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CITATIONS

ICAR AWARD CEREMONY

29 JULY 2014

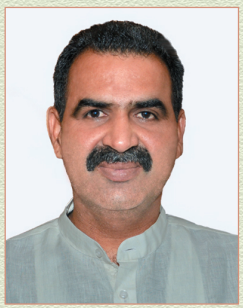
भाकृअनुप
ICAR

Indian Council of Agricultural Research
New Delhi

ICAR Award Ceremony
29 July 2014

Shri Radha Mohan Singh
Minister of Agriculture

Shri Narendra Modi
Hon'ble Prime Minister of India



Dr Sanjeev Kumar Balyan
Minister of State for
Agriculture & FPI

TOWARDS TRICOLOUR REVOLUTION ...

CITATIONS

ICAR Award Ceremony

29 July 2014

Indian Council of Agricultural Research
New Delhi

www.icar.org.in

राधा मोहन सिंह
RADHA MOHAN SINGH

सत्यमेव जयते

कृषि मंत्री, भारत सरकार
MINISTER OF AGRICULTURE
GOVERNMENT OF INDIA

संदेश

मुझे यह जानकर हर्ष हुआ कि भारतीय कृषि अनुसंधान परिषद (आई सी ए आर) अपना वार्षिक पुरस्कार समारोह 2014 आयोजित कर रहा है। मैं उन वैज्ञानिकों, शिक्षकों, किसानों और पत्रकारों को हार्दिक बधाई देता हूँ जिन्होंने अपने कार्यक्षेत्र में सर्वोत्तम कार्य किया है और जिन्हें कृषि अनुसंधान, शिक्षा, विस्तार तथा उत्पादन के क्षेत्र में उत्कृष्ट योगदान के लिए पुरस्कृत किया गया है। मुझे विश्वास है कि इस पुरस्कार से सम्मान पाने वालों में नवीनता, उत्साह और रचनात्मकता बढ़ेगी और इससे अन्य लोगों को भी ऐसे उल्लेखनीय कार्य करने की प्रेरणा मिलेगी।

7 जुलाई 2014
नई दिल्ली

(राधा मोहन सिंह)

डॉ. संजीव कुमार बालियान
Dr SANJEEV KUMAR BALYAN

सत्यमेव जयते

राज्य मंत्री,
कृषि एवं खाद्य प्रसंस्करण उद्योग
भारत सरकार
Minister of State for
Agriculture & Food Processing Industries
Government of India

संदेश

यह प्रसन्नता का विषय है कि भारतीय कृषि अनुसंधान परिषद (आई सी ए आर) द्वारा अपने 86वें स्थापना दिवस एवं वार्षिक पुरस्कार वितरण समारोह 2014 का आयोजन किया जा रहा है। मैं, उन सभी पुरस्कार विजेताओं का हार्दिक अभिनन्दन करता हूँ जिन्होंने देश के कृषि अनुसंधान, शिक्षा और विकास में महत्वपूर्ण योगदान किया है।

आज की स्थिति में प्रभावी नीतियों के माध्यम से नई प्रौद्योगिकियों और आविष्कारों का खेत पर प्रयोग करना विशेष रूप से प्रासंगिक है। मुझे विश्वास है कि इस कार्य में हमारे कृषि वैज्ञानिक और किसान अपना श्रेष्ठतम योगदान देंगे। मैं सभी पुरस्कार विजेताओं, उनके परिवारों और राष्ट्रीय कृषि अनुसंधान प्रणाली से जुडे अन्य सभी लोंगों को अपनी शुभकामनाएं प्रेषित करता हूँ।

1 जुलाई 2014
नई दिल्ली

(डॉ. संजीव कुमार बालियान)

डॉ. एस. अय्यप्पन
Dr S. AYYAPPAN

Secretary, Department of Agricultural Research
& Education and Director General,
Indian Council of Agricultural Research
New Delhi 110 001

FROM THE DG'S DESK

In an era of competition, an appropriate incentive and reward system in an organization makes the employees proficient and productive and provides them the required job satisfaction. The Awards, besides recognizing merit and accomplishments, generate a healthy competition among individuals, groups and institutions to attain yet higher levels of excellence in their area of work.

The Indian Council of Agricultural Research has institutionalized awards in several categories and has been recognizing and rewarding the institutions, scientists, teachers, agricultural journalists and farmers every year. It is a pleasure to share that 89 awardees under 16 different categories have been selected for the year. These comprise three Institutions, one AICRP, 73 scientists, ten farmers and two farm journalists. It is gratifying to see that of the 73 scientists, eleven are women.

Among the Agricultural Universities and Deemed Universities, the Best Institution Award has been bestowed upon National Dairy Research Institute, Karnal. The Sugarcane Breeding Institute, Coimbatore has been adjudged the best ICAR institution among Large Institute category for its achievement in sustainability in sugarcane productivity and production. The Directorate of Poultry Research, Hyderabad has been bestowed the Best Institution Award under relatively Small Institute category for improving sustainability in agriculture through poultry farming.

Chaudhary Devi Lal Outstanding AICRP Award has been bagged by the All-India Coordinated Research Project on Agrimeteorology and has made significant progress in climate characterization of different States.

Jawaharlal Nehru Awards for high quality Ph.D. thesis are being given to 13 scholars. There are two awardees for Panjabrao Deshmukh Woman Scientist Award. The Vasantrao Naik Award for Outstanding Research and Applications in Dryland Farming Systems for 2013 has gone to research team from Central Soil and Water Conservation Research & Training Institute Research Center, Sunabeda, Koraput, Odisha.

Jagjivan Ram Abinav Kisan Puruskar has been awarded to nine farmers, one at National level and eight at Zonal level. The N.G. Ranga Award for Diversified Agriculture has been awarded to a farmer from Haryana.

Rafi Ahmed Kidwai Award and Interdisciplinary Team Research Award for biennium 2011-12 have been bagged by two researchers and four research teams respectively, in area of Crop and Horticulture Sciences, Natural Resource Management and Agricultural Engineering and the Fisheries, Animal Science and Social Science. There are four awardees for the Lal Bahadur Shastri Outstanding Young Scientist Award.

Fakhruddin Ali Ahmed Award for Outstanding Research in Tribal Farming Systems has been bagged by two teams of the scientists from CARI, Andaman & Nicobar Island and the other from Ranchi, Jharkhand. Swami Sahajanand Saraswati Outstanding Extension Scientist Award went to two scientists one from Uttar Pradesh and the other from Andhra Pradesh.

The authors of four technical books in Hindi, one each on Crop Science and Horticulture Science, National Resource Management/ Agricultural Engineering, Animal/Fisheries Sciences and Social Science have been selected for Dr Rajendra Prasad Puruskar. Four teachers have been selected for the Bharat Ratan Dr C. Subramaniam Award in the fields of Crop and Horticultural Science, NRM/Agricultural Engineering, Animal/Fisheries Science and Social Science. Two journalists one each from Print and Electronic media have been given the Chaudhary Charan Singh Award.

The Indian Council of Agricultural Research (ICAR) and National Academy of Sciences India (NASI) has instituted NASI-ICAR Award for Innovation and Research on Farm Implements from the year 2013 in order to reduce drudgery of farm women by development of farm implements and to encourage researchers and innovators to develop farm implements for farm women.

I congratulate all the award winners and their family members and hope that these awards will encourage them to achieve new heights in future and also inspire their colleague to emulate them in pursuit of excellence. I wish to thank all the Award Judging Committees who finalized the Award winners after a scrupulous evaluation of the proposals.

Our greetings to the NARS family on the occasion.

15 July 2014
New Delhi

(S. Ayyappan)

PREFACE

The ICAR acknowledges the outstanding contributions of Institutions, AIRCPs, Scientists, Woman Scientists, Teachers, Students, Innovative Farmers, Journalists covering research, teaching and innovation and Technical Books in Hindi every year by giving away cash award, citation and certificate. The first of these awards was given in 1956. With the passage of time, new awards were added. ICAR and NASI has instituted NASI-ICAR Award for Innovation and Research on Farm Implements from the year 2013 in order to reduce drudgery of farm women. At present, there are twenty categories of award, eighteen are annual and two biennial. In the year 2014, extraordinary contributions are being recognized in 16 categories.

Overall, 499 applications/nominations were received for 16 different ICAR Awards 2013. The procedure for selecting the awardees involves many steps of meticulous planning and diligent efforts. The ICAR Awards were advertised in the month of October-November, 2013 and applications/nominations were received till 31st December, 2013. The applicant's documents were scrutinized and classified either subject area or geographical zone-wise as per guidelines of the awards. The documents along with criteria for evaluation were sent to the Award Judging Committee memebrs and chairpersons well in advance. The committees were chaired by an eminent scientist of national stature and consisted of 3-6 experts in different disciplines and from different parts of the country. Sixteen Judging Committees met in the months of April- July for finalizing the awards. The significant contributions of the awardees are compiled in the booklet entitled CITATIONS. I hope the achievements presented in the booklet would not only bring a sense of gratification and honour in the awardees but would also apprise the new and emerging areas of research work and innovations to scientists, farmers and institutions and encourage them to participate and compete. I express sincere gratitude to Dr S. Ayyappan, Secretary DARE and DG, ICAR for continuous encouragement and guidance and Shri Arvind Kaushal, Additional Secretary DARE and Secretary, ICAR for constant guidance and useful suggestions. The efforts made by staff of Award Cell and Coordinating Unit in scrutinizing the applications, organizing the meetings and award function deserve appreciation. The contribution of Shri Ajay Kohli, Per. Asstt. and Ms. Tandra Bhattacharjee, ACTO is appreciated.

(A.K. Vyas)
Assistant Director General
(Coordination/HRM)

15 July 2014
New Delhi

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SARDAR PATEL OUTSTANDING ICAR INSTITUTION AWARD - 2013

The ICAR was set up on 16 July 1929 on the recommendation of the Royal Commission on Agriculture. It was recognized in 1965. Over the years it has developed a large research and training infrastructure and operates through 99 Institutes including Bureaux, PDs & National Research Centres (NRCs) and 65 Agricultural Universities.

In order to recognize the outstanding performance by the ICAR Institutes, Deemed Universities of ICAR, Central Agricultural University and State Agricultural Universities, three Awards of ₹10.0 lakh each, are given to two ICAR Institutes/NRCs/Project Directorates/National Bureaus (one to large and other to small) and one to State Agricultural University/DUs/CAU. The award has been named after Sardar Vallabhbhai Patel (1875-1950), the first Deputy Prime Minister and Home Minister of India. For the awards of the three categories viz. ICAR's National Institutes/ Large Institutes (scientific cadre strength more than 60), (ii) ICAR's NRCs/Project Directorates etc./small institutes (scientific cadre strength up to 60) and (iii) State Agricultural Universities/ DUs/CAU. Fifteen (15) eligible applications were received in response to the open advertisement, the recipient of awards are:

NATIONAL DAIRY RESEARCH INSTITUTE
Karnal, Haryana 132 001

NATIONAL DAIRY RESEARCH INSTITUTE (NDRI), Deemed University, Karnal, the pioneer Institute in dairy education, research and development has been playing a pivotal role in dairy development in the country. The Institute has achieved landmark success in the area of cloning by producing the world's first buffalo cloned calves using hand- guided cloning. In the area of dairy processing research, the Institute has developed technologies for manufacturing a variety of indigenous dairy products and formulated-foods and health-foods. New functional dairy products as well as inclusion of ingredients from other food groups is also an example of the Institute's foray into the realm of composite foods. Besides, equipments have been designed for both small- scale dairy operation and mechanized production. It has developed research methodologies for economic evaluation of dairy production and processing system, and successfully transferred technologies to end-users. As a result, the industry has picked up some of the prominent innovations and technologies of the Institute.

SUGARCANE BREEDING INSTITUTE, COIMBATORE, has made commendable contribution in sugarcane production in the country during the last nine decades in the form of improved varieties as well as research on sustainability of sugarcane agriculture. At present, more than 95% of cane area in the country is occupied by varieties developed by the Institute. Co 86032 is the most popular variety of sugarcane developed by the Institute in the country. Seventeen new sugarcane varieties released for different agroclimatic zones of the country have already become popular. The institute maintains the largest germplasm collection of sugarcane in the world and conducts germplasm explorations. Use of remote sensing technology in sugarcane disease, surveillance and development of technology for production of sugarcane juice powder are some of the outstanding achievements of the Institute. The user centred website "CaneInfo" launched by the Institute in 2010 was well received by farmers and sugarcane development personnel alike with over 15 lakh hits in one year and was adjudged the best tele-centre initiative by the e- World forum.

SUGARCANE BREEDING INSTITUTE
Coimbatore 641 007

DIRECTORATE OF POULTRY RESEARCH
(Formerly Project Directorate on Poultry)
Rajendra Nagar, Hyderabad 500 030

The DIRECTORATE OF POULTRY RESEARCH, HYDERABAD, is one of the premier institutions in the field of research and extension in poultry science. The institute strives mainly for improving sustainability in agriculture through poultry farming by rural masses using improved chicken varieties. The chicken varieties developed and propagated by the Directorate have spread over the entire nation and supporting in eradicating malnutrition among rural masses. Trade marks registration of varieties have been obtained. Two patents have been filed and under review. Substantial number of improved chicken germplasm is supplied by the Institute in almost all parts of the country. Extension services rendered by the Institute have enabled farmers especially rural and tribal farmers to take up backyard poultry farming technologies.

CHAUDHARY DEVILAL OUTSTANDING ALL INDIA CO-ORDINATED RESEARCH PROJECT (AICRP) AWARD - 2013

Award 2013

The Council has several All India Co-ordinated Research Projects (AICRPs). In order to recognize the outstanding performance of the AICRP and its cooperating centres for enhancement of agricultural productivity, one award of ₹3.0 lakh (₹2.0 lakh for main co-ordinating unit and ₹1.0 lakh for the best centre) is given to the All India Coordinated Research Project. The Award has been named after Chaudhary Devi Lal (1914-2001) who had been the Deputy Prime Minister of India and Union Agriculture Minister. In all three (03) eligible applications were received in response to the open advertisement. Thewinner with its achievement is:

The AICRP ON AGROMETEOROLOGY (AICRPAM) at CRIDA, Hyderabad has made significant progress in terms of climate characterization of majority of the states, bringing out several agro-climatic atlases, taking up frontier research on climatic variability, preparation of real-time contingency plans, issuing of Agromet advisories to farmers, networking of 100 automatic weather stations in KVKs and providing data support to weather based insurance products in several crops. Project Co-ordinating Unit at CRIDA, Hyderabad was selected as the best centre of the AICRP on Agrometeorology.

AICRP ON AGROMETEOROLOGY
CRIDA, Hyderabad
Andhra Pradesh

RAFI AHMED KIDWAI AWARD FOR OUSTANDING RESEARCH IN AGRICULTURAL SCIENCES-2013

The ICAR has instituted the Rafi Ahmed Kidwai Award for Outstanding Research in Agricultural Sciences in order to recognize outstanding research in agricultural and allied sciences and provide incentives for excellence in agricultural research. This award is to be given to agricultural scientists for outstanding contribution in specific areas defined as: (1) Crop and Horticultural Sciences; (2) Natural Resources Management and Agricultural Engineering; (3) Animal and Fisheries Sciences and (4) Social Sciences. A total of four awards are assigned one each in the above areas. Each award consists of ₹5.00 lakh in cash. All Indian Scientists engaged in agricultural research and overseas Indian scientists working in the area relevant to Indian agriculture are eligible for these awards. The award has been named after Late Sh. Rafi Ahmed Kidwai (1894-1954) who was the president of ICAR from 1952 to 1954. A total of fifty (50) eligible applications were received in response to the open advertisement and the winners with their contributions are:

Dr ASHOK KUMAR SINGH
Professor and Project Leader (Rice)
Division of Genetics, IARI
Pusa Campus, New Delhi 110 012

Dr ASHOK KUMAR SINGH has made pioneering contribution in basic and applied research in rice genetics and breeding. He has developed four Basmati varieties, four long slender aromatic varieties and one superfine grain aromatic hybrid in rice. Dr Singh has been instrumental in popularizing the Basmati rice varieties and rice hybrid, Pusa RH 10, through public private partnership. His contributions have improved the livelihood of millions of Basmati rice farmers as well as enhanced the annual foreign exchange earning of the country through export of Basmati rice to all time high.

Prof RINTU BANERJEE
Chair Professor and Prof-in-Charge
P. K. Sinha Centre for Bioenergy
Agricultural & Food Engineering
Department, Indian Institute of Technology
Kharagpur, West Bengal 721 302

Prof RINTU BANERJEE is acknowledged as one of the leading enzymologist working in the area of food, fermentation and bioenergy. Her significant contributions to the fermentation sector include cost-effective production of industrial enzymes. She has also brought the revolution in the area of pre-treatment of lignocelluloses through enzymatic delignification for improved ethanol/butanol yield. She has pioneered novel food processing technologies including enzymatic rice polishing, debittering of juices, nutraceutically enriched food products, lactic acid production with multiple applications. As an outcome of the innovative research, she has been granted with three international and seven national patents. Of which, eight technologies have been transferred to different industries.

LAL BAHADUR SHASTRI OUTSTANDING YOUNG SCIENTIST AWARD-2013

Award 2013

The Council has instituted the Lal Bahadur Shastri Outstanding Young Scientist Award in order to recognize the talented young scientists who have shown extraordinary originality and dedication in their research programmes. Four individual awards are to be given annually across the disciplines, limited to only one award in any discipline. An individual award of ₹1.00 lakh in cash and a challenge project for three years with budgetary provision of ₹10.00 lakh per year and ₹5.00 lakh for foreign training (3 months). The challenge project and foreign training will be administered/monitored by Division of Agricultural Education at ICAR Headquarters. All young scientists who possess a doctoral degree and are below 40 years of age, and hold a regular teaching, research, extension education job in the ICAR-SAU system of institutions and engaged in research in agricultural and allied sciences for at least five years continuously, are eligible for consideration. The award has been named after Late Sh. Lal Bahadur Shastri (1904-1966) who was the Second Prime Minister of India and gave the slogan *'Jai Jawan Jai Kisan'*. Fifty (50) eligible applications were received in response to the open advertisement and the winners are:

Dr PRADEEP SHARMA has actively contributed towards research on post- transcriptional gene regulation by small RNAs under adverse climatic condition, which is critical for understanding and improving stress tolerance in crop plants. He identified five new abiotic stress-induced microRNA in wheat. While studying a variety specific differential regulation scheme of microRNAs in response to abiotic stress revealed that a three microRNAs showed similar expressions/patterns under drought, salt and cold stress conditions captured common regulatory pathways in wheat. His study also revealed the effect of drought stress on miRNA expression in drought tolerant and intolerant wheat gene types.

Dr PRADEEP SHARMA
Senior Scientist (Biotechnology)
Crop Improvement Division
Directorate of Wheat Research
P.O. Box No. 158, Agarsain Marg,
Karnal, Haryana 132 001

Dr SUPRADIP SAHA has worked extensively on development of novel nutraceutical based functional foods. His research contributions included: (i) extraction, purification and analysis of lycopene from tomato, anthocyanin from jamun and black carrot, capsaicinoids and capxanthin from chilli; (ii) HPLC/GC-MS method of tocopherol isomers, capsaicinoids, carotenoid profile in maize; (iii) development of functional and fusion foods based on nutraceutical products; and (iv) development of micronutrient rich finger millet biscuits; (v) screening of tomato, chilli, rajmash, black soybean and finger millet varieties for their nutritional attributes.

Dr SUPRADIP SAHA
Senior Scientist
Division of Agricultural Chemicals
IARI, New Delhi 110 012

Dr B.M. NAVEENA
Senior Scientist
National Research Centre on Meat
Chengicheria, Boda Uppal Post
PO Box No.19, Hyderabad,
Andhra Pradesh 500 092

Dr B.M. NAVEENA is a pioneer researcher in using high throughput proteomic tools for understanding meat quality, identification of peptide biomarkers and detection of adulteration including tissue specification. His patented work on innovative superchilling technology and vacuum packaging for improving the shelf-life of buffalo meat steaks, mutton and chicken drumsticks without freezing has huge demand among meat processors. He developed the technologies for emu slaughtering, processing and packaging. His research findings are helping thousands of emu farmers to better market their produce and many of these technologies have been commercialized to small and medium scale entrepreneurs with a great success.

Dr RANJAY K. SINGH
Senior scientist (Agricultural Extension)
Division of technology Evaluation & Transfer
Central Soil Salinity Research Institute
Zarifa Farm, Karnal, Haryana 132 001

Dr RANJAY K SINGH promoted community based conservation of natural resource including biodiversity in participatory mode to enhance adaptations, sustainability, food security and livelihood in plain and mountain ecosystems of India. A commendable work was accomplished on application of participatory eco-literary in controlling erosion of biodiversity related knowledge by establishing 'village traditional knowledge bank (VTKB) and community' and mobilizing rural and tribal communities in using community knowledge with formal knowledge for enhancing conservation of natural resources and adoption.

PANJABRAO DESHMUKH OUTSTANDING WOMAN SCIENTIST AWARD-2013

To recognize and encourage the women agricultural scientists for their outstanding research contribution in agriculture and allied sciences, the ICAR has constituted Panjabrao Deshmukh Outstanding Woman Scientist Award. Two annual awards are meant exclusively for outstanding women agricultural scientists. The award consists of ₹1.00 lakh in cash with a provision of equal amount of ₹1.00 lakh as travel grant for motivating women scientists and female students across the country, within a year of receiving the award. All women scientists engaged in research in agricultural and allied subjects/extension in a recognized institutions are eligible. The awards are exclusively meant for individual woman scientist. The award has been named after Late Sh. Panjabrao Deshmukh (1898-1965) who was Minister of Agriculture in the first cabinet of Pt. Nehru in 1952. A total of nineteen (19) applications were received in response to the open advertisement. The awardees are:

Dr INDU SHARMA
Project Director
Directorate of Wheat Research
Kunjpura Roadm, Karnal
Haryana 132 001

Dr INDU SHARMA made significant contributions towards Karnal bunt, which is a disease of quarantine significance. To manage the disease in endemic areas resistance was incorporated in high-yielding wheat varieties. She was instrumental in standardization of inoculation technique, which was widely adopted leading to identification of stable sources of Karnal Bunt resistance. Her contribution in this field will be beneficial in facilitating global wheat trade to earn foreign exchange.

Dr P.D. KAMALA JAYANTHI
ICAR National Fellow
Division of Entomology and Nematology
Indian Institute of Horticultural Research
Hessaraghatta Lake PO, Bengaluru
Karnataka 560 089

Dr P.D. KAMALA JAYANTHI isolated and identified potent chemical cues that are attractive to gravid female oriental fruit fly, *Bactrocera dorsalis* and melon fly, *B. cucurbitae.* Proposed computational chemical ecology approach, is a rapid method to identify kairomones compared to lengthy, costly traditional procedures. Dr Jayanti has developed novel kairomonal blends to attract gravid female tephritid fruit flies, *B. dorasalis* and *B.cucurbita,* and identified ROS generation as first line defense *Sechium edule* against melon fly infestation. Dr Jayanthi, working on role of phyto-semichemicals in insect-plant interactions of major horticultural pests to decipher potent cues to strengthen current IPM programmes, developed complete package of eco-friendly IPM which is relevant to need of growers and exporters.

BHARAT RATNA Dr C. SUBRAMANIAM AWARD FOR OUTSTANDING TEACHERS-2013

Award 2013

To provide recognition to outstanding teachers, incentive for excellence in teaching and to promote quality teaching, ICAR constituted 'Bharat Ratna Dr C. Subramaniam Award' for Outstanding Teachers. These awards are meant for individual teachers independently offering a full course or part of an integrated course. An individual award consists of ₹1.00 lakh in cash along with travel grant of ₹1.00 lakh to promote innovation in teaching across the country and a citation. A total of four such awards one each in the Crop/Horticultural Sciences, Natural Resource Management/Agricultural Engineering, Fisheries/Animal Science and Social Sciences have been assigned. The award has been named after Bharat Ratna Dr C. Subramaniam (1910-2000) who ushered in an era of self-sufficiency in food production. Twenty-Six (26) eligible applications were received in response to an open advertisement and the selected awardees are:

Dr A.K. SINGH
Professor and Project Leader (Rice)
Division of Genetics, IARI
New Delhi 110 012

Dr A.K. SINGH in his teaching career of 17 years, taught more than 800 students of genetics, plant breeding and molecular breeding, guided 5 M.Sc. and 12 Ph.D. students career. He has also supervised more than 50 students as member in their Advisory Committee, and greatly helped in HRD as invited/ guest teacher in different universities and institutions in the country. As a teacher, Dr Singh has focused on inspirational and motivational teaching to inculcate among students a great deal of confidence in learning process. He has introduced several innovative methods of teaching including group discussion, project formulation and presentation, use of audio-visual aids and on-line resources as and when needed to augment black-board teaching.

Dr R.K. PANNU
Dean, College of Agriculture
CCS HAU, Hisar, Haryana 125 004

Dr R.K. PANNU has established an environment conducive to learning and leverage available resources outside as well as inside the classroom. He tried to make the course interesting by citing practical examples and use of black-board and audio-visual aids. The interactive method of teaching was used for better understanding, critical and independent thinking. He helps students in setting goals and supports students in achieving them.

Dr VENKATESHWARLU GUDIPATI contributed as a teacher, research guide and academic administrator towards quality education at CIFE, Mumbai. He was involved in the designing of courses for the Masters Programme in Fish Nutrition and Biochemistry. The advance chromatographic technique, taught in these courses facilitated the students and staff to resolve fatty acid profiles of several finfish and shellfish for determining the levels of cardio protective omega-3-fatty acids. Students under his guidance published 30 research papers and commercialized two technologies by transferring to the industry.

Dr VENKATESHWARLU GUDIPATI
Principal Scientist and Dean
Central Institute of Fisheries Education
Fisheries University Road
Versova, Mumbai, Maharashtra 400 061

Dr SEEMA JAGGI is involved in teaching at Post-graduate level for the last twenty one years and taught courses on Statistical Methods including Advanced Statistical Methods and Design of Experiments. As an innovation in teaching, developed an 'eLearn Agriculture' portal for the benefits of students. She has facilitated reflective learning through mentoring of students; guided 14 students (9 Ph.D. and 5 M.Sc.). She has been member of Advisory Committee of about 100 students. She delivered talks on 'Teaching of Agricultural Statistics' and other topics in different forums.

Dr SEEMA JAGGI
Principal Scientist
Division of Design of Experiments
IASRI, New Delhi 110 012

ICAR AWARD FOR OUTSTANDING INTERDISCIPLINARY TEAM RESEARCH IN AGRICULTURAL AND ALLIED SCIENCES FOR BIENNIUM–2011-2012

To give incentives for outstanding interdisciplinary research in agriculture and allied sciences in India and to recognize teams of research workers who have set high standards for co-operative endeavour in Agriculture, Animal Husbandry, Fisheries and allied sciences, the ICAR has instituted ICAR Award for Outstanding Interdisciplinary Team Research in Agriculture and allied sciences. There are 4 awards of ₹5.00 lakh each given once in two years, based on the last 5 years continuous research of applied type in four different areas.For the biennium 2011-2012, forty-four (44) eligible applications were received and the winners are:

Dr G. PADMAJA
Principal Scientist and Head
Division of Crop Utilization
Central Tuber Crops Research Institute
Sreekariyam, Thiruvananthapuram
Kerala 695 017

The team under the leadership of Dr G. PADMAJA adopted to tackle the major issues for the utilization of tuber crops with a greater thrust on cassava and sweet potato. Developing pasta products with good colour, consumer appeal and textural quality using cassava and sweet potato flour which lack gluten was a major challenge under the project. This was made possible through the timely biochemical studies by Team leader and the textural studies on the pasta products by the Process Engineers who were team members. Extruded snack food products developed as health foods, became they contained little/no oil and nutritional quality enhancement was possible through wide range of fortification. Development of innovative starch based products such as superabsorbent polymers, superporous hydrogels, biodegradable biofilms, etc. was possible through a concerted approach. The other members of the team are Dr J. T. Sheriff, Dr M. S. Sajeev, Dr A. N. Jyothi and Smt. L. Rajalekshmy.

Dr R.S. KUROTHE
Principal Scientist
(Agricultural Engineering) & Head
Research Centre, Central Soil & Water
Conservation Research & Training Institute
Vasad, Anand, Gujarat 388 306

The team effort under the guidance of Dr R.S. KUROTHE on Watershed Management indicated that the existing soil and water conservation technologies can still be quite useful to improve and strengthen the natural resources, viz. land, water and vegetation. The basket of technologies developed, compiled, tested in field were the major strength for the team–the bamboo based bio-engineering techniques are being adopted by tree growers; techniques of direct well recharge using custom designed recharge filter has wider acceptability; the advance tool-based techniques for efficient watershed planning and quick DPR preparation has been accepted; stubble mulch farming techniques in combination with intercropping increased crop production. Model watershed recommended as 'Sites of Learning' and undertaking strategic research is for policy level adoption. The other members of the team are Dr V.C. Pande, Dr B.K. Rao, Dr Gopal Kumar, Dr A.K. Vishwakarma, Dr D. R. Sena, Dr G.L. Bagdi and Dr P.K. Mishra.

The multidisciplinary team under leadership of Dr ASHIS SAMANTA made an effort to explore the cheaper lingocellulosic biomass for xylan fractionation, xylooligosacchaides production and its *in vitro* and *in vivo* evaluation for improving gut health in animals. This will enable value-addition of such lignocellulosic biomass and nutraceuticals industries will find newer raw materials for cost effective prebiotic production. The use of prebiotics essentially improves the facultative bacteria in the gut and thereby formulative bacteria in the gut resulting in better feed utilization leading to productivity enhancement. Therefore, it is time for nutraceuticals manufacturers for beginning commercial production of xylooligosaccharides for benefiting the India's animal sector. The other team member are Dr Atul P. Kolte, Dr Swaraj Senani, Dr (Mrs) Manpal Sridhar and Dr C.S. Prasad.

Dr ASHIS SAMANTA
Principal Scientist
Feed Additives and
Nutraceuticals Laboratory
Animal Nutrition Division
NIANP, Adugodi, Hosur Road
Bengaluru, Karnataka 560 030

Dr B. SHANTHI along with her team initiated a project on Diversification of livelihoods among the women self-help group through coastal aquaculture technologies in the aftermath of the Tsunami in 2004. Women beneficiaries have taken up these avocations based on the technologies transferred by the project team. Based on this they have further developed the enterprises at small-scale level and are moving towards the path of self-sustenance. Owing to the relative case of these technologies, coastal women have attained the state of economic independence with good project margin and a potential livelihood for their future venture. The other members of team are Dr M. Krishnan, Dr V.S. Chandrasekaran, Dr C.P. Balasubramanian, Dr K. Ambasankar and Dr S. Kannappan.

Dr B. SHANTHI
Senior Scientist
Social Science Division
Central Institute of
Brackishwater Aquaculture,(CIBA), ICAR
75, Santhome High Road, R.A. Puram
Chennai, Tamil Nadu 600 028

FAKHRUDDIN ALI AHMED AWARD FOR OUTSTANDING RESEARCH IN TRIBAL FARMING SYSTEMS-2013

ICAR instituted Fakhruddin Ali Ahmed Award for Outstanding Research in Tribal Farming Systems primarily for any person or team (with two or three associates, if any) engaged in applied research and its applications in tribal areas of the country aimed at improving the biological resources and livelihoods or in original work directly applicable to tribal farming system. Two awards of the value of ₹1.00 lakh in cash, a citation and provision of equal amount for study on related subject in the geographical area for a year. The award has been named after Late Shri Fakhruddin Ali Ahmed (1905-1977) who was president of the ICAR Society from 1971 to 1974. In all twenty (20) eligible applications were received in response to the open advertisement and the winner with their contribution are:

Dr BIKASH DAS
Senior Scientist
Research Centre, Regional ICAR Research Complex for Eastern Region
Ranchi, Jharkhand 834 010

Dr BIKASH DAS and his team (Dr B.P. Bhatt, Dr A.K. Singh and Dr R.S. Pan) worked to address the issues of food and nutritional security at household and even at individual level, natural resource degradation, paradigm shift from mono-to multiple cropping, providing of round the year employment and livelihood opportunities to the resource poor tribal farmers of Eastern Hill and Plateau region of India. The Regional Research Centre of ICAR Research Complex for Eastern Region, Ranchi, developed number of Integrated Farming Systems to harness the benefit from agri-horti crops and livestock combination. All the eight models were successful not only in conserving water but also in increasing the cropping intensity. Thus ensuring the benefit from intensification of crop husbandry as well as the increased utilization of man days per family.

Dr M. SANKARAN
Senior Scientist
Division of Horticulture & Forestry
Central Island Agricultural Research Institute
Port Blair, A&N Islands 744 101

Dr M. SANKARAN and his team (Dr P. Krishnan, Dr S.K. Zamir Ahmed, and Dr V. Damodaran) have developed, demonstrated and transferred high-yielding varieties of coconut (4), Sweet potato (200), and Greater yam (1) to the tribal farmers of Andaman and Nicobar Islands. The technologies such as plantation management, tuber crops based farming system and marine capture fisheries and its value-additions were demonstrated at Nicobari Tribal Villages in Nicobar district and South Andaman. The programme increased level of income.

JAWAHARLAL NEHRU AWARD FOR OUTSTANDING DOCTORAL THESIS RESEARCH IN AGRICULTURAL AND ALLIED SCIENCES-2013

Award 2013

The ICAR instituted in January 1969, the Jawaharlal Nehru Awards for 'Post-graduate Agricultural Research' based on Ph.D. thesis of the young scientists as an incentive for high-quality fundamental or applied research among post-graduate students in India and to recognize outstanding research work done by them in different fields of agricultural research including Animal Husbandry, Fisheries, Social Science etc. There are 18 awards with a cash prize of ₹0.50 lakh each with a gold plated silver medal. The award has been named after the first Prime Minister of India Late Pt. Jawaharlal Nehru (1889-1964). A total of ninety-four (94) eligible applications were received for consideration in different disciplines and 13 were selected for the award. Out of 13 awardees, 1 obtained degree outside NARS, 5 from Agricultural University and 7 from ICAR Institutes. The awardees and their contributions are given in following pages:

Dr VIGNESH MUTHUSAMY carried out comprehensive genetic analysis of kernel carotenoids of maize and identified promising genotypes that can be deployed in increasing pro-vitamin A carotenoids in maize. His research led to the first ever demonstration of accelerated conversion of seven elite maize inbred to β-carotene-enriched genotypes through marker–assisted backcross breeding. Dr Vignesh obtained his Ph.D. from Indian Agricultural Research Institute, New Delhi.

Dr VIGNESH MUTHUSAMY
Scientist (Plant Genetics)
Division of Genetics
Indian Agricultural Research Institute
Pusa, New Delhi 110 012

Dr SOMANATH AGASIMANI isolated and characterized mutants in rice with a health beneficial functional component 'Resistant Starch'(RS). His study involved screening of large mutant populations for a trait, which is tedious to estimate, that necessitated him to develop a rapid protocol. For this, he generated a reference set of germplasm with varied RS content. By employing this, he developed a novel rapid 'cut grain dip' method (patent pending) for amylose estimation. Dr Somnath Agasimani got his Ph.D. from TNAU, Coimbatore.

Dr SOMANATH AGASIMANI
No. 70, 'Shree Somanath Krupa'
Near KUD Cross, Shreenagar
Dharwad, Karnataka 580 003

Dr SANTOSH KUMAR GUPTA
404, Udaigiri Tower, Kaushmabi
Ghaziabad, Uttar Pradesh 201 010

Dr SANTOSH KUMAR GUPTA studied the functions of co-expressed genes involved in *Pi54* gene mediated blast resistance in rice. The findings of his study indicated an active role for the *Pi54* gene in transgenic rice lines following instructions with the virulent strain of *M. oryzae*. The study also provides novel insights that would be helpful in deciphering the molecular mechanism involved in M-Oryzal-Pi54 interactions. Dr Gupta obtained his Ph.D. degree from Himachal Pradesh University, Shimla.

Dr DHRUBA JYOTI SARKAR
Scientist
Division of Agricultural Chemicals
IARI, New Delhi 110 012

Dr DHRUBA JYOTI SARKAR studied nano-ranged amphiphilic polymers with property of self-assembly into micellar aggregates, which were synthesized using poly (ethylene glycols) hydrophilic head and aliphatic/agromatic di-acids/ di-esters as hydrophobic head. Thiamethoxam, a systemic insecticide, was encapsulated in the nano-micelle of the amphiphilic polymers to prepare controlled release (CR) formulation of thiamethoxam to overcome the problem of conventional formulations. The nano-ranged CR formulations effectively controlled major pests of soybean and thus produced better yield without any environment ill effect in terms of nodulation pattern and residue in soil and seeds. Dr Sarkar obtained his Ph.D. degree from Indian Agricultural Research Institute, New Delhi.

Dr RAKESH KUMAR GHOSH studied the possibility of using fly ash as a resource to manage downward mobility of herbicides. He explored by systematic and comprehensive evaluation of the multitude of interactions and processes that regulate pesticide behaviour in soils. Pesticide (metolachlor and atrazine) adsorption capacity of fly ashes was estimated, and factors influencing adsorption were identified. His work also laid the foundation to develop a potentially viable technology to reduce downward mobility of herbicides using fly ash amendment in soil plough layer. His work breaks the taboo of heavy metal contamination in soil through fly ash application. Thus, the strategy developed will be a step towards sustainability of environment through better management of available resources. Dr Rakesh Kumar Ghosh obtained his Ph.D. degree from Indian Agricultural Research Institute, New Delhi.

Dr RAKESH KUMAR GHOSH
Division of Chemical and Biochemical Processing
National Institute of Research on Jute & Allied Fibre Technology
12 Regent Park, Kolkata
West Bengal 700 040

Dr MAHAJAN GOPAL RAMDAS developed fertilizer nitrogen, phosphorus and sulphur prescription equations, post-harvest soil list value models, critical and optimum lean nitrogen indicator values and phosphorus and sulphur specific hyperspectral algorithms. Using fertilizer prescription equations and post-harvest soil- test value models, it is now possible to recommend nutrients over two consecutive rice-wheat cropping cycles with just one time soil testing. The procedure and protocols developed in the present investigation were aimed at using nutrient inputs efficiently. The methods developed cover traditional method of nutrient recommendations to sophistically sensor based nutrient application. Dr Ramdas obtained his Ph.D. degree from Indian Agricultural Research Institute, New Delhi.

Dr MAHAJAN GOPAL RAMDAS
Scientist (Soil Science)
ICAR Research Complex for Goa
Old Goa, North Goa
Goa 403 402

Dr ZAHOOR AHMED BHAT
S/o Mohd Ahsan Bhat
R/o Awaneera Frisal
Via. Yaripor Anantnag
Kashmir, J&K 192 232

Dr ZAHOOR AHMAD BHAT worked upon to find outstanding genotypes to become a successful variety out of a large quantity of germplasm present especially in perennial fruit crops like pear. Fine scale characterization of pear genotypes at genetic level through SSR markers supplemented with phenotype characters will help in improved selection, precise cataloguing, efficient germplasm conservation, maintenance and utilization of the existing genetic diversity for future breeding programmes. The result also demonstrated that any undesirable off types can be excluded from the breeding programme at an early stage, thereby saving time, space, labour and other economic expenses. Moreover, this study will benefit breeders especially the progress in application of molecular assisted breeding. Dr Bhat obtained his Ph.D. degree from Punjab Agricultural University, Ludhiana.

Dr SUKADEV MANGARAJ
APPD, CIAE, Nabibagh
Berasia Road, Bhopal
Madhya Pradesh 462 038

Dr SUKADEV MANGARAJ developed a packaging system by which the shelf-life of apple, guava and litchi is increased up to 210, 186 and 150% respectively compared to that of at room temperature, using an appropriate modified atmosphere packaging (MAP) system. The performance of various packages was evaluated and it was found that the quality of the fruit at the extended period of storage compared well with that of freshly harvested one. A mathematical model for MA packaging of fruit applying enzyme kinetics based respiration equation coupled with Arrhenius model has been developed. This model can be used for other fruits as well. The MA Packing developed would help in reducing the post-harvest losses and maintaining of quality of fruits during transport, storage, retailing and utilization at homes. Dr Mangaraj obtained his Ph.D. degree from IIT, Kharagpur.

Dr GNANAVEL VENKATESAN studied the development of molecular diagnostic tools, namely, Loop mediated isothermal amplification (LAMP) assays for rapid and easy detection of capripox and Orf viruses; multiplex PCRs by gel based and real time formats for simultaneous detection and quantitation and differentiation of sheep pox, goat pox and orf species in single reaction; and also a simple PCR-RFLP to differentiate capripox strains/isolates as sheep pox and goat pox species. These diagnostic tools were developed and evaluated using purified vaccine viruses/field virus isolates and validated using field clinical samples. These techniques can be used in clinical diagnosis and surveillance of these diseases along with currently available vaccines during control and eradication programmes in India. Dr Venkatesan obtained his Ph.D. degree from IVRI, Izatnagar.

Dr GNANAVEL VENKATESAN
Pox Viral disease Laboratory
Division of Virology
Indian Veterinary Research Institute
Mukteswar Campus
Nainital, Uttarakhand 263 138

Dr B. M. CHANDRANAIK developed a Taq Man probe based real time PCR-based BOHV-1 detection assay with an ability to detect BOHV-1 upto 0.001 $TCID_{50}$/0.1ml. The assay was 100% sensitive, 87.19% specific in virus detection compared to virus isolation and was validated at National laboratories. The study established unique immune evading mechanisms of BOHV-1, as the virus was detected even in sero-negative animals recommending an immediate change of policy in BOHV-1 diagnosis, particularly in breeding stations. The study found that management practices has greater significance in mode and rate of spread of BOHV-1 in a susceptible cattle population. Dr Chandranaik obtained his Ph.D. degree from Karnataka Veterinary Animal and Fisheries Sciences University, Bidar.

Dr B.M. CHANDRA NAIK
Scientist-2, IAH & VB
Hebbal, Bengalur,
Karnataka 560 024

Dr (Mrs) CIJI ALEXANDER
W/o Dr M.S. Akhtar, Scientist
Directorate of Coldwater Fisheries Research
Bhimtal, Nainital, Uttarakhand 263 136

Dr (Mrs) CIJI ALEXANDER's study was aimed to explore the possibilities of nutritional intervention for nitrite management in intensive aquaculture. The result revealed that dietary supplementation of higher doses of vitamin E and tryptophan alleviate nitrite induced physiological alterations. The activity of methaemoglobin reductase system responsible for detoxifying nitrite was enhanced by dietary inclusion of elevated levels of vitamin E and tryptophan. Vitamin E also reduced nitrite- induced inhibition of steroidogenesis. The output of this work may be useful for developing a specific diet for management of nitrite problem in intensive aquaculture. Dr Ciji obtained her Ph.D. degree from CIFE, Mumbai.

Dr RAM DATT
Assistant Professor-cum-Junior Scientist
Department of Extension Education
B.A.C. Sabour, B.A.U., Sabour
Bhagalpur, Bihar 813 210

Dr RAM DATT worked on dairy-based innovations developed by farmers at field level. The study explored the distinguished attributes of selected innovation developed at grassroots. An innovative attempt has been made to develop two scales, namely 'Motivational Scale' and 'Curiosity Scale' for innovative farmers. It also highlighted the contributions of dairy based innovators at grassroot level and opened new vistas for research in extension education in general and promotion of innovation in particular. Dr Ram Datt obtained his Ph.D. degree from NDRI, Karnal.

Dr SARITHA HEGDE documented the use of genetically diversified red rice in various medication and therapies to find its applicability as functional food specifically in promoting lactation. Validation of the indigenous knowledge on use of red rice to promote lactation through maternal supplementation showed significant physiological changes and positive implication of nutritional status of mother and infant and in promotion of lactation. Red rice being the staple farm food of the study region proves to be feasible and concrete solution to address the nutritional problems of mother and child especially during lactation failures. The study integrates traditional knowledge, health, and nutrition and food security. Dr Saritha Hegde obtained her Ph.D. from University of Agricultural Sciences, Dharwad, Karnataka.

Dr SARITHA HEGDE
Chief Technical Officer
(SMS-H.Sc.), KVK, CPCRI, ICAR
Kudlu Post, Kasaragod
Kerala 671 124

JAGJIVAN RAM ABHINAV KISAN PURUSKAR/ JAGJIVAN RAM INNOVATIVE FARMER AWARD (NATIONAL/ZONAL) 2013

Award 2013

In order to recognize the outstanding contribution of innovative farmers for initiatives in development, adoption, modification and dissemination of improved technology and practices for increased income with sustainability, the ICAR instituted the award for farmers at National and Zonal levels as:

National: One annual national award of ₹1.00 lakh in any of the areas of agriculture and allied sciences and equal amount of travel grant across the country to promote his/her achievement are given to farmers at national level.

Zonal: Eight annual awards of ₹0.50 lakh each and equal amount of travel grant to promote his/her achievement and motivate farmers in his respective zone. The geographical area of each zone is given in the guidelines of the award.

These awards have been named after the Late Shri Jagjivan Ram (1908-1986) who was the Deputy Prime Minister and Union Minister for Food and Agriculture in the Union Cabinet. Eighty-one (81) eligible applications were received to the open advertisement. The winners at National level as well as at Zonal levels are as:

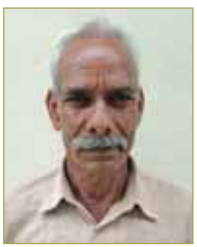
NATIONAL

SHRI MOHAMMED IDRIS AHMED QUADRI
S/o Late Mohammed Gulam Ahmed Quadri
Mohallah Gadi, Bagdal Village
Taluka and District Bidar
Karnataka 585 226

SHRI MOHAMMED IDRIS AHMED QUADRI is a progressive farmer from Bagdal Village of Bidar District. He has wide collection of different varieties of sugarcane, mango, lime, etc. He has maintained a very good dairy farm where both indigenous as well as exotic breeds are reared in a scientific way. Besides, enhancing the dairy activity he also utilizes animal waste effectively and converts it into a farmyard manure and vermincompost which in turn is giving high yield of all products with good quality. Due to erratic power supply, he has constructed an overhead water tank of 2 lakh litre storage capacity to manage irrigation effectively. An animal lifter has been indigenously developed and installed in his dairy farm. He has cultivated sugarcane in such a way that he has stood as a model farmer for others to emulate.

ZONAL

ZONE-I



SHRI PARMA RAM CHOUDHARY
Village: Chhattar
Post Office: Jugahan
Tehsil: Sundernagar, District-Mandi
Himachal Pradesh 175 002

SHRI PARMA RAM CHOUDHARY, a farmer from village Chhattar, Mandi is a source of inspiration for the farming community in the hilly region owing to low-cost innovations and models for marginal farmlands developed through efficient and effective use of limited resources and by following Integrated Farming System Model for livelihood security. He practices agriculture, dairy, sericulture, vermicomposting and mushroom production. For effective utilization of available resources, the mushroom bags are utilized by him for terrace cultivation of vegetables.

ZONE-II

SHRI LAXMAN DAS
Village-Kalipur
Post: Arial Bay, Diglipur
North and Middle Andaman

SHRI LAXMAN DAS, a farmer from Diglipur District, North and Middle Andaman, is an innovative farmer and through sustainable technologies he has not only increased the productivity of his farm but also improved the standard of living by increasing the income per unit area. The noticeable improvement has taken place which include social and economic upliftment through large demonstration on livestock and poultry production including fisheries, bringing more area under crop and vegetable, large-scale adoption of paddy-cum-fish culture, integrated farming system, apiculture with traditional and stingless bee colonies culture for honey production, fish seed production, plant multiplication techniques, vegetable production, rapid multiplication of black pepper on bamboo structure, paddy production of traditional and other improved varieties. His farming system has turned into a real model system for fellow farmers to learn and take up technologies to the maximum to harness for potential production from the farming system of their area.

ZONE-III

SHRI DIPEN BORUAH
Village-Khonamukh,Charingia Gaon
P.O. Khonamukh, District-Jorhat
Asom 785 682

SHRI DIPEN BORUAH from Jorhat, Asom adopted different improved production technologies including high-yielding varieties, integrated nutrient management, integrated pest management, water management practices, mechanization of farm and recycling of various farm resources. He has established a farmers' club namely 'Farmers Friends Club' at Khonamukh, Jorhat to enhance awareness among farming community towards scientific and commercial agriculture and allied farming system and through the active participation of members of the club. The rural youths of the locality are trained, motivated, inspired by practical knowledge and skill to take up commercial agriculture as a means of livelihood security through the club.

ZONE-IV

SHRI RAJPAL SINGH, a responsive and progressive farmer from village Jaigehta Gurjar, district Saharanpur adopted all the technologies demonstrated by KVK, Haridwar, and increased his total farm productivity. He harvested record production of wheat and sugarcane. The highest sugarcane yield of 1,050 q/ha was recorded on his farm. Seeing his success, about 150 farmers have adopted Agri-horti-silvipastoral based land use model for livelihood improvement.

SHRI RAJPAL SINGH
Village-Jaigehta Gurjar
Post-Phundpuri, District-Saharanpur
Uttar Pradesh

ZONE-V

SHRI KATTA RAMAKRISHNA from Obannapalem village of district Prakasam, is a dynamic farmer of Krishna Agroclimatic zone of Andhra Pradesh. He has implemented low- cost weed management in crops and educated the local farmers about this technology. He adopted high-yielding varieties and proven technologies which include high-density cotton planting for improving cotton productivity under rainfed condition, replaced traditional seed with certified seed and reduced unscientific use of chemical fertilizers. He has been selected as a Master Trainer Farmer to give training to the fellow farmers.

SHRI KATTA RAMAKRISHNA
S/o K. Anjaneyulu Obannapalem
Naguluppalapadu
Post Prakasam District
Andhra Pradesh 523 183

SHRI NANDLAL DHAKAR
Village-Jaishingpura, Post-Palka
Tehsil-Chittorgarh
District-Chittorgarh, Rajasthan

ZONE-VI

SHRI NANDLAL DHAKAR of village Jaishinghpura, District Chittorgarh, developed a suitable Integrated Farming System (IFS) model consisting of custard apple, papaya, vegetables, fodder crops, cereals, pulses, mustard and livestock for regular and sustainable income from the farm and minimized risk factor from biotic and abiotic stresses. At present, his farm is an economically-viable IFS model for Chittorgarh district. He has constructed polyhouse for vegetable cultivation and godown for storage of farm produce. Almost all farmers from his village adopted IFS model developed by him and started vegetables + papaya + dairying + crop production.

SHRI PURNA CHANDRA MOHANTY
Qr. No. I, Odisha Krushak Samaj
Sachibalaya Marg, C-7, P.O. Bhoinagar
Bhubaneshwar, Odisha 751 022

ZONE-VII

SHRI PURNA CHANDRA MOHANTY from Khurda district of Odisha, is a popular leader of the farming community. He has developed various pesticides using neem leaves, roots and other forest leaves, ash dust, lime, etc. He has constructed greenhouse by using local resources and developed battery-operated insect trapper and disseminated the technologies to local farmers.

ZONE-VIII

SHRI MALANNA S. NAGARAL of district Bagalkot, Karnataka, has successfully managed to conserve soil and water for improving crop productivity with construction of contour bund across the slope, waste weir and other soil conservation techniques. He has also experimented new agronomic practices with organic farming especially in soil and water conservation. His innovative soil and water conservation practices have been implemented at other farmers' fields also.

SHRI MALANNA S. NAGARAL
IOC Dealer, M/s Vijay Oil Agencies
NH 13, Hunagund, District-Bagalkot
Karnataka 587 118

N.G. RANGA FARMER AWARD FOR DIVERSIFIED AGRICULTURE-2013

Award 2013

The ICAR has instituted the NG Ranga Farmer Award for Diversified Agriculture to recognize the distinguished farmers for their outstanding contributions in the field of diversified agriculture. The award is aimed at creative and innovative approaches resulting in enhancement of production and productivity, resource conservation and application of improved farming techniques/ practices in different disciplines of agriculture. The award carries a cash prize of ₹1.00 lakh and given annually. The award has been named after Late Prof. N.G. Ranga (1900-1995). A total of twenty-one (21) applications were received in response to the open advertisement, the recipient of award is:

Smt KRISHNA YADAV
W/o Shri Goverdhan Singh Yadav
43/3, Main Najafgarh
Gurgaon Road, Village-Bajgheda
Tehsil & District- Gurgaon, Haryana

Smt KRISHNA YADAV, a successful food processing entrepreneur emerged as a role model for other fellow farmers and farm women. She has always been receptive to adopt the innovative technologies in the area of food processing and value-addition of fruits and vegetables. By adopting new package of practices, she is preparing 152 types of products (FPO approved) like pickles, chutneys, candy, murabba, jam, jelly, juice, drinks, wheat flour, etc. Her initiative for diversification of the business activities are bound to maintain and sustain her business on a long-term basis.

कृषि एवं सम्बद्ध विज्ञान में हिन्दी में तकनीकी पुस्तक लेखन के लिए डॉ. राजेन्द्र प्रसाद पुरस्कार - 2013

Award 2013

परिषद ने कृषि एवं संबंधित विज्ञान पर हिन्दी में तकनीकी पुस्तक लेखन के क्षेत्र में मौलिक स्तरीय लेखन तथा भारतीय लेखकों को प्रोत्साहित करने के उद्देश्य से डा. राजेन्द्र प्रसाद पुरस्कार की स्थापना की है। यह पुरस्कार व्यक्तिगत रूप से अथवा लेखकों की टीम के रूप में प्रदान किया जाता है। प्रत्येक पुरस्कार एक लाख रुपये (1,00,000 रू.) नकद के रूप दिया जाता है। कृषि एवं संबंधित विज्ञान के विभिन्न विषयों पर चार पुरस्कार प्रदान किए जाते हैं लेकिन एक विषय पर एक ही पुरस्कार दिया जाता है। कृषि एवं संबंधित विषयों के सभी मौलिक हिन्दी तकनीकी पुस्तकों के भारतीय लेखक तथा एक से अधिक लेखकों की पुस्तकों के संपादक, जिनका स्वयं पुस्तक में उल्लेखनीय योगदान हो, इस पुरस्कार के पात्र हैं। यह पुरस्कार भारत के प्रथम राष्ट्रपति डा. राजेन्द्र प्रसाद (1884–1963) के सम्मान में दिया जाता है। खुले विज्ञापन से प्राप्त चौदह (14) प्रविष्टियों में से पुरस्कृत लेखक और उनका योगदान आगे प्रस्तुत है।

डॉ. डी. आर. भारद्वाज की पुस्तक ''सब्जी अनुसंधान एवं उत्पादन प्रौद्योगिकी'' में राष्ट्रीय एवं अन्तर्राष्ट्रीय परिदृश्य, मानव आहार में सब्जियों का पोषकीय महत्व, आनुवंशिक, जैवसम्पदा, वानस्पतिक विवरण, औद्यानिक वर्गीकरण, अधिक उत्पादक एवं रोग/कीट/सूत्रकृमि प्रतिरोधी, मुक्त परागित, संकर, संश्लेषित व संकुल प्रजातियों का विस्तृत विवरण दिया गया है। पुस्तक में उपयुक्त प्रजातियों का चयन, पौधशाला प्रबन्धन, बुआई/रोपण तकनीकी, पौध संख्या, खाद एवं उर्वरकों का उपयोग, हानिकारक रोगों/कीटों/सूत्रकृमियों आदि से बचाव के लिए सुरक्षित कृषि रसायनों के प्रयोग का विवरण दिया गया है, जिससे कार्बनिक/जैविक पद्धतियों को समाहित कर गुणवत्तायुक्त एवं विषमुक्त सब्जियों का उत्पादन किया जा सके। यह पाठ्य पुस्तक वैज्ञानिकों के शोध परिणामों को सब्जी उत्पादकों तक पहुँचाने में सेतु का कार्य करेगी।

डॉ. डी. आर. भारद्वाज
प्रधान वैज्ञानिक, फसल सुधार विभाग
भारतीय सब्जी अनुसंधान संस्थान
पो. बॉक्स सं. 01, पो. आफिस जखिनी
शहंशापुर, वाराणसी, उ.प्र. 221 305

डॉ. अनिल कुमार सिंह व डॉ. सुशील सोलोमन की पुस्तक ''गन्ना आधारित फसल पद्धतियाँः बदलता परिदृश्य एवं तकनीकी विकास'' में गन्ना आधारित फसल पद्धतियों तथा अपेक्षाकृत परिष्कृत एवं विकसित प्रौद्योगिकियों का समावेश किया गया है। कम अवधि की अधिक आय देने वाली फसलों को गन्ने के साथ अन्तः फसलीकरण द्वारा मृदा की उत्पादन क्षमता बढ़ाने, उत्पादन लागत कम करने और उत्पादन पद्धति को टिकाऊ बनाये रखने में महत्वपूर्ण योगदान परिलक्षित है। इस प्रकार फसल विविधीकरण से उपलब्ध स्रोतों का समुचित उपयोग कर सीमांत और लघु किसानों के आर्थिक और सामाजिक स्तर को बढ़ाया तथा एकल एवं सतत् कृषि के दुष्प्रभावों को कम किया जा सकता है।

डॉ. अनिल कुमार सिंह
प्रधान वैज्ञानिक, फसल विज्ञान
फसलोत्पादन विभाग
भारतीय गन्ना अनुसंधान संस्थान
लखनऊ, उ.प्र. 226 002

डॉ. अवध बिहारी पाण्डेय
अध्यक्ष, वायरस विज्ञान विभाग
एवं केन्द्र प्रभारी
भारतीय पशु चिकित्सा
अनुसंधान संस्थान, मुक्तेश्वर
नैनीताल 263 138

डॉ. अवध बिहारी पाण्डेय, डॉ. शशिभूषण सुधाकर एवं डॉ. विश्वनाथ साहू द्वारा रचित पुस्तक ''पर्वतीय क्षेत्रों में आधुनिक गोपशु पालन'' में गौ प्रबंधन एवं मानक तकनीकों का विस्तार से विवरण प्रस्तुत किया गया है। पुस्तक में प्रजनन, पोषण, चारा संरक्षण, गोपशु उत्पाद उनका प्रसंस्करण तथा मूल्यवर्धन, रोग प्रबंधन, उपचार एवं शल्य क्रिया संबंधी कार्य विधियां, पंचगव्य एवं समवर्गी औषधीय उत्पाद बनानें तथा विभिन्न सरकारी पशु विकास योजनाओं के बारे में सरल एवं विवरणात्मक रूप से प्रकाश डाला गया है। पर्वतीय क्षेत्रों की वर्तमान परिस्थितियों तथा संरचना एवं सामग्रियों की उपलब्धता को ध्यान में रखते हुए इस पुस्तक में पशुपालन तथा अन्य प्रबंधन विधियों की संस्तुति की गयी है।

डॉ. वीरेन्द्र कुमार भारती
मुख्य उत्पादन अधिकारी
डी. के. एम. ए., भा.कृ.अ.प.
कृषि अनुसंधान भवन–1
पूसा, नई दिल्ली 110 012

डॉ. वीरेन्द्र कुमार भारती की पुस्तक ''कागज़ और पर्यावरण'' में कागज़ और पर्यावरण का महत्वपूर्ण पहलू दर्शाया गया है। कागज़ और कागज़ उत्पादों की मात्रा असीम है अतः पर्यावरण पर इनका पड़ने वाला प्रभाव भी बहुत महत्वपूर्ण है। कागज़ के उत्पादन और उपयोग के पर्यावरण पर अनेक प्रतिकूल प्रभाव पड़ते हैं, जिन्हें कुल मिलाकर कागज़ प्रदूषण कहा जाता है। कागज़ उद्योग द्वारा वन्य कच्ची सामग्री का बहुतायत से उपयोग होता है जिसके परिणाम स्वरूप देश के प्राकृतिक वन क्षेत्र में कमी आ रही है, जबकि पिछले एक दशक के दौरान कागज़ उद्योग के नेतृत्व में की गई फार्म/सामाजिक वानिकी के परिणाम स्वरूप लुगदी काष्ठ के लिए वृक्षारोपण हुआ है, जो मुख्यतः किसानों की अपघटित सीमांत भूमियों में किया गया है। विश्व स्तर पर कागज़ उद्योग ने कागज़ के उत्पादन तथा कृषक समुदायों के बीच संपर्क स्थापित किया जिसके परिणास्वरूप देश की अर्थव्यवस्था में बड़ी पूंजी का निवेश संभव हुआ है। इस संदर्भ में जागरूकता लाने के लिए बड़े पैमाने पर कागज़ उत्पन्न करने वाले वृक्षों के रोपण हेतु भूमि उपयोग वानिकी की नीतियां लागू की गई हैं।

VASANTRAO NAIK AWARD FOR OUTSTANDING RESEARCH AND APPLICATION IN DRYLAND FARMING SYSTEMS–2013

Award 2013

In order to provide recognition for outstanding research and application leading to improvement of dryland farming systems, ICAR instituted an annual Vasantrao Naik Award for Research and Application in Dryland Agriculture of ₹1.0 lakh which is given to a scientist or an extension worker who has made outstanding contribution in the areas of Water Conservation and Dryland Farming. The award has been named after Late Sh. Vasantrao Naik (1913-1979) who is regarded as Father of Green Revolution in Maharashtra. Six (06) eligible applications were received in response to the open advertisement and the winner is:

Dr M. MADHU
Head & Principal Scientist
CSWCRTI, Research Centre
Post Box-12, Sunabeda
Koraput, Odisha 763 002

Dr M. MADHU and his team made significant contribution in integrated management of land, water and crop through participatory watershed management in rainfed areas for enhancing its productivity and upliftment of resource poor tribal community including landless labourers in the Eastern Ghat region of Odisha. They implemented sustainable resource conservation technologies and livelihood activities in the watershed area after characterizing the national resources and socio-economic status. There has been increase in rainwater-use efficiency, energy-use efficiency of rainwater, employment generation and average annual income of the tribal community. The team consisted of Er B.S. Naik, Mr Praveen Jakhar, Mr H.C. Hombe Gowda, Dr P.P. Adhikary and Dr K.P. Gore.

SWAMI SAHAJANAND SARASWATI OUTSTANDING EXTENSION SCIENTIST AWARD-2013

The ICAR has instituted the Swami Sahajanand Saraswati Outstanding Extension Scientist Award in order to provide recognition to outstanding agricultural extension work done by agricultural scientists and teachers in the ICAR-SAU system and to provide incentive for excellence in agricultural extension. Two individual awards have been provided. An individual award would consist of ₹1.00 lakh in cash and a citation. The award hasbeen assigned across the disciplines in agriculture and allied sciences. The award has been named after Late Swami Sahajanand Saraswati (1889-1950), a social reformer and the first president of All India Kisan Sabha. A total of twenty (20) eligible applications were received in response to the open advertisement and the winners with their significant contributions are:

Dr ASHOK KUMAR SINGH
Zonal Project Directorate
Zone-IV, G.T. Road, Rawatpur
Kanpur, Uttar Pradesh 208 002

Dr ASHOK KUMAR SINGH made a significant contribution in the field of agricultural extension. He was responsible for experimenting with the emerging IT tool through mobile technology for dissemination of farm technologies, advisories and alerts. Besides, he also co-ordinated the implementation of country-level demonstrations for harnessing pulses productivity through inter-institutional and inter-disciplinary linkages. Through KVK, 35,000 farmers were reached across the country, and more than 25 lakh farm advisories and alerts were delivered which developed the capacity of farmers, KVK scientists and extension workers for use of IT infrastructures. Through national level pulses demonstration conducted across 137 districts of 11 states of the country, more than 18,000 pulse growers were reached. These attempts of Dr Singh helped significantly in reducing the on-farm yield gap in pulses, improving farm profitability of the Indian farmers.

Dr K. SUMAN KALYANI
Principal Scientist (Home Science)
Agricultural Extension
Central Tobacco Research Institute
Bhaskar Nagar, Rajahmundry
East Godavari District
Andhra Pradesh 533 105

Dr K. SUMAN KALYANI identified the agro-based problems of tribal communities through participatory approach. Five different integrated farming system modules were developed and implemented in tribal area of East Godavari district. Simple, viable and need-based technologies were introduced for targeted tribal farmers for improving crop yields and productivity. She has documented and generated comprehensive information on tribal farming, nutrition, education, indigenous technical knowledge through pamphlets and technical bulletins. Fabrication of pedal-operated winnowing fan, and dryland weeders have reduced the drudgery, increasing the farm efficiency of tribal farming community.

CHAUDHARY CHARAN SINGH AWARD FOR EXCELLENCE IN JOURNALISM IN AGRICULTURAL RESEARCH AND DEVELOPMENT-2013

Award 2013

Chaudhary Charan Singh Award for Excellence in Journalism in Agricultural Research and Development was instituted by the ICAR in 2000 in order to recognize the outstanding contribution in Journalism in the field of Agricultural Research and Development in the country. The award carries a cash value of ₹1.00 lakh and is given annually for the outstanding contribution in Journalism in Agriculture and Allied Science through Hindi/English newspapers/magazines/ journals published in India. From 2010, an award for Journalist from electronic media, has also been added. An individual who has made significant contribution by way of writing/analysing/ reporting for enhancement/promotion of Indian Agriculture is eligible for this award. The award has been named after Late Shri Chaudhary Charan Singh (1902-1987) who was the Seventh Prime Minister of India. Thirteen (13) applications were received by the Council in response to the open advertisement and the recipients of the awards with their contributions are:

SHRI PALLAVA BAGLA has been globally acclaimed award winning Indian science communicator and photo-journalist for the past 25 years. His deep insight into scientific issues has contributed to a better public understanding of science in India through electronic media. He has highlighted India's agricultural development and gains from the Green Revolution and revealed how becoming self-sufficient in food has led to an increased recognition of India as a global power to reckon with.

SHRI PALLAVA BAGLA
Science Editor
New Delhi Television and
Correspondent-Science
72-Samachar Apartments
Mayur Vihar-I, Delhi 110 091

SHRI BHAGWAN DASS an accredited journalist since 1975, wrote a number of analytical and research articles on agriculture. His publications have considerably improved the farm economy of Punjab as well as the profitability of farmers. The production and productivity of Basmati rice and wheat have gone up. The various varieties of flowers particularly marigold and roses have attracted the attention of the farmers. His publications also helped the agriculture department align to the needs of farmers and to some extent it has restructured the agricultural extension service.

SHRI BHAGWAN DASS
Journalist
1, Sirhind Road
Opp. Govt. Press
Patiala, Punjab 147 004

NASI-ICAR AWARD FOR INNOVATION AND RESEARCH ON FARM IMPLEMENTS-2013

The ICAR and National Academy of Sciences India (NASI) have instituted NASI-ICAR Award for Innovation and Research on Farm Implements from the year 2013 in order to reduce drudgery of farm women by development of farm implement and to encourage researchers and innovators to develop farm implements for farm women. The award carries a cash price of ₹1.00 lakh and is given annually. A total of eighteen (18) applications were received in response to the open advertisement, the recipient of award is:

Dr. KRISHNA PRATAP SINGH
Senior Scientist
Central Institute of Agricultural Engineering
Bhopal

Dr KRISHNA PRATAP SINGH, Senior Scientist, Central Institute of Agricultural Engineering, Bhopal, has been involved in developing appropriate farm machinery for reduction of drudgery of farm women for more than a decade. His contributions have been in relation to paddy and millets such as thresher for threshing, pearling, and dehulling of finger- millet and barnyard millet; manual-cum power-operated paddy thresher, and small hand tools. He has recently designed a multi-millet thresher-cum dehuller suitable for all six minor millets. These farm machines have been proven to reduce the drudgery of hill and tribal women. Since National Academy of Science India's (NASI) mandate is science and society, the work done by Dr. Krishna Pratap Singh through the application of science and technology is very relevant. Dr Singh received support in his work from Dr Manoranjan Kumar, Dr Ajay Kumar, Dr A.K. Srivastava, Dr Pitam Chandra and Dr H.S. Gupta.

NOTES

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