MINISTRY OF AGRICULTURE AND FARMERS' WELFARE

DEMAND NO. 2

Department of Agricultural Research and Education

(In ₹ crores)

			Actual 2017 2019			Budget 2019 2010			Devised 2019 2010			(/// C/0/es)			
			Actual 2017-2018		Budget 2018-2019		Revised 2018-2019			Budget 2019-2020					
-		Cross	Revenue	Capital		Revenue	Capital		Revenue	Capital		Revenue	Capital	Total	
		Gross	6989.92		6989.92	7800.00		7800.00	7952.73		7952.73	8078.76		8078.76	
		Recoveries	-47.00		-47.00										
		Receipts													
		Net	6942.92		6942.92	7800.00		7800.00	7952.73	•••	7952.73	8078.76	•••	8078.76	
A. The Budget allocations, net	of recoveries, are given below:														
CENTRE'S EXPENDITURE															
Establishment Expendit	ture of the Centre														
1. Secretariat			13.03		13.03	14.30		14.30	14.42		14.42	14.80		14.80	
Central Sector Schemes	s/Projects														
2. Agricultural Extens	sion		232.51		232.51	241.81		241.81	205.53		205.53	221.15		221.15	
3. Agricultural Engine	eering		42.68		42.68	100.00		100.00	59.50		59.50	64.02		64.02	
Management of Natural	Resources														
4. Natural Resource	Management Institutes including		167.68		167.68	174.39		174.39	148.24		148.24	159.48		159.48	
Agro Forestry Res 5. Climate Resilient A			50.00		50.00	52.00		52.00	44.21		44.21	47.56		47.56	
Total-Management of Na	atural Resources		217.68		217.68	226.39		226.39	192.45		192.45	207.04		207.04	
Crop Sciences															
6. Crop Science			399.66		399.66	800.00		800.00	651.99		651.99	701.53		701.53	
7. Horticultural Scien	nce		154.90		154.90	200.00		200.00	165.75		165.75	178.34		178.34	
8. National Agricultur	ral Science Fund		36.55		36.55	50.75		50.75	50.75		50.75	54.60		54.60	
Total-Crop Sciences			591.11		591.11	1050.75		1050.75	868.49		868.49	934.47		934.47	
Animal Sciences															
9. Animal Science			271.97		271.97	400.00		400.00	288.98		288.98	310.98		310.98	
10. Fisheries Science			115.85		115.85	170.69		170.69	132.34		132.34	142.39		142.39	
Total-Animal Sciences			387.82		387.82	570.69		570.69	421.32		421.32	453.37		453.37	
Agricultural Education															
11. Agricultural Univer	rsities and Institutions		658.37		658.37	684.70		684.70	525.59		525.59	565.51		565.51	
12. Economic Statistic	cs and Management		31.29		31.29	32.54		32.54	27.66		27.66	29.76		29.76	

(In ₹ crores)

	Actual 2017-2018			Budget 2018-2019			Revised 2018-2019			Budget 2019-2020		
	Revenue	Capital		Revenue	Capital		Revenue	Capital		Revenue	Capital	Total
13. National Agricultural Higher Education Project	5.00		5.00	7.89		7.89	155.27		155.27			
14. National Agricultural Higher Education Project (EAP)							52.62		52.62	223.68		223.68
Total-Agricultural Education	694.66		694.66	725.13		725.13	761.14		761.14	818.95		818.95
Total-Central Sector Schemes/Projects	2166.46		2166.46	2914.77		2914.77	2508.43		2508.43	2699.00		2699.00
Other Central Sector Expenditure												
Autonomous Bodies												
15. ICAR Headquarters	4574.09		4574.09	4599.37		4599.37	5056.08		5056.08	4868.80		4868.80
16. Central Agricultural Universities	234.93		234.93	270.00		270.00	363.92		363.92	455.00		455.00
17. National Academy of Agricultural Sciences	1.41		1.41	1.56		1.56	1.96		1.96	1.56		1.56
18. Agricultural Scientists Recruitment Board					•••		7.92	•••	7.92	39.60		39.60
Total-Autonomous Bodies	4810.43		4810.43	4870.93	***	4870.93	5429.88	•••	5429.88	5364.96		5364.96
Others												
19. Actual Recoveries	-47.00		-47.00									
Total-Other Central Sector Expenditure	4763.43		4763.43	4870.93	•••	4870.93	5429.88		5429.88	5364.96		5364.96
Grand Total	6942.92	···	6942.92	7800.00	***	7800.00	7952.73	•••	7952.73	8078.76	•••	8078.76
B. Developmental Heads												
Economic Services												
Agricultural Research and Education	6936.21		6936.21	7368.46		7368.46	7485.17		7485.17	7584.37		7584.37
2. Secretariat-Economic Services	6.71		6.71	8.06		8.06	7.60		7.60	7.95		7.95
Total-Economic Services Others	6942.92	•••	6942.92	7376.52		7376.52	7492.77		7492.77	7592.32	•••	7592.32
3. North Eastern Areas				423.48		423.48	459.96		459.96	486.44		486.44
Total-Others Grand Total	6942.92		 6942.92	423.48 7800.00		423.48 7800.00	459.96 7952.73		459.96 7952.73	486.44 8078.76		486.44 8078.76

- 1. **Secretariat:** The provision is for the expenditure on salary of DARE staff.
- 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 and planting materials and 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.
- 14. **National Agricultural Higher Education Project (EAP):** 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, and 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 and on par with global agricultural standards.
- 15. **ICAR Headquarters:** Provision is primarily for the salaries, pensions and expenses on administrative and logistic support to different schemes under ICAR in order to implement them efficiently. The provision in RE 2018-19 goes up dramatically because of revision of pay scales and pension to Scientific personnel of ICAR due to implementation of 7th CPC.

- 16. **Central Agricultural Universities:** The provision is to strengthen the regional education, research and extension capabilities based on local agro-climatic situation.
- 17. **National Academy of Agricultural Sciences:** The provision is to provide a forum to Agricultural Scientists to deliberate on important issues of agricultural research, education and extension and present views of the scientific community as policy inputs to planners, decision/opinion makers at various levels
- 18. **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.