

MINISTRY OF AGRICULTURE AND FARMERS' WELFARE**DEMAND NO. 2****Department of Agricultural Research and Education***(In ₹ crores)*

| | Actual 2018-2019 | | | Budget 2019-2020 | | | Revised 2019-2020 | | | Budget 2020-2021 | | |
|--|------------------|---------|----------------|------------------|---------|----------------|-------------------|---------|----------------|------------------|---------|----------------|
| | Revenue | Capital | Total | Revenue | Capital | Total | Revenue | Capital | Total | Revenue | Capital | Total |
| Gross | 7943.58 | ... | 7943.58 | 8078.76 | ... | 8078.76 | 7846.17 | ... | 7846.17 | 8362.58 | ... | 8362.58 |
| Recoveries | -399.33 | ... | -399.33 | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Receipts | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Net | 7544.25 | ... | 7544.25 | 8078.76 | ... | 8078.76 | 7846.17 | ... | 7846.17 | 8362.58 | ... | 8362.58 |
| A. The Budget allocations, net of recoveries, are given below: | | | | | | | | | | | | |
| CENTRE'S EXPENDITURE | | | | | | | | | | | | |
| Establishment Expenditure of the Centre | | | | | | | | | | | | |
| 1. Secretariat | 12.89 | ... | 12.89 | 14.80 | ... | 14.80 | 13.18 | ... | 13.18 | 13.85 | ... | 13.85 |
| Central Sector Schemes/Projects | | | | | | | | | | | | |
| 2. Agricultural Extension | 205.53 | ... | 205.53 | 221.15 | ... | 221.15 | 221.15 | ... | 221.15 | 242.50 | ... | 242.50 |
| 3. Agricultural Engineering | 59.50 | ... | 59.50 | 64.02 | ... | 64.02 | 64.02 | ... | 64.02 | 70.00 | ... | 70.00 |
| Management of Natural Resources | | | | | | | | | | | | |
| 4. Natural Resource Management Institutes including Agro Forestry Research | 148.51 | ... | 148.51 | 159.48 | ... | 159.48 | 158.83 | ... | 158.83 | 174.00 | ... | 174.00 |
| 5. Climate Resilient Agriculture Initiative | 44.21 | ... | 44.21 | 47.56 | ... | 47.56 | 46.00 | ... | 46.00 | 52.00 | ... | 52.00 |
| Total-Management of Natural Resources | 192.72 | ... | 192.72 | 207.04 | ... | 207.04 | 204.83 | ... | 204.83 | 226.00 | ... | 226.00 |
| Crop Sciences | | | | | | | | | | | | |
| 6. Crop Science | 651.99 | ... | 651.99 | 701.53 | ... | 701.53 | 635.00 | ... | 635.00 | 715.50 | ... | 715.50 |
| 7. Horticultural Science | 165.75 | ... | 165.75 | 178.34 | ... | 178.34 | 173.61 | ... | 173.61 | 194.00 | ... | 194.00 |
| 8. National Agricultural Science Fund | 50.75 | ... | 50.75 | 54.60 | ... | 54.60 | 50.00 | ... | 50.00 | 55.00 | ... | 55.00 |
| Total-Crop Sciences | 868.49 | ... | 868.49 | 934.47 | ... | 934.47 | 858.61 | ... | 858.61 | 964.50 | ... | 964.50 |
| Animal Sciences | | | | | | | | | | | | |
| 9. Animal Science | 288.98 | ... | 288.98 | 310.98 | ... | 310.98 | 310.00 | ... | 310.00 | 330.00 | ... | 330.00 |
| 10. Fisheries Science | 132.34 | ... | 132.34 | 142.39 | ... | 142.39 | 142.39 | ... | 142.39 | 156.00 | ... | 156.00 |
| Total-Animal Sciences | 421.32 | ... | 421.32 | 453.37 | ... | 453.37 | 452.39 | ... | 452.39 | 486.00 | ... | 486.00 |
| Agricultural Education | | | | | | | | | | | | |
| 11. Agricultural Universities and Institutions | 525.59 | ... | 525.59 | 565.51 | ... | 565.51 | 450.00 | ... | 450.00 | 480.00 | ... | 480.00 |
| 12. Economic Statistics and Management | 27.66 | ... | 27.66 | 29.76 | ... | 29.76 | 29.76 | ... | 29.76 | 30.00 | ... | 30.00 |

(In ₹ crores)

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|--|------------------|---------|----------------|------------------|---------|----------------|-------------------|---------|----------------|------------------|---------|----------------|
| | Revenue | Capital | Total | Revenue | Capital | Total | Revenue | Capital | Total | Revenue | Capital | Total |
| 13. National Agricultural Higher Education Project | 155.28 | ... | 155.28 | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 14. National Agricultural Higher Education Project (EAP) | 52.63 | ... | 52.63 | 223.68 | ... | 223.68 | 207.85 | ... | 207.85 | 230.00 | ... | 230.00 |
| Total-Agricultural Education | 761.16 | ... | 761.16 | 818.95 | ... | 818.95 | 687.61 | ... | 687.61 | 740.00 | ... | 740.00 |
| Total-Central Sector Schemes/Projects | 2508.72 | ... | 2508.72 | 2699.00 | ... | 2699.00 | 2488.61 | ... | 2488.61 | 2729.00 | ... | 2729.00 |
| Other Central Sector Expenditure | | | | | | | | | | | | |
| Autonomous Bodies | | | | | | | | | | | | |
| 15. ICAR Headquarters | 5056.09 | ... | 5056.09 | 4868.80 | ... | 4868.80 | 4868.80 | ... | 4868.80 | 5137.75 | ... | 5137.75 |
| 16. Central Agricultural Universities | 363.92 | ... | 363.92 | 455.00 | ... | 455.00 | 459.18 | ... | 459.18 | 459.80 | ... | 459.80 |
| 17. National Academy of Agricultural Sciences | 1.96 | ... | 1.96 | 1.56 | ... | 1.56 | 1.56 | ... | 1.56 | 1.60 | ... | 1.60 |
| 18. Agricultural Scientists Recruitment Board | ... | ... | ... | 39.60 | ... | 39.60 | 14.84 | ... | 14.84 | 20.58 | ... | 20.58 |
| Total-Autonomous Bodies | 5421.97 | ... | 5421.97 | 5364.96 | ... | 5364.96 | 5344.38 | ... | 5344.38 | 5619.73 | ... | 5619.73 |
| Others | | | | | | | | | | | | |
| 19. Actual Recoveries | -399.33 | ... | -399.33 | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Total-Other Central Sector Expenditure | 5022.64 | ... | 5022.64 | 5364.96 | ... | 5364.96 | 5344.38 | ... | 5344.38 | 5619.73 | ... | 5619.73 |
| Grand Total | 7544.25 | ... | 7544.25 | 8078.76 | ... | 8078.76 | 7846.17 | ... | 7846.17 | 8362.58 | ... | 8362.58 |
| B. Developmental Heads | | | | | | | | | | | | |
| Economic Services | | | | | | | | | | | | |
| 1. Agricultural Research and Education | 7537.61 | ... | 7537.61 | 7584.37 | ... | 7584.37 | 7376.74 | ... | 7376.74 | 7820.10 | ... | 7820.10 |
| 2. Secretariat-Economic Services | 6.64 | ... | 6.64 | 7.95 | ... | 7.95 | 6.78 | ... | 6.78 | 7.55 | ... | 7.55 |
| Total-Economic Services | 7544.25 | ... | 7544.25 | 7592.32 | ... | 7592.32 | 7383.52 | ... | 7383.52 | 7827.65 | ... | 7827.65 |
| Others | | | | | | | | | | | | |
| 3. North Eastern Areas | ... | ... | ... | 486.44 | ... | 486.44 | 462.65 | ... | 462.65 | 534.93 | ... | 534.93 |
| Total-Others | ... | ... | ... | 486.44 | ... | 486.44 | 462.65 | ... | 462.65 | 534.93 | ... | 534.93 |
| Grand Total | 7544.25 | ... | 7544.25 | 8078.76 | ... | 8078.76 | 7846.17 | ... | 7846.17 | 8362.58 | ... | 8362.58 |

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.

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.