

19. Partnership and Linkages

The International Cooperation in ICAR/DARE has been operating through the Memoranda of Understandings/Work Plans signed with various countries/International organizations with ICAR/DARE as the Nodal Department and through participation of ICAR/DARE in the Memoranda of Understandings/Work Plans signed by the Department of Agriculture and Cooperation as the Nodal Department. Besides Ministry of Science and Technology has developed programme of co-operation with various countries and international organizations in which ICAR/DARE is the participating agency in the field of agricultural research. The Joint Commissions/Working Groups constituted by the Ministry of External Affairs and the Ministry of Commerce have the component of agriculture/ agricultural research in which DARE participates directly or through the Department of Agriculture and Cooperation. The activities of the Division are mainly carried out under Memoranda of Understandings/ Agreements/Work Plans signed with different international organizations/countries etc.

The Department of Agricultural Research and Education has also been involved in International Symposium-cum-workshop in Acarology from 8 to 10 April 2010; International Conference on "Eliminating Hunger and Poverty Priorities in Global Agricultural Research and Development Agenda in an Era of Climate Change and Rising Food Prices" at Chennai from 7 to 9 August, 2010; International Seminar on "Frontiers on Stem Cell and Biotechnology in Human and Veterinary Medicine' at conference hall Madras Veterinary College, Tamil Nadu, Chennai from 15 to 16 July 2010; International Conference on 'Traditional Practices in Conservation Agriculture' held at Rajasthan College of Agriculture, Udaipur, Rajasthan from 18 to 20 September 2010; International Coconut Conference on "Coconut Biodiversity for Prosperity" at CPCRI, Kasaragod, Kerala from 27 to 30 October and Regional Training Workshop on "In vivo Conservation of Animal Genetic Resources" at NASC Complex, New Delhi from 28 to 30 October, 2010; and International Symposium and Annual Convention of the Indian Society for the Study of Animal Reproduction at Department of Animal Reproduction, Gynaecology, Agriculture and Technology, GBPUA and T, Pantnagar from 11 to 13 November, 2010.

The Department is also organizing visits of foreign nationals under "Ad hoc Category". The Department also receives proposals for customized training courses for foreign nationals.

MEMORANDUM OF UNDERSTANDING/ WORK PLAN

• A Memorandum of Understanding between the Indian Council of Agricultural Research,



New Delhi, India and the Kansas State University, Manhattan, Kansas, USA was signed on 7 June 2010

 A Work Plan between the ICAR and International Water Management Institute for Scientific and Technical Cooperation was signed on 25 August, 2010 at NASC Complex, New Delhi.

COLLABORATIVE PROJECT

Genomics and molecular breeding of linseed/ flax: The IARI/National Research Centre on Plant Biotechnology are participating in the collaborative project, "Genomics and Molecular Breeding of Linseed/ Flax", with University of Saskatoon, Canada for 3 years with effect from 5 May, 2010. The objective of the project is to exploit the technique of Molecular Biology to carry out genes prospecting in linseed genotypes available in NARS and their further utilization in crop improvement programme. The project is on co-sharing basis and no funding will be received by the institutes from University of Saskatoon, Canada. The total funds are to the tune of ₹ 223.42 lakh (₹ 162.44 lakh for NRC on Plant Biotechnology and ₹ 60.98 lakh for IARI) and will be met from their respective EFC budget.

Fund release to CG Institutes: India will be contributing 0.5 US \$ million under window I and 2.36 US\$ million under window III by the end of this financial year.

CENTRAL AGRICULTURAL UNIVERSITY

The Central Agricultural University, Imphal (with 7 campuses in 6 states of North-East is offering 8 undergraduate programmes in Agriculture, Horticulture, Forestry, Veterinary Sciences and Animal Husbandry, Fisheries, Home Science, Agricultural Engineering and Processing and Food Engineering with total intake capacity of 335 is offering 25 post-graduate programmes at College of Agriculture, Imphal, College of Horticulture and Forestry; College of Veterinary



Sciences and Animal Health, Selesih, Aizawl; College of Fisheries, Lembuchera, Agartala; and at College of Post-graduate studies, Barapani with intake capacity of 48, 10, 30, 20 and 48, respectively. In the Junior Research Fellowship examination conducted by ICAR, 21 students received Junior Fellowship for post-graduate education and the University ranks 6th in the country. The 68 students from CAU are admitted in different State Agricultural Universities during 2010 for postgraduate programme in various subjects. The 21 students from CAU have secured admission on the basis of national competition in National Institutes, viz. IARI Delhi, IVRI Izatnagar, NDRI Karnal, and CIFE Mumbai. The University has 18 centres of AICRPs or National Network Projects on various crops and animals which are under operation at the Central Agricultural University. To address the problems of local importance 131 Intramural Projects are also sanctioned by the University. Besides this, 37 research projects funded by external agencies are under operation.

Achievements of CAU

- (i) The genotypes tested (38) under varietal test of soybean indicated maximum grain yield of 1,830 kg/ha from genotype No. 34 when compared with best check variety RKS-18 (1,251 kg/ha). Maximum seed yield (1,327 kg/ha) and maximum net return (₹ 54,389/ha) were obtained with genotypes RKS-18 and JS 97-52 sown with a seed rate of 55 kg/ha with a row spacing of 45 cm.
- (ii) The highest pod yield of 2,123 kg/ha was obtained from Spanish genotype of groundnut ASK -2009-14. The variety JD-6 of mustard gave highest mean yield within 110 days when sown on October 10. Uttara variety of *urd bean* gave a yield of 932 kg/ha under Manipur conditions.
- (iii) Under the rice improvement programme, 19 minimum duration hill genotypes were tested for their performance. The rice genotype entry No. 2602 recorded highest grain yield of 5,605 kg/ha when compared with 4,911 kg/ha of CAU- R1 rice, high-yielding variety. Under Mega Seed Project, 55 of breeder seed of different crops were produced.
- (iv) Standardization of reproductive characteristics in Mizo local pigs (ZOVAWK) is in progress. A mother with 12 piglets/litre has been selected. A Regional CSF Referral Laboratory is established for molecular works on cell culture and sample processing for epidemiological studies on clinical swine fever in the northeast India.
- (v) A fish-based integrated farming model suited for hilly areas were developed at College of Fisheries, Lembucherra, Tripura. Under Mega Seed Project, 70 lakh spawns and 25,000 fingerlings were produced and made available to the farmers.
- (vi) In horticultural crops, J 95-227, early-maturing

- potato hybrid was found to give highest yield of 30.3 tonnes/ha under Arunachal Pradesh conditions. In variety Kufri Pukhraj potato highest tuber yield (38.58 tonnes/ha) was recorded with 80 kg/N, 120 kg P₂O₅ and 100 kg K₂O/ha.
- (vii) Prototype feasibility testing of light weight power tiller indicated that power tiller PT-1 (4-stroke diesel operated engine of 7.5 HP with 120 kg weight) was more economical for primary tillage and puddling operations in hill terraces.

The Krishi Vigyan Kendras (3) located at Andro, Imphal East (Manipur); Selesih, Aizawl (Mizoram) and East Siang, Pasighat (Arunachal Pradesh) work for technology assessment, refinement and dissemination through training of farmers and in-service extension personnel. The Directorate of Extension Education organized 3 training programmes on capacity building benefiting 63 SMS of Krishi Vigyan Kendras (KVKs) of Manipur, Arunachal Pradesh and Mizoram. Three KVKs organized 131 trainings in which, 3,544 participants were benefited. Twenty Front-Line Demonstrations benefiting 237 farmers and 14 onfarm trials benefiting 176 farmers were also organized by 3 Krishi Vigyan Kendras of the University.

PROTOCOL ACTIVITIES

Delegations abroad

- Dr Sanjay Kumar Singh, (Senior Scientist, DWR, Karnal) visited to Cornell University, Ithaca, New York, USA for 3 months, from 8 February to 7 May, 2010 for training on "Molecular marker development and allied areas" under DRRW-ICAR bilateral programme.
- Dr P. Shinoj (Scientist, NCAP, New Delhi) visited to Cornell University, Ithaca, New York, USA, for the Norman Borlaug International Agricultural Science Technology Fellowship Programme, 2009 under Indo-US AKI in the field of Agricultural Economics from 6 March to 16 April, 2010.
- Dr B.K. Joshi (Director, NBAGR, Karnal), Dr P.K. Vij, (Principal Scientist, NBAGR, Karnal) and Dr Vineet Bhasin (Principal Scientist, AG and B, ICAR Hq., New Delhi) visited to Hungary from 4 to 11 May, 2010 under the Work Plan for 2009–2010 signed between the Ministry of Republic of India and the Ministry of Agriculture and Rural Development of the Republic of Hungary.
- Dr Ram Prakash Dua, ADG(Food Crops), ICAR, New Delhi visited to Eritrea to study the agricultural situation in Eritrea and to suggest what might go into the Work Plan of the host country for 2010–11 from 24 to 30 May, 2010.
- Dr C.S. Prasad, ADG(ANP), ICAR visited to Washington DC, USA as part of the delegation led by Minister of State (IC) of Science and Technology to USA to participate in the First Meeting of the Indo-US Joint Commission on

- Science and Technology from 24 to 25 June, 2010.
- Dr S. Ayyappan, Secretary (DARE) and Director General, ICAR, visited to USA as a member delegation led by Dr K. Kasturi Rangan, Member (Science) Planning Commission from 11 to 17 August, 2010.
- Dr S. Sreenivasan, (Director, CIRCOT, Mumbai) and Dr P.R. Bharambe (Head Division of Crop Production, CICR, Nagpur) visited Benin for 2 weeks, w.e.f. 22 November, 2010 for preparation of a feasibility study on enhancing the production of cotton and also the post-harvest management and value-addition to cotton in Benin.
- Dr Bir Pal Singh (Director, CPRI, Shimla) visited to Thimphu, Bhutan as a member of the Indian delegation being led by Horticulture Commissioner, Department of Agriculture and Co-operation, Krishi Bhavan from 20 to 25, September, 2010.

Foreign delegation

- His Excellency Vice President, China Central Rural Work Leading Group, China, Mr Tian Chengping, visited Indian Agricultural Research Institute, New Delhi, on 31 May, 2010 along with high level 6-member delegation led by him.
- His Excellency President of the Republic of Mozambique, Mr Amandio Emilio Guebuza, and Mrs Maria da Luz Guebuza visited IARI, New Delhi on 1 October, 2010.
- Dr Tatiana Tiatiushkina (Scientist, All-Russian Institute of Gardening and Horticulture, Russia) and Dr Raisa Kulyan (Scientist, All-Russian Scientific Research Institute of Flowers and Subtropical Crops, Sochi, Russia) visited IIHR, Bengaluru for study in the field of "Cultivar Research-Introduction and Research of Essential Cultivars and their Wild Congeners (Citrus, Horticultural Decorative flowering" from 20 to 26 September 2010.
- Mr Yashin Valery (Head, Laboratory of Conservation Conditions of Amelioration of All-Russia Scientific Research Institute of Hydrotechnics) and Amelioration named A.N. Kostyakov and Mr Kulik Alexey (Senior Scientist, Department of Protection from Agroand Forest Amelioration) visited Central Soil Salinity Research Institute, Karnal for study in the field of "Reclamation of Salt Affected Soils— Advances in Reclamation and Management of Salted Lands" from 13 September to 2 October, 2010.
- Mr Luma Nidhi Pandey and Dr R.B.Prasad (both Senior Scientist, Nepal Agricultural Research Council, Nepal) visited National Dairy Research Institute, Karnal from 17 to 23 August, 2010 under the Work Plan for 2009–10.

Indian scientists on foreign assignments

- Dr B.M. Prasanna (Principal Scientist and National Fellow, Division of Genetics, IARI, New Delhi) visited on deputation as Director, Global Maize Programme, CIMMYT, Mexico based at CIMMYT, Nairobi, Kenya from March 2010 to March 2015.
- Dr Bog Raj Singh (Principal Scientist, ICAR Research Complex of NEH Region, Nagaland) visited on deputation as 'Expert' for disease mapping project at Veterinary Research Centre, Ministry of Agriculture and Fisheries, Directorate General of Agricultural and Livestock Research, Muscat, Sultanate of Oman.
- Dr Y.P. Singh (Principal Scientist, CSSRI, RRS, Lucknow) visited on deputation as 'Consultant' for undertaking the consultancy in the IRRI-East and Southern Africa Regional Office (ESARO) at *Dar es Salaam*, Tanzania under the project, 'Developing the next generation of new rice varieties for sub-Saharan Africa and South-East Asia.
- Dr (Mrs) Sumitra Arora (Sr Scientist, NCIPM, New Delhi) visited DEEWR, Government of Australia for Endeavour Research Fellowship for 6 months, i.e. from 10 April to 10 October 2010.
- Dr (Mrs) Anita Chaudhary (Sr. Scientist, IARI, New Delhi) visited Biodesign Institute at Arizona State University 1001 South McAllister Avenue, USA for "Optimization of Parameters for Biofuel Production Process by Photo-synthetic Bacteria in Photobiore-actors" for 3 months, i.e. from 25 September to 4 December 2010 under ASM International Professorship Programme
- Dr K.V.H. Sastry (Sr. Scientist, CARI, Izatnagar) visited DEEWR, Government of Australia for 2010-Endeavour Executive Award for 4 months, i.e. from 12 May to 12 September 2010.
- Dr (Mrs) Ravinder Kaur (Sr. Scientist, IARI, New Delhi) visited University of Florida, USA for USIEF Fulbright Nehru Environmental Leadership Programme 2009–10 for 4 months, i.e. from 15 January to 14 May, 2010 under USIEF.
- Dr Subir Kumar Nag (Sr. Scientist, IGFRI, Jhansi) visited DEEWR, Government of Australia for 2010-Endeavour Research Fellowship for 6 months, i.e. from 16 April to 15 October, 2010.
- Dr A.K. Singh (Sr. Scientist, NDRI, Karnal) visited Anhalt University of Applied Sciences, Bernburg, Germany for availing Erasmus Mundus scholarship for 3 months, from 14 February to 14 May, 2010, under Erasmus Mundus Programme of European Union.
- Dr (Mrs) Aruna Tyagi (Principal Scientist, IARI, New Delhi) visited Ohio State University, Columbus, USA for USIEF Fulbright Nehru Environmental Leadership programme 2009–10 for 4 months, from 12 March to 12 July 2010, under USIEF, USA.
- Dr Kedar Nath Mohanta (Sr. Scientist, ICAR)





- Research Complex for Goa) is visiting University Swans Malaysia, Penag, Malaysia for availing Post-Doctoral Programme for 1 year from March/April, 2010 to March/April, 2011.
- Dr N. Shanmugam (Sr. Scientist, CIRCOT, Mumbai) visited Egyptian International Centre for Agriculture (EICA), Giza, Egypt for undergoing training course entitled, "Cotton Production and Technology" for 76 days from 1 April to 15 June, 2010 under EICA programme.
- Dr P. Adhiguru (Sr. Scientist, NCAP, New Delhi) visited EICA, Giza, Egypt for undergoing training course entitled, "Agricultural Services" for 76 days from 1 April to 15 June, 2010 under EICA programme.
- Dr A. Arangasamy (Scientist SS, NRCE, Bikaner) is undergoing training on "Role of Sperm's Protein Biomarkers on Reproductive Efficiency" at College of Veterinary Medicine, Washington State University, Pullman, WA 99163, USA for under DST's BOYSCAST Fellowship, 2009–10 for 12 months, w.e.f. 11 June, 2010 to 10 June, 2011 under DST programme.
- Dr R.S. Pawaiya (Sr. Scientist, IVRI, Izatnagr) visited St. George's University, Grenada for availing Post-doctoral Fellowship for 1 year, w.e.f 1 July 2010.
- Dr Hukum Chandra (Sr. Scientist, IASRI, New Delhi) visited University of Wollongong, Australia for availing Post-Doctoral Research Fellow Position in Small Area Estimation for 1 year from 5 July 2010 to 4 July 2011.
- Dr G. Kedirvel (Sr. Scientist, ICAR Research Complex for NEH Region, Umiam) visited University of Illinois of Urbana-Campaign USA for DST's BOYSCAST Fellowship 2009–10 for 12 months, w.e.f. 17 June, 2010 under DST programme.
- Dr (Mrs) Sohini Dey (Scientist SS, IVRI, Izatnagar) visited Institute for Animal Health, Pirbright, United Kingdom for DST's BOYSCAST Fellowship 2009–10 in the area of "Vaccine Development" for 6 months, w.e.f. 20 May, 2010 under DST programme.
- Dr S.K. Maiti (Sr. Scientist, IVRI, Izatnagar) visited University of Koln (Cologne), 50931 Koln, Germany for undergoing training on "Therapeutic Application of Mesenchymal Stem Cells Construct of Chondrogenesis of Repairing Cartilage Defects in Animal Model" under Dr Dimitry Spitkovsky, Group Leader for 3 months, w.e.f. 10 May, 2010.
- Dr K.C. Das (Sr. Scientist, NRC-M, Jharnapani) visited Lakehead University, Canada for undergoing training on "Life Science (Animal Nutrition)" under DBT Overseas Associateship for 3 months from 1 August to 31 October, 2010.
- Dr R.K. Malik (Principal Scientist, NDRI, Karnal) visited Max Rubner-Institute, BFIEL, Karlsruhe, Germany for study visit under DAAD Reinvitation Programme for 45 days from 1 July

- to 14 August 2010 under DAAD, Germany.
- Dr Mohan N.H. (Sr. Scientist, IVRI, Izatnagar)
 visited Harvard Medical School, Massachusetts
 General Hospital, Massachusetts, USA for availing
 DST's BOYSCAST Fellowship 2009–10 in the
 area of "Transgenic Plants and Animals" for 12
 months commencing from any date in October,
 2010 under DST, New Delhi programme.
- Dr R.P.S. Verma (Principal Scientist, DWR, Karnal) visited Adelaide, South Australia for the training for operation of scientific equipment for 6 working days, w.e.f 14 June 2010.
- Dr P.K. Mishra (Project Coordinator, CRIDA, Hyderabad) visited University of Karlsruhe, Germany for availing DAAD Re-invitation Program for 45 days, i.e. from 15 September to 29 October 2010 under DAAD, Germany.
- Dr Shripad R. Bhat (Principal Scientist, NRCPB, New Delhi) visited Leica Factory in Germany for training of 1 week on use of Confocal Microscope, i.e. from 19 to 23 July, 2010 under sponsorship of M/s. Labindia Instruments Pvt. Ltd. New Delhi.
- Dr C. Appunu (Scientist, SBI, Coimbatore) visited Institute of National Resources, CES, Spain for Post-Doctoral Fellowship under Dr Jose Javier Pueyo Dabad, Director for 18 months, i.e. from 1 August 2010 to 31 January, 2012.
- Dr B. Ramakrishnan (Sr. Scientist, IARI, New Delhi) visited University of South Australia, Adelaide, Australia for availing 2010- Endeavour Research Fellowship Award for 6 months, from 22 September 2010 to 21 March 2011.
- Dr P.G. Padmaja (Scientist, SS, DSR, Hyderabad) visited Harpdnden Hertfordshire, United Kingdom for availing Rosthamsted International Fellowship for 6 months, i.e. from 8 March to 7 September 2010.
- Dr P. Kathiravan (Scientist, NBAGR, Karnal) visited University of Illinois at Urbana-Champaign, Urbana, Illinois for availing DST's BOYSCAST Fellowship 2009–10 on the subject titled "Biodiversity and Conservation Biology" for 12 months, w.e.f. 30 June 2010.
- Dr Deepa Bhagat (Scientist SS, NBAII, Hebbal, Bengaluru) visited Guangzhou, P.R. China for attending a training course on 'Crop Diseases and Pests Ecological Control for Developing Countries' for 42 days, i.e. from 24 May to 4 July, 2010.
- Shri K. Srinivasa Babu (Scientist, SS, DWR, Karnal) visited Guangzhou, P.R. China for attending a training course on 'Crop Diseases and Pests Ecological Control for Developing Countries', from 24 May to 4 July, 2010. Its host is Guangzhou, P.R. China.
- Dr Someshwar Bhagat (Scientist, CARI, Port Blair) visited Guangzhou, P.R. China for attending a training course on 'Crop Diseases and Pests Ecological Control for Developing Countries'

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- for 42 days, i.e. from 24 May to 4 July, 2010.
- Dr P.K. Sharma (Sr. Scientist, ICAR Research Complex for NEH Region, Manipur Centre, Imphal) visited Washington State University, USA for DBT Overseas Associateship on "Viral Gene Silencing" for 6 months, i.e. from any date in October, 2010.
- Dr Irani Mukherjee (Principal Scientist) and Dr Suman Gupta (Sr. Scientist) both from IARI, New Delhi visited Masaryk University, in Brno, Czech Republic to attend VIth Summer School on 'Environmental Chemistry and Ecotoxicology' for 6 days from 28 June to 3 July, 2010.
- Dr K.K. Baruah (Principal Scientist, NRC on Mithun, Jharnapani) visited University of Wisconsin-Madison, USA for undergoing training on "Life Sciences (Reproduction Technology)" under DBT for 6 months, i.e. from 1 June to 30 November, 2010.
- Dr Ashok Kumara (Sr. Scientist, CSWR and TI, Research Centre, Dadwara, Kota, Rajasthan) visited EICA, Egypt for undergoing training course on "Integrated Rural Development" for 81 days, from 10 July to 25 September, 2010.
- Dr P. Jayakumar (Sr. Scientist, NCIPM, New Delhi) visited University of Arizona, USA for availing DST's BOYSCAST Fellowship 2009– 10 on "Transgenic Plants and Animals (Life Sciences)" for 12 months from any date before 30 June, 2010. Its host is DST, New Delhi.
- Shri Shamsudeen M (Scientist, CAZRI, RRS, Kukme, Bhuj) visited University of Nottingham, U.K. for availing Ph. D programme in Soil Science under the ICAR International Fellowship 2009–10 for 3 years, i.e. from 1 October, 2010 to 30 September 2013 under ICAR Fellowship.
- Shri Gajender Yadav (Scientist, CSSRI, Karnal) visited University of Reading in U.K. for availing the award of Commonwealth Scholarship and Fellowship Plan 2010 for 3 years, w.e.f. 1 October, 2010
- Dr Anjani Kumar Jha (Sr. Scientist, Hort., ICAR Research Complex for NEH Region, Umiam) visited University of Kentucky, Lexington, USA for availing DBT Overseas Associateship exclusively for North-Eastern Region Researchers on "Plant Biotechnology/Medicinal Plants" for 12 months, w.e.f. any date in September, 2010.
- Dr Amit Nath (Sr. Sci., ICAR Research Complex For NEH Region, Umiam) visited Zhejiang University, Hang Zhou, China for DBT Overseas Associateship exclusively for North-Eastern Region Researchers on "Post-Harvest Technology" for 3 months, w.e.f. any date in October, 2010.
- Dr Lakshmi Kant (Principal Scientist, VPKAS, Almora) visited University of Sydney, Australia for attending a training programme on "Rust Resistance in New Wheat Cultivars in India" sponsored by AUSAID for 3 months, from 30 August to 24 November, 2010.
- Dr Priyabrata Santra (Scientist, CAZRI Regional

- Station, Jaisalmer) visited International Centre for Theoretical Physics (ICTP), TRIESTY, Italy for attending a training programme on "College on Soil Physics: Soil Physical Properties and Processes under climate change" for 12 days, from 30 August to 10 September, 2010.
- Dr Raj Kumar (Sr. Scientist, DWR, Karnal) visited Swedish International Development Cooperation Agency *SIDA), Sweden for undergoing training programme 2010 on "Plant Breeding and Seed Production" for 26 days, from 6 September to 1 October 2010.
- Dr Tapan Jyoti Purakayastha (Sr. Sci., IARI, New Delhi) visited University of Georgia, Athens, USA for availing USIEF Fulbright Nehru Senior Research Fellowship Programme 2010–11 for 6 months, w.e.f. any date in October, 2010.
- Dr Davendra Kumar (Sci. SS, CSWRI, Avikanagar) visited EICA, GGIZA, Egypt for undergoing training course on "Animal Production and Health" for 76 days from 01 October to 15 December 2010.
- Dr Gopal Krishnan S. (Sr. Scientist, IARI, New Delhi) visited Centre for Plant Conservation and Genetics South Cross University, Lismore NSW 2480, Australia for availing DST's BOYSCAST Fellowship 2009–10 in the area of "Molecular Marker Assisted Plant Breeding" for 12 months from any date in October 2010 to September 2011.
- Shri Lalit Laxman Kharbikar (Scientist, CRIJAF, Barrackpore, Kolkata) visited Harper Adams University College, U.K. for pursuing Ph.D Programme for 3 years beginning from any date in September–October, 2010.
- Dr Ranjay Kumar Singh (Sr. Scientist, CSSRI, Karnal) visited University of Michigan, USA for availing USIEF Fulbright Nehru Environmental Leadership Programme 2010–11 for 4 months, w.e.f. 01 February 2011.
- Dr C. Tosh and Dr S. Nagarajan (Sr. Scientist, HSADL, IVRI Campus, Bhopal) visited jointly organized by FAO/IAEA in Seibersdorf, Austria for participation in the Regional Training Course under the Technical Co-operation Regional Project RER/5/015 in the area of "Supporting Early Warming and Surveillance of Avian Infection in Wild and Domestic Birds and Assising Genetic Markers for Bird Resistance" for 12 days, i.e. from 20 September to 01 October 2010.
- Dr K.V. Rajendran (Principal Scientist, CIFE, Mumbai) visited Auburn University, USA for availing USIEF Fulbright Nehru Senior Research Fellowship Programmme 2010–2011 for 8 months, w.e.f. 01 February to 30 September, 2011.
- Dr Suresh Kumar (Sr. Scientist, IGFRI, Jhansi) visited University of California, Riverside, USA for availing Indo-US Research Fellowship on "Life Sciences" for 12 months, i.e. from 18 October, 2010 to 17 October, 2011.
- Dr M. Muralidhar (Sr. Scientist, CIBA Chennai)



- visited Thailand for attending Annual Meeting of Aqua-Climate Project on "Strengthening Adaptive Capacities to the Impacts of Climate Change in Resource Poor Small-scale Aquaculture and Aquatic Resources-dependent Sector in South and South-East Asian Region" by NACA, Bangkok from 7 to 8 April, 2010.
- Dr B. K. Joshi (Director, NBAGR, Karnal) visited Italy for attending the workshop for preparation of FAO Guidelines for *vivo*-conservation Animal Genetic Resources organized by FAO at Como, Italy from 19 to 23 April, 2010.
- Dr Sain Dass (Project Director, DMR) and Shri A. Prabhakaran (Deputy Secretary, DARE) visited Bangladesh for participation in the "Inception Workshop of the SAARC Initiative on Regional Food Security" Projects at Dhaka, from 19 to 20 May, 2010.
- Dr Subodh Joshi (Principal Scientist, Division of Vegetable Science, IARI, New Delhi) visited 18 institutes of vegetable and flowers pertaining to Chinese Academy of Agriculture Sciences, Beijing, China from 25 May to 4 June 2010.
- Dr Dilip Kumar (Director, CIFE, Mumbai) visited Thailand for participation in FAO Expert Workshop on 'Enhancing the Contribution of Small-Scale Aquaculture' to Food Security, Poverty Alleviation and Socio-economic Development, from 21 to 24 April, 2010.
- Dr Jyoti Misri (Sr. Scientist, AH, ICAR) visited for participation in the "Inception Meeting for the Regional Socio-Economic Impact Assessment of Highly Pathogenic Avian Influenza in South and South-East Asia in Bangkok" from 28 to 29 April, 2010.
- Dr S. S. Singh (Project Director, DWR Karnal) visited Afghanistan for participation in SAARC seminar on "Utilization of Agriculture Science and Technology to Alleviate Poverty and Ensure Food Security in Development of Countries" held in Kabul, Afghanistan from 15 to 16 June 2010.
- Dr S. Ayyappan (Secretary, DARE and DG, ICAR) visited Philippines to attend a meeting on 'IRRI in the investment forum for food security in Asia and Pacific' from 7 to 9 July 2010.
- Request for extension deputation of Dr N. Longanandhan with ICRISAT-WWF Project at ICRISAT Patencheru, Andhra Pradesh for 1 year upto 31 December 2011.
- Dr N.H. Rao (Jt. Director, NAARM, Hyderabad) visited Vietnam for attending a workshop on "Food Security Assessment under Climate Change" to be conducted By CASPSA/UNESCAP in collaboration under a Technical cooperation with Government of Japan at Hanoi Vietnam from 4 to 15 July 2010.
- Dr H.P. Singh, DDG, Horticulture visited Portugal for participation in ISHS, Jt. Executive committee and Council Meeting by ISHS at Lisbon, Portugal from 20 to 26 August 2010.
- Dr B. Venkateswarlu (Director, CRIDA,

- Hyderabad) visited for participation in SAARC Regional Workshop on "Drought Risk Management at Kabul from 8 to 9 August 2010.
- Dr Ambekar E. Eknath (Director, CIFA, Bhubaneswar, Odisha), Dr A.G. Ponnaih (Director, CIBA, Chennai) and Dr J.K. Jena, (Head, Aquaculture Production and Environment Division, CIFE Bhubaneswar, Odisha) visited Thailand for participation in Global Conference on Aquaculture, 2010 organized by Network of Aquaculture Centre in Asia—Pacific at Phuket, Thailand from 22 to 25 September 2010.
- Dr Y.P. Singh (Principal Scientist CSSRI, RRS Lucknow) visited Tanzania for the position of Consultant in IRRI-East and Southern Africa Regional Office from 1 September, 2010 to 31 August, 2011.
- Dr T.P. Trivedi (Project Director, DIPA) visited Thailand for participation in the workshop on ICT/ICM for National Agricultural Research Information System in Asia Pacific Region at Bangkok, Thailand from 14 to 16 September 2010.
- Shri Rajiv Mehrishi (Additional Secretary, DARE and Secretary ICAR) visited Egypt for attending the IVth Steering Committee Meeting of INCANA alongwith the Expert Consultation Meeting in Cairo from 10 to 12 September, 2010.
- Mrs Usha K. Khemchandani (Incharge, IARI Library Services) visited Thailand for participation in the Workshop on ICT/ICM at Bangkok from 14 to 17 September 2010.
- Dr B Singh (Project Coordinator, IIVR, Varanasi)
 visited Bangladesh to attend the SAARC Japan
 Special Fund at Dhaka from 8 to 9 October 2010.
- Dr Ramesh Chand (Director, NCAP, Pusa) visited Bangladesh for participation in VIth Meeting of Technical Committee on Agriculture and Rural Development of SAARC at Dhaka from 9 to 12 October 2010.
- Shri Chaman Kumar (Additional Secretary and Financial Advisor, DARE) visited Italy for attending 36th session of the committee on World Food Security at FAO (Hq), Rome from 11 to 14 and 16 October, 2010.
- Dr Ramesh Chand (Director NCAP) visited Bangladesh to attend IVth SAARC meeting at Dhaka Bangladesh from 24 to 26 October, 2010.
- Dr S. Rajan (ADG, Horticulture) visited Indonesia to attend workshop at Topas Galleria Hotel, Indonesia from 1 to 3 November 2010.
- Dr M. Muralidhar (Sr. Scientist, CIBA, Chennai) visited Thailand for participation in Aqua-climate Project Workshop of NACA at Bangkok, Thailand from 29 to 30 November 2010.
- Dr N.P.S Sirohi, ADG (Engg) visited Malaysia for participation in UNAPCAEM Strategic Planning Workshop at Kuala Lumpur.
- Dr (Mrs) Kavita Gupta, (Sr. Scientist Plant

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- Quarantine Division, NBPGR, New Delhi) visited United Kingdom for participation in the 2010 Compendium Consortium Workshop' at Wallingford, United Kingdom from 16 to 17 November 2010.
- Dr B.S Mahapatra, Director CRIJ and AF Barrackpore, Kolkata visited Bangladesh to attend in the 9th Biennial conference of the Bangaladesh Society of Agronomy (BSA), Dhaka from 6 to 7 October, 2010.

Nomination for the APAARI Training Course on "Assisted Reproductive Technologies for Livestock Improvement" at Taiwan Livestock Research Institute Chinese Taipei from 24 to 28 October, 2010.

- Dr N. Gopalkrishnan (Head CICR Regional Research Station) visited Egypt for attending IVth Steering Committee Meeting of INCANA in Cairo from 10 to 12 October, 2010.
- Dr S. Anandan (Sr. Scientist NIAN and P Bengaluru) visited Italy for participation in an Experts 'Meeting to Develop Guidelines for Preparing and Maintaining National Animal Feed Inventories" at FAO Rome from 25 to 27 October, 2010.
- Dr M. Kumaran (Sr. Scientist, CIBA Chennai) visited Thailand for participation in Aqua-climate Project Workshop of NACA in Bangkok from 1 to 3 November, 2010.

Visit of scientists under Borlaug Fellowship Programme, Cornell University Programme and other Bilateral Programmes

- Dr T.K. Behra (Sr. Scientist, Division of Vegetable Science, IARI, New Delhi) visited Libya for consultancy as FAO consultant under FAO programme, Vegetable Breeding, from 20 March to 18 April 2010.
- Dr S.Anandan (Sr. Scientist, Animal Nutrition Division NIANP, Bengaluru) visited on consultant proposal offered by ILRI c/o ICRISAT, Patencheru, Andhra Pradesh for hiring consultancy services for assisting in the activities of ongoing projects of ILRI for 45 days.
- Dr T.P. Rajendran, ADG(PP) visited for FAO as a TCDC Expert for Harmonization of Biopesticides Registration under project TCP/ RAS/3212 for 31 days in 2 missions from 1 August to 30 November, 2010.
- Dr Ramesh Chand (Director, NCAP, Pusa, New Delhi) visited for attending FAO Workshop on "Food and Agricultural Policy Analysis Capacity Strengthening" from 30 August to 5 September, 2010.
- Consultancy project proposal of DMAPR, Anand Gujarat for collaborative project, "Organic Production of Underutilized Medicinal, Aromatic and Natural Dye Plants Programmes of Sustainable Livelihoods in South Asia" in Bhutan.
- Dr D.C Bhandari (Director, NBPGR, New Delhi) visited Korea for International Symposium on

- Sustainable, Agricultural Development and Use of Agro-biodiversity in Asia Pacific Region in Republic of Korea from 12 to 15 September, 2010.
- Dr B. Meenakumari (DDG, Fisheries) visited Thailand to attend the Global Conference on 'Aquaculture, 2010' and 21st GCM-21as member of NACA in Thailand from 21 to 25 September, 2010
- Proposal of Dr Aniket Sanyal (Principal Scientist, Project Directorate on Foot-and-Mouth Disease, IVRI Campus, Mukteshwar) visited United Kingdom from 1 to 3 October, 2010.
- Dr B. Singh (Project Coordinator, IIVR, Varanasi) visited Bangladesh to attend the SAARC Japan Special Fund (SJSF) at Dhaka, Bangladesh from 8 to 9 October, 2010.

International Deputation and Training funded by CG Centres or covered under collaborative projects of ICAR and CG centres for 2010

- Dr S. Ayyappan (Secretary, DARE and DG, ICAR) visited USA to Cornell University, Ithaca, New York on 8 September, 2010.
- Dr N. Nadarajan (Director, IIPR, Kanpur) visited Turkey for participation in 5 International Food Legumes Research Conference at Anatalya from 26 to 30 April, 2010 and post-conference tour to ICARDA, Syria from 1 to 5 May, 2010.
- Dr Lakshmi Kant (Sr. Scientist, VPKAS, Almora) visited Mexico to attend Wheat Improvement and Pathology Training programme at CIMMYT's (Hqrs) in El Batan at Research Station in Ciudad Obergon, Mexico from 15 February to 14 May, 2010
- Dr S. Ayyappan (Secretary, DARE and Director General, ICAR) visited Bangladesh to participate in the XVIth Regional Steering Committee Meeting of Rice Wheat Consortium held at Dhaka, Bangladesh from 1 to 2 October, 2010.
- Dr R. Selvakumar (Sr. Scientist, DWR, Karnal) visited Mexico for participation in training programme on "Wheat Improvement and Pathology" held at CIMMYT, Mexico from 15 February to 14 May, 2010.
- Dr A.K. Singh (DDG, NRM) and Dr C.S. Prasad (ADG, PIM) visited Syria to attend the First Meeting of the CGIAR Independent Science Partnership Council held at ICARDA, Syria from 14 to 16 April, 2010.
- Dr R. S. Meena (Scientist SS, NRCSS, Ajmer, Rajasthan); Dr (Smt.) Anita Babbar (Chickpea Breeder, JNKVV, Jabalpur, Madhya Pradesh); Mr LB. Mhase, (Chickpea Breeder, MPKV, Rahuri, Maharashtra); Dr Gyanendra Singh, (Lentil Breeder), VPKAS, Almora Uttrakhand; Dr H.C. Nanda, (Lathyrus Breeder, IGKVV, Raipur, Chattisgadh); and Dr S.S. Punia (Lentil Breeder, Agricultural Research Station, Kota, MPUA and T, Rajasthan) visited Syria for Breeder training at ICARDA, Aleppo, Syria from 25 April to 7 May, 2010.



- Dr Sanjeev Gupta (Principal Scientist, IIPR, Kanpur) visited Turkey for participation in V International Food Legumes Research Conference, from 26 to 30 April, 2010 and Post-Conference tour to ICARDA, Antalya, Syria from 1 to 5 May, 2010.
- Dr M.M. Pandey (Deputy Director General, Agriculture Engineering, ICAR Hq) visited China to participate in III Global forum of Leader for Agriculture Science and Technology (GLAST-2010), co-sponsored by CAAS and CGIAR held from 12 to 14 August, 2010 in Harbin, Heilongjiang Province, China.
- Dr Jagjeet Singh Lore (Assistant Plant Pathologist, Department of Plant Breeding and Genetics) visited Philippines to work with Dr Laetitia Willocquet (Scientist, Plant Pathology, PBGB Division, IRRI) at IRRI, Manila under the Collaborative research project from 8 March to 5 April, 2010.
- Shri Rajiv Mehrishi (Additional Secretary, DARE and Secretary, ICAR) visited Germany to attend a workshop being organized by CGIAR fund office to discuss the Administrative Agreement to CGIAR Fund held at Berlin, Germany from 12 to 13 April, 2010.
- Dr Chikappa G. Karjagi (Scientist, Directorate of Maize Research, IARI, New Delhi) visited Mexico to attend training course on Maize Molecular Breeding sponsored by CIMMYT (Hq.) El Batan, Mexico from 5 to 16 April, 2010.
- Dr S. Ayyappan (Secretary, DARE and DG, ICAR) visited Korea for participating in the XIV Annual Meeting of the Council for Partnership on Rice Research in Asia held from 11 to 12 October, 2010 and for participating in the General Assembly Meeting of Association of Agricultural Research Institutions held from 13 to 15 October, 2010.
- Dr S.K. Sharma (Director, NBPGR, New Delhi) visited Bologna for attending the meeting of Biodiversity International from 28 to 29 April, 2010.
- Dr S.S. Singh (Project Director) and Dr Mohinder Prashar (Principal Scientist, DWR, Flowerdale, Shimla) and Dr Ravish Chatrath (Principal Scientist, DWR, Karnal) visited Russia for participation in upcoming Borlaug Global Rust Initiative 2010 workshop from 30 to 31 May, 2010 and International Wheat Conference from 1 to 4 June, 2010 held at St. Petersburg, Russia.
- Dr M.A. Khan (Director, RCER, Patna) visited Ethiopia for participating in 3-day conference on "Improving Water Productivity of Crop Livestock Systems for Benefiting the Poor and the Environment" from 20 to 22 April, 2010.
- Dr P.K. Aggarwal (Principal Scientist and National Professor, Division of Environmental Science, IARI, New Delhi) visited Kenya for participation and presentation of scientific paper in CCAFS

- Launch conference on "Building Food Security in the Face of Climate Change" at Nairobi from 4 to 7 May, 2010.
- Dr M.A. Khan (Director, RCER, Patna) visited France for participating in International Conference on Innovation and Sustainable Development in Agriculture and Food (ISDA, 2010) at Montpellier, France from 28 June to 1 July, 2010.
- Dr Tapan Kumar Adhya (Director, CRRI, Cuttack) and Dr R.P. Dua (ADG, FFC) visited Cambodia for participating in attend the IX CURE Review and Steering Committee Meeting held at Siem Reap, Cambodia from 3 to 6 May, 2010.
- Dr S.K. Sharma (Director, NBPGR New Delhi) visited Italy for participating in 2-day meeting organized by Biodiversity International on CGIAR Collaborative activity "Inventory of Genetic Stock Collection" from 28 to 29 April 2010.
- Prof. S.K. Datta (DDG, Crop Science) visited Philippines for participating in the IRRI's 50th Alumni Homecoming from 19 to 24 April, 2010.
- Dr S. Ayyappan (Secretary, DARE and Director General, ICAR) visited Italy for participation in Inaugural CGIAR Funders Forum held at Rome, Italy on 15 July, 2010 followed by the Fund Council Meeting on 16 July, 2010 along with Shri Rajiv Mehrishi (Additional Secretary, DARE and Secretary, ICAR) and Shri Rajesh Ranjan, Director, DARE visited USA to participate in the Fund Council Meeting held at Washington DC from 1 to 2 November, 2010 and Deputation of Shri Ravinder Pattar, Director (Finance), ICAR; Smt. Sumita Dasgupta, (Under Secretary, CG) and Shri Roopak Chaudhuri, (Under Secretary, IC-III) of DARE) visited Italy for participation in Fund Council Meeting of Consultative Group on International Agricultural Research (CGIAR) held in Rome from 14 to 16 July, 2010.
- Dr Jitendra Kumar (Principal Scientist, Division of Genetics IARI, New Delhi) visited Turkey for participation in V International Food Legumes Research Conference at Antalya, Turkey from 26 to 30 April, 2010 and Post-Conference Tour to ICARDA, Syria from 1 to 5 May, 2010
- Dr A.K. Singh (DDG, NRM), Dr S.S. Singh (Director DWR, Karnal) and Dr Ramesh Chandra (Director NCAP, New Delhi) visited Syria to acquaint themselves about ICARDA's research activities from 17 to 22 May, 2010.
- Dr P.K. Joshi (Director, NAARM, Hyderabad) visited Kenya to attend "Planning Workshop and Steering Committee Meeting of the Challenge Program on Climate Change, Agriculture and Food Security held at Nairobi, Kenya from 3 to 8 May, 2010.
- Dr S.K. Sharma (Director, NBPGR, New Delhi) visited Italy to participate in the workshop to develop the Cross-Cutting Component on Genetic Resources held at CGIAR, Rome, Italy from 5 to 6 May, 2010.

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- Dr S. Ayyappan (Secretary, DARE and Director General, ICAR) visited Russia to participate in Borlaug Global Rust Initiative, 2010 workshop held at St Petersburg, Russia from 30 to 31 May, 2010.
- Dr Suresh Pal (Head, Division of Agricultural Economics) visited Thailand to attend a workshop on "Measuring and Analyzing Agricultural R and D Investments and Capacity Trends in South Asia" in Bangkok, Thailand from 29 to 30 April, 2010.
- Dr G.G.S.N. Rao (Project Coordinator, Agricultural Meteorology) and Dr V.U.M. Rao (Principal Scientist, CRIDA, Hyderabad) visited Bangladesh to participate in Review Meeting for the Project on "Vulnerability to Climate Change: Adaptation Strategies and Layers of Resilience" followed by a Policy Dialogue on "Building Climate Resilience Agriculture in Asia" held at Dhaka, Bangladesh from 3 to 7 May, 2010.
- Dr S.K. Datta (DDG,Crop Science), ICAR) visited Russia for participation in Borlaug Global Rust Initiative, 2010 workshop held at St Petersburg, Russia from 30 to 31 May 2010 followed by VIII International Wheat Conference at St Petersburg, Russia from 1 to 2 June, 2010.
- Shri R.K. Sahu (Scientist (SG), CRRI, Cuttack) visited Bangladesh to attend training Workshop on 'Quality Rice Seed Production' at Bangladesh Rice Research Institute, Gazipur from 9 to 15 May, 2010.
- Dr Mohinder Prashar (Principal Scientist, DWR, Flowerdale, Shimla) visited Russia to attend the Pre- Meeting on Rust Surveillance and Gene Deployment Strategies held at St. Petersburg, Russia from 27 to 28 May, 2010.
- Dr S. Ayyappan (Secretary, DARE and Director General, ICAR) visited Philippines from 5 to 9 July, 2010 to visit IRRI for an overview of IRRI's programmes and activities from 5 to 6 July, 2010 at Los Banos, Philippines followed by participation in the Investment Forum for Food Security in Asia and the Pacific held in Manila from 7 to 9 July, 2010.
- Dr Indu Sharma (Sr. Plant Pathologist, Wheat, Department of Plant Breeding and Genetics, PAU, Ludhiana), Dr Anju M. Singh (Sr. Scientist, Division of Genetics, IARI, New Delhi), Dr Vinod Tiwari (Principal Scientist, DWR, Karnal), Dr K.V. Prabhu (Head, Division of Genetic, IARI, New Delhi), Dr Gyanendra Singh (Principal Scientist) and Dr (Smt.) Sindhu Sareen (Sr. Scientist, DWR, Karnal), and Dr Ratan Tiwari and Dr M.S. Saharan (Sr. Scientists, DWR, Karnal) visited Russia to attend Borlaug Global Rust Initiative, 2010 workshop and VIII International Conference held in St. Petersburg, Russia from 30 to 31 May, 2010 and 1 to 4 June, 2010.

- Dr P.K. Joshi (Director, NAARM, Hyderabad) visited Syria to attend the External Review Meeting of Centre Commissioned External Review of ICARDA's Research on Food Legumes at Aleppo, Syria from 27 May to 1 June, 2010.
- Dr Krishna Srinath (Director, DRWA, Bhubaneshwar) visited Columbia, South America for participating in Action Workshop on "Repositioning Participatory Research and Gender Analysis in times of Change" held at the International Centre for Tropical Agriculture, Cali from 16 to 18 June, 2010.
- Dr R P S Verma (Principal Scientist, DWR, Karnal) visited Syria to acquaint about ICARDA's Barley Research activities from 28 May to 2 June, 2010.
- Dr S.S. Singh (Project Director, DWR, Karnal) visited Australia for the development of Wheat Quality Project Plan under IAP-MAWB from 14 to 24 June, 2010.
- Dr S. Ayyappan (Secretary, DARE and DG, ICAR) and Shri Rajiv Mehrishi (Additional Secretary, DARE and Secretary, ICAR) visited USA on invitation from CIMMYT, BMGF and USAID regarding future directions of agriculture research and to broaden support for Borlaug Institute for South Asia from 14 to 19 June, 2010.
- Dr I. Sekar (Sr. Scientist, Division of Agricultural Economics, IARI, New Delhi) visited Turkey to attend the ISPC workshop held at Istanbul, Turkey from 1 to 3 June, 2010.
- Dr T.R. Sharma (Principal Scientist, NRC on Plant Biotechnology, New Delhi) visited Spain for participating in workshop on Data Management for Plant Breeders at Zaragoza, Spain from 30 May to 4 June, 2010.
- Dr R. Kalpana Sastry (Head, ARSMP Division) and Dr S.K. Soam (Principal Scientist, NAARM, Hyderabad) visited USA to attend the CAS-IP Annual National Partners Initiative Meeting at Washington DC, USA from 13 to 19 June, 2010.
- Dr S.K. Chakrabarti (Head, Plant-Protection, CPRI, Shimla) visited USA to participate in Agribusiness Management Programme Course, 2010 held in Ithaca New York, USA from 21 to 29 June, 2010 under ABSP-II.
- Dr Himanshu Pathak (Sr. Scientist, Div. of Environmental Science, IARI, New Delhi) visited USA to attend a conference, "Soil Carbon Sequestration and Carbon Credits" organized by Bill and Melinda Gates Foundation held at Seattle, USA from 8 to 9 June, 2010.
- Dr S.K. Sharma (Director, NBPGR, New Delhi) visited Italy to participate in the IIIrd International Steering Committee Meeting on "Global Information on Germplasm Accession Meeting, Bioversity International (Hqrs), Maccarese (Rome), Italy from 22 to 24 June, 2010.
- Dr K. Sami Reddy (Principal Scientist, IISS, Bhopal) visited Australia for participating in XIX



- World Congress of Soil Science held at University of Queensland, Brisbane, Australia from 1 to 6 August, 2010 followed by project work under the Australian Centre for International Agricultural Research funded project SMCN/2002/032 "Integrated Nutrient Management in Soybean/ Wheat Cropping Systems" for 3 weeks, i.e. up to 20 August, 2010.
- Dr S. Ayyappan (Secretary, DARE and Director General, ICAR) visited Tanzania to participate in the meeting of the ICRISAT Governing Board and Committees held at Arusha, Tanzania from 20 to 23 September, 2010.
- Dr P.D. Sharma (ADG, Soils, ICAR (Hqrs) visited Syria to participate in the II MP-1 Stakeholders Consultative Conference held at Aleppo, Syria from 9 to 10 August, 2010.
- Dr A. Subba Rao (Director, IISS, Bhopal) visited Australia to participate in the XIX World Congress of Soil Science held at University of Queensland, Birsbane, Australia from 1 to 10 August, 2010.
- Dr S.K. Dutta (Deputy Director General, Crop Science, ICAR (Hq.) visited Syria for participation in International Conference on Agricultural Productivity Increase: Challenges and Means of Development, held at Der-Azzor, Syria from 28 to 30 November, 2010.
- Dr N.P.S. Yaduvanshi (Principal Scientist, CSSRI, Karnal) visited Australia for participation in XIX World Congress of Soil Science from 31 July to 12 August, 2010.
- Dr B. Venkateswarlu (Director, CRIDA, Hyderabad) visited Syria to attend the stakeholders meeting on Integrated Agriculture Systems for the Poor and Vulnerable: Integrated Agricultural Production Systems for Dry Areas" at Nairobi, Kenya from 8 to 9 July, 2010.
- Prof. Swapan Kumar Datta (Deputy Director General, Crop Science, ICAR Hq.) visited Bangladesh to participate in 50th Anniversary of IRRI and meeting with Bangladesh Authorities and SAARC Agricultural Centre at Dhaka, Bangladesh from 12 to 14 July, 2010.
- Dr M. Sivasamy (Senior Scientist, IARI Regional Station, Wellington) and Dr Vinod (Senior Scientist Division of Genetics, IARI, New Delhi) visited Mexico to attend a training on Wheat Improvement and Pathology at CIMMYT, Mexico from 2 August to 1 October, 2010.
- Dr S.S. Singh (Director, DWR, Karnal) visited Kenya to participate in the Stakeholders Meeting for Mega Program 3 on Dryland Cereals held in Nairobi, Kenya from 2 to 3 August, 2010.
- Dr A.G. Ponniah (Director, CIBA, Bhubneshwar) visited Malaysia to participate in the Design Workshop for CGIAR Mega programme 1.3 "Harnessing the Development Potential of Aquatic Systems for the Poor and Vulnerable at Penang, Malaysia from 19 to 21 July, 2010.

- Dr S.V. Singh (Principal Scientist) and Dr Parveen Kumar (Sr. Scientist of CPRS, Modipuram) visited Turkey to attend International Symposium on 'Agronomy and Physiology of Potato' held at Nevsehir, Turkey from 20 to 24 September, 2010.
- Dr R. Kalpana Sastry (Head, ARSMP Division, NAARM Hyderabad) visited Addis Ababa, Ethiopia to attend a consultative meeting development of the proposal for the CGIAR's Mega Programme 2 (MP2) held at ILRI Campus in from 17 to 19 August, 2010.
- Dr V.D. Patil (ADG, O &P, ICAR Hqrs.) visited Kenya (from 2 to 7 August, 2010) for participation in the Stakeholders Meeting for Mega Programme 3 on Dryland Cereals (2 to 3 August) and Grain Legumes (6 to 7 August).
- Dr V. Celia Chalam (Virologist, ICAR) visited to IITA (Hq.) Ibadan, Nigeria from 20 to 26 September, 2010 followed by a presentation in the World Cowpea Conference organized by International Institute of Tropical Agriculture from 27 September to 1 October, 2010 in Dakar Senegal.
- Dr S.K. Naskar (Director, CTCRI, Kerala) visited Ghana to participate in the World Cafe meeting Accra, Ghana from 9 to 10 August, 2010.
- Dr Suresh Pal (Head, Division of Agricultural Economics, IARI, New Delhi) visited South Africa to attend the Advisory Committee Meeting of Agricultural Science and Technology Indicators, IFPRI at Stellenbosch, South Africa from 24 to 25 September, 2010.
- Shri Rajiv Mehrishi (Additional Secretary, DARE and Secretary, ICAR) and Prof. S.K. Datta (Deputy Director General, Crop Science) visited Vietnam for participation in the III International Rice Congress from 8 to 12 November, 2010.
- Dr R.K. Tyagi (Principal Scientist and Head, Germplasm Conservation Division, NBPGR, New Delhi) visited Rome to participate as an expert in Expert Consultation Meeting for revision of genebank standard at Bioversity International, Rome from 6 to 8 September, 2010.
- Dr S. Ayyappan (Secretary, DARE and Director General, ICAR) visited on deputation as Trustee to the International Potato Centre (CIP) Board.
- Dr S.K. Datta (DDG, Crop Science, ICAR, Hq), Dr S.S. Singh (Project Director, DWR, Karnal) and Dr Vinod Prabhu (Head, Department of Genetics, IARI, New Delhi) visited Australia to participate in the IInd Annual Steering Committee Meeting as members of the Indian Steering Committee of the Indo-Australian Programme on Marker Assisted Wheat Breeding (IAP-MAWB) from 2 to 8 October, 2010.
- Dr R.P. Dua (ADG, FFC, ICAR) visited Iran to attend CLAN Country Coordinators' Steering Committee Meeting held at SPII, Karaj, Islamic Republic of Iran from 27 to 29 November, 2010.

- Dr A.N. Mishra (Principal Scientist and Head, IARI, Regional Station Indore, Madhya Pradesh) visited Nepal to participate in the II Annual Review Meeting on Cereal Systems Initiative for South Asia, Wheat Breeding (Objective-4) held at Kathmandu, Nepal from 14 to 18 September, 2010.
- Dr Ravish Chatrath (Principal Scientist), Dr Ratan Tiwari (Principal Scientist), Dr M.S. Sharan (Senior Scientist) all from DWR, Karnal visited Australia under ACIAR-DWR Collaborative Project CIM/2005/20 "Molecular Markers Technologies for Faster Wheat Breeding in India" from 22 September to 01 October, 2010.
- Dr Ravish Chatrath (Principal Scientist, DWR, Karnal) visited Nepal to participate in the II Annual Review Meeting on Cereal Systems Initiative for South Asia, Wheat Breeding (Objective-4) held at Kathmandu, Nepal from 14 to 18 September, 2010.
- Dr Tapan Kumar Adhya (Director, CRRI, Cuttack) visited Vietnam to attend III International Rice Congress held at Hanoi, Vietnam from 9 to 11 November, 2010.
- Prof. Swapan K Dutta (DDG, Crop Science, ICAR) visited Vietnam to participate in the Third International Rice Congress, 2010 held at Hanoi, Vietnam from 8 to 12 November, 2010.
- Dr G.S. Mavi (Assistant Plant Breeder, Department of Plant Breeding and Genetics, PAU, Ludhiana) visited Australia to understand the process of molecular wheat breeding and to review the international crop information system implementation work Plans as Active project scientists from 22 September to 1 October, 2010.
- Dr S. Ayyappan (Secretary, DARE and DG, ICAR) visited Kenya to attend International Centre for Research and Agroforestry and also to International Livestock Research Institute in Nairobi, Kenya from 6 to 8 December, 2010.
- Dr Govinda Krishnan (Principal Scientist, CPRI, Shimla) visited Peru to participate in CIP Study and Exchange Program, Peru from 15 to 29 November, 2010.
- Dr P. Jayaprakash (Sr. Scientist, IARI Regional Station, Wellington) visited Kenya to attend training on "Standardization of Stem Rust Notes and Germplasm Evaluation, with Discussions on Yellow and Brown Rust" held in Njoro, Kenya from 5 to 12 October, 2010.
- Dr B.P. Singh (Director), Dr S.K. Chakrabarti (Head and Principal Scientist) and Dr S.K. Kaushik (Sr. Scientist, CPRI, Shimla) visited Bangladesh for participation in Potato Partner Level Meeting at Dhaka from 31 October to 1 November, 2010.
- Dr Jyoti Kaul (Sr. Scientist), Dr C.M. Parihar (Scientist) and Dr Manivannan A (Scientist) all from Directorate of Maize Research, New Delhi visited Bangladesh to participate in the training

- organized by CIMMYT at BARI, Bangladesh from 2 to 5 October, 2010.
- Dr Preetinder Singh Sarao (Entomologist, Department of Plant Breeding and Genetics) visited Philippines to attend the "New Paradigms in Rice Hopper Resistance" Workshop held at IRRI, Laguna, Philippines from 18 to 22 October, 2010.
- Dr Randhir Singh (Principal Scientist, DWR, Karnal) and Dr Anuj Kumar (Sr. Scientist, DWR, Karnal) visited to Australia to attend the Project Work Shop meeting in Adelaide, South Australia from 11 to 16 October, 2010.
- Dr P.R. Meghwal (Principal Scientist, CAZRI, Jodhpur) visited Agadir, Morocco to attend the VII International Congress on Cactus Pear and Cochineal being organized by FAO-ICARDA from 17 to 22 October, 2010.
- Dr J.S. Bentur (Principal Scientist, DRR, Hyderabad) visited Philippines to participate in the International Workshop on "New Paradigms in Rice Hopper Resistance" from 18 to 22 October, 2010 followed by post-workshop activities including collaborative research and writing, visits from 23 to 31 October, 2010 at IRRI, Philippines.
- Dr H.P. Singh (DDG, Horticulture) visited to Vietnam to participate as Chairman in the BAPNET Biodiversity International Meeting, organized by FAVRI at Hanoi, Vietnam from 2 to 5 November, 2010.
- Dr Sanjukta Das (Principal Scientist, CRRI, Cuttack) visited Vietnam for participation in the III International Rice Congress at Hanoi, Vietnam from 8 to 11 November, 2010.
- Dr (Mrs) Livinder Kaur and Dr Sarvjeet Singh (Sr. Plant Breeder, Department of Plant Breeding and Genetics, PAU, Ludhiana) visited Australia to review research work of the collaborative research project "Accelerated Genetic Improvement of *desi* Chickpea: An International Alliance between DAFWA/UWA/CLIMA/COGGO/ICRISAT" from 17 to 22 October, 2010.
- Dr S.K. Singh (Principal Scientist, Goat Genetic and Breeding Division, CIRG, Makhdoom) visited Korea to participate in the International Symposium on "Sustainable Agricultural Development and Use of Agro-biodiversity in the Asia-Pacific Region" held at Suwon, Republic of Korea from 13 to 15 October, 2010.
- Dr A.K. Thakur (Sr. Scientist, DWM, Bhubaneshwar) visited Vietnam to attend III International Rice Congress scheduled held at Hanoi, Vietnam from 8 to 12 November, 2010.
- Dr S.K. Naskar (Director, CTCRI, Thiruvananthapuram) visited Italy in the Second Strategic Meeting of the Global Cassava Partnership for the 21st century held at Bellagio, Italy from 1 to 5 November, 2010.





- Dr K.T. Sampath (Director, NIANP, Bengaluru) visited Laos to attend the 'End of Project Workshop on Fodder Innovation Project' from 15 to 19 November, 2010.
- Dr N. Shobha Rani, Dr N. Sarla, Dr T. Ram all the three are Principal Scientists, Dr B.C Viraktamath (Project Director) and Dr K. Surekha (Sr. Scientist, DRR) visited Vietnam to attend III International Rice Congress scheduled held at Hanoi, Vietnam from 8 to 12 November, 2010.
- Dr M.V. Singh (Project Coordinator, (Micro nutrients, Indian Institute of Soil Science, Bhopal) visited Washington to attend the "First Global Conference on Biofortification-Discovery to Delivery" from 9 to 11 November, 2010.
- Dr Raj Kumar Gautam (Head, Division of Field Crops, CARI, Port Blair) visited Vietnam to participate in International Rice Congress at

- Hanoi, Vietnam held from 9 to 11 November, 2010
- Dr O.N. Singh (Principal Scientist, CRRI, Cuttack) visited Vietnam to participate in International Rice Congress at Hanoi, Vietnam held from 9 to 11 November, 2010.
- Dr M. Variar (Principal Scientist and OIC), Dr N.P. Mandal (Sr. Scientist), Dr C.V. Singh (Sr. Scientist of CRRURRS, Hazaribag under CRRI) and Dr J.N. Reddy (Principal Scientist, Cuttack) visited Vietnam to participate in International Rice Congress at Hanoi, Vietnam held from 8 to 12 November, 2010.
- Dr S.K. Dubey (Principal Scientist, CSWCRTI, Agra) visited Vietnam to participate in the III IRC held at Hanoi, Vietnam from 8 to10 November, 2010.