

18. Organization and Management

DARE

The Department of Agricultural Research and Education (DARE) was established in the Ministry of Agriculture in December 1973. Subjects allotted to the DARE as per the Government of India (Allocation of Business) Rules are specified in Appendix I of the DARE. The Indian Council of Agricultural Research (ICAR) is an autonomous body under the Department of Agricultural Research and Education. The Secretary to the Government of India in the DARE functions as the Director-General of the ICAR. The Financial Advisor of the DARE is the Financial Advisor of the ICAR. Generally a single-file system is followed between DARE and ICAR. The Department has one more autonomous body, viz. the Central Agricultural University, Imphal, under its administrative control. The Central Agricultural University, established in 1993, has its jurisdiction over the States of Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Sikkim and Tripura, and is wholly financed by the Government of India.

The DARE has 16 Group A, 15 Group B, 12 Group C, and 6 Group D posts in position. The sanctioned strength is given in Appendix II. The recruitment to the posts in the Groups A, B, and C is being made centrally, either through the Department of Personnel and Training or through the Department of Agriculture and Co-operation, depending on the level of the post. The DARE makes direct recruitment only to Group D posts. Such recruitments are being made in accordance with the orders of the Government of India regarding reservations for Scheduled Castes, Scheduled Tribes, and Other Backward Class. Presently, DARE has 5 Scheduled Castes and 2 Scheduled Tribes employees.

A detailed break-up of the posts and names of the the important functionaries is given in Appendix II of the DARE. The financial requirement (Grant No. 2) includes budget estimates (BE) and revised estimates (RE) of the DARE, CAU, and ICAR (Plan and Non-Plan) 2010-2011, respectively, and BE for 2011-12 (Plan and Non-Plan). The detailed break-up of these financial figures is given in Appendix III of the DARE.

The DARE has an Official Language Section for the compliance and implementation of the Official Language Policy of the Government of India. It consists of one post each of Assistant Director (Official Language), Junior Hindi Translator and Hindi Typist. This section does the Hindi translation of the Budget, and compilation and preparation of the Annual Report of the Department. Its functioning includes holding of Hindi workshops, meetings, reports, organizing Hindi *Pakhwada* to encourage employees for doing their official work in Hindi.

ICAR

The Indian Council of Agricultural Research is an autonomous organization under the Department of Agricultural Research and Education, Ministry of Agriculture, Government of India. Formerly known as the Imperial Council of Agricultural Research, it was established on 16 July 1929 as a Registered Society under the Societies Registration Act 1860 on the recommendations of the Royal Commission of Agriculture, and has been reorganized twice, in 1965 and in 1973. The headquarters of the ICAR is located at Krishi Bhavan, New Delhi, and its other buildings are Krishi Anusandhan Bhavan I and II, and NASC Complex, New Delhi.

The Union Minister of Agriculture is the President of the ICAR. The Principal Executive Officer of the ICAR is the Director General, who acts as Secretary to the Government of India in the Department of Agricultural Research and Education. The General Body of the ICAR Society is the supreme authority of the ICAR, and the Union Minister of Agriculture, Government of India, heads it. Its members are Ministers for Agriculture, Animal Husbandry and Fisheries, and the Senior Officers of the various state governments, representatives of the Parliament, industry, educational institutes, scientific organizations and farmers (Appendix 1).

The Governing Body (Appendix 2) is the chief executive and decision-making authority of the ICAR. It is headed by the Director General, ICAR, who also acts as Secretary, DARE. It consists of eminent agricultural scientists, educationists, legislators and representatives of the farmers. It is assisted by the Accreditation Board, Regional Committee, Policy and Planning Committee, several Scientific Panels, and Publications Committee. In the scientific matters, Director General is assisted by eight Deputy Directors General, one each for (i) Crop Science (ii) Horticulture, (iii) Natural Resource Management, (iv) Agricultural Engineering, (v) Animal Sciences, (vi) Fisheries, (vii) Agricultural Education, and (viii) Agricultural Extension. The Director General is also assisted by one National Director, National Agricultural Innovation Project (NAIP), and one National Co-ordinator, National Fund for Basic, Strategic and Frontier Application Research in Agriculture (NFBSFARA).

The Deputy Directors General are responsible for their corresponding Research Institutes, National Research Centres, and fundings of Projects Directorates in their respective fields. The National Director (NAIP) is responsible for all the research projects running under the Components I to IV of the NAIP. The NAIP



supported a number of policy and institutional changes and financed 185 sub-projects under four components. Three sub-projects under Component-III were funded by the additional financing grant from the Global Environment Facility Trust Fund of the World Bank. Twelve strategic priority areas on which the NFBSFARA would focus during the XII Plan have been identified.

The ICAR recruits scientists and such other posts and services as may be specified by the President of the ICAR Society from time to time through competitive examination/direct recruitment by selection and through its independent recruitment body, Agricultural Scientists' Recruitment Board (ASRB), that was established on 1 November 1973. The ASRB is accountable to the President of the ICAR Society.

The ICAR receives funds from the Government of India and from the proceeds of the Agricultural Produce. The list of the Senior Officers at the ICAR (Hqrs) is given in Appendix 3. The Research set-up of the ICAR includes 49 Institutes (Appendix 4), 6 National Bureaux (Appendix 5), 27 Project Directorates and 8 Zonal Project Directorates (Appendix 6), 19 National Research Centres (Appendix 7), and 79 All-India Co-ordinated Research Projects including Network Projects (Appendix 8).

During the reported period, the ICAR has renamed Directorate of Information and Publications of Agriculture as the Directorate of Knowledge Management in Agriculture (DKMA) that works as the communication arm of the ICAR and is responsible for delivery of information/knowledge generated by the network of the ICAR and its institutions. The DKMA addresses its mandate through Publications and Information Unit, Agricultural Knowledge Management Unit (erstwhile ARIS) and Public Relations Unit. The e-Publishing Knowledge System in Agricultural Research, a project under the NAIP, is among the top 10 projects in the list of the NAIP. It has increased public awareness across the globe. A total of 125,135 abstracts of *The Indian Journal of Agricultural Sciences* and 133,007 of *The Indian Journal of Animal Sciences* were viewed on-line. From the former journal 32,562 research papers were downloaded and from the latter 31,729 research papers were downloaded. The users of these research journals of the ICAR are in 181 countries and there is an increase in the number of foreign authors for these journals. Besides, Mobilizing Mass Media Support for sharing agri-information, the DKMA is also covering news and disseminating information through print as well as electronic media.

The ICAR promotes research, education and extension in 52 State Agricultural Universities, five Deemed Universities, and four Central Universities with Agricultural faculty by giving financial assistance in different forms; and DARE promotes one Central Agricultural University for the North- Eastern Hills Region (Appendix 9).

The total sanctioned as well as existing strength of the employees of the ICAR system, including scheduled

castes, scheduled tribes and other backward classes, is given in Appendix 10.

Thus with an extensive network of research infrastructure, backed by an excellent team of scientists and other employees, the ICAR is making rapid strides in agricultural research, and provides support to the national efforts in achieving food security and self-sufficiency.

INTELLECTUAL PROPERTY AND TECHNOLOGY MANAGEMENT

The Intellectual Property and Technology Management (IP&TM) activities in the ICAR are taken up through a decentralized three-tier IP management mechanism. Accordingly, Institute Technology Management Units (ITMUs) have been established in 95 institutes as a single-window mechanism to showcase intellectual assets in each institute and pursue matters related to IP management and transfer/commercialization. The Five ZTM&BPD Units, strengthened with support from the National Agricultural Innovation Project, act as the middle-tier, in synergy with the ITMUs, in their respective zones.

The diverse set of technologies generated at the research institutions have been evaluated and categorized on the basis of various parameters encompassing technical, market and social factors, and consequently the mode of the IP protection.

IP protection and grant of titles

IP protection

Patents: Forty-three patent applications were filed by the 19 ICAR institutes [NRC on Plant Biotechnology, New Delhi (9); Indian Agricultural Research Institute, New Delhi and National Bureau of Agriculturally Important Insects, Bengaluru (6 each); Central Institute for Research on Cotton Technology, Mumbai, and Sugarcane Breeding Institute, Coimbatore (3 each); Indian Veterinary Research Institute, Izatnagar and National Centre for Integrated Pest Management, New Delhi (2 each); Central Institute of Fishwater Aquaculture, Bhubaneswar; Central Institute of Post-harvest Engineering and Technology, Ludhiana; Central Institute of Research on Buffaloes, Hisar; Central Research Institute for Dryland Agriculture, Hyderabad; Central Tuber Crops Research Institute, Sreehariyam, Thiruvananthapuram; Directorate of Maize Research, New Delhi; Indian Institute of Horticultural Research, Bengaluru; Indian Institute of Natural Resins and Gums, Ranchi; Indian Institute of Spices Research, Calicut; Indian Institute of Sugarcane Research, Lucknow; National Dairy Research Institute, Karnal; and National Research Centre on Meat, Hyderabad (1 each)]. One international and three national patent applications were granted permission in this year.

Plant varieties: As the Protection of Plant Varieties and Farmers' Rights Authority notified new genera, applications for 66 varieties, 60 extant and 6 new,

were filed at the Plant Variety Registry; these included: wheat, sorghum, groundnut, linseed, sesame, castor, sugarcane, cotton, tomato, potato, brinjal, cabbage, cauliflower and chrysanthemum. The cumulative total of applications filed by the ICAR for plant variety registration is 821 (736 extant and 85 new varieties); of which 198 extant varieties have been registered and granted protection; and 436 applications were brought out in the *Plant Variety Journal*.

Trademarks: Trademark NRCB was filed by National Research Centre for Banana, Trichi; and Trademark 'IISR' was granted to Indian Institute for Spices Research, Calicut.

Copyright: Six Copyrights were registered by the ICAR institutes to protect the softwares developed by them. 'Weather Cock' software package, registered by the Central Research Institute for Dryland Agriculture, Hyderabad, has been developed for climate change, and is capable of agro-meteorological analysis to understand possible impact on crop performance for a particular location/region. Similarly, catering to the need of dynamic relational database software, which can store, transmit and analyse retrospective/prospective disease and livestock related data, three databases, Livestock and Poultry Disease Information System (*Pashudhan Avum Kukkut Rog Suchna Pranali*) and Digital *Pashuswashthya Avum Pashupalan Prashnotiri* were developed and registered by the Indian Veterinary Research Institute, Izatnagar. Further two softwares, 'ResourCeS-A Regional Resource Characterizing System' and 'USAR- An EIA Tool for managing salt affected agricultural lands and irrigation waters' were registered by the Indian Agricultural Research Institute, New Delhi.

Design registration: Four applications for Design registration were submitted by the IVRI, Izatnagar [Multi-nutrients feed block making machine (*Pashu Chocolater*); Thresher-cum-treatment machine; One horse-power single phase 2,800 rpm electric motor-driven gearless grass cutter having vibration dampeners; and Bulk milk feeder for kids]. Design registration for Scaffolding Unit was granted to Sugarcane Breeding Institute, Coimbatore.

Strengthening IP and technology management mechanism

Technology transfer/commercialization

Depending upon the core strengths, the institutes entered into partnerships through Licensing/Agreements/MoA/MoU for technology transfer/commercialization, consultancy, contract research, certification services etc. with private organizations, companies, NGOs and government departments. Some important varieties of technologies licensed/transferred included the followings :

Crop varieties: Rice hybrid DRRH 2 (DRR, Hyderabad); wheat variety HD 2967 (TL Seeds), Pusa rice hybrid PRH 10, maize hybrid PEEHM 5, and wheat variety HI 1563 (IARI, New Delhi); french bean varieties, viz. Arka Sharath and Arka Meghana; chilli

hybrids, viz. Arka Haritha and Arka Komal (IIHR, Bengaluru); and turmeric varieties, viz. IISR Pratibha and IISR Alleppey Supreme (IISR, Calicut).

Veterinary technologies: Quail production technology (Central Avian Research Institute, Izatnagar); Area specific mineral mixture and urea molasses mineral block (IVRI, Izatnagar); and poultry breeds, viz. Vanaraja, Gramapriya and Krishibro (Project Directorate on Poultry, Hyderabad).

Fisheries technologies: Extension of consultation on Shrimp feed technology (CIBA, Chennai); Method for extraction of chitin and chitosan from prawn shell waste; and Technology for effluent treatment plant (ETP), CIFT, Cochin.

Processing technologies: Soymilk and *paneer*, meat, tomato and ginger processing, breads and biscuits from black rice, green chilli powder and *puree* (CIPHET, Ludhiana); palmyrah fibre separator machines (CTRI-KVK, Rajahmundry); grain and chaff separator (DMR, New Delhi); pusa fruit drink (IARI, New Delhi); preparation of meat-based emulsion and test marketing of products (NRC on Meat, Hyderabad) and process for preparing sugarcane juice powder (SBI, Coimbatore).

Crop protection technologies: Improved aerial insect trap (DMR, New Delhi); Evaluation of pesticides (DWR, Karnal); Production of biological agents for fruit and vegetables (IIHR, Bengaluru); *RNAi* gene construct against ToLCV virus (IARI, New Delhi); *cryIAa-B* gene, *Bt* Tomato Event 25, *cryIAabc* gene and *cryIFal* gene (NRC on Plant Biotechnology, New Delhi).

Outreach activities

To augment NARS relationship with agri-industry of all kinds and scale and to have a better client orientation, the IP&TM Unit organized the 'ICAR-CII Industry Meet, 2011' in collaboration with the Confederation of Indian Industry (CII) on 23 May 2011; and an Interaction Meet with NGOs and Farmer Entrepreneurs on 17 September 2011. The key objective of the ICAR-CII Industry Meet was to foster and strengthen linkages between NARS and industries working in the area of research and technology transfer in agriculture and allied sectors. A special focus was kept on three thematic areas, viz. (i) Research and Development Requirements of Industry, (ii) Technology



Interaction Meet of Shri Sharad Pawar, Hon'ble Union Minister of Agriculture and Food Processing Industries with NARS Scientists of Animal Sciences and Fisheries at New Delhi



Transfer and Agri-business, and (iii) High-end research. The mission of the 'ICAR-CII Industry Meet 2011' was to generate business prospects for goods and services available in the ICAR as also to enhance human resource competence through mutual engagement with industry.

ADMINISTRATION

Recruitment

Consequent upon Cadre Review proposal approved by the Department of Expenditure, Ministry of Finance, eight vacancies have been filled in the grade of Director, 20 in Deputy Secretary/Chief Administrative Officer, 16 in Under Secretary, four in Senior Administrative Officer, 47 in Administrative Officer, two in Director (Finance)/Comptroller, two in CF&AO, 11 in Senior F&AO, 40 in Finance & Accounts Officer, 28 in Section Officer, 12 in Principal Private Secretary, 20 in Private Secretary, one in Legal Adviser, eight in Deputy Director (OL), 66 in Assistant, 14 in Personal Assistant, one in UDC, 29 in LDC and two in SSS. It also includes the regular vacancies arisen during 2010-11.

Financial upgradation granted under MACP scheme

As per the Government of India instructions, financial upgradation was granted to many eligible employees in various grades during this period, viz. CAO, SAO, SF&AO, F&AO, SOs, PS, PPS, AAO, F&AO, AD(OL), Stenographer, LDC and SSS.

Staff welfare fund scheme

- (i) As per the recommendations of the Managing Committee of ICAR Hqrs' Welfare Fund, financial assistance of ₹ 125,000 was extended to the family of five deceased employee of the ICAR Hqrs.
- (ii) Forty-eight Scholarships (₹ 2,500 each) were awarded to the meritorious wards of the Council's employees under Staff Welfare Fund Scheme.

FINANCE AND AUDIT

Out of the total allocation of ₹ 2,865.00 crore in Non-Plan Revised Estimate (R.E.) 2010-11, ₹ 2,856.22 crore was earmarked for the ICAR, ₹ 7.28 crore was sanctioned for the activities of the DARE and ₹ 1.50 crore was for AP Cess fund-related activities. Of the total allocation of the ICAR, ₹ 14.34 crore was allocated towards creation of Capital Assets and the remaining ₹ 2,841.88 crore was allocated for meeting revenue expenditure of the ICAR.

An amount of ₹ 113.93 crore (including Interest on Loans and Advances, Income from revolving fund schemes and Interest on Short-term deposits) was generated by the ICAR by way of Internal resources, of which, ₹ 53.76 crore was utilized for various purposes of the ICAR. Under the Plan, of the total allocation of ₹ 2,300.00 crore, ₹ 230.00 crore were earmarked for NEH region (₹ 80.00 crore for CAU, Imphal and ₹ 150.00 crore for ICAR activities in the NEH region),

and of the remaining ₹ 2,061.24 crore were allocated for the ICAR and ₹ 8.76 crore were allocated for DARE.

During 2011-12, under the Non-Plan budget of ₹ 2,157.60 crore, an amount of ₹ 2,148.76 crore has been allocated for the ICAR, ₹ 1.00 crore for AP Cess fund-related projects/sub-projects and the remaining ₹ 7.84 crore for the DARE. An allocation of ₹ 15.00 crore has been made towards creation of Capital Assets in the Non-Plan Budget Estimate (BE) 2011-12 of the ICAR. The remaining amount of ₹ 2,133.76 crore was allocated for meeting revenue expenditure of the ICAR. The targets for Internal resource generation for 2011-12 has been fixed at ₹ 62.09 crore. Under the Plan, of the total allocation of ₹ 2,800.00 crore, ₹ 308.00 crore have been earmarked for NEH region (₹ 108.00 crore for CAU, Imphal and ₹ 200.00 crore for ICAR activities in the NEH region) and out of the remaining ₹ 2,461.00 crore are allocated for the ICAR and ₹ 31.00 crore have been allocated for the DARE.

PROGRESSIVE USE OF RAJBHASHA

DARE

The Department of Agricultural Research and Education has an Official Language Section for the compliance and implementation of the Official Language Policy of the Government of India. It consists of one post each of Assistant Director (Official Language), Junior *Rajbhasha* Translator as well as Typist. Besides the *Rajbhasha* translation of the Budget, compilation and preparation of the Annual Report of the Department etc. also take place. The functioning of this section also includes holding Hindi workshops, meetings, reports, organizing Hindi *Pakhwada* to encourage the employees for doing their official work in Hindi.

ICAR

The achievements are:

1. During 2010-11, under report three Institutes/Centres of the Council were notified in the Gazette of the Government of India thus raising the total number of notified Centres to 118 under rule 10(4) of the Official Language Rule 1976.
2. Joint Official Language Implementation Committee of the DARE and the ICAR working under the Chairmanship of the Additional Secretary, DARE/Secretary, ICAR. During the reporting period, ICAR met thrice. Similarly, Official Language Implementation Committees constituted at mostly Institutes/Centres convened its meetings.
3. Proceedings of the Official Language Implementation Committee meetings held by the Institutes etc., as well as the quarterly progress reports regarding the use of Official Language *Rajbhasha* received from various

- institutes at the ICAR (Hqrs) were reviewed and proper measures were suggested to overcome the shortcomings found therein.
4. During 2010-11, rosters were maintained for imparting training in *Rajbhasha* typing as well as Stenography and officials were accordingly deputed for training. This year, 17 typists were nominated for *Rajbhasha* Stenography and Typing respectively.
 5. The “*Hindi Chetna Maas*” was celebrated at ICAR (Hqrs) and many programmes were organized for staff to promote the progressive use of *Rajbhasha* in official business. A message of the Union Minister of Agriculture was issued at this occasion. The Director General, ICAR, also issued instructions to the officers/staff to do their maximum official work in *Rajbhasha*. The Hindi Day/Week/Month was also organized in different Institutes/Centres of ICAR.
 6. Four Hindi Workshops were also organized for various categories of officers/staff.
 7. Cash awards were given to 10 officials at headquarters for doing their maximum official work in Hindi.
 8. Following Institutes were awarded with “*Rajarshri Tandon Rajbhasha Puraskar* for doing maximum work in Hindi.
 - (i) *Big Institutes award*: First award was given away to IVRI, Izatnagar and Second was given away to CRIDA, Hyderabad.
 - (ii) *Small Institutes award of ‘A’ and ‘B’ Region*: First award was given away to Directorate of Soybean Research, Indore and Second was given away to the Directorate of Rapeseed Mustard-Research, Bharatpur.
 - (iii) *C Region’s Institute award*: First award was given away to CIFT, Kochi and Second was given away to Directorate of Water Management, Bhubaneshwar.
 9. During 2010, “*Ganesh Shankar Vidyarthi Utkrist Hindi Krishi Partika Puraskar*” was given away to various institutions: First prize to ‘*Pashu Chikitsa Vigyan*’ by IVRI, Izatnagar; Second prize to *Krishi Jal* by the Directorate of Water Management, Bhubaneshwar; and Consolation prize to ‘*Santra Samvad*’ brought out by the National Research Centre for Citrus, Nagpur.
 10. In accordance with the recommendations made by the Department of Official Language and the Parliamentary Committee on Official Language, to assess the progressive use of *Rajbhasha* at the ICAR Headquarters as well as its institutes 23 offices were inspected during 2011, and suggestions were given to improve the shortcomings. Second sub-Committee of the Parliamentary Official Language Committee inspected 11 Institutes/Centres of the Council during this year.
 11. The Council and its institutes are organizing regular training programmes for farmers in Hindi

and in other regional languages. Remarkable progress has been made in the use of Hindi and in the other regional languages in their day-to-day official work at Krishi Vigyan Kendras situated in Hindi speaking region.

12. Apart of the material regarding Parliament, Annual Plan Report, Review of demands for grants, General Body, Standing Finance Committee, Parliamentary Standing Committee on Agriculture, Annual General Meeting of the ICAR Society and many other meetings were prepared bilingually. The drafts of speeches of the Union Agriculture Minister and other higher officials of ICAR were prepared originally in Hindi also.

TECHNICAL COORDINATION

The Council provided financial support to 48 journals for publication, 25 societies/associations/universities for holding National Seminars/Symposia/Conferences and 21 societies/associations/universities for holding International Seminars/Symposia/Conferences. Annual grant to the NAAS, Indian Science Congress and IAUA were also released. A meeting of the executive committee members of different scientific societies was organized on 22 July 2011 to receive their inputs for XII Plan. Thirty-five queries from VIPs, 8 queries under RTI Act, 28 Parliament Questions were replied. Annual Report of the DARE, and Account Report were placed before the Parliament.

The meetings of Regional Committees No. V and No. III were organized at the CSSRI, Karnal, during 10-12 January 2011 and at the ICAR Research Complex, Barapani, Meghalaya, during 5-7 May 2011 respectively. The meeting of Regional Committee No. III focused on formation of regional bio-diversity boards, swine fever vaccine, acid soil amelioration measures, package of practices for different crops, *Jhum* cultivation, INM package for pineapple. Knowledge Innovation Repository in Agriculture for North-East (KIRAN) was inaugurated. The key issues discussed in-depth during the meeting of Regional Committee No. V at Karnal, included efficient use of sewage and wastewater, water conservation and management, deterioration of soil health, crop-specific fertigation schedule, management of parasitic weed *Orobanche*, precision farming, rice straw burning, aerobic rice to save water, lameness in dairy animals, reduction in post-harvest losses, popularization of saline aquaculture amongst farmers.

Monthly report of major breakthroughs achieved in research and other related matter at various ICAR Institutes/NRCs/Project Directorates was timely submitted to Cabinet Secretariat, Ministries and the Departments.

The ICAR collaborated with DSIR in recommending proposals for recognition of in-house Research and Development Units of private entrepreneurs. Work Plans (29) were prepared for collaboration in the field of

agriculture and allied sectors with different countries. The deputation reports of scientists/staff personnel of ICAR were evaluated and screened.

Two Director's Conferences were organized by the coordination unit. In the first conference held from 23 to 24 February 2011, Director General emphasized the role of specific agriculture which is a way to use small acreages of land to produce enough income from an enterprise for it to become a viable and profitable business venture. Need for hubs for specific research was stressed. During the second conference on 15 July 2011, DG, ICAR stressed that the hills and dryland agriculture should be given importance under the National Initiative on 'Climate Resilient Agriculture'. For future plans, the Director General assigned various platforms to different working groups working in ICAR. These platforms are Genomics; Seeds; Hybrid varieties; Climate changes; Conservation agriculture; GM foods; Health foods; Feed and fodder; Fibre; Biofortification; Diagnostics and Vaccines; Precision Farming, Farm mechanization and energy; Nanotechnology; High value compounds/Phytochemicals; Water; Waste-solid Agro-waste, Municipal; Secondary agriculture-processing and value-addition; Mission on goat; Piggery and backyard poultry.

AWARDS AND RECOGNITIONS

The Government of India conferred coveted civilian honour Padam Shri to Dr K.L. Chadha, former National Professor, ICAR, and distinguished horticulture scientist; and Dr Vijaypal Singh, former Principal Scientist, ICAR, and noted rice breeder in recognition to their outstanding contributions in respective fields.

In view of the emerging challenges in agriculture, especially in the South Asian region, the ICAR and CIMMYT have established Borlaug Institute for South

Asia at Ludhiana in Punjab, Pusa (Samastipur) in Bihar and Jabalpur in Madhya Pradesh under the collaborative project, 'Work Plans for Scientific and Technical Partnership on Maize and Wheat System' for five-years. Funding and in-kind support will come from the Government of India and from a consortium of International and regional, public and private investors. Besides, ICAR has instituted two prestigious awards: the ICAR Norman E. Borlaug Award to recognize a scientist, who has provided a breakthrough in agriculture through a new insight that has created high potential value for the future, and the ICAR Challenge Award.

ICAR Award Ceremony-2010: The ICAR Award-2010 function was held at the NASC Complex, Pusa, New Delhi, on 16 July 2011.



A farmer is receiving award from Shri Harish Rawat, Union Minister of State for Agriculture and Dr C D Mahant, Union Minister of State for Agriculture and Food Processing Industries

Eighty-five awards were conferred under 17 different categories. These comprised 13 Institutions, 59 scientists, 10 farmers and 3 journalists. Of the 59 scientists, there were 9 women scientists and one woman farmer (Appendix 11).