MINISTRY OF AGRICULTURE AND FARMERS WELFARE

DEMAND NO. 2

Department of Agricultural Research and Education

(In ₹ crores)

Actual 2020-2021 Baudget 2021-2022 Revised 2021-2022 Baudget 2022-2023 Revene Capital Total Revenue Capital Revenue Capital Total Revenue Capital Revenue Revenue <th></th> <th></th> <th></th> <th></th> <th>1</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th colspan="4">(In ₹ crores)</th>					1						(In ₹ crores)			
Gross 7685.51 7685.51 8513.62 8513.62 6513.62 6513.62 6513.62 6513.62 6513.62 6513.62 6513.62 6513.62 6513.62 6513.62		, i i i i i i i i i i i i i i i i i i i	Actual 2020-2021		Budget 2021-2022			Revised 2021-2022			Budget 2022-2023			
Receiver -131.74 -131.74 -131.74 -1		Revenu	e Capital	Tota	Revenue	Capital	Total	Revenue	Capital	Total	Revenue	Capital	Total	
Receipts	Gro	oss 7685.	51	7685.51	8513.62		8513.62	8513.62		8513.62	8513.62		8513.62	
Net 753.77 753.77 953.72 9513.62 8513.62 8513.62 8513.62 8513.62 8513.62 8513.62 8513.62 8513.62 8513.62 8513.62 8513.62 8513.62 8513.62 8513.62 <td>Reco</td> <td>veries -131.</td> <td>74</td> <td>-131.74</td> <td>4</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	Reco	veries -131.	74	-131.74	4									
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CENTRE'S EXPENDITURE Rest and instrume in the instrume instrum	N	et 7553.		7553.77	8513.62		8513.62	8513.62		8513.62	8513.62		8513.62	
Establishment Expenditure of the Centre 12.58 12.58 14.05 14.05 14.09 14.09 39.68 Contral Management of Natural Resources 58.31 58.31 65.00 165.00 165.00 40.87 40.87 Corp Science 592.59 592.59 70.80.00	A. The Budget allocations, net of recoveries, are given below:													
1. Secretariat 12.58 12.58 14.05 14.05 14.09 14.09 39.68 39.68 Central Sector Schemes/Projects 328.00 328.00 228.00 284.00 243.72 243.72 243.72 243.72 243.72 243.72 243.72 243.72 243.72 243.72 243.72 243.72 243.72 243.72 243.72 243.72 243.72 243.72 48.30 49.30 195.00 168.00 168.00 144.90 44.90 40.87 40.87 40.87 40.87 40.87 40.87 40.87 40.87 40.87 40.87 40.87 40.87 <td>CENTRE'S EXPENDITURE</td> <td></td>	CENTRE'S EXPENDITURE													
Central Sector Scheme/Projects 236.72 236.72 328.00 328.00 284.00 284.00 243.72 243.72 3. Agricultural Extension 58.31 58.31 65.00 328.00 55.00 48.30 243.72 243.72 Management of Natural Resources 55.00 55.00 48.30 44.90 Agricultural Engineering 170.43 49.83 55.00 55.00 47.00 47.00 40.87 40.87 Total-Management of Natural Resources 220.26 220.00 55.00 47.00 47.00 40.87 40.87 Total-Management of Natural Resources 220.26 220.20 215.00 47.00 47.00 47.07 40.87 40.87 Total-Management of Natural Resources 592.59 70.80.00	Establishment Expenditure of the Centre													
2. Agricultural Extension 236.72 236.72 328.00 328.00 284.00 48.00 48.00 48.00 48.00 48.00 48.00 48.00 40.87 40.87 40.87 40.87 40.87 40.87 40.87 40.87 40.87 40.87 40.87 40.87 40.87 40.87 40.87 40.87 40.87 40.80 </td <td>1. Secretariat</td> <td>12.</td> <td>58</td> <td>12.58</td> <td>14.05</td> <td></td> <td>14.05</td> <td>14.09</td> <td></td> <td>14.09</td> <td>39.68</td> <td></td> <td>39.68</td>	1. Secretariat	12.	58	12.58	14.05		14.05	14.09		14.09	39.68		39.68	
3. Agricultural Engineering 58.31 58.31 58.31 65.00 65.00 55.00 55.00 56.00 48.30 48.30 Management of Natural Resource Management Institutes including Ago Forestry Research 170.43 170.43 195.00 55.00 47.00 40.87 40.87 5. Climate Resilient Agriculture Initiative 49.83 49.83 55.00 55.00 47.00 40.87 40.87 Total-Management of Natural Resources 202.66 220.26 220.26 250.00 250.00 215.00 40.87 40.87 6. Crop Science 7 Horicultural Science 175.72 175.72 212.00 212.00 48.00 48.00 48.00 157.53 157.53 157.53 157.53 157.53 157.53	Central Sector Schemes/Projects													
Management of Natural Resources 170.43 170.43 195.00 195.00 168.00 168.00 144.90 144.90 Agro Forestry Research 49.83 49.83 55.00 55.00 47.00 47.00 40.87 40.87 Total-Management of Natural Resources 220.26 220.26 250.00 250.00 215.00 47.00 40.87 40.87 Crop Science 5 220.26 220.26 250.00 250.00 215.00 47.00 40.87 40.87 Crop Science 5 592.59 708.00 708.00 615.00 183.00 157.53 157.53 8. National Agricultural Science Fund 37.06 37.06 48.00 48.00 42.00 35.67 356.71 368.00 84.000 183.00	2. Agricultural Extension	236.	72	236.72	328.00		328.00	284.00		284.00	243.72		243.72	
4. Natural Resource Management Institutes including Agro Forestry Research 170.43 195.00 195.00 168.00 168.00 144.90 144.90 Agro Forestry Research 49.83 49.83 55.00 55.00 47.00 47.00 40.87 40.87 Total-Management of Natural Resources 220.26 220.26 250.00 250.00 215.00 40.87 40.87 6. Crop Science 592.59 592.59 708.00 708.00 615.00 615.00 526.08 526.08 7. Horticultural Science 175.72 175.72 212.00 210.00 48.00 42.00 42.00 42.00 42.00 708.00 708.00 48.00 42.00 42.00 42.00 42.00 42.00 42.00 40.01 </td <td>3. Agricultural Engineering</td> <td>58.</td> <td>31</td> <td>58.31</td> <td>65.00</td> <td></td> <td>65.00</td> <td>55.00</td> <td></td> <td>55.00</td> <td>48.30</td> <td></td> <td>48.30</td>	3. Agricultural Engineering	58.	31	58.31	65.00		65.00	55.00		55.00	48.30		48.30	
Agro Forestry Research 49.83 49.83 55.00 55.00 47.00 47.00 40.87 40.87 Total-Management of Natural Resources 220.26 220.26 220.26 250.00 250.00 215.00 47.00 40.87 40.87 Corp Sciences 592.59 592.59 708.00 708.00 615.00 615.00 526.08 526.08 7. Horticultural Science 175.72 175.72 212.00 48.00 48.00 48.00 48.00 48.00 49.03 59.56 59.57 59.56 59.57 59.57 59.57 59.57 59.57 59.57 48.00 48.00 48.00 49.03 56.76 719.28 719.28 719.28 719.28 719.28 71	Management of Natural Resources													
5. Climate Resilient Agriculture Initiative 49.83 49.83 55.00 55.00 47.00 47.00 40.87 40.87 Total-Management of Natural Resources 220.26 220.26 250.00 250.00 215.00 212.00 183.00 183.00 157.53 157.53 8. National Agricultural Science 175.72 175.72 212.00 48.00 42.00 42.00 42.00 42.00 42.00 42.00		170.	43	170.43	195.00		195.00	168.00		168.00	144.90		144.90	
Total-Management of Natural Resources 220.26 220.26 220.26 250.00 250.00 215.00		49.	83	49.83	55.00		55.00	47.00		47.00	40.87		40.87	
6. Crop Science 592.59 592.59 708.00 708.00 615.00 615.00 526.08 526.08	Total-Management of Natural Resources	220.	26	220.26	250.00		250.00	215.00		215.00	185.77		185.77	
7. Horticultural Science 175.72 175.72 212.00 212.00 183.00 183.00 157.53 157.53 8. National Agricultural Science Fund 37.06 37.06 48.00 48.00 42.00 40.00 40.00 40.00 40.00 40.00 40.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 400.00 440.00 400.00 <t< td=""><td>Crop Sciences</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	Crop Sciences													
8. National Agricultural Science Fund 37.06 37.06 48.00 48.00 42.00 40.00 719.28 719.28 719.28 118.89 118.89 118.89 118.89 118.89 118.89 118.89 118.30 343.30 <td>6. Crop Science</td> <td>592.</td> <td>59</td> <td>592.59</td> <td>708.00</td> <td></td> <td>708.00</td> <td>615.00</td> <td></td> <td>615.00</td> <td>526.08</td> <td></td> <td>526.08</td>	6. Crop Science	592.	59	592.59	708.00		708.00	615.00		615.00	526.08		526.08	
Total-Crop Sciences 805.37 805.37 968.00 968.00 840.00 840.00 719.28 719.28 9. Animal Science 256.38 256.38 302.00 302.00 262.00 262.00 224.41 224.41 10. Fisheries Science 143.81 143.81 160.00 160.00 138.00 138.00 118.89 318.89 Total-Animal Sciences 400.19 400.19 462.00 462.00 400.00 330.00 304.30 343.30 11. Agricultural Universities and Institutions 316.68 316.68 355.00 355.00 300.00 300.00 263.77 245.41 12. Foreserie Stricties and Measurement	7. Horticultural Science	175.	72	175.72	212.00		212.00	183.00		183.00	157.53		157.53	
Animal Sciences 256.38 256.38 302.00 302.00 262.00 262.00 224.41 224.41 10. Fisheries Science 143.81 143.81 160.00 160.00 138.00 138.00 118.89 118.89 Total-Animal Sciences 400.19 400.19 462.00 462.00 300.00 303.00 303.00 303.00 303.00 303.00 303.00 303.00 303.00 303.00 303.00 303.00 303.00 303.00 303.00 303.00 303.00 303.00 243.77 11. Agricultural Universities and Institutions 316.68 303.00 300.00 300.00 300.00 24.51	8. National Agricultural Science Fund	37.	06	37.06	48.00		48.00	42.00		42.00	35.67		35.67	
9. Animal Science 256.38 256.38 302.00 302.00 262.00 262.00 262.00 262.00 262.00 262.00 262.00 262.00 262.00 138.00 138.00 138.00 138.00 138.00 138.00 138.00 138.00 138.00 138.00 343.30 345.77 263.77 263.77	Total-Crop Sciences	805.	37	805.37	968.00		968.00	840.00		840.00	719.28		719.28	
10. Fisheries Science 143.81 143.81 160.00 160.00 138.00 138.00 118.89 118.89 118.89 118.89 118.89 118.89 118.89 118.89 118.89 118.89 118.89 118.89 343.30 <	Animal Sciences													
Total-Animal Sciences 400.19 400.19 462.00 460.00 400.00 400.00 343.30 343.30 Agricultural Education 11. Agricultural Universities and Institutions 316.68 316.68 355.00 355.00 300.00 300.00 263.77 263.77	9. Animal Science	256.	38	256.38	302.00		302.00	262.00		262.00	224.41		224.41	
Agricultural Education 316.68 316.68 355.00 355.00 300.00 263.77 263.77 263.77 2451	10. Fisheries Science	143.	81	143.81	160.00		160.00	138.00		138.00	118.89		118.89	
11. Agricultural Universities and Institutions 316.68 316.68 355.00 355.00 300.00 300.00 263.77 263.77 12. For partial Statistics and Management 30.40 30.40 32.00 300.00 300.00 263.77 263.77	Total-Animal Sciences	400.	19	400.19	462.00		462.00	400.00		400.00	343.30		343.30	
	Agricultural Education													
12. Economic Statistics and Management 29.46 29.46 33.00 33.00 28.00 28.00 24.51 24.51	11. Agricultural Universities and Institutions	316.	68	316.68	355.00		355.00	300.00		300.00	263.77		263.77	
	12. Economic Statistics and Management	29.	46	29.46	33.00		33.00	28.00		28.00	24.51		24.51	

(In ₹	crores)
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	Actu	ual 2020-2021		Budget 202)22	Revised 2021-2022			Budg	et 2022-20	23
	Revenue	Capital	Total	Revenue	Capital	Total	Revenue	Capital	Total	Revenue	Capital	Total
13. National Agricultural Higher Education Project (EAP)	180.00		180.00	225.00		225.00	225.00		225.00	167.18		167.18
Total-Agricultural Education	526.14		526.14	613.00		613.00	553.00		553.00	455.46		455.46
Total-Central Sector Schemes/Projects	2246.99		2246.99	2686.00		2686.00	2347.00		2347.00	1995.83		1995.83
Other Central Sector Expenditure												
14. ICAR Headquarters	4984.93		4984.93	5322.02		5322.02	5561.48		5561.48	5877.06		5877.06
15. Central Agricultural Universities	427.96		427.96	470.95		470.95	562.95		562.95			599.45
16. National Academy of Agricultural Sciences	1.60		1.60	1.60		1.60	1.60		1.60			1.60
17. Agricultural Scientists Recruitment Board	11.45		11.45	19.00		19.00	26.50		26.50			
Total-Autonomous Bodies	5425.94		5425.94	5813.57		5813.57	6152.53		6152.53			6478.11
Others												
18. Actual Recoveries	-131.74		-131.74									
Total-Other Central Sector Expenditure	5294.20		5294.20	5813.57		5813.57	6152.53		6152.53	6478.11		6478.11
Grand Total	7553.77		7553.77	8513.62		8513.62	8513.62		8513.62	8513.62		8513.62
B. Developmental Heads												
Economic Services												
1. Agricultural Research and Education	7547.81		7547.81	7857.70		7857.70	7881.35		7881.35	8013.39		8013.39
2. Secretariat-Economic Services	5.96		5.96	7.32		7.32	7.07		7.07	32.65		32.65
Total-Economic Services Others	7553.77		7553.77	7865.02		7865.02	7888.42		7888.42	8046.04		8046.04
3. North Eastern Areas				648.60		648.60	625.20		625.20	467.58		467.58
Total-Others Grand Total	 7553.77		 7553.77	648.60 8513.62		648.60 8513.62	625.20 8513.62		625.20 8513.62			467.58 8513.62
	Budget Support	IEBR	Total	Budget Support	IEBR	Total	Budget Support	IEBR	Total	Budget Support	IEBR	Total
C. Investment in Public Enterprises												
1. Agrinnovate India Limited		5.11	5.11					3.49	3.49		5.00	5.00
Total		5.11	5.11					3.49	3.49		5.00	5.00

1. **Secretariat:** The provision is for the expenditure on salary and establishment expenditure of Department and Agricultural Scientists Recruitment Board(ASRB). ASRB is an attached office of DARE.

2. **Agricultural Extension:** The provision is for the activities to reach out to the farmers at grass root level through Krishi Vigyan Kendras to disseminate and refine frontline agricultural technologies. It includes training of farmers and extension personnel on local technologies, distribution of seed, planting materials, testing of soil and water samples.

3. **Agricultural Engineering:** The provision is for research, development and refinement of farm equipment, process and value addition protocols.

4. **Natural Resource Management Institutes including Agro Forestry Research:** The provision is for research to address low farm productivity and profitability, land degradation, low water productivity, soil health deterioration and low nutrient use efficiency, deterioration in ecosystem services, abiotic stresses, etc. It is necessary to encounter deteriorating natural resource base for long term sustainability.

5. **Climate Resilient Agriculture Initiative:** The provision is to conduct strategic research and technology demonstration to enhance resilience of Indian agriculture to climate change and climate vulnerability. The research on adaptation and mitigation covers crops, livestock, fisheries and natural resource management.

6. **Crop Science:** Research provision is to develop trait- specific high yielding field crop varieties/hybrids having tolerance to pest and diseases, besides various abiotic stresses. The quality attributes are also given due importance with no yield penalty. The All India Coordinated Research Project (AICRPs)/Network Research Projects with active collaboration with State Agricultural Universities (SAUs) are engaged in the development of improved crop varieties/ hybrids, cost-effective production and environment-friendly protection technologies in different agro-climatic regions.

7. **Horticultural Science:** The provision is to address thrust areas of enrichment of horticultural genetic resources, development of new cultivation with resistance mechanism to biotic and abiotic stresses, appropriate production technology and health management system of horticultural and vegetable crops.

8. **National Agricultural Science Fund:** Supports basic and strategic research in agriculture to address the prioritized research problems.

9. **Animal Science:** The provision is to develop new technologies to support production enhancement, profitability, competitiveness and sustainability of livestock and poultry sector for food and nutritional security. It will facilitate need based priority research in livestock and poultry sector in on-going and new emerging areas to support productivity increase, thereby reducing the gap between potential and actual yield.

10. **Fisheries Science:** The provision is to implement research and academic programmes in fisheries and aquaculture. It also provides technical, training, analytical, advisory support and consultancy services in the field of resources assessment and management, standardization of aquaculture hatchery and grow-out culture technologies, responsible fishing system and species diversification and utilization of inland saline soils for aquaculture, fish health monitoring, etc. 11. **Agricultural Universities and Institutions:** The provision will provide financial support to all the agricultural universities in the country comprising State Agricultural Universities (SAUs), Deemed Universities (DUs), and Central Universities (CUs) with Agriculture Faculty. The scheme is also responsible for maintainance and improvement of standard of agricultural education through:(i) accreditation of educational institutions, (ii) providing International/national fellowships both at post and undergraduate levels, (iii) organization of training and capacity building programmes for the scientists/faculty of National Agricultural Research System in cutting-edge areas.

12. **Economic Statistics and Management:** The provision is for conducting research in the areas of agricultural economics and agricultural statistics to address the policy, management and database issues and accordingly provide need-based support to other schemes and agricultural stakeholders.

13. **National Agricultural Higher Education Project (EAP):** It is an externally aided project funded by World Bank and the Government. The provision is for the externally aided component of the National Agricultural Higher Education Project (NAHEP) which aims to develop resources and mechanism for supporting infrastructure, faculty and student advancement, providing means for better governance and management of agricultural universities, so that a holistic model can be developed to raise the standard of current agricultural education system that provides more jobs and is entrepreneurship oriented on par with global agricultural standards.

14. **ICAR Headquarters:** Provision is primarily for the salaries, pensions, expenses on administrative and logistic support to different schemes under ICAR in order to implement them efficiently.

15. **Central Agricultural Universities:** The provision is to strengthen the regional education, research and extension capabilities based on local agro-climatic situation.

16. **National Academy of Agricultural Sciences:** The provision is to provide a forum to Agricultural Scientists to deliberate on important issues of agricultural research, education, extension and present views of the scientific community as policy inputs to planners, decision/opinion makers at various levels.

17. **Agricultural Scientists Recruitment Board:** The provisions are for the creation of an separate autonomous body which would be responsible for the recruitment to posts in the Agricultural Research Service (ARS) of the ICAR and other group A posts in ICAR.