



**STANDING COMMITTEE ON AGRICULTURE, ANIMAL
HUSBANDRY AND FOOD PROCESSING**

(2024-25)

EIGHTEENTH LOK SABHA

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

**DEMANDS FOR GRANTS (2024-25)
(DEMAND NO. 2)**

SECOND REPORT



**LOK SABHA SECRETARIAT
NEW DELHI**

December, 2024/ Agrahayana, 1946 (Saka)

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(DEMAND NO. 2)**

Presented to Lok Sabha on 17.12.2024

Laid on the Table of Rajya Sabha on 17.12.2024



**LOK SABHA SECRETARIAT
NEW DELHI**

December, 2024/ Agrahayana, 1946 (Saka)

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**COMPOSITION OF THE STANDING COMMITTEE ON AGRICULTURE, ANIMAL
HUSBANDRY AND FOOD PROCESSING (2024-25)**

Shri Charanjit Singh Channi – Chairperson

LOK SABHA

2. Shri Patel Umeshbhai Babubhai
3. Smt. Harsimrat Kaur Badal
4. Shri Rajkumar Chahar
5. Smt. Anita Nagarsingh Chouhan
6. Shri Kuldeep Indora
7. Shri Rajpalsinh Mahendrasinh Jadav
8. Md. Abu Taher Khan
9. Shri Rahul Singh Lodhi
10. Shri Sukanta Kumar Panigrahi
11. Smt. Krishna Devi Shivshankar Patel
12. Shri Naresh Chandra Uttam Patel
13. Shri Narayan Tatu Rane
14. Shri Murasoli S.
15. Shri Dharambir Singh
16. Shri Dushyant Singh
17. Shri Sudhakar Singh
18. Shri Kodikunnil Suresh
19. Shri Tejasvi Surya
20. Smt. Geniben Nagaji Thakor
21. Shri Bhausahab Rajaram Wakchaure

RAJYA SABHA

22. Smt. Ramilaben Becharbhai Bara
23. Dr. Anil Sukhdeorao Bonde
24. Shri Banshilal Gurjar
25. Shri S. Kalyanasundaram
26. Shri Nitin Laxmanrao Jadhav Patil
27. Shri Madan Rathore
28. Shri Ramji Lal Suman
29. Shri P. P. Suneer
30. Shri Randeep Singh Surjewala
31. Vacant*

* Vacant *vice* Shri Krishan Lal Panwar resigned from Rajya Sabha on 14.10.2024.

SECRETARIAT

1. Shri Srinivasulu Gunda - Joint Secretary
2. Shri Khakhai Zou - Director
3. Shri Prem Ranjan - Deputy Secretary

INTRODUCTION

I, the Chairperson, Standing Committee on Agriculture, Animal Husbandry and Food Processing, having been authorized by the Committee to submit the Report on their behalf, present this Second Report on the Demands for Grants (2024-25) of the Ministry of Agriculture and Farmers Welfare (Department of Agricultural Research and Education).

2. The Committee under Rule 331E(1)(a) of the Rules of Procedure and Conduct of Business in Lok Sabha considered the Demands for Grants (2024-25) of the Ministry of Agriculture and Farmers Welfare (Department of Agricultural Research and Education), which were laid on the table of the House on 05th August, 2024. The Committee took evidence of the representatives of the Ministry of Agriculture and Farmers Welfare (Department of Agricultural Research and Education) at their Sitting held on 21st November, 2024. The Report was considered and adopted by the Committee at their Sitting held on 14th December, 2024.

3. For facility of reference and convenience, the Observations/Recommendations of the Committee have been printed in bold letters in Part-II of the Report.

4. The Committee wish to express their thanks to the Officials of the Ministry of Agriculture and Farmers Welfare (Department of Agricultural Research and Education) for appearing before the Committee and furnishing the information that they desired in connection with the examination of Demands for Grants of the Department.

5. The Committee would also like to place on record their deep sense of appreciation for the invaluable assistance rendered to them by the Officials of Lok Sabha Secretariat attached to the Committee.

NEW DELHI;
14 December, 2024
23 Agrahayana, 1946 (Saka)

CHARANJIT SINGH CHANNI
Chairperson,
Standing Committee on Agriculture,
Animal Husbandry and Food Processing

REPORT

PART- I

CHAPTER - I

Introductory

1.1. The Department of Agricultural Research and Education (DARE) was established in the Ministry of Agriculture in December 1973. DARE coordinates and promotes Agricultural Research and Education in the country.

Mandate of DARE

- i. Fundamental, applied and operational research and higher education including coordination of such research and higher education.
- ii. Coordination and determination of standards in institutions for higher education or research and scientific and technical institutions.
- iii. International cooperation and assistance in the field of agricultural research and education including relations with foreign and international agricultural research and education institutions and organizations.

It has the following four autonomous bodies under its administrative control:

- Indian Council of Agricultural Research (ICAR), New Delhi
- Central Agricultural University (CAU), Imphal
- Dr Rajendra Prasad Central Agricultural University, Pusa, Bihar
- Rani Laxmi Bai Central Agricultural University, Jhansi, Uttar Pradesh

1.2 The DARE provides the necessary government linkages for the Indian Council of Agricultural Research (ICAR), the premier research Organisation for coordinating, guiding and managing research, education and extension in Agriculture including horticulture,

fisheries and animal sciences in the entire country. Besides, it has Agricultural Scientists Recruitment Board (ASRB) as an Attached Office and Agrinnovate India Limited (AgIn), a Government of India enterprise under its control.

1.3 The Indian Council of Agricultural Research (ICAR) is an apex scientific research Organization for planning, promotion, execution and coordination of agriculture research and education in the country. Formerly known as the Imperial Council of Agricultural Research, it was established on 16 July, 1929 as a registered society under the Societies Registration Act, 1860 on the recommendations of the Royal Commission of Agriculture. It was reorganized in 1965 and again in 1973, with its Headquarters located in Krishi Bhawan, New Delhi with support facilities in Krishi Anusandhan Bhawan 1 and 2 and NASC Complex, Pusa, New Delhi. It functions at a national level through networks of institutes, projects (All-India Coordinated/ Networks) under five sectors comprising of eight Subject Matter Divisions and has linkages with State Agriculture Universities and other Departments of the Central and State Governments.

Organizational Set up of ICAR

1.4 The ICAR, as a vibrant organization, continues to generate technologies for sustainable development of Agriculture. The ICAR is the guiding and monitoring entity of the country for National Agriculture Research System (NARS) consisting of 103 ICAR Research and Education Institutes, 76 Agricultural Universities and 731 Krishi Vigyan Kendras spread across the country having responsibility of developing technologies in various fields of agriculture and allied sectors.

There are eight Subject Matter Divisions, viz. i) Crop Science, ii) Natural Resources Management iii) Horticultural Science, iv) Animal Science, v) Fisheries

Science, vi) Agricultural Engineering vii) Agricultural Education, and viii) Agricultural Extension and they are entrusted with the overall responsibility for the preparation, scrutiny, review, and technical supervision and guidance of the research schemes, educational and extension programs and projects within their respective disciplines.

Mandate of ICAR:

- Plan, Undertake, Coordinate and Promote Research and Technology Development for Sustainable Agriculture.
- Aid, Impart and Coordinate Agricultural Education to enable Quality Human Resource Development.
- Frontline Extension for technology application, adoption, knowledge management and capacity development for agri-based rural development.
- Policy, Cooperation and Consultancy in Agricultural Research, Education and Extension.

Goal of ICAR:

1.5 The goal of ICAR is to promote sustainable and inclusive agricultural growth and development in the country by interfacing education, research and extension initiatives complemented with efficient and effective institutional, infrastructure and policy support, for ensuring livelihood and environmental security.

ICAR has rationalized its earlier Schemes into 8 Schemes. The list of the Schemes is as follows:

Sl. No	Central Sector Schemes
	Scheme

1.	Natural Resource Management
2.	Agriculture Production and Post-Production Mechanisation Augmented with Innovative Technologies for Sustainable Agriculture Development (Agricultural Engineering)
3.	Crop Science for Food and Nutritional Security
4.	Technology based support in improvement and management of horticulture crops towards enhanced and sustainable productivity for nutritional security (Horticultural Science)
5.	Research, Education and Technology Development for Sustainable Livestock Health and Production towards Nutritional Security (Animal Science)
6.	Fisheries and Aquaculture for Sustainable Development
7.	Strengthening of Krishi Vigyan Kendras (KVKs)
8.	Strengthening Agricultural Education, Management & Social Sciences
9. EAP*	National Agricultural Higher Education Project (NAHEP)

* Externally Aided Project

1.6 The DARE along with ICAR has played a pivotal role in making agriculture sustainable through use of eco-friendly management and innovative technologies which helped the country to enhance the production of food grains, horticultural crops, milk, fish and eggs. This has enabled the nation not only to be food and nutrition secure but also improved livelihood of the farmers.

A. Summary of Demand for Grant

1.7 Department of Agricultural Research and Education has been allocated Rs. 9941.09 Crore for financial year 2024-25 under Demand No.2 presented to the Lok Sabha on 5th August, 2024. Allocation of Funds to the Department under different Heads of Account alongwith Actuals for 2022-23 and BE and RE for 2023-24 are as follows:-

			Revenue	Capital	Total	(In ₹ Crore)
Charged :			...	...	...
Voted :			9434.59	6.50	9941.09	
	Major Head		2022-2023 Actuals	2023-2024 Budget Estimates	2023-2024 Revised Estimates	2024-2025 Budget Estimates

	REVENUE SECTION					
	Secretariat-Economic Services	3451	33.19	25.87	36.32	43.98
	Agricultural Research and Education	2415	8544.96	8941.93	9281.38	9303.22
	North Eastern Areas	2552	...	525.79	548.94	587.39
	Charged :	...	...	...	4.00	...
	Voted :	...	...	525.79	544.94	587.39
	Total-Revenue Section		8578.15	9493.59	9866.64	9934.59
	Charged :	...	...	...	4.00	...
	Voted :	8578.15	9493.59	9862.64	9862.64	9934.59
	CAPITAL SECTION					
	Capital Outlay on Other General Economic Services	5475	...	10.41	9.96	6.50
	Total-Capital Section		...	10.41	9.96	6.50
	GRAND TOTAL		8578.15	9504.00	9876.60	9941.09
	Charged :	...	...	...	4.00	...
	Voted :	8578.15	9504.00	9504.00	9872.60	9941.09
<i>Note: The above estimates do not include the recoveries shown below which are adjusted in reduction of expenditure</i>						
	Revenue Section					
	Agricultural Research and Education	2415	-178.42	...	...	...
	Secretariat-Economic Services	3451	-0.01	...	...	...
	Total-Revenue Section		-178.43	...	...	...
<i>The expenditure provisions, net of the above recoveries, will be as under:</i>						
	Revenue		8399.72	9493.59	9866.64	9934.59
	Capital		...	10.41	9.96	6.50
	Total		8399.72	9504.00	9876.60	9941.09

1.8 Unlike previous years, Rs. 10.41 Crore has been allocated in BE 2023-24 under 'Capital Section' which was reduced to 9.96 Crore at RE. On being asked about the utilization status of this fund, the Department stated:-

“Funds utilized under Capital Section for different purposes are as under:

Budget Head	Expenditure 2023-24 (Rs Lakhs)
DARE Secretariat	
Machinery and Equipment	0.67
ICT Equipment	9.95
Furnitures and Fixtures	0.89
Agricultural Scientist Recruitment Board (Attached Office)	
Motor Vehicles	0.00
Machinery & Equipment	12.61

Information, Computer, Telecommunication	45.37
Buildings & Structures	214.06
Furniture & Fixtures	53.14
Other Fixed Assets	2.26
Total Capital Section	338.95

1.9 When the Committee asked about the reasons for less allocation (Rs. 6.50 Crore) in BE 2024-25 under 'Capital Head' as compared to BE 2023-24 (10.41 crore) and RE 2023-24 (Rs. 9.96 crore) and how this amount is going to be utilized during the financial year 2024-25, the Department stated:

“Less expenditure in Capital is mainly due to less requirement for Agricultural Scientists Recruitment Board (ASRB) under their concerned Object Heads to clear the balance payments of previous year.

The breakup of different Object Heads under which budget allocation of Rs 6.5 Crore to be spent during 2024-25 is as under:

Budget Head	Provisioning Spending (Rs) Lakhs
DARE Secretariat	
Machinery and Equipment	6.00
ICT Equipment	20.00
Furnitures and Fixtures	4.00
Agricultural Scientist Recruitment Board (Attached Office)	
Motor Vehicles	0.00
Machinery & Equipment	20.00
Information, Computer, Telecommunication	220.00
Buildings & Structures	200.00
Furniture & Fixtures	150.00
Other Fixed Assets	30.00
	650.00

1.10 The Sector-wise Budget estimates for 2024-25 of the Department of Agricultural Research and Education are:

	(Rs. In crore)
Major Head	Budget Estimates
Central Sector Schemes	
Natural Resource Management + NICRA	252.16
Agricultural Engineering	91.24
Crop Science	930.22

Horticulture	257.07
Animal Science	415.15
Fisheries Science	200.92
Agriculture Extension	234.89
Agricultural Universities and Institutions	398.74
National Agricultural Higher Education Project (NAHEP)	0.00
Total Central Sector Schemes	2780.39
Non-Scheme (Establishment)	
DARE Secretariat + ASRB	58.14
ICAR Headquarter	6378.70
Central Agricultural Universities	723.55
National Academy of Agricultural Sciences (DARE- NAAS & IAUA)	0.31
Total Non-Scheme (Establishment)	7160.70
Grand Total (Scheme + Non-Scheme)	9941.09

* Scheme closed on 30 September, 2024

1.11 When the Committee asked whether the funds allocated in BE 2024-25 are sufficient to meet the requirements of the Department for Fiscal Year 2024-25, the Department stated:

“The allocation made by Ministry of Finance for BE 2024-25 is Rs 9941.09 crore only. However, the Department has proposed a demand of Rs. 11173.21 crore while submitting its BE proposal to MoF. Further, the scheme budget was proposed at Rs 3011.62 crores. The allocations made by Ministry of Finance for scheme budget is Rs 2780.39 crores. The Department has prioritized its programs and activities in view of reduced allocations.”

B. An Analysis of Demand No. 2

1.12 The Sector-wise Budget Estimates, Revised Estimates and Actual Expenditure for 2023-24 and Budget Estimates for 2024-25 are as under:

(Rs. in crore)

Major Head	Budget Estimates 2023-24	Revised Estimates 2023-24	Actual Expenditure 2023-24	Budget Estimates 2024-25
Central Sector Schemes				
Natural Resource Management + NICRA	240.00	239.98		252.16
Agricultural Engineering	65.00	70.09	70.09	91.24

Crop Science	714.41	962.78	930.62	930.22
Horticulture	212.00	217.45		257.07
Animal Science	300.00	306.72	303.92	415.15
Fisheries Science	150.00	150.00		200.92
Agriculture Extension	327.00	250.00	248.49	234.89
Agricultural Universities and Institutions	322.74	322.74	322.74	398.74
National Agricultural Higher Education Project (NAHEP)*	92.26	54.60		0.00
Total Central Sector Schemes	2423.41	2574.36	2532.60	2780.39
Non-Scheme (Establishment)				
DARE Secretariat + ASRB	43.71	53.88		58.14
ICAR Headquarter	6384.59	6576.49		6378.70
Central Agricultural Universities	651.53	671.11		723.55
National Academy of Agricultural Sciences (DARE-NAAS & IAUA)	0.76	0.76		0.31
Total Non-Scheme (Establishment)	7080.59	7302.24	7271.79	7160.70
Grand Total (Scheme + Non-Scheme)	9504.00	9876.60	9804.39	9941.09

* Scheme closed on 30th September, 2024

1.13 According to the Department the BE and RE proposed by the Department and allocations made by Ministry of Finance since the year 2020-21 are as under:-

Year	BE Proposed	BE allocated	RE Proposed	RE allocated
2020-21	10650.17	8362.52	8397.71	7762.38
2021-22	10241.68	8513.62	9330.53	8513.62
2022-23	9698.91	8513.62	9943.07	8658.89
2023-24	10390.53	9504.00	10665.71	9876.60
2024-25	11173.21	9941.09	10435.25	*

*RE 2024-25 Budget ceiling is still awaited from MoF.

As per the information shown in the table above, it may be observed that the Department has been seeking enhanced budget allocations to Ministry of Finance during previous years. Also, Department has submitted proposal for the current financial year in the UBIS Module of MoF for increasing the Scheme budget of DARE as per the EFC provisions as well as Non-Scheme budget allocation. The higher authorities of the Department have also expressed the utmost need of additional funds before the Ministry of Finance during the pre-budget meeting held for finalization of expenditure ceilings in MoF. Further, on different occasions and platforms, Department has made sincere efforts to impress upon the MoF for enhancing the budget allocation.

1.14 The Department has stated that the proportion (in % terms) of Budgetary Allocation (Budget Estimates) made in favour of the Department out of the total Budget of the Government of India since the Financial Year 2020-21 are:

Year	Outlay (BE) Rs. Crore	Total Outlay (BE) of Gol (Rs. Crore)*	% of the Total Outlay
2020-21	8362.58	3042230.00	0.27%
2021-22	8513.62	3483236.00	0.24%
2022-23	8513.62	3944909.00	0.22%
2023-24	9504.00	4503097.00	0.21%
2024-25	9941.09	4820512.00	0.21%

* As per data of PIB (Press Information Bureau) Website

1.15 As per the information furnished by the Department the proportion (in % terms of Budgetary Allocation (Revised Estimates) made in favour of the Department out of the Total Budget of the Government of India since the year 2020-21 are as under:-

Year	Outlay (RE) (In Rs. Crore)	Total Outlay (RE) (in Rs. Crore)	% of the Total Outlay
2020-21	7762.38	3450305.00	0.22
2021-22	8513.62	3770000.00	0.23
2022-23	8658.89	4187232.35	0.21
2023-24	9876.60	4490485.57	0.22

1.16 On being asked about the adequacy of funds as allocated in RE 2023-24, the Department stated:

“The proportion of Budgetary Allocations (Revised Estimates) made in favour of the Department out of the Total Budget of the Government of India during the last three Financial Years has decreased. The scheme budget allocation made by the Ministry of Finance in RE 2023-24 i.e. Rs 2574.36 crores against the proposed amount of Rs 2675.03 crores has also been on the lower side. This has adversely impacted the various planned activities under various schemes. In many cases, capital expenditure planned in EFC/SFC could not be made due to inadequate budgetary allocations. Financial assistance was provided to various units from Non Scheme budget in order to meet its committed recurring contingencies and avoid crisis.”

C. FINANCIAL PERFORMANCE

1.17 The Year-wise Budget Estimates (BE), Revised Estimates (RE) and Actual Expenditure (AE) of the Department since 2020-21 are as follows:

(Rs. in Crore)

Year	BE	RE	Actual Expenditure	% Utilization of RE
2020-21	8362.58	7762.38	7685.52	99.01
2021-22	8513.62	8513.62	8439.94	99.13%
2022-23	8513.62	8658.89	8374.15	96.71%
2023-24	9504.00	9876.60	9804.39	99.27%
2024-25	9941.09	*	-	-

* RE 2024-25 is still awaited from MoF

1.18 When the Committee desired to know the basis on which the Department works out the financial requirements of various activities, before and after finalization of the allocation for the Department, it stated:

“Various Subject Matter Divisions (SMDs) assess the requirement of funds for taking up the Research & Operational activities as per planning done while preparing the EFC/SFC. The annual requirements of funds are called for from each SMD for Central Sector Schemes for the Budget Estimates and the Revised Estimates. The Non-Scheme budget which primarily includes Grant-in-Aid Salary and Pension is prepared on the basis of requirements of each Institute in a centralized manner. The total requirement of funds is then forwarded to the Ministry of Finance for consideration. After the BE/RE allocations are conveyed to the Department, the central sector scheme wise allocation is made to various SMDs within the overall allocation given by the Ministry of Finance.”

1.19 Regarding mechanism available in the Department to plan budgetary requirement and to monitor and ensure full utilization of Budgetary Allocation and quarter-wise quantum of fund spent by the Department during last five Financial Years in absolute terms and in terms of percentage of Budgetary Allocations, the Department has submitted:-

“The Subject Matter Division (SMD) of each Central Sector Scheme has been entrusted responsibility to plan budgetary requirements and monitor the expenditure for its respective Central Sector Scheme and ensure full utilization of budgetary allocation. As regards the Non-Scheme budget requirement, the same is prepared centrally after seeking demand of funds for each ICAR institute, CAUs, DARE Secretariat and ASRB. Also the pace of expenditure and budget utilization under both Scheme and Non-Scheme budget is monitored by highest authorities in DARE/ICAR i.e. Secretary, DARE along with Additional Secretary, ICAR and AS&FA, DARE/ICAR during the monthly senior officer’s committee meetings.

The quantum of fund spent by the Department quarter-wise since the year 2020-21 in absolute terms as well as percentage is given below:-

(Rs. in Crore)

Quarter	2020-21			2021-22			2022-23			2023-24		
	Total Budget (RE)	Exp	% w.r.t Budget Allocation	Total Budget (RE)	Exp	% w.r.t Budget Allocation	Total Budget (RE)	Exp	% w.r.t Budget Allocation	Total Budget (RE)	Exp	% w.r.t Budget Allocation
April-June	7762.38	1648.75	21.24%	8513.62	2126.16	24.97%	8658.89	2122.21	24.51%	9876.6	2370.71	24.00%
July-Sep		1663.3	21.43%		2126.66	24.98%		2128.67	24.58%		2370.73	24.00%
Oct-Dec		1816.05	23.40%		2125.73	24.97%		2123.2	24.52%		2373.06	24.03%
Jan-Mar		2557.42	32.95%		2061.39	24.21%		2000.07	23.10%		2689.89	27.23%
TOTAL		7762.38	7685.52		99.01%	8513.62		8439.94	99.13%		8658.89	8374.15	96.71%	9876.6	9804.39	99.27%

The Department has also stated that it adheres to the expenditure ceilings for the last quarter as laid down by the Department of Economic Affairs. Necessary instructions in this regard are also reiterated time and again to all spending units by the Department to follow the instructions diligently.

D. ALLOCATION UNDER SCHEME HEAD

1.20 The Year-wise Budget Estimates (BE), Revised Estimates (RE) and Actual Expenditure (AE) under Schemes Head since the year 2020-21 are as follows:

(Rs. in Crore)

Year	BE	RE	Actual Expenditure
2020-21	2729.00	2305.00	2194.98
2021-22	2686.00	2347.00	2244.49
2022-23	1995.83	1995.61	1966.48
2023-24	2423.41	2574.36	2532.60
2024-25	2780.39	-	2085.30*

*Expenditure is as per records of Pr. AO till 10.11.2024. RE 2024-25 is still awaited from MoF

1.21 On being asked about the adequacy of funds as allocated in BE 2024-25 under Scheme Head, the Department stated the Scheme Budget was proposed at Rs. 3011.62 Crores. The allocations made by the Ministry of Finance for Scheme Budget is Rs. 2780.39 Crores. The Department has prioritized its programs and activities in view of reduced allocations.

1.22 When asked how the Department is planning to utilize the increased allocation under the Scheme Head in BE 2024-25 in comparison to BE and RE 2023-24, the Department stated:

“The increase in Scheme Budget allocation 2024-25 over BE 2023-24 and RE 2023-24 will be utilized as per provision made in EFC/SFC duly approved by Cabinet for various scientific programmes and research activities of the Department. The detail of Central Sector Scheme wise budget allocation is as follows:

Central Sector Scheme	(Rs. In crore)		
	BE 2024-25	BE 2023-24	RE 2023-24
Crop Science for Food and Nutritional Security	930.22	714.41	962.78
Technology Based Support in Improvement and Management of Horticulture Crops Towards Enhanced and Sustainable Productivity for Nutritional Security (Horticultural Science)	257.07	212.00	217.45
Strengthening of Krishi Vigyan Kendras (KVKs)	234.89	327.00	250.00
Strengthening Agricultural Education Management and Social Science	398.74	322.74	322.74
Agricultural Production and Post-Production Mechanization Augmented with Innovative Technologies for Sustainable Agriculture Development	91.24	65.00	70.09
Natural Resource Management (AGRI R AND E)	252.16	240.00	239.98
Research Education and Technology Development for Sustainable Livestock Health and Production towards Nutritional Security	415.15	300.00	306.72
Fisheries and Aquaculture for Sustainable Development	200.92	150.00	150.00
NAHEP (EAP)	0.00	92.26	54.60
Total	2780.39	2423.41	2574.36

E. ALLOCATION UNDER NON-SCHEME HEAD

1.23 The Year-wise Budget Estimates (BE), Revised Estimates (RE) and Actual Expenditure (AE) under Non- Scheme head since the year 2020-21 are as follows:

(Rs. in Crore)

Year	BE	RE	Actual Expenditure
2020-21	5633.58	5457.38	5449.27
2021-22	5827.62	6166.62	6116.81
2022-23	6517.79	6663.28	6588.78
2023-24	7080.59	7302.24	7271.79
*2024-25	7160.70	-	5392.11 #

*RE 2024-25 ceiling is still awaited from MoF.

#Expenditure is upto 10.11.2024 as per record of Pr. AO.

1.24 On being asked about the reasons for enhancement in allocation under Non-Scheme Head in BE 2024-25 in comparison to BE 2023-24, the Department stated:

“The increased budget allocation under Non-Scheme to the tune of Rs 80.11 crores (approx.) in the BE of Rs 7160.70 crore for 2024-25 in comparison to BE 2023-24 (i.e. Rs 7080.59 crore) has been sought taking into consideration the increase in the Salary and Pension liability on account of various factors such as dearness allowance / dearness relief, annual increment, promotions etc. Also enhanced budget allocation under Non-Scheme will be utilized towards meeting the additional salary liabilities of new recruitments of staff (Scientists, Technical and Administrative) planned during the FY 2024-25.”

It is noted that allocation in BE 2024-25 under Non-Scheme Head is less than the allocation in RE 2023-24 as well as Actual Expenditure during the year 2023-24.

F. REVENUE RECEIPTS

1.25 According to the information furnished by the Department, the data on the targets and achievements of internal Revenue Generation by the Institutes of ICAR for the last five years are as under:

“Internal Revenue Generation: Targets and Achievements

(Rs. in Crore)

Year	Target	Achievement
2020-21	91.675	72.37
2021-22	76.00	73.16

2022-23	78.96	75.15
2023-24	84.91	91.63
2024-25*	106.50	-

*Actual achievement of revenue generation target for the year 2024-25 will be prepared after completion of CFY 2024-25.”

1.26 When asked about the details of fee received by all Institutes of ICAR for Consultancy/Training Services provided to other Organizations and utilization of revenue generated during the last five Fiscal Years, the Department stated:

“The fee received and utilized by the department during the last five fiscal years

(Rs. in crores)

Year	Fee Received	Utilization of revenue
2019-20	7.31	14.58
2020-21	5.00	0.86
2021-22	5.07	62.79
2022-23	6.25	0.00
2023-24	8.42	76.77

G. SURRENDER OF FUNDS

1.27 On being asked about the Funds surrendered by the Department during the last five Financial Years, the Department in its reply stated:-

“Details of scheme wise surrender of funds for the year 2019-2020.

(Amount in actual Rupees)

Sl.No.	Central Sector Schemes	Budget Allocated during 2019-20 (in Rs.)	Expenditure during 2019-20 in Rs.	Unspent balance in Rs.
1	Crop Science	6350000000.00	6241115816.00	108884184.00
2	Horticulture Science	1736100000.00	1688535714.00	47564286.00
3	Agricultural Extension	2211500000.00	1955506801.00	255993199.00
4	Agricultural Education	4500000000.00	4325783457.00	174216543.00
5	Economics Statistics and Management	297600000.00	286433924.00	11166076.00
6	Agricultural Engineering	640200000.00	632268558.00	7931442.00
7	ICAR Hqrs. Admn.	4868800000.00	48022085489.00	315799229.00
8	National Agricultural Science Fund	500000000.00	357872220.00	142127780.00
9	Natural Resources	1588300000.00	1558141575.00	30158425.00

	Management			
10	NICRA	460000000.00	384544227.00	75455773.00
11	Animal Science	3100000000.00	3005713918.00	94286082.00
12	Fisheries Science	1423900000.00	1401143160.00	22756840.00
13	NAHEP (EAP)	2078500000.00	1861265982.00	0.00
	Total amount refunded to GOI	73574100000.00	71720410841.00	1286339859.00

Percentage Utilization: 97.48%

The unspent balance of Rs. 217234018 for the FY 2019-20 under NAHEP (EAP) was revalidated.

Details of scheme wise surrender of funds for the year 2020-21

The unspent balance of Rs.68.63 crore for the financial year 2020-21 has also been surrendered to Govt. It includes Rs.0.50 crores in Non-scheme and Rs.68.13 crore in Schemes. An amount of Rs.3 5.37 crore pertaining to NAHEP has been revalidated for utilization during 2021-22.

The unspent balance of Rs. 66.86 crore for the financial year 2021-22 has been surrendered.

(Amount in actual Rs.)

Sr. No.	Central Schemes	Sector	Budget Allocation 2020-21	Expenditure during 2020-21	Unspent balance
1	Crop Science		6122500000.00	5783867453.33	338632546.67
2	Horticulture Science		1817200000.00	1771451705.00	45748295.00
3	Agricultural Extension		2374900000.00	2004175620.13	370724379.87
4	Agricultural Education		3199000000.00	3122462777.38	76537222.62
5	Economics and Management	Statistics	300000000.00	299596461.20	403538.80
6	Agricultural Engineering		585500000.00	576179134.00	9320866.00
7	ICAR Hqrs. Admn.		4997150000.00	49955712551.48	15787448.52
8	National Agricultural Science Fund		420000000.00	301819462.80	118180537.20
9	Natural Resources Management		1733800000.00	1624076097.90	109723902.10
10	NICRA		498300000.00	417612166.16	80687833.84
11	Animal Science		2741200000.00	2596334245.62	144865754.38

12	Fisheries Science	1457600000.00	1439672412.00	17927588.00
13	NAHEP (EAP)*	1800000000.00	2013658113.00	-213658113.00
	Total	73021500000.00	71906618200.00	1114881800.00
	NAHEP previous year 2019-20 grant utilized during 2020-21			213658113.00
	NAHEP grant duly revalidated for utilization during FY 2021-22			353691187.00
	Amount Automatically Lapsed in TSA			642250990.00
	Total amount refunded to GOI	73021500000.00	71906618200.00	686288922.00
		Percentage Utilization of total budget is 98.47%		

*Out of current year (2020-21) grant of NAHEP i.e. Rs.180,00,00,000.00 and unspent opening balance of NAHEP of Rs.567349300/- (Revalidated vide F No.3(13)/2020-NAHEP dated 18.05.2021) an amount of Rs.2013658113/- (Rs. 1800000000 of current year plus 213658113 against previous year unspent duly revalidated) was utilized during 2020-21, leaving an unutilized amount of Rs.353691187/- (revalidated vide F.No.1(1)/2021-NAHEP/Pt.I dated 04.08.2021) to be carried forward to financial year 2021-22.

Details of scheme wise unspent amount of funds for the year 2021-22:-

(Amount in actual Rupees)

S.N	Central Sector Schemes	Budget Allocation during 2021-22 (in Rs)	Funds Automatically lapsed in TSA	Expenditure during 2021-22 in Rs.	Unspent balance in Rs.
1	Crop Science	6150000000.00	136256794.00	5996624810.00	17118396.00
2	Horticulture Science	1830000000.00	17827624.00	1791737601.00	20434775.00
3	Agricultural Extension	2840000000.00	45288588.00	2697640159.00	97071253.00
4	Agricultural Education	3000000000.00	592423.00	2973870713.00	25536864.00
5	Economics Statistics and Management	280000000.00	12047224.00	267952776.00	0.00
6	Agricultural Engineering	550000000.00	499189.00	548773880.00	726931.00
7	ICAR Hqrs. Admn.	5561480000.00	26064329.00	55563159261.00	25576410.00
8	National Agricultural Science Fund	420000000.00	0.00	303875950.00	116124050.00

9	Natural Resources Management	1680000000.00	12779045.00	1659757540.00	7463415.00
10	NICRA	470000000.00	0.00	456942650.00	13057350.00
11	Animal Science	2620000000.00	48949704.00	2530700920.00	40349376.00
12	Fisheries Science	1380000000.00	97972.00	1375643577.00	4258451.00
13	NAHEP (EAP)**	2250000000.00	520984.00	1843091094.00	406387922.00
	Total-A	7908480000.00	300923876.00	78009770931.00	774105193.00
	NAHEP grant of 2021-22 duly revalidated for utilization during FY 2022-23-B				406387922.00
	Total Refundable/Unspent balance-A-B	7908480000.00	300923876.00	78009770931.00	367717271.00
	Total Refundable /lapsed grant				668641147.00
			Percentage Utilization		98.64%

* Out of current year (2021-22) grant of NAHEP i.e. Rs 225,00,00,000.00, an amount of Rs 184,30,91,094.00 is utilised during 2021-22 and an amount of Rs 5,20,984.00 was lapsed under TSA leaving unspent balance of Rs 40,63,87,922.00.

** During 2022-23 an amount of Rs 241,42,15,000.00 was revalidated by NAHEP vide F.No.NAHEP-1-7(MISC)/2022-FINANCE dated 29-06-2022 which includes amount of Rs 40,63,87,922 + Rs 35,36,91,187 for the year 2021-22 and 2020-21 respectively.

Details of scheme wise unspent amount of funds for the year 2022-23:-

(Amount in actual Rupees)

Sl. No.	Central Sector Schemes	Budget Allocation during (in Rs) 2022 - 23	Funds Automatically lapsed in TSA	Expenditure during 2022 - 23	Unspent balance
1	Crop Science	5,26,04,00,000	1,26,78,028	5,21,23,29,602	3,53,92,370
2	Horticulture Science	1,57,53,00,000	47,94,539	1,56,69,95,200	35,10,261
3	Agricultural Extension	2,43,72,00,000	13,69,375	2,43,57,19,995	1,10,630
4	Agricultural Education	2,63,77,00,000	0.00	2,63,76,71,497	28,504
5	Economics	24,51,00,000	27,66,964	23,92,97,184	30,35,852

	Statistics and Management				
6	Agricultural	48,30,00,000	1,35,766	48,01,23,940	27,40,294
	Engineering				
7	ICAR Hqrs. Admn .	60,41,95,00,000	71,78,123	59,66,86,25,459	74,36,96,418
8	National Agricultural	0.00	0.00	0.00	0.00
	Science Fund				
9	Natural Resources Management	1,85,77,00,000	31,68,742	1,82,14,17,392	3,31,13,866
10	NICRA	0.00	0.00	0.00	0.00
11	Animal Science	2,24,41,00,000	78,73,130	2,23,05,99,866	56,27,005
12	Fisheries Science	1,18,89,00,000	2,15,851	1,18,71,20,705	15,63,444
13	NAHEP (EAP)*	1,67,00,00,000	80,07,363	1,56,75,08,256	9,44,84,382
	Total - A	80,01,89,00,000	4,81,87,881	79,04,74,09,095	92,33,03,024
	NAHEP grant of 2021 - 22 duly revalidated for utilization during FY 2022 - 23 - B	0.00	0.00	0.00	9,44,84,382
	Amount surrendered to PAO during the year 2022-23 (C)	0.00	0.00	0.00	69,46,34,000
	Total amount refunded to GOI Unspent balance - A – B-C	80,01,89,00,000	4,81,87,881	79,04,74,09,095	13,41,84,642
				Percentage Utilization: 98.78%	

Details of scheme wise unspent amount of funds for the year 2023-24:-

(Amount in actual Rupees)

S.No	Central Sector Schemes	Budget allocation during the FY 2023-24	TSA Lapsed amount	Expenditure Incurred	Amount surrendered	Balance to be refunded
1	Natural Resources Management	2399800000.00	84812.00	2399692602.00	0.00	22586.00

2	Agri. Engineering	700900000.00	17939.00	700787190.00	0.00	94871.00
3	Crop Science	9627800000.00	151215859.00	9306239465.02	170335800.00	8875.98
4	Horticulture	2174500000.00	29738143.00	2098168304.00	46547632.00	45921.00
5	Animal Science	3067200000.00	27294826.00	3039866156.00	0.00	39018.00
6	Fisheries	1500000000.00	1605803.00	1498239462.00	0.00	154735.00
7	Agri Extension	2500000000.00	736205.00	2499094731.00	160000.00	9064.00
8	Agri Education	3227400000.00	9241956.00	3218114634.00	0.00	43410.00
10	NAHEP (EAP)	546000000.00	0.00	543163490.00	0.00	2836510.00
	TOTAL SCHEME	25743600000.00	219935543.00	25303366034.02	217043432.00	3254990.98
NON-Scheme						
11	ICAR (incl NASF)	65764900000.00	7614070.00	65718908316.98	37870173.00	507440.02
Grand Total		91508500000.00	227549613.00	91022274351.00	254913605.00	3762431.00
					Percentage utilization 99.46%	

Out of current year (2023-24) grant of NAHEP *i.e.* Rs 546000000, an amount of Rs.543163490 is utilised during 2023-24 and an amount of Rs NIL was lapsed under TSA leaving unspent balance of Rs 2836510.

Out of the current year grant of Rs. 91508500000/-, an amount of Rs. 227549613/- was lapsed under TSA and Rs. 254913605 was surrendered during the same year under TSA. Further an amount of Rs 91022274352/- was utilized leaving an unspent amount of Rs.3762430/-. Out of this unspent an amount of Rs 2836510 pertaining to NAHEP for the year 2023-24 has been revalidated. Accordingly, the net closing balance of Grant-in-Aid refundable to MoF stands at Rs 3762431(Rs 925921-2836510).

CHAPTER - II

Analysis of Sectoral Schemes

A. Natural Resources Management and National Innovations in Climate Resilient Agriculture (NICRA)

2.1. The year-wise Budget Estimates (BE), Revised Estimates (RE) and Actual Expenditure (AE), under the head National Resources Management and National Innovations in Climate Resilient Agriculture (NICRA) head since the year 2020-21 are as follows:-

(In Rs. Crore)

Year	BE	RE	Actual Expenditure
2020-21	226.00	223.21	204.17
2021-22	250.00	215.00	211.67
2022-23	185.77	185.77	182.14
2023-24	240.00	239.98	-
2024-25	252.16	-	-

2.2 About the utilization of allocated Funds, the Department has informed that the restriction imposed after outbreak of Covid-19 had impacted the allocations at RE and subsequent utilization of the funds during 2020-21 and 2021-22. Wherein Division has utilized 98.05% of funds allocation (RE) during the financial year 2022-23.

2.3 The Division utilized 99.99 % of allocated funds at RE during the financial year 2023-2024.

2.4 When the Committee desired to know how the Department is planning to utilize/spend the increased allocation in BE 2024-25 under this Division during the Financial Year 2024-25, the Department stated:

“Programs and activities of the Division were prioritized and aligned as per the availability of funds so that physical targets were achieved accordingly in view of enhanced BE in 2024-25. Further, the 50 additional villages of 151 climatically vulnerable districts have been included for demonstration of climate resilient technologies.”

“The Division has laid down roadmap and set targets to undertake planned activities during 2024-25 for ensuring optimum utilization of the allocated funds. Further regular monitoring of the expenditure is done to ensure effective utilization of funds. Regular meetings are held with the constituent institutes and the utilization of funds is closely monitored and any deficiency found is addressed immediately.”

2.5 On being asked regarding shift in the Agricultural Activities observed in the country due to change in climatic pattern or weather fluctuation and efforts made by the Department during the last five years for soil conservation, and enhancing water holding capacity to enhance resilience of soil towards climate variability in the country, the Department in its reply has submitted the following:

“ICAR under NICRA assessed the vulnerability of Indian Agriculture to climate change, placed agricultural contingency plans of 650 agriculturally predominant districts to sensitize developmental departments for climate sensitization, preparedness and adaption of real time measures. Since the launch of NICRA, a total of 70 interface meetings were conducted in the states facing significant weather fluctuations. Sixty-eight climate resilient technologies including soil and water conservation are demonstrated in 446 villages of 151 clusters. Further, 41 agro-forestry models have been developed and promoted to enhance resilience, livelihood and income security in different agro-ecologies.”

2.6 On being asked whether the Department has any mechanism to advice farmers on crop selection taking into account the fluctuations in weather patterns, the Department stated:

“Twenty-five centres of “AICRP on Agro-meteorology” studied a shift in climatic pattern in major agricultural regions. ICAR issues agromet advisories (weather-based agro advisories) twice a week (Tuesday and Friday) to the farmers for farm level interventions considering prevailing weather forecast and fluctuations. Presently, more than 3 crore farmers are receiving agromet advisories through the Gramin Krishi Mausam Seva.”

2.7 When the Committee asked about the climate resilient technologies of farming developed by the Department and their applicability to different regions of the country and target set to create awareness among farmers about successful climate resilient practices and technologies under NICRA projects, the Department stated:

“A total of 286 climate resilient technologies have been developed for the benefit of stakeholders/ farmers of 22 states and 3 Union Territories (UTs). The climate resilient technologies including crop varieties, intercropping systems, conservation agriculture, crop diversification, agroforestry systems, zero till drill sowing of wheat to escape terminal heat stress, alternate methods of rice cultivation (system of rice intensification, aerobic rice and direct seeded rice), *in-situ* moisture conservation etc. have been disseminated among the farmers/ stakeholders in 151 vulnerable districts across the country.

During the past thirteen years, a total of 22,464 training programs were conducted against the target of 17,500 training programs to educate farmers of the Country on various aspects of climate change and resilient technologies. So far 6,37,924 farmers covered to enable wider adoption of climate resilient technologies and minimize the agricultural loss.”

2.8 When specifically asked about the steps being taken by the Department to promote Climate Smart Farming practices in the country, the Department stated:

“To promote climate-smart farming practices in the country, NICRA under Technology Demonstration Component (TDC) have tested and validated various location-specific promising climate resilient technologies at on-farm sites of 446 villages in 151 climatically vulnerable districts for adoption by the farmers. The climate-smart farming technologies are shared with the respective State Governments for further upscaling. So far, the program has been implemented in 446 villages involving an area of about 2,71,605 hectares with 2,31,421 households distributed in 28 States and one Union Territory.”

2.9 According to the Department, Division has prepared the Soil Resource Map (Atlas) of the country at 1:1 million scale and is available in public domain. Large scale mapping of the country (higher scale) has been contemplated in collaboration with Soil & Land Use Survey of India to finish the mapping during next 5 years.

2.10 Besides, Soil resource inventory map (LRI) at district level is prepared based on priority / need. So far LRI for 73 districts at 1:50,000 scale is prepared and released in public domain. The LRI maps are prepared by state soil survey department, and ICAR-NBSS&LUP has already trained them to take up district level (high resolution) LRI. Using the revised methodology developed by ICAR-NBSS&LUP, all the districts of the country, represented by 62 Agro-Ecological Sub-Regions (AESR) can be covered in the next 10-15 years (by 2040).

2.11 When the Committee asked how preparation of the Land Resource Atlas and LRI would help Farmers of the country and make Indian Agriculture climate resilient, the Department stated:-

“The land resource inventory is helpful to estimate strength, weakness and potential of land units. This enables the agriculture experts to suggest soil management practice, choice of crops, conservation strategies for mitigating adverse effects of climate change. In addition, effective use of soil data helps farmers and development planners to efficiently address local and region-specific climatic vagaries. For example, watershed development plans executed in Karnataka base on LRI have performed better than all other watershed programs.”

B. AGRICULTURAL ENGINEERING

2.12 The year-wise Budget Estimates (BE), Revised Estimates (RE) and Actual Expenditure (AE) under the head of Agricultural Engineering Division since the year 2020-21 are as follows:

YEAR	BE	RE	Actual Expenditure
2020-21	70.00	58.55	57.62
2021-22	65.00	55.00	54.72
2022-23	48.30	48.30	48.01
2023-24	65.00	70.09	70.09
2024-25	91.24	-	-

2.13 About the utilization of allocated fund to the Division, the Department stated:

“The Agricultural Engineering Division utilized funds to the tune of 98.4% of the allocated RE during 2020-21, 99.5% during 2021-22, and 99.4% during 2022-23. The division put best efforts and managed to optimize the utilization of allocations.”

2.14 The allocation in RE 2023-24 was Rs. 70.09 Crore for the Agricultural Engineering Division, which was fully utilised by the end financial year 2023-24.

2.15 When the Committee asked how the Department is planning to utilize/spend the increased allocation in BE 2024-25 under this Division during the Financial Year 2024-25, the Department stated:

“The BE allocation of Agricultural Engineering Division has been enhanced during 2024-25 to take up advanced areas of research like development of robotics, Artificial intelligence, sensors and systems for quality and safety assessment and IoT based farm/post-harvest technologies etc.”

2.16 On being asked about the contributions made by the Department for promoting Farm Mechanization particularly for Small and Marginal farmers in the country, the Department stated:

“The Division developed several technologies for promoting farm mechanization particularly for small and marginal farmers in the country. These technologies encompass tools for manual handling to tractor operated equipment. The department is promoting small tools and equipment on individual ownership, while big equipment requiring higher capital are promoted through custom hiring centres. The developed 432 technologies out of which 212 have been commercialized. These helped in availability of higher efficiency machines with less drudgery and are user-friendly machines. Established 74 Agro-processing centres (APCs) for capacity development of the entrepreneurs in the food processing and post-harvest management. *Premier testing facilities tested 372 commercial farm and post-harvest machines and also tested 1560 samples of food, fibre, yarn, fabric etc.* Supported the establishment of agricultural machinery custom hiring centers in Madhya Pradesh and Chhattisgarh. A total of 9664 outreach activities were conducted to train different stakeholders. “

2.17 With regard to the steps/action taken by the Department for removing inter-regional disparities in level of mechanization in the country, the Department stated:

“Inter-regional variation in level of mechanization has many factors which include crops and cropping pattern, geographical factors, socio economic factors, manufacturing and promotional policies of State Governments.

The Division made efforts to develop equipment and process protocols for enhanced agricultural mechanization especially for the hilly, coastal and dry arid regions of the country, wherein mechanization level is low. The state governments of these regions have been impressed upon to provide necessary incentive for strengthening manufacturing and supply of tools and equipment.”

C. CROP SCIENCE

2.18 The year-wise Budget Estimates (BE), Revised Estimates (RE) and Actual Expenditure (AE) under the Head of Crop Science since the year 2020-21 are as follow:-

(Rs in Crore)

Year	BE	RE	Actual Expenditure
2020-21	715.50	612.24	578.39
2021-22	708.00	615.00	599.66
2022-23	526.08	526.04	521.23
2023-24	714.41	962.78	930.62
2024-25	930.22	-	-

2.19 On being asked about the reasons for less Actual Expenditure *vis-à-vis* Allocation in RE for the years 2020-21, 2021-22 and 2022-23, the Department stated:-

“Expenditure during 2020-21, 2021-22 and 2022-23 was 94.47%, 97.51% and 99.09%, respectively. The restriction imposed after outbreak of Covid-19 had impacted the allocations at RE and subsequent utilization of the funds during 2020-21 and 2021-22.”

2.20 When the Committee asked about the reasons for increase in allocations at RE stage during the Financial Year 2023-24 and status of utilization of the allocated Fund, the Department stated:

“Crop Science Division had increased allocation at RE stage during 2023-24 for the two new projects, which were announced in the Budget Announcements 2023-24.

The actual expenditure during the financial year 2023-24 was Rs.930.62 Crore against the allocation of Rs.962.78 Crore at RE 2023-24. Division put all efforts to optimize utilization of allocated funds and utilized 96.66 % funds during 2023-24. The major unspent expenditure was under capital head for the works.”

2.21 Taking note of the substantial increase in allocation in BE 2024-25 under Crop Science Division, when the Committee asked how the Department is planning to utilize/spend the increased allocation during the FY 2024-25, the Department stated:-

“Crop Science Division had enhanced allocation in BE 2023-24 and 2024-25 for the two new projects namely

- i. Enhancing climate resilience and ensuring food security with genome editing and
- ii. Global R&D Hub for millets in India, which were announced in the Budget Announcements 2023-24.

The additional funds, thus allotted are for the infrastructure development and operation components under both research and research establishment heads and will be utilised accordingly.”

2.22 When the Committee asked about the steps undertaken by the Department for bringing about improvement in the Seeds of various types of crops like pulses, food grains and oilseeds so as to achieve self-sufficiency in the production of Agricultural Produce during last five Financial Years, the Department stated:

“During last five years total 2008 varieties of 78 field crops have been released which include cereals (905), oilseeds (281), pulses (310), forage crops (122), fibre crops (305), sugarcane (58) and other crops (27). Department made systematic efforts to produce breeder seed of the newly released varieties, wherein a total of 542892 q of breeder seed of more than 2000 varieties across 60 crops was produced. The Varietal Replacement Rate (Less than 5 years and 10 years old varieties in seed chain) during 2019-20 to 2023-24 had significant gain in all major field crops over the past five years. The percentage share of breeder seed indents for varieties less than 5 years old varieties increased notably during 2023-24 in almost all the major crops except soybean. The varietal mismatches have been reduced to 12.1% during 2023-24 from 19.30 % during 2018-19. Further, the inclusion of newly released high yielding varieties in the seed chain has led to enhancement in the varietal replacement rates leading to significant increase in the productivity across the crops over the years.”

2.23 Further, when asked whether the ICAR has any system in place to monitor performance and productivity of New Crop Varieties and Hybrids released by their Institutes, the Department replied:

“Newly developed varieties and hybrids are demonstrated at farmers’ field through front line demonstrations (FLDs) to evaluate the performance of varieties and hybrids outside the research farm. Survey and surveillance activities are regularly carried to check the performance and response of varieties to diseases and insect-pests. High yielding varieties and hybrids, after their release, find place in the seed chain. Breeder seed indents are the indicators of adaptability and popularity of any variety. Higher the indent of variety in comparison to its other contemporary varieties establishes the popularity and acceptability of that variety among the framers. The feedback received from farmers-oriented programs after demonstrating the varieties also indicate the performance. The impact analysis studies are regularly conducted on performance of ICAR varieties.”

2.24 Taking note of the fact that many endemic Crop Varieties are on the verge of extinction and the conservation of local (endemic varieties) crops is a must, when the Committee asked whether the Department has any specific budget and policy for the conservation of endemic crops, the Department replied

“The Department is ensuring the conservation of endemic varieties. The ICAR-National Bureau of Plant Genetic Resources (NBPGR), New Delhi is nodal Institute for collection, characterization, conservation and exchange of Plant Genetic

Resources in the country as per the extant regulations/guidelines. The ICAR-NBPGR has ten regional stations situated in different diversity rich regions of the country with special attention to the endangered and near extinction species. The centre has currently conserved 470637 accessions of 2147 species in its National Gene Bank (NGB) which include 999382 accessions of landraces, farmers/traditional varieties collected from across the country and the National Gene Bank has the status of second largest gene bank in the world. The NGB has a capacity to conserve about one million germplasm, is supported by partnership of 59 other institutions including ICAR research Institutes and State Agricultural Universities designated as the National Active Germplasm Sites (NAGS) for both *in-situ* and *ex-situ* collections located in various parts of the country for maintaining, evaluating and distributing germplasm from their active collections to NGB and other centres. Department has specific budgetary provision of Rs. 37.11 crores during 2024-25 for ICAR-NBPGR for the conservation of plant genetic resources including that of endemic crops.”

D. HORTICULTURE SCIENCE

2.25 The year-wise Budget Estimates (BE), Revised Estimates (RE) and Actual Expenditure (AE), under the Head of Horticulture Science Division since the year 2020-21 are as follow:-

(Rs. in Crore)

Year	BE	RE	AE
2020-21	194.00	181.72	177.15
2021-22	212.00	183.00	179.17
2022-23	157.53	157.53	156.70
2023-24	212.00	217.45	-
2024-25	257.07	-	-

2.26 When asked about the status of utilization of allocated Funds for the Financial Year 2023-24 under the Horticulture Science Division, the Department stated:

“The Division put all efforts for optimum utilization of allocated funds during the year 2023-24 and utilized approx. 96.5 % of RE 2023-24. Couple of expensive equipment could not be purchased at the fag end of the financial year 2023-24 and are planned during the year 2024-25.”

2.27 On being asked how the Department is planning to utilize/spend the increased allocation in BE 2024-25, the Department submitted:

“The Division has planned programs, activities and targets aligned with available

funds to achieve physical targets for the advanced research including genome editing in horticultural crops for ‘Enabling climate resilience and ensuring food & nutritional security.’

2.28 As per the information furnished by the Department, a total of 604 varieties of horticultural crops were notified/released during the last 5 years.

Year	Varieties notified/released
2020	93
2021	98
2022	122
2023	99
2024	192

2.29 On being asked about the steps the Department has taken to popularize cropping/cultivation of these new varieties/hybrids of Horticultural Crops notified/released by ICAR during the last 5 years, the Department stated:

“To popularize the cultivation of new varieties of horticultural crops, regular outreach programs in form of Kisan Melas/ Kisan Gosthis, Exhibitions, trainings & Field Demonstrations are organized. During last five years, a total of 2313 trainings and 2377 field demonstration of technologies were arranged for the farmers. Produced and distributed 2,636.07q breeder/Truthful Label seeds of vegetables, spices etc.; 9672.633t seed of tuber crops, 120.8 lakh rooted cuttings, 110.87 lakh plants of perennial crops and 1993.49q of mushroom spawn to farmers as a part of transfer of improved technologies.”

2.30 When asked about new and developed varieties of Horticultural crops among the farmers and their response with regard to adoption of these varieties of Horticultural crops, the Department stated:

“The Department has laid emphasis on transfer of technology among Small and Marginal Farmers through training and capacity building of stakeholders and field demonstration of technologies. During April 2021 to September 2024, a total of 525 trainings and capacity building programs were organized for stakeholders benefitting 28,025 farmers and 1334 Field demonstration of technologies benefitting 26630 farmers. To popularize improved varieties of horticultural crops, a total of 485.01 quintal seeds of vegetables, spices etc. benefitting 19703 farmers; 1677.88 quintal seeds of potato and other tropical tuber crops benefitting 4013 farmers; 4440822

improved variety plants/cuttings of horticultural crops benefitting 17381 farmers were distributed in different agroclimatic regions. To demonstrate the usefulness of balanced nutrient management for enhanced productivity of horticultural crops, distributed a total of 9091.45 quintal fertilizers benefitting 10178 farmers; 1307.92q micronutrients/biofertilizers benefitting 8797 farmers and 7846kg/lit plant protection chemicals/bioformulations benefitting 6860 farmers. Also, to facilitate the intercultural operations in production chain, a total of 21638 implements/tools were distributed to 11376 farmers.”

2.31 Responding to a query as to how the varieties developed by the Department have contributed in the increase in income of the farmers of the country, the Department stated:-

“The improved varieties with matching production technologies in horticultural crops have been helpful in increased area and production and thereby income of stakeholders at large. The area under horticultural crops has increased from 26.46 million ha during 2019-20 to 28.44 million ha during 2022-23 with increased production from 311.05 million metric tons to 355.5 million metric tons. As a result of increased production, the export also increased leading to enhanced foreign exchange earnings. Commercial varieties of grapes grafted on Dogridge rootstock, *Pomegranate variety Phule Bhagwa*, *the potato variety Kufri Phukraj* and *the triple disease resistant Arka Rakshak & Arka Samrat tomato hybrids* have enabled increased foreign exchange earnings.

Studies on demonstration of improved varieties of tuber crops indicated increase in net household income through tuber crops-based Integrated Farming System models by Rs. 21,000/ha in tribal regions of Andaman & Nicobar Islands.”

2.32 When asked about the steps undertaken by the Department to preserve and increase the shelf life of Horticultural crops, the Department stated:

“Various pre- and post-harvest technologies were standardized to enhance the shelf life of horticultural crops, which were disseminated to farmers and other stakeholders. A Controlled onion storage structure has been developed by which the shelf life of onion could be extended upto eight months as against four to five months in other storage systems with reduced post-harvest losses from 30 percent to 15 percent. Wax coating of fruits and vegetables such as oranges and apples has enhanced shelf life of more than a month and reduced weight loss of 12 to 15 per cent.”

2.33 On being asked about steps taken for post-harvest handling of Horticultural crops so as to minimize their wastage, the Department stated:-

“The Department has developed several processing and value-addition technologies to minimize wastage of produce. Improved techniques of harvesting, curing & grading have been developed for post-harvest handling of Horticultural produce for minimizing wastage.”

E. ANIMAL SCIENCE

2.34 The year-wise Budget Estimates (BE), Revised Estimates (RE) and Actual Expenditure (AE) under the head of Animal Science Division since the year 2020-21 are as under:-

(Rs. in crore)

Year	BE	RE	Actual Expenditure
2020-21	330.00	274.13	259.63
2021-22	302.00	262.00	253.07
2022-23	224.41	224.41	223.06
2023-24	300.00	306.72	303.92
2024-25	415.15		

2.35 When asked about the status of utilization of allocated Funds for the Financial Year 2023-24 under the Animal Science Division, the Department stated:-

“The Division utilized Rs. 303.92 Crores out of allocation Rs. 306.72 (RE) during 2023-24. The utilization of allocated funds is about 99%.”

2.36 On being asked how the Department is planning to utilize/spend the increased allocation during the Financial Year 2024-25, the Department stated:

“The Department has planned to utilize increased funds for creating infrastructure and advanced research on development of new generation vaccines, identification of indigenous livestock, genome editing and animal genomics studies etc. for improved animal health and production in the Country.”

2.37 About the achievement made by the ICAR in development of vaccine for tackling diseases among cattle in the country, the Department stated:

“The most effective way to increase livestock productivity and minimize losses from disease morbidity and mortality is by monitoring health, as well as diagnosis and control of diseases by using effective vaccines. The research on veterinary biologicals in the ICAR has led to successful eradication of important diseases viz., Rinderpest and contagious bovine pleuropneumonia from the country. ICAR has developed vaccines for economically important diseases for cattle in the country viz., Foot and Mouth Disease, Anthrax Spore, Black Quarter (BQ), Haemorrhagic

Septicaemia (HS), Brucella Abortus (S-19 Strain), Buffalo pox, Infectious Bovine Rhinotracheitis and Lumpy Skin Disease.”

2.38 When asked how many new/improved processes for value addition of milk, meat, egg, fibre, etc have been developed by the ICAR in last 5 years, the Department stated:

“The Department has developed new/improved processes: 25 during 2020-21, 25 during 2021-22, 18 during 2022-23, 20 during 2023-24 and 10 during 2024-25, for value addition of milk, meat, egg, fibre.”

2.39 On being asked about steps being taken by the Department for improvement, characterization and registration of populations of Indigenous livestock, poultry, dogs, etc and by what time, all indigenous livestock of the country would get registered, the Department stated:-

“The ICAR has established a standard process of characterization, cataloguing and registration of animal genetic resources of the Country, which has been appreciated by UN recently. Department has launched “Mission toward non-descript AnGR in India” to characterize livestock, poultry and dog breeds of India. The registration of 219 indigenous breeds have been completed, these breed includes; 53 for cattle, 20 for buffalo, 39 for goat, 45 for sheep, 8 for horses & ponies, 9 for camel, 14 for pig, 3 for donkey, 3 for dog, 1 for yak, 20 for chicken, 3 for duck, 1 for geese. Total 212 registered breeds have been Gazette notified by the Govt. of India. In next 4-5 years, about 50-60 new populations would get registered as indigenous breeds, in the country. All 219 indigenous breeds of livestock and poultry species have been included for conducting Breed-wise 21st Livestock Census (2024), being conducted in the country by the Dept. of Animal Husbandry & Dairying, Ministry of FAHD, Govt. of India.”

F. AGRICULTURE EXTENSION

2.40 The year-wise Budget Estimates (BE), Revised Estimates (RE) and Actual Expenditure (AE), under the head of Agriculture Extension Division since the year 2020-21 are as follow:-

(Rs. in Crore)

YEAR	BE	RE	Actual Expenditure
2020-21	242.50	237.49	200.42
2021-22	328.00	284.00	269.76
2022-23	243.72	243.72	243.57
2023-24	327.00	250.00	248.49
2024-25	234.89	-	-

2.41 About the utilization of allocated Funds, the Department has informed that the restriction imposed after outbreak of Covid-19 had impacted the allocations at RE and subsequent utilization of the funds during 2020-21 and 2021-22. Wherein Division has utilized 99.94 % of funds allocation (RE) during the financial year 2022-23.

The Division has utilized Rs. 248.49 crore against an allocation (RE) of Rs 250.00 crore during the financial year 2023-24, thus Division utilized 99.40 % of allocated funds.

2.42 When asked about the reasons for decrease in allocation in BE 2024-25 *vis-à-vis* BE & RE 2023-24 under this Division, the Department stated:

“The total allocation of the Scheme” Strengthening of Krishi Vigyan Kendras (KVKs)” for the period 2021-26 is Rs.1202.45 Crore. During the initial period of the plan (2021-26), the financial prudence and management called for optimum planning of expenditure particularly under the “Capital” budget head, which is concentrated more in initial years of the plan period. This prevents the spill-over of procurements/civil works from one plan period to another.”

2.43 As per the information provided by the Department, there are 766 districts in the country and a network of 731 KVKs spread all over the country. There are 93 districts having two KVKs each and 121 districts do not have KVK. The Department has also informed that a total of 15 new KVKs have been opened during the last five years. Out of these, 08 KVKs have been opened in the District where a KVK is already functioning.

2.44 When queried regarding constraints being faced by the Department to open at least one KVK in each district of the country, the Department stated:

“The constraints faced by the Department to open at least one KVK in each district of the country includes permission Committee of Establishment Expenditure (CEE), provision of fund and availability of 20 hectare contiguous potential land.”

2.45 On being asked about the availability of adequate infrastructure in the existing KVKs and how the inadequate infrastructure is hampering the work of KVKs, the Department stated:

“As per the KVK scheme each KVK provided an Administrative Building, Farmers Hostel, Staff Quarters, Demo Unit and Compound Wall as the basic infrastructure requirement. A provision is placed for the same and the respective civil work is undertaken depending upon the availability of Funds. KVKs are having adequate

infrastructure and the same is strengthened depending upon the actual requirement in different plan periods. The civil work related to creation of infrastructure at the KVKs is placed depending upon the actual requirement. The respective ATARI periodically monitors the status of completion of these civil works. The KVKs which do not have adequate infrastructure are supported by the respective host organizations through sharing of infrastructure of nearby research station/KVK/college.”

2.46 On being asked to provide details of vacancies in KVKs across the country, the Department stated:

“The KVKs across the country have 11696 total sanctioned positions and 3499 position (29.92 %) are vacant. The posts of the KVKs are filled by respective Host Organization and filling up of vacancies in KVKs is a continuous process. Whenever vacancies in KVKs arise, the host organization takes appropriate action for filling the same. However, to fasten the process of filling of the vacancies, the Secretary (DARE) and Director General (ICAR) peruses this issue with Vice-cancellor of Agricultural Universities and the Chief Secretaries of the States, and Hon’ble Minister of Agriculture & Farmers Welfare to the Hon’ble Chief Ministers of the States. The recruitment of staff of ICAR-KVKs are done centrally by ICAR and recently recruitment of 165 SMS and 36 Senior Scientist and Heads of KVKs is done.

2.47 When asked regarding efforts made by the KVKs in the country to attract and retain the rural youth towards agriculture, the Department stated:

“KVKs making efforts to attract and retain the rural youth toward agriculture by organizing different programs involving rural youth. The vocational training programs are organized for rural youth and school dropouts. During 2023-24, 11106 programs were organized with 3.03 lakh participants. Besides, Department implemented a program “Attracting and Retaining Youth in Agriculture (ARYA)” through 100 KVKs since 2017-18. A total of 85531 rural youth has been trained and 19014 agro-enterprises have been established involving 34790 trainees. The KVKs are also organizing National Skill Qualification Framework aligned with skill development training programs of more than 200 hours since 2016-17, wherein 44296 rural youth have been trained so far.”

2.48 On being asked about the efforts made by the ICAR in general and KVKs in particular to train and educate the women engaged in farm practices so as to reduce their hardships and drudgeries, the Department stated:

“KVKs trained and educated about 26.77 lakh farm women on various aspect of agriculture and allied sectors to increase the productivity and profitability and of

drudgery reduction. Total 48782 women farmers were trained under different skill training programs during July to October 2024.”

2.49 When asked whether the mandate of KVKs cover Animal Husbandry related matter also, the Department stated:

“Mandate of the KVKs cover the animal husbandry related matters and the KVKs organize different activities related to animal Husbandry for diffusion of information on animal husbandry and fisheries related technologies among the farmers. During 2023-24, the KVKs organized 5603 and 1426 training programmes on different facets of animal husbandry and fisheries for capacity development of 1.68 lakh livestock farmers and 38310 fish farmers, respectively. The KVKs also organized 19537 Frontline Demonstrations on the technologies related to livestock and fisheries.”

2.50 When further asked about the efforts made to make KVKs more productive in terms of extension programs and outreach to maximize benefit to the farming population in their area, the Department submitted:

“Efforts are put forth for strengthening technology demonstration and promotion; supporting entrepreneurs and farmers' organizations through Public Private Partnership (PPP), integrating, packaging and promoting the technologies specific for various agro-climatic zones and training and capacity building for their larger adoption, reorienting the KVKs as knowledge and information centres for providing farmer-centric digital solutions and services, ensuring availability of quality seeds, planting materials and other technological inputs to the farmers in PPP mode, and creating mass awareness and community mobilization for nature-friendly and climate resilient agriculture and allied sectors.”

2.51 Asked to provide details about steps being taken/contemplated by the Department to ensure benefit of Agriculture Extension Programme actually reach to farmers of the country, the Department submitted:

“The Department has established 731 Krishi Vigyan Kendras (KVKs) in the Country with mandate of technology assessment and demonstration for its application and capacity development. The activities of KVKs include on-farm testing to identify the location specificity of technology under various farming systems; frontline demonstration to establish the production potential of improved agricultural technologies on the farmers' fields; capacity development of farmers for knowledge and skill up gradation; and production of quality seeds, planting materials and other technology inputs for availability to the farmers. In order to develop awareness of improved agricultural technology among the farmers, a large number of extension activities are taken up by the KVKs. The activities of KVKs motivate the farmers to adopt new agricultural technologies. The KVKs are also working in convergence with other Departments of Govt. of India in

different flagship programs such as Viksit Bharat Sankalp Yatra, Vibrant Village Program, PM Janjati Adivasi Nyaya Maha Abhiyan (PMJANMAN), Agri-Drone, etc.”

G. AGRICULTURAL EDUCATION

2.52 The year-wise Budget Estimates (BE), Revised Estimates (RE) and Actual Expenditure (AE), under the head of Agricultural Education Division since the year are as follows:

(Rs. in Crore)

Year	BE	RE	Actual Expenditure
2020-21	510.00	349.90	342.21
2021-22	388.00	328.00	324.18
2022-23	288.28	288.28	287.70
2023-24	322.74	322.74	322.74
2024-25	398.74		

2.53 Regarding the status of utilization of allocated Funds during the Financial Year 2023-24 under the Agricultural Education Division, the Department stated:

“Department has fully utilized the funds allocated (Rs.322.74 crore) during 2023-24.”

2.54 Considering increase in allocation in BE 2024-25 *vis-à-vis* BE and RE 2023-24 under Agricultural Education Division, the Committee asked whether the allocated amount is sufficient for the Division, the Department stated:

“The allocation in BE 2024-25 has been increased by 22%. For 2024-25 at BE stage, an amount of Rs.398.74 crore has been earmarked. However, DARE/ICAR has raised the demand of Rs.630.07 crore as per approved EFC outlay at RE stage. Department is committed to fully utilize the funds by the end of this current financial year.”

2.55 About the role being played by the Department in formulation/preparation of syllabi of Agricultural Universities of the Country, the Department stated:

“The Department plays a major role in formulation/preparation/revision of syllabi of Agricultural Universities of the Country. The Deans Committees are constituted for undergraduate programs to develop syllabus with delineated provision during graduation degree as certificate, diploma, degree and degree with research. The Subject Matter Area Committees are for PG and PhD programme to maintain the uniformity in the nomenclature and content across the country.”

2.56 On being asked about the steps taken by the DARE/ICAR during the last five years to maintain and develop quality standards in Higher Agricultural Education in the Institutes/Universities of the country, the Department stated:

“ICAR is conducting accreditation of agricultural and allied sciences colleges both under public and private sectors. After the grant of accreditation to the university/college, a midterm review is conducted to monitor the recommendations of Accreditation Board to ensure quality in the education. Further Department implemented Sixth Deans’ Committee report across AUs for 13 UG programmes as per the norms and guidelines of NEP2020 in 2024. Also, revised Model Act for Higher Agricultural Education Institutions, restructured Broad Subject Matter Areas (BSMA) Committee and revised the syllabi of Post Graduate and Ph.D. Programmes.”

PART-II

OBSERVATIONS/RECOMMENDATIONS OF THE COMMITTEE

Budgetary Allocation

1. The Committee note that the Department of Agricultural Research and Education (DARE) sought an allocation of Rs. 11173.21 crore for the year 2024-25, it got Rs.9941.09 Crore which is 0.21% of total Outlay (BE) of Rs. 48,20,512 crore of Government of India for the year. This allocation is, however higher than the allocations of Rs. 9504.00 crore made in BE 2023-24 and Rs. 9876.60 crore made in RE 2023-24. The Committee also note that the proportion (in % terms) of Budgetary Allocation (BE) made in favour of the Department out of the total Budget of the Government of India has progressively declined from 0.27% in the year 2020-21 to 0.21% in 2024-25.

The Committee feel that inadequate Budget allocation as well as progressive decline in proportion of Budgetary Allocation with respect to the total Budget of the Government of India is not a healthy trend particularly in view of the fact that the Agriculture and Allied Sectors are facing numerous challenges like low productivity, sub-standard quality of seeds, impact of variability in weather and climate change, degraded soil, depleting water resources, etc. The Committee are of the considered view that relevant Research and Development (R&D) is essential to develop climate resilient, high yielding, bio-fortified variety of seeds, new technologies ,etc. In all these endeavors, the DARE and the Indian Council of Agricultural Research (ICAR), being the premier research organization for coordinating, guiding and managing research and education in Agriculture and Allied activities, have to play pivotal role. The Committee, therefore, recommend the Government to consider increasing the allocation for the Department in future.

2. The Committee note that Rs. 10.41 crore was allocated in BE 2023-24 under Capital Section (Capital Outlay on other General Economic Services) which was reduced to Rs. 9.96 crore in RE 2023-24. Out of this allocation, Rs. 3.389 crore only was utilized during the year 2023-24. The Committee while noting the reasons for

delay in taking up the required works resulting in surrender of more than 60 % of the funds allocated at RE stage, suggest that proper planning may be put in place to use funds meant for capital works.

Allocations Under Scheme Head

3. The Committee note that out of the total allocation (BE) of Rs. 9941.09 Crore to the Department (DARE) for the year 2024-25, Rs. 2780.39 Crore has been allocated under Scheme Head which constitutes around 27.97% of the total allocation. The Allocation under Scheme Head in BE 2024-25 (Rs. 2780.39 Crore) is 356.98 Crore more than the allocation of Rs. 2423.41 Crore in BE 2023-24, and Rs. 206.03 Crore more than the allocation of Rs. 2574.36 Crore in RE 2023-24. The Committee also note that the Department has sought/proposed Rs. 3011.62 Crores under Scheme Head for BE 2024-25 and the Department has to prioritize its programs and activities in view of reduced allocations. The Committee have been apprised that inadequate allocation during the financial year 2023-24 had adversely impacted the various planned activities under various Schemes. In many cases, capital expenditure planned in EFC/SFC could not be made due to inadequate budgetary allocations. Financial assistance was provided to various units from Non-Scheme budget in order to meet its committed recurring contingencies and avoid crisis. The Committee are of firm opinion that inadequate allocation in BE 2024-25 particularly under Scheme Head would adversely impact the Scheme and Programmes planned by various Subject Matter Divisions (SMDs) and may impact the overall working of Research Institutes under the ICAR.

The Committee are of considered view that further strengthening of Research and Development (R&D) eco-system for Agriculture and Allied Sectors in the country is indispensable for ensuring food and nutritional security and to improve profitability, sustainability and climate resilience. They, therefore, recommend the Department to take up the matter of enhancing the allocation under Central Sector Schemes with the Ministry of Finance in future.

Surrender of Funds

4. The Committee note that the percentage utilization of RE allocation of the Department for the Financial Years 2020-21, 2021-22, 2022-23 and 2023-24 are 99.01%, 99.13%, 96.71% and 99.27% respectively. There is a surrender of Rs 76.86, 73.68, 284.74 and 72.21 crore respectively during the years. The high percentage of utilization though is commendable, the Committee suggest that in future , efforts may be made to utilize fully especially funds under capital section to avoid payment of higher amounts due to inflation to complete the works taken under capital section.

Promotion of Climate Resilient Farming

5. Variability in weather and climate change alongwith degraded soil and depleting water resources are some of the major challenges confronting Indian Agriculture. The Committee have been apprised that a total of 286 climate resilient technologies have been developed for the benefit of stakeholders/ farmers of 22 states and 3 Union Territories (UTs). The climate resilient technologies including crop varieties, intercropping systems, conservation agriculture, crop diversification, agroforestry systems, zero till drill sowing of wheat to escape terminal heat stress, alternate methods of rice cultivation (system of rice intensification, aerobic rice and direct seeded rice), *in-situ* moisture conservation etc. have been disseminated among the farmers/ stakeholders in 151 vulnerable districts across the country The Committee note that Rs. 252.16 crore has been allocated to Natural Resources Management and National Innovations in Climate Resilient Agriculture (NICRA) Division in BE 2024-25 which is more than the allocations of Rs. 240.00 crore in BE 2023-24 and Rs. 239.98 crore in RE 2023-24. The Division had utilized 99.99% of allocated funds at RE during the Financial Year 2023-24. The Committee, while appreciating the efforts of the DARE/ICAR, are of the view that more appropriate steps are required to be taken to promote Climate Resilient Farming by giving priority to Research for development of location-specific, cost-effective, eco-friendly Climate Resilient Practices and Technologies and their dissemination and demonstration on large scale in the

country so that adverse impact of climate change on Indian Agriculture is minimized and food and nutritional security of the nation is maintained.

Agricultural Engineering

6. The Committee note that Rs. 91.24 crore has been allocated to Agriculture Engineering Division in BE 2024-25 which is more than the allocations of Rs. 65.00 Crore in BE 2023-24 and Rs. 70.09 Crore in RE 2023-24. The Committee have been apprised that the allocation of Rs. 70.09 Crore in RE 2023-24 for the Agricultural Engineering Division was fully utilized by the end of the Financial Year 2023-24. Further, the BE allocation of Agricultural Engineering Division has been enhanced during 2024-25 to take up advanced areas of research like development of robotics, Artificial intelligence, sensors and systems for quality and safety assessment and IoT based farm/post-harvest technologies etc. They appreciate that out of 432 technologies developed, 212 technologies have been commercialised resulting in availability of higher efficiency machines with less drudgery and user friendly machines. The Committee hope that as in the past, this year also the Department will be able to spend the entire enhanced allocations for the said purpose.

Crop Science

7. The Committee note that Rs. 930.22 crore has been allocated to Crop Science Division in BE 2024-25 which is more than the allocation of Rs. 714.41 in BE 2023-24 but less than the allocation of Rs. 962.78 crore in RE 2023-24 and Actual Expenditure of Rs. 930.62 crore during the Financial Year 2023-24. The Committee also note that many biofortified, hybrid and high yielding varieties of Field Crops – cereals, oilseeds, pulses, forage, fibre, sugarcane, etc have been developed, released and notified for commercial cultivation by the farmers which lead to increase in production and productivity of these crops. At the same time, the Committee also note that several of these high yielding varieties of crops possess certain drawbacks like short shelf life, tastelessness, high consumption of inputs, degradation of soil and water, etc which needs to be addressed on priority. The Committee, therefore, recommend the Department to optimally and effectively utilize the allocation made to this Division and lay emphasis on developing crop

varieties having better productivity while retaining qualities in terms of taste, flavor, shelf life, nutrients, environment friendliness etc.

Animal Science

8. The Committee note that Rs. 415.15 crore has been allocated to Animal Science Division in BE 2024-25 which is substantially higher than the allocations of Rs. 300.00 crore in BE 2023-24 and Rs. 306.72 crore in RE 2023-24. The Committee have been apprised that the research on veterinary biologicals in the ICAR has led to successful eradication of important diseases *viz.* Rinderpest and contagious bovine pleuropneumonia from the country. ICAR has developed vaccines for economically important diseases for cattle in the country *viz.*, Foot and Mouth Disease, Anthrax Spore, Black Quarter (BQ), Haemorrhagic Septicaemia (HS), Brucella Abortus (S-19 Strain), Buffalo pox, Infectious Bovine Rhinotracheitis and Lumpy Skin Disease. The Committee have also been apprised that the Department has planned to utilize increased funds for creating infrastructure and advanced research on development of new generation vaccines, identification of indigenous livestock, genome editing and animal genomics studies etc. for improved animal health and production in the Country. The Committee are of the considered view that Animal Husbandry sub-sector is one of the promising sources for improving farm incomes and every rupee spent on livestock sub-sector's research and development yields much better returns. The Committee, therefore, while appreciating the Department for enhancing the allocation under Animal Science Division, recommend that emphasis should be given to research for enhancing productivity as well as ensuring animal health so as to increase the income of farmers and contribute immensely to the growth of the Indian Economy.

Krishi Vigyan Kendras (KVKs)

9. The Committee note that Agricultural Extension Division has been allocated Rs. 234.89 crore in BE 2024-25 which is less than the allocation of Rs. 327.00 crore made in BE 2023-24 and the Actual Expenditure of Rs. 248.49 crore incurred during the year 2023-24. The Committee also note that Agricultural Extension Division is carrying out on-farm testing to identify the location specificity of agricultural

technologies, frontline demonstrations to demonstrate the production potential of different crops, training of farmers and extension personnel on knowledge and skills improvement and creating awareness on improved technologies among farmers of the country through a network of 731 Krishi Vigyan Kendra (KVKs) spread all over the country. At present, 93 districts have two KVKs each and 121 districts do not have KVK. Also only 15 new KVKs have been opened during the last five years. Besides, there are inadequate infrastructure in several of the existing KVKs and about 30% of the sanctioned posts are vacant in KVKs across the country. In view of the foregoing, the Committee feel that the reduction in allocation in BE 2024-25 to Agriculture Extension Division is not a step in the right direction. The Committee are of the considered view that there should be atleast one KVK with adequate infrastructure and sufficient manpower in each district of the country. The Committee, therefore, recommend the Department to take steps for enhancing allocation to Agriculture Extension Division to achieve the desired goal.

10. The Committee note that the KVKs play an important role in extension services. The benefits of the research and innovations in the field of agriculture reach to the farmers by KVKs through demonstration and dissemination of information about new varieties, practices and technologies. The Committee desire the Department to make the training/extension services at Krishi Vigyan Kendras (KVKs) more broad-based and inclusive by including Fishery, Animal Husbandry and other related subjects and also by covering more number of farmers without frequently repeating the same group of farmers for training and other extension services.

Agricultural Education

11. The Committee note that Rs. 398.74 crore has been earmarked for Agricultural Education Division in BE 2024-25 which is about 22% more than the allocated amount of Rs. 322.74 Crore in BE and RE 2023-24. The Committee feel that there is a need to strengthen Agricultural Education in the country and the

enhancement of allocation for Agricultural Education is a welcome step. Since most of the Farmers and Agricultural labourers are 10th – 12th class dropouts, it is imperative that the Department take steps for introduction of Agriculture related basic education at school level also. Further, the Committee desire that the Department take steps for strengthening higher agricultural education in the country by having sufficient number of qualified teachers in Agriculture colleges and universities, provision of scholarship for all students to attract talented students to Agriculture Institutions and Universities, student-faculty exchange programme with foreign countries etc.

Problems in implementation of Agricultural Research Programmes

12. The Committee suggest that they may be provided a status report on the problems faced in implementation of Agricultural Research Programmes/output of the Agricultural Research by Agriculture Research Institutes/ICAR.

Agricultural Targets for 2047

13. The Committee would like to be apprised of the targets set for various parameters in Agricultural and allied Sectors to be achieved by 2047 as part of *Viksit Bharat*. Further, they also want the short term targets fixed in this regard.

**NEW DELHI;
14 December,2024
23 Agrahayana, 1946 (Saka)**

**SHRI CHARANJIT SINGH CHANNI
Chairperson
Standing Committee on Agriculture,
Animal Husbandry and Food Processing**

**MINUTES OF THE NINTH SITTING OF THE COMMITTEE ON AGRICULTURE,
ANIMAL HUSBANDRY AND FOOD PROCESSING (2024-25)**

The Committee sat on Thursday, the 21st November, 2024 from 1405hrs to 1535 hrs in Committee Room No G-074, Ground Floor, Parliament Library Building, New Delhi.

Present

Shri Charanjit Singh Channi – Chairperson

Members

Lok Sabha

2. Shri Patel Umeshbhai Babubhai
3. Shri Kuldeep Indora
4. Shri Sukanta Kumar Panigrahi
5. Shri Dharambir Singh
6. Shri Sudhakar Singh
7. Smt. Geniben Nagaji Thakor
8. Shri Bhausahab Rajaram Wakchaure

Rajya Sabha

9. Smt. Ramilaben Becharbhai Bara
10. Dr. Anil Sukhdeorao Bonde
11. Shri Ramji Lal Suman

Secretariat

- | | | | |
|----|--------------------------|---|------------------|
| 1. | Shri Srinivasulu Gunda | - | Joint Secretary |
| 2. | Shri Khakhai Zou | - | Director |
| 3. | Shri Prem Ranjan | - | Deputy Secretary |
| 4. | Shri Anil Kumar Sanwaria | - | Deputy Secretary |

LIST OF WITNESSES

**Ministry of Agriculture and Farmers Welfare
Department of Agricultural Research and Education (DARE)
/ Indian Council of Agricultural Research (ICAR)**

Sl. No.	Name	Designation
1.	Dr. Himanshu Pathak	Secretary (DARE) & DG (ICAR)
2.	Shri Sanjay Garg	AS (DARE) & Secretary (ICAR)
3.	Dr. Tilak Raj Sharma	Dy. Director General (Crop Science), ICAR
4.	Dr. Joykrushna Jena	Dy. Director General (Fisheries Science)

- | | | |
|----|------------------------|---|
| 5. | Dr. R.C. Agrawal | Dy. Director General (Agri. Edn.), ICAR |
| 6. | Dr. Raghavendra Bhatta | Dy. Director General (Animal Science), ICAR |
| 7. | Dr. Sanjay Kumar Singh | Dy. Director General (Horticultural Science),
ICAR |
| 8. | Shri S. K. Pathak | Joint Secretary (Fin.), ICAR |

2. At the outset, the Chairperson welcomed the Members of the Committee to the Sitting convened for taking Oral Evidence of the representatives of the Ministry of Agriculture and Farmers Welfare (Department of Agricultural Research and Education) - in connection with the examination of the Demands for Grants (2024-25) - Demand No. 2. Thereafter, the representatives of the Department of Agricultural Research and Education were called in. After welcoming the representatives of the Department to the Sitting, the Chairperson drew their attention to Direction 55 (1) of the Directions by the Speaker regarding confidentiality of the proceedings.

3. After introduction by the representatives of the Department, the representative made a Power-Point Presentation briefing the Committee about Mandate of the Department; Mandate and Functional areas of Indian Council of Agricultural Research (ICAR); Nation-wide network of Agricultural Research, Education and Extension; Allocation/Utilization of funds under ICAR Schemes (2023-24); Comparison of Scheme Allocation during 2023-24 and 2024-25; Allocations and Utilization of fund since the year 2019-20; Major Achievements of ICAR in 2023-24 in Crop science, Horticultural Science, Animal Science, Fisheries Science, Natural Resource Management (NRM) Technologies, Agricultural Engineering, Agricultural Education and Agriculture Extension; Publications over the years; Intellectual Property (IP) & Tech Management; Collaboration with other Departments and States; ICAR's Global Reach; G-20 and International Year of Millets; Agri-Food System: Now and 2047 under various parameters; Challenges of Indian Agriculture and Action Plan to address them such as Innovations for Sustainable Agriculture; Genome Editing and Speed Breeding, Precision Farming Technologies, Vaccines & Diagnostics for Animal Disease Control, Integrated Multi-trophic Technology for Marine Farming, Strengthening KVKs to District Level Institution of Scientific Agriculture (DISA); Recent Initiatives in Research Management *etc.*

4. The Committee raised several issues/points which are briefly mentioned below and sought clarification(s)/information thereon from the Department:-

- i. Need to increase the Budget allocation to the Department;
- ii. Reasons for under-utilization of allocated fund under some Schemes;
- iii. Need to develop a mechanism so as to ensure that benefits of Research & Development and other Schemes reach to the ground level on wide scale;
- iv. Need to make Agriculture as an attractive and remunerative profession;
- v. Enhancing of allocation to Agriculture Extension Division for Strengthening of Krishi Vigyan Kendras (KVKs) in terms of number, infrastructure, manpower etc as benefits of the research and innovations in the field of agriculture reach to the farmers by KVKs through demonstration and dissemination of information about new varieties, practices and technologies;
- vi. Need to make training/extension services at KVKs more broad-based and inclusive by covering more number of farmers without frequently repeating the same group of farmers;
- vii. Issue of legal framework of bio-fortification of crops through hybridisation, genetically modified technology and Gene editing;
- viii. Issue of spurious and sub-standard seeds in the market;
- ix. Need to address the drawbacks/shortcomings such as tastelessness, short shelf life, etc of the Hybrid seeds;
- x. Steps taken for promotion of Millets, Natural farming and Climate Resilient Farming in the country;

5. The Representatives of the Ministry/Department assured to send all the requisite information and details to the Committee in writing within 3-4 days. The Chairperson, then thanked the witnesses for sharing valuable information with the Committee.

The Committee then adjourned.

(A copy of the verbatim proceedings of the Sitting has been kept separately.)

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**MINUTES OF THE FOURTEENTH SITTING OF THE COMMITTEE ON AGRICULTURE,
ANIMAL HUSBANDRY AND FOOD PROCESSING (2024-25)**

The Committee sat on Saturday, the 14th December, 2024 from 1005 hours to 1050 hours in Committee Room 'D', Parliament House Annexe, New Delhi.

Present

Shri Charanjit Singh Channi – Chairperson

Members

Lok Sabha

2. Shri Patel Umeshbhai Babubhai
3. Shri Rajkumar Chahar
4. Smt. Anita Nagarsingh Chouhan
5. Shri Kuldeep Indora
6. Shri Rajpalsinh Mahendrasinh Jadav
7. Md. Abu Taher Khan
8. Shri Sukanta Kumar Panigrahi
9. Smt. Krishna Devi Shivshankar Patel
10. Shri Naresh Chandra Uttam Patel
11. Shri Murasoli S.
12. Shri Dharambir Singh
13. Shri Dushyant Singh
14. Shri Sudhakar Singh
15. Shri Kodikunnil Suresh
16. Shri Bhausabeb Rajaram Wakchaure

Rajya Sabha

17. Smt. Ramilaben Becharbhai Bara
18. Shri S. Kalyanasundaram

Secretariat

- | | | | |
|----|--------------------------|---|------------------|
| 1. | Shri Srinivasulu Gunda | – | Joint Secretary |
| 2. | Shri Khakhai Zou | – | Director |
| 3. | Shri Prem Ranjan | – | Deputy Secretary |
| 4. | Shri Anil Kumar Sanwaria | - | Deputy Secretary |

2. At the outset, the Chairperson welcomed the Members to the Sitting of the Committee. Thereafter, the Committee took up for consideration the following Reports:

*(i) XXXX XXXX XXXX XXXX XXXX

(ii) Draft Report on 'Demands for Grants (2024-25)' of the Ministry of Agriculture and Farmers Welfare (Department of Agricultural Research and Education);

*(iii) XXXX XXXX XXXX XXXX XXXX

*(iv) XXXX XXXX XXXX XXXX XXXX

*(v) XXXX XXXX XXXX XXXX XXXX

*(vi) XXXX XXXX XXXX XXXX XXXX

3. After some deliberations, the Committee adopted the Draft Reports without any modifications and the Committee authorized the Chairperson to finalize and present these Reports to Parliament.

4. The Committee also decided to undertake a tour in the second week of January, 2025.

The Committee then adjourned.

*Matter not related to this Report