**Department of Agriculture Research and Education**

1. **Crop Science (CS)**

| FINANCIAL OUTLAY (Rs in Cr) | OUTPUTS 2022-23 | | | OUTCOMES 2022-23 | | |
|---|---|---|---|---|---|---|
| **2022-23** | **Output** | **Indicators** | **Targets 2022-23** | **Outcome** | **Indicators** | **Targets 2022-23** |
| 526.08 | 1. Entries tested in AICRP multilocation trials | 1.1 Total number of new entries tested in AICRP multi-location trials | 4,200 | 1. Expected improvement in potential productivity of crops | 1.1 Percent increase in yield potential | 2.6 |
| | 2. Varieties identified by AICRP multi-location trials | 2.1 Total number of varieties identified by AICRP Varietal Identification Committees for release | 120 | 2. Enhanced adoption of farming techniques under crop science schemes | 2.1 Percent farmers adopting to new technologies demonstrated to them | 25 |
| | 3. Breeder seed produced | 3.1. Total quantity of breeder seed produced (quintals) | 1,00,000 | | | |
| | 4. Trainings organized | 4.1. Total number of trainings organized for farmers, scientists, technical, supporting staff, extension agencies | 350 | | | |
| | 5. Human resource development | 5.1. Total number of Master's and Doctoral Degrees awarded | 240 | | | |
| | 6. No. of publications | 6.1. Total number of publications | 400 | | | |

**Department of Agriculture Research and Education**

**1. Agricultural Extension (CS)**

| FINANCIAL OUTLAY (Rs in Cr) | OUTPUTS 2022-23 | | | | OUTCOMES 2022-23 | | |
|---|---|---|---|---|---|---|---|
| **2022-23** | | **Output** | **Indicators** | **Targets 2022-23** | **Outcome** | **Indicators** | **Targets 2022-23** |
| 243.72 | 1. | Training of farmers and extension personnel for creating awareness on upcoming technologies | 1.1. Number of farmers, farm women and extension personnel trained by KVKs (In lakh) | 16.20 | 1. Greater adoption of agro-ecosystem specific relevant technologies for farmer-centric growth | 1.1. Adoption rate of new technologies (%) | 10% |
| | 2. | On-farm testing and Frontline demonstration to identify the location specificity and to establish the production potential of improved agricultural technologies | 2.1. No. of on-farm trials and frontline demonstrations conducted by KVKs | 32,000 | | | |
| | | | 2.2. No. of frontline demonstrations conducted by KVKs | 1,70,000 | | | |
| | 3. | Enhanced production of seeds | 3.1. Quantity of seeds produced (Tons) | 16,000 | | | |
| | 4. | Enhanced | 4.1. 1.No. of planting | 250 | | | |

| FINANCIAL OUTLAY (Rs in Cr) | OUTPUTS 2022-23 | | | OUTCOMES 2022-23 | | |
|---|---|---|---|---|---|---|
| **2022-23** | **Output** | **Indicators** | **Targets 2022-23** | **Outcome** | **Indicators** | **Targets 2022-23** |
| | production of planting materials | materials produced (In lakh) | | | | |

## 2. Agricultural Engineering (CS)

| FINANCIAL OUTLAY (Rs in Cr) | OUTPUTS 2022-23 | | | OUTCOMES 2022-23 | | |
|---|---|---|---|---|---|---|
| **2022-23** | **Output** | **Indicators** | **Targets 2022-23** | **Outcome** | **Indicators** | **Targets 2022-23** |
| 48.30 | 1. Development/ refinement of technologies/ machines for farm mechanization; process protocols/ products for processing and value addition of agro-produce | 1.1. No. of new technology/ Machines/process protocols/ value added products developed | 25 | 1. Enhanced level of farm mechanization and agro - produce processing | 1.1. Expected increase in input use efficiency and agro-processing (%) | 1.5% |
| | 2. Front line demonstration of the newly | 2.1 No. of front-line demonstrations of newly developed prototypes | 27 | | | |

| FINANCIAL OUTLAY (Rs in Cr) | OUTPUTS 2022-23 | | | OUTCOMES 2022-23 | | |
|---|---|---|---|---|---|---|
| **2022-23** | **Output** | **Indicators** | **Targets 2022-23** | **Outcome** | **Indicators** | **Targets 2022-23** |
| | developed/ improved prototypes. | | | | | |
| | 3. Training of the farmers and entrepreneurs for for custom hiring, testing of farm & processing machines and samples | 3.1. Farmers/ entrepreneurs trained | 400 | | | |
| | | 3.2. Machines/ samples tested (nos.) | 25 | | | |

**3. Natural Resource Management +NICRA (CS)**

| FINANCIAL OUTLAY (Rs in Cr) | OUTPUTS 2022-23 | | | OUTCOMES 2022-23 | | |
|---|---|---|---|---|---|---|
| **2022-23** | **Output** | **Indicators** | **Targets 2022-23** | **Outcome** | **Indicators** | **Targets 2022-23** |
| 185.77 | 1. Soil inventory and characterization | 1.1. Total Number of Block level land resource inventory developed | 9 | 1. Productivity gains due to efficient and cost-effective management of natural resources | 1.1. Percentage increase in crop productivity over previous year | 2.5 |

| FINANCIAL OUTLAY (Rs in Cr) | OUTPUTS 2022-23 | | | | OUTCOMES 2022-23 | | |
|---|---|---|---|---|---|---|---|
| **2022-23** | **Output** | | **Indicators** | **Targets 2022-23** | **Outcome** | **Indicators** | **Targets 2022-23** |
| | 2. | Testing of soil and water conservation measures for supplementary irrigation | 2.1. Total number of soil & water conservation technologies developed | 6 | | 1.2. Percentage increase in cropping intensity over the previous year | 2.5 |
| | 3. | Development of system based farm production technologies | 3.1. Total number of system-based farm production technologies developed | 14 | | | |
| | 4. | Development of organic farming packages | 4.1. Total number of organic farming packages of practices developed | 5 | | | |
| | 5. | Development and demonstrations of climate resilient technologies | 5.1. Total number of climate resilient technologies developed and demonstrated | 6 | | | |
| | 6. | Development of technologies for managing soil health | 6.1. Number of technologies developed on managing soil health | 6 | | | |
| | 7. | Design and development of technologies for irrigation | 7.1. Number of technologies developed for irrigation water | 5 | | | |

| FINANCIAL OUTLAY (Rs in Cr) | OUTPUTS 2022-23 | | | OUTCOMES 2022-23 | | |
|---|---|---|---|---|---|---|
| **2022-23** | **Output** | **Indicators** | **Targets 2022-23** | **Outcome** | **Indicators** | **Targets 2022-23** |
| | water management | management | | | | |

### 4. Horticulture Science (CS)

| FINANCIAL OUTLAY (Rs in Cr) | OUTPUTS 2022-23 | | | OUTCOMES 2022-23 | | |
|---|---|---|---|---|---|---|
| **2022-23** | **Output** | **Indicators** | **Targets 2022-23** | **Outcome** | **Indicators** | **Target** |
| 157.53 | 1. Collection of germplasm | 1. Germplasm accessions for breeding of new varieties (No.) | 800 | 1. Increase in potential production and productivity of fruits and vegetables | 1.1. Increase in potential productivity of component horticultural crops (%) | 1 |
| | 2. Identification & Release of varieties/hybrids | 2. Improved varieties identified/released for higher productivity/ resource use efficiency (No.) | 40 | | 1.2. Enhanced potential gross production of horticultural crops (%) | 1 |
| | 3. Standardization of technologies (production /protection/ post-harvest handling/ processing/ value addition/process/ | 3. Technologies standardized for higher productivity (No.) | 120 | 2. Introduction of new varieties of horticultural crops | 2.1 Increase in potential area covered under new varieties of horticultural crops (%) | 1 |

| FINANCIAL OUTLAY (Rs in Cr) | OUTPUTS 2022-23 | | | OUTCOMES 2022-23 | | |
|---|---|---|---|---|---|---|
| 2022-23 | Output | Indicators | Targets 2022-23 | Outcome | Indicators | Target |
| | kit) for enhanced productivity | | | | | |
| | 4. Training and capacity building of stakeholders | 4.1. Trainings and capacity building programs conducted for farmers/ stakeholders (No.) | 225 | 3. Reduced potential crop losses due to improved varieties breeder seeds | 3.1. Reduction in potential crop losses due to development of trait specific improved varieties and management techniques of horticultural crop | 2 |
| | 5. Field demonstration of technologies | 5.1. Field demonstrations conducted for Dissemination of technologies to stakeholders (No.) | 300 | | | |
| | 6. Production of improved seed/spawn and plants | 6.1. Improved seed, spawn, plants made available for enhanced productivity Breeder /truthfully labeled seeds of vegetables, spices etc (quintal) | 100 | | | |
| | | 6.2. Breeder seed of tuber crops (potato, tropical tuber crops, perennial spices) etc. (metric tons) | 2,450 | | | |
| | | 6.3. Rooted cuttings (lakhs) | 12 | | | |
| | | 6.4. Plants of perennial | 15 | | | |

| FINANCIAL OUTLAY (Rs in Cr) | OUTPUTS 2022-23 | | | OUTCOMES 2022-23 | | |
|---|---|---|---|---|---|---|
| 2022-23 | Output | Indicators | Targets 2022-23 | Outcome | Indicators | Target |
| | | Horticultural Crops (lakh) | | | | |
| | | 6.5. Mushroom spawn (q) | 600 | | | |

**5. National Agricultural Science Fund (CS)**

| FINANCIAL OUTLAY (Rs in Cr) | OUTPUTS 2022-23 | | | OUTCOMES 2022-23 | | |
|---|---|---|---|---|---|---|
| 2022-23 | Output | Indicators | Targets 2022-23 | Outcome | Indicators | Targets 2022-23 |
| 35.67 | 1. Publications | 1.1. No of publications | 60 | 1. Better research facilities to increase high rated publications, patents and technologies | 1.1. % of high impact publication from the total no. of publication | 50% |
| | 2. Patents/copyrights | 2.1. No. of patents/ copyrights filed/granted | 3 | | | |
| | 3. Technologies developed | 3.1. No of technologies developed | 10 | | | |

**6. Animal Science (CS)**

| FINANCIAL OUTLAY (Rs in Cr) | OUTPUTS 2022-23 | | | OUTCOMES 2022-23 | | |
|---|---|---|---|---|---|---|
| 2022-23 | Output | Indicators | Targets 2022-23 | Outcome | Indicators | Targets 2022-23 |
| 224.41 | 1. Evaluation, and | 1.1 Number of genetic | 11 | 1. Overall increase | 1.1. Percent | 1 |

| FINANCIAL OUTLAY (Rs in Cr) | OUTPUTS 2022-23 | | | OUTCOMES 2022-23 | | |
|---|---|---|---|---|---|---|
| **2022-23** | **Output** | **Indicators** | **Targets 2022-23** | **Outcome** | **Indicators** | **Targets 2022-23** |
| | characterizatio n of genetic resources | resources characterized | | in productivity of livestock and poultry sectors in the project areas | increase in milk productivity of cattle and buffaloes | |
| | 2. Production of quality germplasms (semen doses, piglets and poultry) | 2.1. Number of germplasms produced | 1500000 | | 1.2. Percent increase in egg production of layers and body weight in broiler poultry as well as sheep and goat (small ruminants). | 2.5 |
| | 3. Development of genetic markers and diagnostic kits for diseases, adulterants / environmental pollutants, and new value added products / processes (milk, meat, egg, fibre) | 3.1. Number of genetic markers, diagnostic kits and new value-added products / processes developed | 39 | | | |
| | 4. Sero-surveillance, sero monitoring and testing of | 4.1. Number of samples tested | 350000 | | | |

| FINANCIAL OUTLAY (Rs in Cr) | OUTPUTS 2022-23 | | | OUTCOMES 2022-23 | | |
|---|---|---|---|---|---|---|
| 2022-23 | Output | Indicators | Targets 2022-23 | Outcome | Indicators | Targets 2022-23 |
| | samples for important diseases of livestock and poultry | | | | | |
| | 5. Stakeholders trained | 5.1. Number of stakeholders trained | 15000 | | | |

**7. Fisheries Science (CS)**

| FINANCIAL OUTLAY (Rs in Cr) | OUTPUTS 2022-23 | | | OUTCOMES 2022-23 | | |
|---|---|---|---|---|---|---|
| 2022-23 | Output | Indicators | Targets 2022-23 | Outcome | Indicators | Targets 2022-23 |
| 118.89 | 1. Development of fish breeding technologies | 1.1. No. of breeding technologies developed | 5 | 1. Enhanced fish production | 1.1. Percentage (%) increase in fish production | 6 |
| | 2. Development of fisheries & aquaculture products | 2.1. Nos. of process/ products/technolo gies developed | 25 | | | |
| | 3. Technology transfer on fisheries and aquaculture through de | 3.1. No. of demonstrations of fisheries and aquaculture technologies conducted | 50 | | | |
| | | 3.2. No. of | 10000 | | | |

| FINANCIAL OUTLAY (Rs in Cr) | OUTPUTS 2022-23 | | | OUTCOMES 2022-23 | | |
|---|---|---|---|---|---|---|
| **2022-23** | **Output** | **Indicators** | **Targets 2022-23** | **Outcome** | **Indicators** | **Targets 2022-23** |
| | | stakeholders trained | | | | |

## 8. National Agricultural Higher Education Project (NAHEP) (CS)

| FINANCIAL OUTLAY (Rs in Cr) | OUTPUTS 2022-23 | | | OUTCOMES 2022-23 | | |
|---|---|---|---|---|---|---|
| **2022-23** | **Output** | **Indicators** | **Targets 2022-23** | **Outcome** | **Indicators** | **Targets 2022-23** |
| 167.18 | 1. Increase in education facilities, courses and trainings to facilitate knowledge upgradation | 1.1. International trainings undertaken for students | 110 | 1. Improvement in student and faculty | 1.1. Percentage increase in AU on time graduation rate over previous year | 2 % |
| | | 1.2. Industry seminars and professional workshops conducted | 210 | | 1.2. Percentage increase in student placement rates | 2% |
| | | 1.3. New pilot courses added/ upgraded | 10 | 2. Reduced student and faculty inbreeding | 2.1 Reduced student inbreeding (% increase in AU students admitted from other states) | 4% |

| FINANCIAL OUTLAY (Rs in Cr) | OUTPUTS 2022-23 | | | OUTCOMES 2022-23 | | |
|---|---|---|---|---|---|---|
| **2022-23** | **Output** | **Indicators** | **Targets 2022-23** | **Outcome** | **Indicators** | **Targets 2022-23** |
| | | 1.4. New facilitative units established to enable academic and research infrastructure | 18 | | 2.2 Reduced faculty inbreeding (% faculties with HE degrees from more than one university and more than one state) | 4% |
| | | 1.5. National and international trainings undertaken for faculty upgradation | 215 | 3. Increased faculty research effectiveness | 3.1. Percentage increase in faculty research effectiveness | 2% |
| | 2. Promotion of research and technology transfer initiatives | 2.1. Number of MoUs signed with industry | 35 | | 3.2. Number of students and faculties directly benefitted | 20000 |

**9. Agriculture Education +ESM (CS)**

| FINANCIAL OUTLAY (Rs in Cr) | OUTPUTS 2022-23 | | | OUTCOMES 2022-23 | | |
|---|---|---|---|---|---|---|
| **2022-23** | **Output** | **Indicators** | **Targets 2022-23** | **Outcome** | **Indicators** | **Targets 2022-23** |

| FINANCIAL OUTLAY (Rs in Cr) | OUTPUTS 2022-23 | | | OUTCOMES 2022-23 | | |
|---|---|---|---|---|---|---|
| **2022-23** | **Output** | **Indicators** | **Targets 2022-23** | **Outcome** | **Indicators** | **Targets 2022-23** |
| 288.28 | 1. State universities financially supported for creation of amenities | 1.1. Number of SAUs supported | 58 | 1. Attracting talented students towards higher agricultural education (UG students) | 1.1 Percent change in number of students enrolled in AUs over previous | 10% |
| | | 1.2. Number of Hostels, Examination Halls, Radio Stations, Smart Class rooms, sports facilities created | 50 | 2. Total Number of publications in High Impact factor Journals | 2.1 Percentage of high impact factor publications from total number of publications (NAAS impact factor 6 and above) | 5% |
| | 2. Capacity building programs organized /conducted | 2.1 Number of training programs | 250 | 3. Skills and Entrepreneurship/self-employment among UG student | 3.1. Percent change in students taking up Entrepreneurship/employ ability (% increase over last year) | 2% |
| | | 2.2 Number of faculty trained | 16000 | | | |
| | 3. Technology/processes/ Models/policies/other tools etc. developed | 3.1. No. of technology/ processes/Models/ policies/other to | 14 | | | |
| | 4. Skill and entrepreneurship development through READY Program | 4.1. Number of students trained | 16000 | | | |