areas, high yielding varieties have been evolved Some of them are: HDR-77, K-8972, K-9465, K-8027, NEPZ, PBW-299, WH-533, PBW-396, NWPZ; VL-738, HPW-42, HS-365, VL-829, VL-616, VL-832, NHZ; HW-2004, JWS-17, HI-1500, HD-4674(d)-CZ; K-9644, HD-2781-PZ. For sodic soil also, the varieties have been evolved such as Raj 3077, KRL -19. For summer sowing in northern hill zone, variety like HS - 375 has also been developed. For normal sown conditions for hill areas, the varieties such as VL 738, VL 804, HS 240 have been developed. Similarly, for rainfed areas in northern hills, varieties such as VL -738, HPW-42, HS-365, VL-829, DT-46 are evolved. For southern hill zone also, high yielding varieties have been developed such as HUW - 318, SW-1085, HW2044. For enhancing the productivity in Central Zone under the rainfed area, the varieties such as GW 322, GW 173, HW 200, HD4672 have been developed.

Product specific varieties suited for bread, biscuit, pasta and for chapattis has been identified for use by the various industries/stakeholders. Raj 3765, NIAW-34 Halna and WH-730 have been characterized as potential donors of heat tolerance in wheat. To enhance the availability of quality seeds, all the indents for the breeder seed from the Department of Agri. & Cooperation (DAC) have been fully met and the Council is capable of meeting the additional demand for breeder seed.

There is a need to further demonstrate and popularize resource conservation technologies like Zero Tillage. The zero tillage technology of seeding wheat without any field preparation has several advantages over conventional tillage. It reduces the cost of cultivation (about Rs.2500/ha), advances the time of wheat sowing, requires less water

for the first irrigation and results in less infestation of *Phalaris minor*, which is a serious problem in northwest India. The Furrow Irrigated Raised Bed-planting System(FIRBS) is another resource conservation tillage technology, which saves seed and fertilizer nitrogen(25 per cent) as well as scare water resource(25-35 per cent).

For enhancing yield productivity further efforts for developing hybrid Wheat are also being made in terms of identification of better restorers, high heterosis and standardizing commercially viable seed production technologies. Winter X Spring Wheat Hybridization Programme is also taken up to bring in new yield and resistant genes into Spring Wheat. The use of biotechnological tools such as marker aided selection, identification of quantitative traits loci, genetic transformations for transfer of important gene and to improve yield potential stability, efficiency of bio-mass production and biological nitrogen fixation are also undertaken. For management of Karnal Bunt, a variety PBW-502 has been developed with yield at par with PBW-343. A Network Project has also been initiated to manage the Karnal Bunt disease. Similarly, a Network Projects on Gene Pyramiding has been initiated to combine the various gene sources for different rust into popular varieties for longer stability.

The frontline demonstrations conducted has found a clear yield gaps of about 1 tonne per hectare which can be easily met by the appropriate transfer of technologies and input delivery/other policy resources.

Hybrid rice technology has shown the potential to increase the productivity by about 1 tonne per hectare. Research efforts in ICAR have resulted into development of widely adopted hybrids such as KRH2, Pant Shankar Dhan 1, Pant Shanker Dhan 3, DRRH-2, Sahayadri etc. Hybrid seed production technology has also been developed and refined. Promotion and development of hybrid rice will result into higher production of rice.

Maize is a versatile crop and is grown for food, feed and industrial purposes. Quality Protein maize hybrids such as Shaktiman 1, Shaktiman 2, Shaktiman 3, Shaktiman 4 contains higher amount of lysine and tryptophan which have better nutritive value. A number of hybrids suitable for different zones have been developed. Production of winter maize has good potential for increasing the productivity of maize. Demand for maize is likely to increase for its uses for food, feed, industrial use, hence, developmental efforts are needed to enhance the production and productivity of Maize.

Sorghum is staple food crop for large section of people and also a main source of feed for cattle. For kharif and also for Rabi a number of High Yielding Hybrids have been developed such as CSH-16, CSH -18, CSV-16, etc. Parbhani Sweta has been developed as a grain mold tolerant variety. Phule Yasoda, has been released for Rabi Sorghum growing areas. Sorghum need to be promoted also for starch, baking industry, alcohol, pop-sorghum, malt and for feed industry.

In pulses, 12 crops including 4 arid legumes are grown in different parts of the country. Among these pigeonpea, mungbean, urdbean and chickpea are grown on large area with maximum share in the total production. ICAR/ SAUs have developed several hybrids (Arhar) and varieties in pulse crops. Noteworthy research achievements are :

- Development of short duration varieties in pigeonpea (having tolerance/resistance to disease and pest) providing the scope for crop diversification and double cropping. The hybrids of pigeonpea have proved an increase in the productivity by 25 percent and are being popularized.
- Several long duration varieties of pigeonpea have been replaced by short duration/mid late varieties with good degree of resistance to fusarium wilt and sterility mosaic.
- Bold seeded kabuli varieties in Bengal gram has a potential as high value crop. The varieties viz Kak-2, Pusa 1003, BG 1053 K, JGK-1 are becoming popular among the farmers.
- In Lathyrus the ODAP (Oxide Diamino Propionic Acid) content in seed has been reduced by using biotechnology and the varieties developed like Bio 302, Bio 212 (Ratar) are safe for consumption.
- The FLDs on pulse crops conducted on farmers' fields have shown the potential of productivity to the tune of 2.0 tones/ha.
- The short duration mung varieties maturing in 55-60 days has further provided potential for crop diversification and double cropping.
- Several efficient Rhizobium strains have been developed for different pulse crops having good potential for nitrogen fixation and thereby improvement in the soil fertility. This has also helped in increase of yield vis-à-vis improvement of soil fertility and reduction in the cost of cultivation.

For efficient and effective delivery of technologies this Department interacts with Department of Agriculture and Cooperation, on a regular basis, through DAC-ICAR Interface, organized before the National Conference on *rabi* and *kharif* crops. During these interface which are co-chaired by Secretary DAC and Secretary DARE, the package of practices are finalized and related issues are discussed threadbare.

The creation of infrastructure through public investment is crucial for long term growth and development agriculture sector. Beginning of 1980s witnessed a very significant change in policy of resource allocation to agriculture. It marked the beginning of decline in public investment in agriculture. In early 1980s more than 4 percent of GDP agriculture was used in public investments. In the recent years this has fallen to 1.54 percent. The decline in public investments in agriculture is believed to be causing adverse impact on creation of infrastructure in agriculture and on long term growth of farm output.

### **Comments of the Committee**

**1.30 The Committee are not satisfied with the reply of the Department as the reply mainly speaks about what has already been done by the Department and does not mention anything about what is still required to be done by the DARE/ICAR and how they propose to take urgent action to enhance productivity of foodgrains, especially wheat to bring the nation out of the anxious situation of shortage in wheat production.**

**The Committee note from the reply of the Government the following points, namely, (i) massive extension efforts and appropriate input support is considered vital to overcome/remove the factors causing decline/stagnation in wheat production/productivity; (ii) there is a need to further demonstrate and popularize resource conservation technologies like Zero Tillage and the Furrow Irrigated Raised Bed-planting System (FIRBS), etc; (iii) developmental efforts are needed to enhance the production and productivity of maize; (iv) the frontline demonstration conducted has found earlier wheat production gaps of about 1 tonne per hectare which can be easily met by the appropriate transfer of technologies and input delivery/other policy resources; (v) The promotion and development of Hybrid rice will result in higher production of rice by about one tonne per hectare; (vi) the decline in public investments in agriculture is causing adverse impact on creation of infrastructure in agriculture and on long term growth of farm input.**

**The Committee desire a detailed note from the Department on each of the points mentioned in (i) to (vi) above as to how the Department proposes to get the needful done so that these issues {mentioned in (i) to (vi) above} do not remain pending/unattended any longer and get resolved at the earliest.**

**The Committee appreciate the work already undertaken by the DARE/ICAR for enhancing the production and productivity of foodgrains and other agricultural produces but at the same time reiterate their earlier recommendation and wish to place on record that it is high time that DARE/ICAR should reorient their research programmes to overcome the lacunae and short-comings in their working and also make all out vigorous efforts to make our country self-reliant in foodgrains and other agrarian products, so that there is no need to import the wheat and other foodgrains including pulses, etc.**

## **CHAPTER II**

### **RECOMMENDATIONS/OBSERVATIONS WHICH HAVE BEEN ACCEPTED BY THE GOVERNMENT**

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

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

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

The Committee note that Sri Lanka and Latin American countries spend 0.81 per cent and 0.98 per cent of AGDP on Agricultural Research, respectively. Astonishingly, in comparison to some of the leading industrialized countries whose spending on agricultural research ranges between 2.45 per cent and 4.02 per cent of AGDP, India's spending on agricultural R&D ranged between 0.17 and 0.32 per cent during the last one decade which was even less than the average of all the developing countries.

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

agrarian and allied produces, so as to feed the ever growing population for decades to come with too meager public funding of about 0.3% AGDP?

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

### **Reply of the Government**

2.2 Indian Agriculture has already entered into an era of WTO regime and globalization. Mashelkar Committee's recommendations on "Alternative Models for ICAR to pursue research on commercial lines" have been considered. Accordingly, ICAR's draft guidelines on "Intellectual Property Management and Technology Transfer / Commercialization" were prepared and suggestions / comments invited to refine them further. Steps have also been initiated to further enhance multi-lateral and by-lateral resource generation. Since the Xth Plan is in its last year, the resources available with the Department would be made use of to optimize research output and bring the programmes to a logical conclusion. However, the XIth Plan Working Group has already been constituted by Planning Commission to critically review the agricultural research and education in a holistic way and give its recommendations.

### **Comments of the Committee**

2.3 For comments of the Committee please see Para No.1.6 of Chapter I of this Report.

#### **Recommendation No.2**

*Insufficient allocation to DARE/ICAR in 2006-2007*

2.4 The Committee note that the Department proposed an outlay of Rs. 2,000 crore for 2006-07 but has been allocated only Rs. 1,350 crore. Obviously, the reduced allocation by Rs. 750 crore will hamper the functioning of the Department, particularly in

vital research areas. The Department has put up an additional demand of Rs. 5,000 crore for the Tenth Plan to address the research and developmental aspects related to enhancement of productivity, input use, efficiency, modernization of infrastructure and centres of excellence in State Agricultural Universities (SAUs). For the year 2006-07 also the Department had taken up the issue at the highest level seeking additional funds for priority areas.

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

The Committee, therefore, strongly recommend that the Planning Commission and the Ministry of Finance should reconsider the genuine requirement of funds for DARE/ICAR during the terminal year of the Tenth Plan as an additionality over and above Rs. 5,368 crore already allocated for this Plan. The Committee also recommend that for the year 2006-07, as part of Department's proposal of Rs. 2000 crore, as discussed earlier, Rs. 750 crore should be provided at RE stage to the Department in addition to the BE of Rs. 1,350 crore already provided, so that the research and educational activities of the Department get a real thrust and impetus in the emerging global agrarian scenario.

### **Reply of the Government**

2.5 The recommendation of the Committee has already been forwarded to Ministry of Finance, which communicates RE budget of the Department. The Department made a request to Planning Commission at the highest level seeking additional allocation to meet demands of important initiatives. The Planning Commission responded that uncovered additionalities and other requirements would be considered for augmentation at RE/Supplementary stage.

### **Comments of the Committee**

2.6 For comments of the Committee please see Para No.1.9 of Chapter I of this Report.

### **Recommendation No.4**

#### ***Unsatisfactory performance/functioning of Krishi Vigyan Kendras (KVKs)***

2.7 The Committee note that DARE/ICAR are doing their best to achieve the long awaited target of opening/having at least one Krishi Vigyan Kendra (KVK) in each of the rural District of India. As there are 575 rural districts in India and so far

DARE/ICAR has already sanctioned/opened 524 KVKs in various rural districts. The remaining 54 rural districts are planned to be covered during 2006-07.

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

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

The Committee, therefore, once again not only recommend to the Department to complete the target of having at least one KVK in all the rural districts of India but also unanimously urge the Department to have a serious look into the issues of malfunctioning/ unsatisfactory functioning of many KVKs especially in Bihar, Uttar Pradesh, Maharashtra, North East Region, J&K-Leh region, Himachal Pradesh, Madhya Pradesh and other States, as have been repeatedly brought to the notice of the Department by the elected representatives of the people, i.e. Members of Parliament and Members of the Parliamentary Standing Committee on Agriculture during Committee meeting held on 12.04.2006 and also during such meetings held in the previous years.

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

### **Reply of the Government**

2.8 The Department is fully seized of the constraints faced by the KVKs. The Department is endeavoring to meet the target of having one KVK in each of the rural districts of India by the end of March, 2007. Till date, 537 KVKs have been sanctioned. Establishment and effective operation of KVK requires adequate infrastructure development, recruitment of scientific and technical manpower, procurement of equipment, and creation of the required farm and lab facilities.

The Department has initiated a number of measures for further improvement of KVK, which includes :



- i) A Quinquennial Review Team under the Chairmanship of Shri J.N.L. Srivastava, Former Secretary, Department of Agriculture and Cooperation to review the functioning of the KVKs and suggest measures for enhancing their efficiency. The first meeting of the Committee was held on 31.7.2006. The Committee is expected to give its report within 6 months.
- ii) It has been decided to link each SAU with the KVKs in its area of operation for knowledge empowerment, technological backstopping and overseeing their activities.
- iii) All the host organizations (SAUs, ICAR Institutes, NGOs, other Organizations) have been requested for filling up the vacant posts.
- iv) Quarterly monitoring of the activities of the KVKs against its annual target are being regularly undertaken.
- v) Monitoring the progress of implementations of action plan by the Scientific Advisory committee of each KVK to ensure the fulfillment of the mandate vested in each of the KVKs.

### **Comments of the Committee**

2.9 For comments of the Committee please see Para No.1.15 of Chapter I of this Report.

#### Recommendation No.7

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

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

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

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

### **Reply of the Government**

2.11 The Government have constituted the Agricultural Coordination Committee under the Chairmanship of Prime Minister and Minister of Agriculture, Group of concerned Ministers as Members including Deputy Chairman Planning Commission, Chairman, National Commission on Farmers, to evolve a systematic approach to Policy formulation in all issues pertaining to agriculture and to promote inter-sectoral and inter-departmental coordination in planning and implementation.

Since the issues raised above, are developmental in nature and the Department of Agriculture and Cooperation is the Nodal/ Developmental Department in Agriculture Ministry, the DAC would need to refer these issues to the above said Agricultural Coordination Committee.

### **Comments of the Committee**

2.12 For comments of the Committee please see Para No.1.24 of Chapter I of this Report.

### **CHAPTER III**

RECOMMENDATIONS/OBSERVATIONS WHICH THE COMMITTEE DO NOT  
DESIRE TO PURSUE IN VIEW OF GOVERNMENT'S REPLIES

**-NIL-**

## CHAPTER IV

### RECOMMENDATIONS/OBSERVATIONS IN RESPECT OF WHICH REPLIES OF THE GOVERNMENT HAVE NOT BEEN ACCEPTED BY THE COMMITTEE

#### *Recommendation No.8*

##### *DARE/ICAR lagging behind to bring in the much awaited Second Green Revolution in the Country*

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

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

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

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

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

## Reply of the Government

4.2 The Department has initiated a few network projects, which deal with basic and strategic research. The research findings of these projects will help in developing new crop varieties / hybrids, methodologies and technologies to improve yield from the current level and bring in stability in agricultural production.

Sustainability of Agriculture and improving the profitability and competitiveness of the Indian farmer is the major focus of research under the Indian Council of Agricultural Research (ICAR). This includes development of hybrids and high yielding varieties alongwith associated production and protection technology, improving soil health and enhancing input use efficiency. Recently, ICAR has launched the National Agricultural Innovative Project with an outlay of about Rs. 1200 crores. Further, a project on "Seed Production in Agricultural Crops and Fisheries" with an outlay of Rs. 198.89 crores is in operation to enhance the production of quality seeds, planting materials etc. For development of transgenics in crops, initiatives have been taken through launching a Network Projects with an outlay of Rs. 32.85 crores. Efforts has also been made for conducting basic and strategic research through a number of network projects such as gene pyramiding, molecular breeding, diagnostics etc. In addition, a National fund for basic and strategic research in agricultural sciences to build capacity and for supporting research has also been launched.

Breeder Seed Production is the mandate of ICAR, which is being produced through different centres at ICAR Institutes and State Agricultural universities. It is a demand driven process where different States are submitting their indent to department of Agriculture and Cooperation after compilation, which is being forwarded to ICAR for production of breeder seed of different crops. The breeder seed is used to produce foundation seed than certified seed which is being supplied to the farmers. The statement of breeder seed produced during last 5 years is given below:-

(qtls)

S.No.	Year	Indent	Production
1.	2000-01	23983.80	23793.27
2.	2001-02	22670.51	30643.67
3.	2002-03	26140.26	30670.98

4.	2003-04	25316.80	40228.86
5.	2004-05	29491.75	43413.05

In addition to above, more than 10,000 quintals breeder seed is produced yearly for State released Varieties directly by centres as per indent of their respective States.

### **Comments of the Committee**

4.3 For comments of the Committee please see Para No.1.27 of Chapter I of this Report.

### ***Recommendation No.9***

#### ***DARE/ICAR to take Urgent Action to Enhance Productivity of Foodgrains, especially Wheat***

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

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

grains and also fodder etc. not only to make India self-reliant in foodgrains and agrarian products but also to help the country to save precious and scarce foreign exchange/public money being spent on importing wheat and other agrarian produces.

### **Reply of the Government**

4.5 The wheat production and productivity peaked during 1999-2000 being 76.37 million tonnes and 27.78 quintals per hectare. Since then, the production could not reach the same level and fluctuated around 70-72 million tonnes, although the productivity level was around 27 quintals per hectare. The area under wheat cultivation during 1999-2000 was 27.49 million hectares and declined by about 1 million hectares since then. The stagnant production and productivity could be attributed to late sowing, rising temperature, deteriorating soil health including low carbon content and organic matter, imbalanced use of fertilizers, declining factor productivity, etc. Among various States, imbalanced use of fertilizer is highest in the States of Haryana and Punjab and multiple nutrient both major and minor deficiencies are appearing due to repeated cultivation of rice and wheat in rotation and non-adoption of Integrated Plant Nutrient Management System. Nitrogen phosphorus and potash are required to be given in a 4:2:1 ratio. But in certain part of these two States, it is almost 35:9:1. The micro-nutrients, the deficiency of which occurs particularly in those areas where crop intensity is very high. The farmers have to add more fertilizers inputs for attaining the yield level of 1990s indicating a decline in total factor productivity. Similarly, the carbon content in the soil has gone very low and the organics are not being applied. The burning of agro waste and residues is also adding to the problem and consequently, the soil health is adversely affected. The rotation of crops followed in a particular area also have a bearing on the production. Hence massive extension efforts and appropriate input support is considered vital.

Indian Council of Agricultural Research (ICAR) has developed a number of high yielding varieties suitable for different agro-climatic regions. Some of the important and popular varieties are: PBW 343, PBW502, Raj 3765, HD2733, WH 283, WH 542. Varieties for late sown division has also been developed such as PBW-373 UP 2338, UP 245, Raj 3077, Raj 3765, HW2025. For enhancing production and productivities in rainfed areas, high yielding varieties have been evolved Some of them are: HDR-77, K-8972, K-9465, K-8027, NEPZ, PBW-299, WH-533, PBW-396, NWPZ; VL-738, HPW-42, HS-365, VL-829, VL-616, VL-832, NHZ; HW-2004, JWS-17, HI-1500, HD-4674(d)-CZ; K-9644, HD-2781-PZ. For sodic soil also, the varieties have been evolved such as Raj 3077, KRL -19. For summer sowing in northern hill zone, variety like HS - 375 has also been developed. For normal sown conditions for hill areas, the varieties such as VL 738, VL 804, HS 240 have been developed. Similarly, for rainfed areas in northern hills, varieties such as VL -738, HPW-42, HS-365, VL-829, DT-46 are evolved. For southern hill zone also, high yielding varieties have been developed such as HUW - 318, SW-1085, HW2044. For enhancing the productivity in Central Zone under the rainfed area, the varieties such as GW 322, GW 173, HW 200, HD4672 have been developed.

Product specific varieties suited for bread, biscuit, pasta and for chapattis has been identified for use by the various industries/stakeholders. Raj 3765, NIAW-34 Halna and WH-730 have been characterized as potential donors of heat tolerance in wheat. To

enhance the availability of quality seeds, all the indents for the breeder seed from the Department of Agri. & Cooperation (DAC) have been fully met and the Council is capable of meeting the additional demand for breeder seed.

There is a need to further demonstrate and popularize resource conservation technologies like Zero Tillage. The zero tillage technology of seeding wheat without any field preparation has several advantages over conventional tillage. It reduces the cost of cultivation (about Rs.2500/ha), advances the time of wheat sowing, requires less water for the first irrigation and results in less infestation of *Phalaris minor*, which is a serious problem in northwest India. The Furrow Irrigated Raised Bed-planting System(FIRBS) is another resource conservation tillage technology, which saves seed and fertilizer nitrogen(25 per cent) as well as scare water resource(25-35 per cent).

For enhancing yield productivity further efforts for developing hybrid Wheat are also being made in terms of identification of better restorers, high heterosis and standardizing commercially viable seed production technologies. Winter X Spring Wheat Hybridization Programme is also taken up to bring in new yield and resistant genes into Spring Wheat. The use of biotechnological tools such as marker aided selection, identification of quantitative traits loci, genetic transformations for transfer of important gene and to improve yield potential stability, efficiency of bio-mass production and biological nitrogen fixation are also undertaken. For management of Karnal Bunt, a variety PBW-502 has been developed with yield at par with PBW-343. A Network Project has also been initiated to manage the Karnal Bunt disease. Similarly, a Network Projects on Gene Pyramiding has been initiated to combine the various gene sources for different rust into popular varieties for longer stability.

The frontline demonstrations conducted has found a clear yield gaps of about 1 tonne per hectare which can be easily met by the appropriate transfer of technologies and input delivery/other policy resources.

Hybrid rice technology has shown the potential to increase the productivity by about 1 tonne per hectare. Research efforts in ICAR have resulted into development of widely adopted hybrids such as KRH2, Pant Shankar Dhan 1, Pant Shanker Dhan 3, DRRH-2, Sahayadri etc. Hybrid seed production technology has also been developed and refined. Promotion and development of hybrid rice will result into higher production of rice.

Maize is a versatile crop and is grown for food, feed and industrial purposes. Quality Protein maize hybrids such as Shaktiman 1, Shaktiman 2, Shaktiman 3, Shaktiman 4 contains higher amount of lysine and tryptophan which have better nutritive value. A number of hybrids suitable for different zones have been developed. Production of winter maize has good potential for increasing the productivity of maize. Demand for maize is likely to increase for its uses for food, feed, industrial use, hence, developmental efforts are needed to enhance the production and productivity of Maize.

Sorghum is staple food crop for large section of people and also a main source of feed for cattle. For kharif and also for Rabi a number of High Yielding Hybrids have been developed such as CSH-16, CSH -18, CSV-16, etc. Parbhani Sweta has been

developed as a grain mold tolerant variety. Phule Yasoda, has been released for Rabi Sorghum growing areas. Sorghum need to be promoted also for starch, baking industry, alcohol, pop-sorghum, malt and for feed industry.

In pulses, 12 crops including 4 arid legumes are grown in different parts of the country. Among these pigeonpea, mungbean, urdbean and chickpea are grown on large area with maximum share in the total production. ICAR/ SAUs have developed several hybrids (Arhar) and varieties in pulse crops. Noteworthy research achievements are :

- Development of short duration varieties in pigeonpea (having tolerance/resistance to disease and pest) providing the scope for crop diversification and double cropping. The hybrids of pigeonpea have proved an increase in the productivity by 25 percent and are being popularized.
- Several long duration varieties of pigeonpea have been replaced by short duration/mid late varieties with good degree of resistance to fusarium wilt and sterility mosaic.
- Bold seeded kabuli varieties in Bengal gram has a potential as high value crop. The varieties viz Kak-2, Pusa 1003, BG 1053 K, JGK-1 are becoming popular among the farmers.
- In Lathyrus the ODAP (Oxide Diamino Propionic Acid) content in seed has been reduced by using biotechnology and the varieties developed like Bio 302, Bio 212 (Ratar) are safe for consumption.
- The FLDs on pulse crops conducted on farmers' fields have shown the potential of productivity to the tune of 2.0 tones/ha.
- The short duration mung varieties maturing in 55-60 days has further provided potential for crop diversification and double cropping.
- Several efficient Rhizobium strains have been developed for different pulse crops having good potential for nitrogen fixation and thereby improvement in the soil fertility. This has also helped in increase of yield vis-À-vis improvement of soil fertility and reduction in the cost of cultivation.

For efficient and effective delivery of technologies this Department interacts with Department of Agriculture and Cooperation, on a regular basis, through DAC-ICAR Interface, organized before the National Conference on *rabi* and *kharif* crops. During these interface which are co-chaired by Secretary DAC and Secretary DARE, the package of practices are finalized and related issues are discussed threadbare.

The creation of infrastructure through public investment is crucial for long term growth and development agriculture sector. Beginning of 1980s witnessed a very significant change in policy of resource allocation to agriculture. It marked the beginning of decline in public investment in agriculture. In early 1980s more than 4 percent of GDP agriculture was used in public investments. In the recent years this has fallen to 1.54



percent. The decline in public investments in agriculture is believed to be causing adverse impact on creation of infrastructure in agriculture and on long term growth of farm output.

### *Comments of the Committee*

4.6 For comments of the Committee please see Para No.1.30 of Chapter I of this Report.

## CHAPTER V

### RECOMMENDATIONS/OBSERVATIONS IN RESPECT OF WHICH FINAL REPLIES OF THE GOVERNMENT ARE STILL AWAITED

#### **Recommendation No.3**

##### **Entire Budgetary Process requires Reformative Changes**

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

The Department in its Action Taken Reply on the Second Report of the Committee has stated that “the recommendation of the Parliamentary Standing Committee on Agriculture is valuable. The above recommendation of the Committee was forwarded to Ministry of Finance and Planning Commission. The Ministry of Finance has intimated that they have noted the recommendation and that all efforts will be made by them to comply with the recommendation. The Planning Commission also communicated that the budget allocations for the ongoing schemes/projects are being made on the basis of approved Annual Plan outlays, which allows a degree of certainty about the availability of funds to the Department and its lower formation.”

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

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

The Committee are, however, perturbed to note that the RE (2004-05) and RE (2005-06) allocations were received from the Ministry of Finance on 3rd January 2005 and 16 January, 2006 respectively, which not only is in contradiction to the crux of the recommendations of the Committee in this regard but also is in contradiction to the repeated positive assurances given by the Department/Planning Commission/Ministry of Finance in this matter. Evidently, for all practical purposes, all the three major parties involved in the entire budgetary process, namely, the Department, Planning Commission and the Ministry of Finance have failed to bring about any positive change or reform in their entire budgetary process during 2004-2005 and 2005-2006 despite their assurances.

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

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

### **Reply of the Government**

- 5.2 The recommendation of the Committee expressing the concerns about the entire tardy budgetary process have been sent to Ministry of Finance and Planning Commission. The Department will utilize the opportunity at the finalization of RE 2006-07, wherein the representatives of Ministry of Finance and Planning Commission participate, to plead for reformatory changes in the entire process.

### **Comments of the Committee**

- 5.3 For comments of the Committee please see Para No.1.12 of Chapter I of this Report.

### **Recommendation No.5**

***Planning Commission has been ignoring the Genuine Requirement of One-Time Catch Up Grant of DARE/ICAR***

5.4 The Committee note that the DARE has a number of institutions/laboratories, which are more than twenty years old. In order to have excellent academic standards in the State Agricultural Universities and to have globally competitive research working environment, the Eighth Plan and Ninth Plan Working Groups had recommended Rs.300 crore and Rs. 500 crore respectively, one time catch up grant to meet the critical need for upgrading laboratory equipment, pilot plants, farm and laboratory facilities, class rooms and audio visual facilities in these institutions.

The Committee also note that during the Eighth Plan Period, Planning Commission did not provide any catch up grant. During the Ninth Plan, the Planning Commission had communicated a total outlay of Rs. 3,376.95 crore including Externally Aided Projects (EAPs) out of which Rs. 400 crore was indicated as one time catch-up grant but no separate allocations were made for catch up grant, though the Department had proposed an allocation of Rs.100 crore, Rs.200 crore, Rs. 250 crore and Rs.306.81 crore for the year 1998-99, 1999-2000, 2000-2001 and 2001-02 respectively for the purpose.

Committee have further been apprised that Planning Commission had communicated that the amounts indicated for annual plans, also included the amount for one time catch-up grant, i.e., the Department could meet its requirement of catch up grant out of their Annual Plan budgets only. Accordingly, the Department had taken a decision in the year 1999-2000 that the Institutes could spend up to a maximum of 20 per cent of their respective Plan; during 2000-2001 this percentage limit was raised to 30 per cent and for 2001-2002, it was decided that the Institutes could incur expenditure under one time catch up grant to the extent to which they could spare the money after meeting their other essential research requirements. For State Agricultural Universities (SAUs), these percentages were 30 per cent for 1999-2000, 40 per cent for 2000-01 and for 2001-02 it was allowed at par with institutes.

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

With no solution in hand and unable to comply with the direction of the Planning Commission to spend all the required amounts from their annual plans for changing the old age infrastructure for research system to the latest state-of-the-art infrastructure and research system, the Department projected a requirement of Rs. 1000 crore as One Time Catch up Grant for the entire Tenth Plan Period. The Planning Commission did not made any provision for the same in the Tenth Plan outlay of the Department, which was pegged at Rs. 5368 crore. Thereafter, the Department consistently proposed a requirement of Rs. 200 crore as Catch up Grant in each year i.e. 2002-03, 2003-04 and 2004-05 but the response of the Planning Commission to these proposals was *'the catch up grant which was meant for upgrading the research facility of ICAR's institutions had already been taken care of while approving the proposals during Tenth Five Year Plan'*. Due to the clear-cut stand taken by Planning Commission on this issue, the Department did not pursue the matter further.

The Committee take a serious view of the adamant and rigid stand taken by the Planning Commission on this issue of One time Catch-up-Grant demanded for the Department's requirement of latest State-of-the-art technology for research system and to provide modern infrastructure for the same and they are also not happy about the callous/pessimistic attitude of the Department in this matter as for the last two years they have stopped pursuing the matter with the Planning Commission and they desire the Department to put an end to their passive attitude and pursue the matter more vigorously and emphatically giving detailed reasons, with the Planning Commission and Ministry of Finance till the issue of One time Catch-up-Grant is resolved in favour of the DARE/ICAR.

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

The Committee also feel that although the Government and the people have great expectations from our agricultural scientists to usher India into Second Green Revolution and to achieve major breakthroughs in finding out solutions for problems faced by farmers and people engaged in agrarian and allied sectors apart from bringing total food and fodder security and overall prosperity and growth, yet the fulfillment of these great expectations will not be possible unless the Government provide the much desired and directly needed funds and incentives to ICAR to make it a real apex organization and the hub of the most talented scientists of the nation.

The Committee once again strongly urge the Planning Commission and the Ministry of Finance to provide much needed one time catch up grant of Rs. 1000 crore over and above the annual allocations, in a phased manner to ICAR given its track record of service to the nation and being pivy to agricultural revolution in the country.

### **Reply of the Government**

5.5 The Recommendations have been sent to Planning Commission and Ministry of Finance. The Government have approved an allocation of Rs.200 crore, in June, 2006, to strengthen agricultural education in the country, over and above Rs. 720 crore provided earlier for the Xth Plan period. Further, the Government have also approved another Rs. 200 crore approximately for development of seed infrastructure in SAUs/ ICAR which will ensure the availability of quality seed, planting material and fish seed beside generating internal resource.

### **Comments of the Committee**

5.6 For comments of the Committee please see Para No.1.18 of Chapter I of this Report.

## **Recommendation No.6**

### ***Suffering of Plan Schemes of DARE/ICAR owing to 3 to 4 years time taken in SFC/EFC/CCEA Approval***

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

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

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

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

The Committee see no justification in such a situation wherein many schemes/plan projects of the Department have an outlay for a period of 5 years mentioned

on paper only but actually cannot be utilised on their major work of planned activities for a period of 2 to 4 years out of a total 5 year Plan period, till the approval of SFC/EFC/CCEA remains pending. The Committee urge the Department as well as the concerned Appraisal Agencies to seriously introspect over the delays, which are so detrimental for the progressive functioning of a Department like DARE/ICAR.

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

### **Reply of the Government**

5.8 The recommendation of the Committee has been sent to appraisal agencies viz. Ministry of Finance and Planning Commission. The preparation of XIth Plan SFC/EFC proposal would depend on many pre-requisites such as constitution and subsequent recommendations of the XIth Plan Working Group; finalization of the Approach Paper to XIth Plan by Planning Commission and other related instructions; the communication of XIth Plan outlay of the Department; in-principle approval of the new initiatives by the Planning commission etc. Thus, this is a long process of getting cleared the SFC/EFC proposals, however, the Department will put its maximum efforts to get the SFC/EFC/CCEA proposals cleared on expeditious basis.

### **Comments of the Committee**

5.9 For comments of the Committee please see Para No.1.21 of Chapter I of this Report.

**NEW DELHI;  
YADAV  
8 March, 2007**

*Chairman,  
17 Phalguna, 1928 (Saka)  
Agriculture.*

**PROF. RAM GOPAL**

*Standing Committee on*

APPENDIX-I

MINUTES OF THE SIXTH SITTING OF THE STANDING COMMITTEE ON  
AGRICULTURE HELD ON THURSDAY, THE 8<sup>TH</sup> MARCH, 2007 AT 1500  
HRS. IN COMMITTEE ROOM 'B', GROUND FLOOR, PARLIAMENT  
HOUSE ANNEXE, NEW DELHI

The Committee sat from 1500 HRS TO 1630 HRS

**PRESENT**

*Prof. Ram Gopal Yadav - Chairman*

**MEMBERS**

**LOK SABHA**

2. Shri Manoranjan Bhakta
3. Shri Khagen Das
4. Shri Deepender Singh Hooda
5. Shri Hari Rama Jogaiah
6. Shri M.P.Veerendra Kumar
7. Shri Baleshwar Yadav

**RAJYA SABHA**

8. Shri Harish Rawat
9. Shri Vikram Verma
10. Shri Sk. Khabir Uddin Ahmed
11. Shri Datta Meghe

**SECRETARIAT**

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



At the outset, the Hon'ble Chairman, welcomed the Members to the sitting of the Committee and requested them to take up the following Memoranda on draft Action Taken Reports on Demands for Grants (2006-07) of the Ministry of Agriculture and Ministry of Food Processing Industries for consideration and adoption:

- (1) Memorandum No. 2 regarding 23<sup>rd</sup> Action Taken Report on recommendations contained in the 18<sup>th</sup> Report on Demands for Grants (2006-07) in respect of Ministry of Agriculture (Deptt. of Agriculture and Co-operation)
- (2) Memorandum No. 3 regarding 24<sup>th</sup> Action Taken Report on recommendations contained in the 19<sup>h</sup> Report on Demands for Grants (2006-07) in respect of Ministry of Agriculture (Deptt. of Agricultural Research and Education)
- (3) Memorandum No. 4 regarding 25<sup>th</sup> Action Taken Report on recommendations contained in the 20<sup>th</sup> Report on Demands for Grants (2006-07) in respect of Ministry of Agriculture (Deptt. of Animal Husbandry, Dairying and Fisheries)
- (4) Memorandum No. 5 regarding 26<sup>th</sup> Action Taken Report on recommendations contained in the 21<sup>st</sup> Report on Demands for Grants (2006-07) in respect of Ministry of Food Processing Industries.

2 The Committee then considered and adopted the draft Action Taken Reports with minor additions/modifications as suggested by members of the Committee.

3. The Committee, thereafter, authorized the Chairman to present the above-mentioned Reports to the House on a date and time convenient to him.

*The Committee then adjourned.*

## APPENDIX-II

(Vide Para 4 of Introduction of the Report)

### ANALYSIS OF ACTION TAKEN BY GOVERNMENT ON THE NINETEENTH REPORT OF STANDING COMMITTEE ON AGRICULTURE (14<sup>TH</sup> LOK SABHA)

(i)	Total number of Recommendations	9
(ii)	Recommendations/Observations which have been Accepted by the Government	
	Serial Nos. 1, 2, 4 and 7	
	Total	4
	Percentage	44.45%
(iii)	Recommendations/Observations which the Committee Do not desire to pursue in view of the Government's replies	
	Serial No. NIL	
	Total	NIL
	Percentage	0%
(iv)	Recommendations/Observations in respect of which replies of the Government have not been accepted by the Committee	
	Serial Nos. 8 and 9	
	Total	2
	Percentage	22.22%
(v)	Recommendations/Observations in respect of which Final replies of the Government are still awaited	
	Serial Nos. 3, 5 and 6	
	Total	3
	Percentage	33.33%