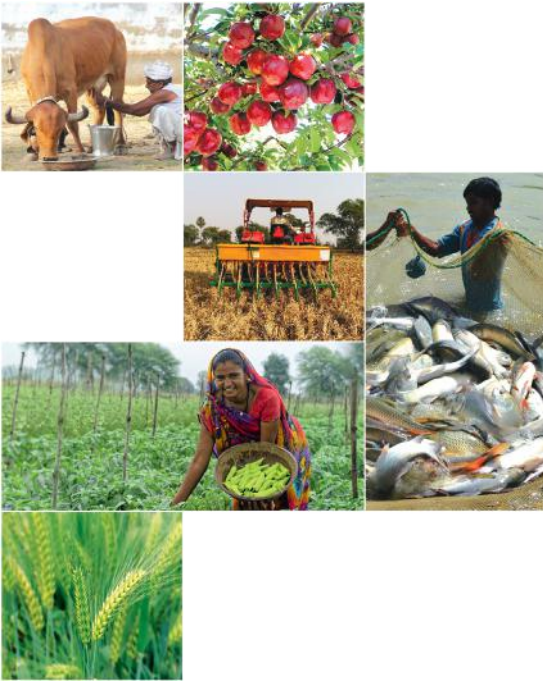




Prime Minister of India



SIGNIFICANT ACHIEVEMENTS 2019-20



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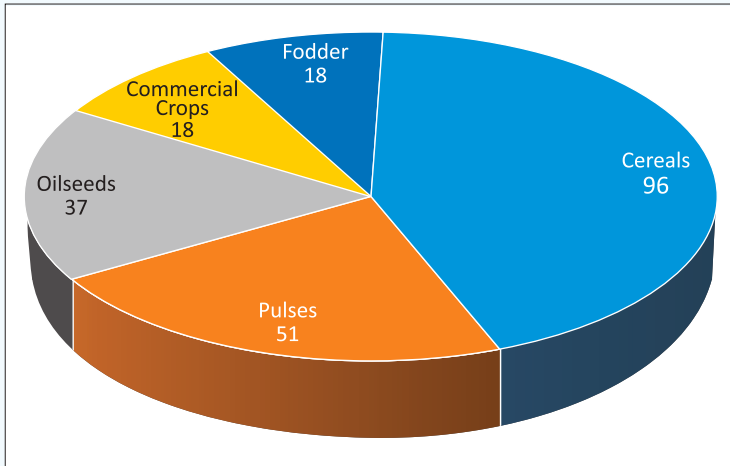
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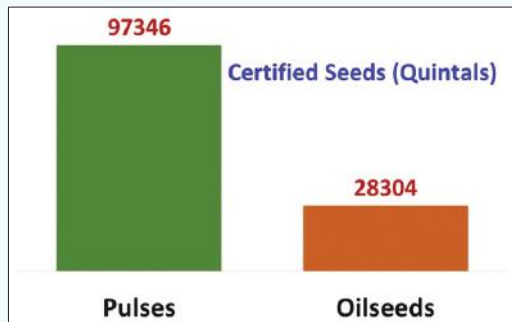
Significant Achievements (2019-20)

Food and Nutritional Security

- Total 220 high yielding varieties including 101 climate-resilient, 15 multiple stress-tolerant and 17 biofortified varieties in 40 field crops released and notified for commercial cultivation. The striking feature of the year is that 13 varieties were developed by molecular breeding (MB)

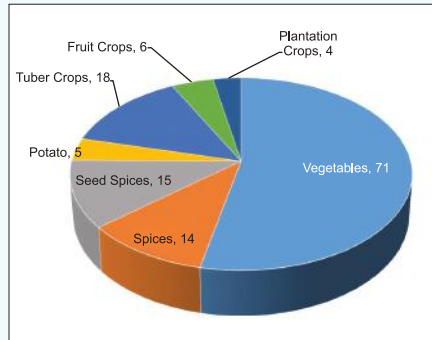


- Breeder seed to the tune of 1,15,707 quintals of 1330 varieties covering 51 field crops was produced against the total indent of 85,752 quintals by the Central and State seed agencies. The breeder seeds are further multiplied to produce quality certified seed for the farmers
- For strategic crops such as pulses and oilseeds, 97,346 and 28,304 quintals of certified seeds were produced through 150 and 35 seed hubs, respectively. These seed hubs are being managed by ICAR institutes and KVVKs



Horticulture for Nutrition and Income Security

- 133 varieties of 35 horticultural crops were notified and released for commercial cultivation



- Produced 139 tons of breeder/truthfully labelled seed of potato and tropical tuber crops; 10.7 lakh planting materials; 12 quintals breeders/truthfully labelled seeds of vegetables & spices

Indigenous Animal Breeds and Health Management for Enhanced Productivity

- Registered 13 new breeds of livestock and poultry. So far, a total of 197 breeds have been registered
- Gazette notification of 184 registered indigenous animal breeds in Gazette of India
- Developed 20 vaccines/ vaccine candidates and diagnostic kits for adulterants in milk and meat
- Developed 18 Resource based region specific feeding modules including feed additives



Nari Cattle
Gujarat and Rajasthan



Agricultural Ministers release
Bursal Disease Vaccine



AH and DARE Secretaries release
Swine Fever Cell Culture Vaccine

Fisheries Technology for Blue Revolution and Human Nutrition

- Developed breeding protocols for 4 important food fishes and 11 ornamental finfish
- Discovered 16 new fish/shellfish species
- Developed 12 value added products from fish/ shellfish waste for commercialization purpose.
- Demonstrated three-tier cage farming of sea bass in mangrove regions of Sindhudurg, Maharashtra by SHGs that generated revenue of Rs. 12 lakh from 40 cages of 4x4x2 m each in 8 months

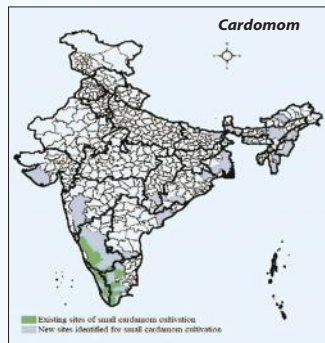
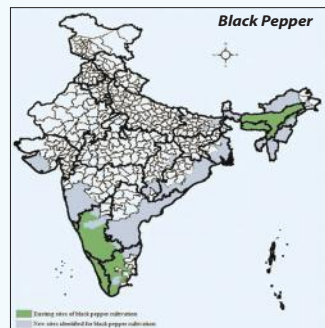


Marcia's Anthias



Management of Natural Resources and Climate Resilient Agriculture

- Land Resource Inventory (1:10000 scale) completed for 27 aspirational districts of India to enable block level land use planning and given to NITI Ayog
- Prepared e-ATLAS on Micronutrients of the Indian Soils
- Climate Resilient Villages, popularly called NICRA Villages have been upscaled from 151 villages to 446 village clusters
- Prepared 36 district Agriculture Contingency Plans (DACPs) totalling to 650 districts
- Developed drought proofing action plans for 24 districts (16 in Karnataka, 4 each in Rajasthan and Andhra Pradesh)
- Climate analogues developed for habitat suitability for black pepper and cardamom cultivation in the country. This has forecasted area expansion from 97 to 133 districts, and 24 to 104 districts in case of black pepper and cardamom, respectively



Green shade is existing area and Blue shade is the climate analogue

Mechanization of Field and Post-Harvest Operations

- Developed 42 new equipments/ machines and tested 98 equipments for their quality and efficiency
- Developed 12 process protocols and value added products
- Established 11 agro-processing centres in different States for capacity development and demonstration of processing protocols
- Provided mechanization solutions to combat burning of crop residues in the northern India. Over 46,800 machines including Happy Seeder designed by ICAR-AICRP centre at PAU, Ludhiana were distributed through a central government scheme to the farmers that enabled 51.9% reduction in straw burning events in 2019 as compared to 2016



Automatic Soymilk Plant



Happy Seeder for *in situ* Straw Management

Strengthening Higher Agricultural Education

- Twenty-two new Experiential Learning Modules were established to encourage entrepreneurship and provide hands-on experience to students
- To promote excellence in agricultural sciences particularly at SAUs, 7 Centres of Excellence (CoEs) were established on emerging thematic areas'
- Introduced 18 Niche Area programmes for scaling up the research capabilities, capacity building and teaching
- To enhance to teaching standard and learning outcomes, 49 faculty members and 109 students of Agricultural Universities were sponsored by the World Bank supported National Higher Agricultural Education Project (NAHEP) of ICAR for training in various International Universities
- Introduced 65 new pilot courses on communication skills, entrepreneurial skills, creative and innovative thinking, leadership skills



Lab to land and Farmers Outreach

- All KVKs linked with 3.5 lakh Common Service Centres (CSCs) to enhance the reach of KVKs for providing technological solutions to the farmers
- Organized 60,672 training programmes benefiting 16.82 lakh farmers including farmwomen and rural youth and trained 1.16 lakh extension personnel through 3948 training programmes
- As much as 10.5 Cr. mobile-based agro-advisories issued benefitting farmers and other clientele
- Established 1949 units of agro-enterprises benefitting 3790 rural youth under ARYA program
- 6125 technologies tested at 20,759 locations through 34,432 trials on the farmers' field
- 2.44 lakh frontline demonstrations (FLDs) including 83,090 on pulses and 56,064 on oilseeds conducted; 39648.14 quintals seed of pulses were also produced through 97 seed hubs located in the KVKs
- Produced 20,100 tons seeds of improved varieties and 348.01 lakh quality-planting materials of crops, vegetables, flowers, fruits, spices, fodder, forest species, medicinal plants and fibre crops and distributed to farmers
- Five New KVKs established in Sangli and Nagpur districts of Maharashtra; Kondagaon district of Chhattisgarh; and Hardoi and Moradabad districts of Uttar Pradesh
- Established District Agro-Met Units (DAMUs) in 199 KVKs
- Tree plantation campaign was organized on 17th September, 2019 by 649 KVKs in collaboration with IFFCO. Total 7,10,740 plants were planted with participation 1,41,243 farmers, 34 Hon'ble Member of Parliaments, 50 MLAs and 2000 other VIPs
- Organized 557 melas under *Jal Shakti Abhiyan* with participation of over 3.14 lakh farmers and school children



On-Farm Demo of Zero-Till Drill



Farmer-Scientist Interface



Distribution of Seedlings to Farmers



Special Campaigns

- Information, Education and Communication (IEC) campaign for in-situ management of crop residues were undertaken in ~700 village, block and district level awareness programs. About 2 lakh people participated. This created large-scale awareness bringing much needed change in attitude as reflected in reduced straw burning events
- Padma awardee farmers, innovative and progressive farmers participated in the Brainstorming Sessions on 'Technological Innovations and Strategies for Farmers' Prosperity for Rajasthan, MP and Chhattisgarh organized on 13 July and 26-27 August 2019 with 300 and 460 participants, respectively
- Hon'ble Prime Minister launched National Animal Disease Control Program (NADCP) for FMD and Brucellosis and Nationwide Artificial Insemination program in 600 districts having less than 50% AI coverage on 11th September, 2019 at Mathura, Uttar Pradesh. Simultaneous workshops at 651 KVKs were organized on vaccination and disease management and AI. 65 MPs; 106 MLAs led the program at KVKs and 1,33,140 farmers participated. Vaccination and Artificial insemination were carried out on 65,262 animals

Interfacing and Coordination with States

- Prepared state level action plans for Madhya Pradesh, Chhattisgarh and Rajasthan through Farmers' Interaction benefitting over 3000 farmers
- Organized 3 Regional Committee Meetings, one each in Guwahati (Assam), Bengaluru (Karnataka) and Nagpur (Maharashtra) covering 12 States, in which, senior officers of the state government departments participated. State-specific action plans were developed
- Reviewed the reports of the State-Level Coordination Committees on Doubling of Farmers' Income
- Gave technical inputs and advisories for the *Kharif* and *Rabi* campaigns organized by Department of Agriculture, Cooperation and Farmers' Welfare, Govt. of India



Hon'ble Union Agriculture Minister Addressing the Farmers



Hon'ble MoS Agriculture in ICAR-State Coordination Meeting

International Events and Cooperation

- Organized Global Potato Conclave (GPC) during January 2020 at Gandhinagar bringing progressive farmers and agro-industries together that enabled sharing of global expertise. Field Day was also organized on the occasion benefiting more than 1000 farmers
- Organized International Conference on Agricultural Statistics during November 2019 in New Delhi that attracted over 600 global delegates to have focused discussion on the role of agricultural statistics in meeting the Sustainable Development Goals (SDGs)
- Organized International Seminar on Climate Smart Farming Systems exclusively for BIMSTEC Countries in December, 2019
- ICAR represented India and participated in the G20-Chief Scientists Meeting held in Japan
- ICAR represented India and participated in the CGIAR-System Council Meeting held in China
- 3 MoUs signed: AVRDC (World Vegetable Centre), Taiwan; International Centre for Bamboo Research, China, and Heinrich-Heine University, Germany for International Cooperation with international agencies and Universities



Virtual Inauguration of GPC 2020 by Hon'ble PM



Chief Guest Address by Mr. Bill Gates in ICAS-2019



MoU with AVRDC (World Vegetable Centre)

National Partnerships

- Five MoUs signed with different National Organizations such as Patanjali Bio Research Institute (PBRI), Haridwar; NABARD, Mumbai; MANAGE, Hyderabad; ASCI, Hyderabad and ICICI Foundation, Chennai



Hon'ble Agriculture Ministers in the MoU signing event with Patanjali



MoU with National Agriculture and Rural Development Bank (NABARD)

- 526 partnership agreements finalized and signed with 373 public and private organizations harnessing the potentials of 183 ICAR technologies in agriculture and allied sector



Hon'ble Minister of Agriculture and Farmers Welfare addressing the Farmers in the Bharat Ratna C. Subramanian Auditorium, ICAR Convention Centre

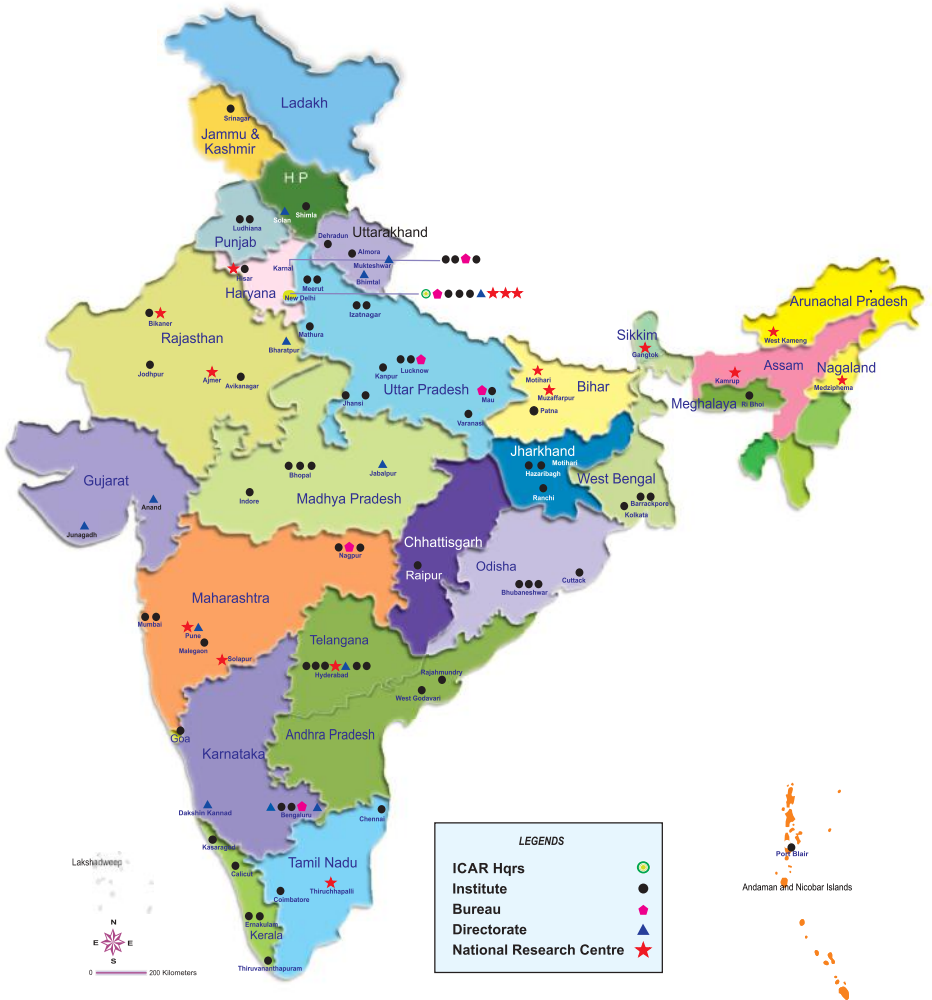
Advisories and services during COVID-19 Pandemic

ICAR reached out to 5.58 crore farmers through national and state-specific advisory translated into all 15 regional languages.



INDIAN COUNCIL OF AGRICULTURAL RESEARCH

Institutes, Bureaux, National Research Centres and Directorates



● 72 Research Institutes ● 6 Bureaux ● 12 Directorates ● 14 National Research Centres

* Map not to the scale



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किसानों का हमसफर
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