

Annexure-I

LIST OF RESEARCH PROJECTS

DEVELOPMENT AND ANALYSIS OF EXPERIMENTAL DESIGNS FOR AGRICULTURAL SYSTEMS RESEARCH

On-going

ICAR National Professor Scheme

1. Designs for single factor and multi-factor experiments and their applications in agricultural systems research. VK Gupta: 05.04.2006-16.03.2016

Institute Funded

2. Planning, designing and analysis of data relating to experiments for AICRP on long-term fertilizer experiments. (SIX1206)
Krishan Lal (till 31.03.2014), BN Mandal (from 01.10.2012 to 21.09.2013 and 22.10.2014 onwards) and LM Bhar (from 01.10.2013 to 30.10.2014): 01.04.2012–31.03.2017
3. Planning, designing and analysis of 'On Farm' research experiments planned for AICRP on IFS. (SIX1207)
NK Sharma (till 30.09.2014), Cini Varghese (from 01.10.2014), Sukanta Dash (from 01.10.2012) and Arpan Bhowmik (from 01.10.2014): 01.04.2012–31.03.2017
4. Information system for designed experiments. (SIX1208)
OP Khanduri (till 13.11.2014), DK Sehgal (till 31.08.2012), Soumen Pal (till 30.09.2012), Susheel Kumar Sarkar (w.e.f. 01.10.2012) and Shashi Dahiya (on study leave from 03.07.2014): 01.04.2012–31.03.2017
5. Planning, designing and analysis of experiments planned 'On Stations' under the AICRP on IFS. (SIX1209)
Anil Kumar and Eldho Varghese (w.e.f. 01.10.2012): 01.04.2012–31.03.2017
6. Factorial experiments with minimum level changes in run sequences. (AGENIASRISIL201301200013)
Arpan Bhowmik, Eldho Varghese, Cini Varghese and Seema Jaggi: 16.08.2013-15.02.2016

Outside Funded

7. Experimental designs in the presence of indirect effects of treatments. Funded by DST (SOX1115)
Seema Jaggi, Cini Varghese, Anu Sharma (till 04.09.2013) and Eldho Varghese: 01.10.2011–30.09.2015
8. Bioacoustics tool: A novel non-invasive approach for different monitoring of health and productivity in dairy animals. Funded by DBT (AGENIASRICOP201300400005)
NDRI, Karnal: Surender Singh Lathwal, Shiv Prasad, TK Mohanty, Archana Verma, AP Ruhil and SV Singh, IASRI: Anil Kumar: 01.02.2013-31.01.2016
9. Information system for planning and analysis of experiments on All-India Coordinated Research Project on Vegetable Crops. Funded by AICRP (VC), IIVR, Varanasi. (AGENIASRICOL201400200021)
IASRI: Rajender Parsad and Sukanta Dash, NAARM, Hyderabad: A Dhandapani, IIVR, Varanasi: B Singh, PM Singh (since January 2015), Satyandra Singh (since October 2014), T Choubey: 05.02.2014-31.03.2017

Completed

Institute Funded

10. Experimental designs for polycross trials. (AGENIASRISIL201300200003)
Cini Varghese, Seema Jaggi and Eldho Varghese: 04.02.2013–31.07.2014

New Initiated**Institute Funded**

11. Minimal responses surface designs for resource optimization in agricultural experiments. (AGENIASRISIL201401500034)
Eldho Varghese, Arpan Bhowmik, Seema Jaggi and Cini Varghese: 04.09.2014-03.09.2017
12. A optimal block designs for comparing test treatments with control treatment(s)-an algorithmic approach. (AGENIASRISIL201500200039)
BN Mandal, Rajender Parsad, VK Gupta and Sukanta Dash: 18.02.2015-17.02.2018

FORECASTING, MODELLING AND SIMULATION TECHNIQUES IN BIOLOGICAL AND ECONOMIC PHENOMENA**On-going****Institute Funded**

13. A study on modelling and forecasting of time-series with long memory processes. (AGENIASRISIL201300700008)
Ranjit Kumar Paul, Himadri Ghosh and Bishal Gurung: 01.05.2013-30.04.2015
14. A study on STAR and SV families of nonlinear time-series models for describing cyclicity and volatility in Agriculture. (AGENIASRISIL201300800009)
Bishal Gurung, Himadri Ghosh and Ranjit Kumar Paul: 21.05.2013-30.04.2015
15. Development of statistical approach for prediction of eukaryotic splice sites. (AGENIASRISIL201301300014)
Prabina Kumar Meher, SD Wahni and AR Rao: 03.09.2013-02.09.2015
16. Estimation of heritability under correlated errors. (AGENIASRISIL201400100020)
Amrit Kumar Paul and SD Wahni: 04.01.2014-03.01.2016

Outside Funded

17. Network project on market intelligence. Funded by ICAR, DARE, Ministry of Agriculture, New Delhi (AGENIASRICOP201400300022)
NIAP: Raka Saxena, IASRI: Ranjit Kumar Paul: 13.02.2014-31.03.2017

Completed**Institute Funded**

18. Study of commodity price forecast based on time series data. (AGENIASRISIL201300300004)
SP Bhardwaj, DR Singh (till 31.07.2013), KN Singh, Ranjit Kumar Paul and Sanjeev Panwar (w.e.f. 01.03.2014): 18.02.2013-28.02.2015

Outside Funded

19. Mapping and cultural authority of science across Europe and India (MACAS-EU & India)[†]. Funded by ICSSR, New Delhi. (AGENIASRISOL201301600017) (Association of IASRI w.e.f. 18.07.2013)
IHD: Rajesh Shukla, IASRI: KN Singh: 01.04.2012 -30.09.2015

New Initiated**Institute Funded**

20. Study on volatility spillover of agricultural commodity prices. (AGENIASRISIL201401000029)
Kanchan Sinha, Wasi Alam, Sanjeev Panwar and Bishal Gurung: 12.05.2014-11.05.2016

Outside Funded

21. Network project on impact assessment of agricultural research and development. Funded by ICAR. (AGENIASRICOP201500100038)
NIAP, New Delhi: PS BIRTHAL, Jaya Jumrani, Kingsly IT, SK Srivastava
IASRI: Ranjit Kumar Paul: 01.01.2015-31.03.2017 (Association of IASRI w.e.f. 12.01.2015)

DEVELOPMENT OF TECHNIQUES FOR PLANNING AND EXECUTION OF SURVEYS AND STATISTICAL APPLICATIONS OF GIS AND REMOTE SENSING IN AGRICULTURAL SYSTEMS

On-going

Outside Funded

22. Pilot study for estimation of seed, feed and wastage ratios of major food grains. Funded by National Accounts Division, Central Statistical Office, MOS&PI, Government of India. (AGENIASRISOL201300900010)
AK Gupta, UC Sud, KK Tyagi (till 30.09.2014), Hukum Chandra, Tauqueer Ahmad, VK Jain (till 31.10.2013), Kaustav Aditya, Prachi Misra Sahoo and Ankur Biswas: 01.07.2013-30.06.2015
23. Development of innovative approaches for small area estimation of crop yield, socio-economic and food insecurity parameters-under ICAR's Lal Bahadur Shastri Young Scientist award- 2012. (AGENIASRISOL201301800019)
Hukum Chandra and Kaustav Aditya: 09.12.2013-08.12.2016
24. Assessment of quantitative harvest and post harvest losses of major crops/commodities in India (Collaboration with CIPHET, Ludhiana association w.e.f. 01.06.2012) (COP1220)
CIPHET, Ludhiana: SK Nanda, (till 30.11.2013), RK Gupta (from 14.11.2013 to May 2014), SN Jha (since June 2014) and RK Vishwakarma IASRI: Tauqueer Ahmad, Anil Rai and Prachi Mishra Sahoo: 01.02.2012-31.03.2015

Completed

Institute Funded

25. Small area estimation for skewed data. (AGENIASRISIL201300100002)
Hukum Chandra, UC Sud and Kaustav Aditya: 19.01.2013-31.12.2014

New Initiated

Institute Funded

26. Calibration estimators under two stage sampling design when study variable is inversely related to auxiliary variable. (AGENIASRISIL201400800027)
Ankur Biswas, Kaustav Aditya and UC Sud: 01.05.2014-30.04.2016

Outside Funded

27. Study to test the developed alternative methodology for estimation of area and production of horticultural crops. IASRI component of CHAMAN program under under MIDH, Funded by Department of Agriculture and Cooperation (DAC), Ministry of Agriculture (MoA), Government of India. (AGENIASRISOL201401700036)
UC Sud, Tauqueer Ahmad, Prachi Misra Sahoo, Kaustava Aditya, AK Gupta and Ankur Biswas: 16.09.2014-15.06.2017
28. Pilot study for developing state level estimates of crop area and production on the basis of sample sizes recommended by Professor Vaidyanthan Committee Report. Funded by Directorate of Economics and Statistics, Department of Agriculture and Cooperation, Ministry of Agriculture, Government of India, New Delhi. (AGENIASRISOL201500300040)
UC Sud, Kaustava Aditya, Hukum Chandra, AK Gupta, Ankur Biswas, Vandita Kumari, Raju Kumar, Anshu Bhardwaj and Anil Kumar: 16.02.2015- 15.02.2017

DEVELOPMENT OF STATISTICAL TECHNIQUES FOR GENETICS/ COMPUTATIONAL BIOLOGY AND APPLICATIONS OF BIOINFORMATICS IN AGRICULTURAL RESEARCH

On-going

Institute Funded

29. Methodology for protein structure comparison and its web implementation. (AGENIASRISIL201300600007)
Sudhir Srivastava, MNV Prasad Gajula (till 31.03.2014), DC Mishra and SB Lal (since 04.04.2014): 18.04.13-17.04.15

30. Development of a tool for comparison of protein 3D structure using graph theoretic approach. (AGENIASRISIL201400500024)
UB Angadi, KK Chaturvedi, Monendra Grover and Sudhir Srivastava: 18.03.2014- 31.01.2017
31. Multilevel functional classification of abiotic stress related proteins in poaceae. (AGENIASRISIL201400600025)
Monendra Grover, UB Angadi and Sudhir Srivastava: 20.03.2014-14.08.2016

Outside Funded

32. Phenomics of moisture deficit and low temperature stress tolerance in rice (Funded by NRCPB, New Delhi). (COP1106)
NRCPB: P Ananda Kumar, IARI: Viswanathan Chinnusamy, IASRI: Sudeep, SD Wahi, Alka Arora and AR Rao (w.e.f. 01.10.2013), IIT: S Chaudhury, University of Delhi: JP Khurana, CRRI, Cuttack: ON Singh, IGKV, Raipur: G Chandel, CAU, Barapani: Wricha Tyagi, ICAR RC-NEHR, Barapani: A Pattanaik: 15.02.2011–30.12.2015
33. Modelling network of gene responses to abiotic stress in rice. Funded by NFBSFARA, ICAR (AGENIASRICOL201300500006)
IASRI: Sanjeev Kumar, Dinesh Kumar, Anil Rai, SB Lal and DC Mishra, NRCPB: Kishore Gaikwad, NK Singh and Vandana Rai, DRR: D Subramanyam, P Senguttuvel, DKMA: Himanshu, CDAC: Rajendra Joshi: 01.04.2013-31.03.2016
34. Whole genome sequencing and development of allied genomic research in two commercially important Fish-Labeo rohita and Clarias batrachus. Funded by DBT (AGENIASRISOL201301400015)
IASRI: Dinesh Kumar, Sarika (w.e.f. 28.01.2014) and Mir Asif Iquebal (w.e.f. 28.01.2014), NBFGR: NS Nagpure, Basdeo Kushwaha and Ravindra Kuamr, CIFA: Paramananda Das, P Jayasankar and L Sahoo, Anand Agricultural University: Chaitanya G Joshi, PG Koringa: 10.09.2013-09.09.2016

Completed

Institute Funded

35. Parallelized workflows for gene prediction, phylogenetic analysis and primer designing. (SIX1219)
SB Lal, Anu Sharma (till 05.09.2013) and Sarika: 28.08.2012–03.02.2015

Outside Funded

36. Whole Genome Association (WGA) analysis in common complex diseases: An Indian initiative (Centre of Excellence in Genome Science and Predictive Medicine) Funded by DBT (COP0807)
UDSC: BK Thelma, NII: Ramesh C Juyal, DU: Sanjay Jain, IASRI: AR Rao and SD Wahi (w.e.f. 22.06.2010), AIIMS: Ashok Kumar, DMC: Ajit Sood: 29.09.2008–31.07.2014
37. Bio-prospecting and allele mining for abiotic stress tolerance (NAIP Component IV: Consortium Partner). (COP0910)
NRCPB: NK Singh, IASRI: AR Rao, Sudeep and SD Wahi: 04.05.2009–30.06.2014

New Initiated

Institute Funded

38. Estimation of breeding value using longitudinal data. (AGENIASRISIL201400700026)
Upendra Kumar Pradhan, Prabina Kumar Meher, AR Rao and AK Paul: 23.04.2014-22.10.2016
39. Modelling and construction of transcriptional regulatory network using time-series gene expression data. (AGENIASRISIL201401100030)
Samrendra Das, Bishal Gurung, Sanjeev Kumar and SD Wahi: 22.05.2014 – 21.11.2016
40. Bioinformatics approaches for data analysis and functional inferences in soil metagenome(s). (Collaboration with NBAIM, Mau). (AGENIASRICIP201401200031)
NBAIM, Mau: DP Singh, Renu, Sunil Kumar, IASRI: Anil Rai, Sanjeev Kumar and Samir Farooqi: 01.07.2014-30.06.2017

Outside Funded

41. Whole genome based SNP mining and development of breed signatures for dairy and dual-purpose indigenous cattle. Funded by DBT. (AGENIASRICOL201401600035)

NBAGR, Karnal: Satpal Dixit, Jaya Kumar S, NDRI, Karnal: Ajay Kumar Dang, Avtar Singh, IASRI: Mir Asif Iquebal, Dinesh Kumar: 09.07.2014-08.07.2017

42. A new distributed computing frame work for data mining. Funded by Department of Information Technology. Association of IASRI w.e.f. 01.11.2012. (COP1222)
BITS, Pilani: Navneet Goyal, Poonam Goyal and Sundar Balasubramaniam, IASRI: Sanjeev Kumar and Sudhir Srivastava (w.e.f. 02.05.2013): 15.10.2012–14.10.2015

DEVELOPMENT OF INFORMATICS IN AGRICULTURAL RESEARCH

On-going

Institute Funded

43. Project information and management system of ICAR (PIMS-ICAR). (SIX0901)
RC Goyal (till 30.06.2013), Pal Singh, PK Malhotra (till 30.09.2014), Sudeep and Alka Arora: 01.01.2009–30.04.2014
44. Management system for post graduate education - II. (SIX1218)
Sudeep, PK Malhotra (30.09.2014), RC Goyal (till 30.06.2013), Yogesh Gautam (till 15.08.2014) and Pal Singh (w.e.f. 01.10.2013): 01.04.2012– 31.03.2017
45. National information system on agricultural education network in India. (NISAGENET-IV). (SIX1217)
RC Goyal (till 30.06.2013), Sudeep, Alka Arora, Pal Singh, Shashi Dahiya and Soumen Pal (till 30.09.2012): 01.04.2012–31.03.2017
46. Development of web based mushroom expert system. (CIP1110)
DMR, Solan: Mahantesh Shirur (till 30.09.2012), K Manikandan (from 01.10.2012 to July 2014), B Vijay, RC Upadhyay, VP Sharma, OP Ahlawat, Satish Kumar, Shwet Kamal and Goraksha C Wokchaure, IASRI: Sudeep (w.e.f. 01.10.2013), Yogesh Gautam (w.e.f. 01.10.2011), Pal Singh, Hari Om Agarwal (till 29.02.2012) and Harnam Singh (till 01.02.2012): 01.04.2011–31.03.2015
47. Strengthening and refinement of maize AgriDaksh. (CIP1113)
DMR: Virendra Kumar Yadav (till June 2014), KP Singh (from July 2014), P Kumar, Vinay Mahajan, KS Hooda, Jyoti Kaul, Ashok Kumar, Aditya Kumar Singh, Ishwar Singh, Meena Shekhar, DP Choudhary, Avinash Singode, CM Parihar, Chikkappa G Karjagi, and Ambika Rajendran; IASRI: Sudeep (w.e.f. 01.03.2012), Yogesh Gautam (w.e.f. 01.10.2011), Pal Singh, Hari Om Agarwal (till 29.02.2012) and Harnam Singh Sikarwar (till 01.02.2012), NS Rao (from 01.10.2014): 01.04.2011–31.03.2016

Completed

Institute Funded

48. Refinement of livestock feed resources and development of dynamic database information system. (Collaboration with NIANP, Adugodi, Bangalore) (AGENIASRICIP201400400023) (Association of IASRI w.e.f. 22.08.2013)
NIANP, Bangalore: S Jash and S Anandan, IASRI: UB Angadi: 01.07.2010–31.12.2014

Outside Funded

49. Establishment of National Agricultural Bioinformatics Grid in ICAR. Funded by NAIP (COL1002)
Director (IASRI), Anil Rai, PK Malhotra (till 31.03.2011), KK Chaturvedi (till 31.08.2010 and again from 01.10.2013), Dinesh Kumar, SB Lal, Anu Sharma, Samir Farooqi, Sudeep (till 31.03.2011), AR Rao, Seema Jaggi, Sanjeev Kumar (w.e.f. 01.09.2011), Sarika (w.e.f. 03.09.2012), Hukum Chandra, MA Iquebal (w.e.f. 01.04.2013) and Monendra Grover (w.e.f. 01.10.2013): 01.04.2010–30.06.2014
50. Implementation of Management Information System (MIS) including Financial Management System (FMS) in ICAR. Funded by NAIP (COL1203)
Director (IASRI), AK Choubey (w.e.f. 15.02.2013), Alka Arora, Sudeep, Shashi Dahiya, Soumen Pal (till 30.09.2012), SN Islam (w.e.f. 11.06.2012), Anshu Bharadwaj (w.e.f. 15.03.2013), Mukesh Kumar (w.e.f. 01.10.2013), Pal Singh (w.e.f. 01.10.2013), N Srinivasa Rao (w.e.f. 01.10.2013) and Sangeeta Ahuja (w.e.f. 01.10.2013): 19.01.2012–30.06.2014
51. Engaging farmers, enriching knowledge: agropedia phase-II. Funded by NAIP (AGENIASRISOL201301000011)
IIT, Kanpur: TV Prabhakar, IASRI: Shashi Dahiya, Yogesh Gautam and AK Choubey: 01.04.2013-30.06.2014

New Initiated**Institute Funded**

52. Results framework document management system in ICAR (RFD-MS). (AGENIASRISIL201400900028)
N Srinivas Rao, Mukesh Kumar and AK Choubey: 09.05.2014-30.04.2017
53. Development of 16s rDNA rumen specific microbes database. (Collaboration with NIANP, Bangalore) (AGENIASRICIP201401400033) (Association of IASRI w.e.f. 23.07.2014)
NIANP, Bangalore: M Baghat, AP Kolte, IASRI: UB Angadi, Monendra Grover: 01.04.2014 -31.03.2017
54. Development and application of electronic learning and diagnostic modules for health management of dogs. (Collaboration with IVRI, Izatnagar) (AGENIASRICIP201401300032)
IVRI, Izatnagar: Rupasi Tiwari, IASRI: Mukesh Kumar: 01.07.2014-31.12.2015
55. Tobacco Agridaksh: An online expert system. (AGENIASRICIP201401800037)
CTRI, Rajahmundry: H Ravisankar, D Damodar Reddy, U Sreedhar, K Sivaraju, K Sarala, S Kasturi Krishna, M Anuradha, IASRI: N Srinivasa Rao, Sudeep: 20.10.2014-20.10.2017

Outside Funded

56. ICAR Network Project on Transgenics in Crops (NPTC). (AGENIASRICOP201500400041)
NRCPB: NK Singh, IASRI: MA Iquebal, Sarika, Dinesh Kumar, Anil Rai: 27.01.2015-31.03.2017

CONSULTANCY PROJECT

57. Study on improving methods for estimating crop area, yield and production under mixed, repeated and continuous cropping. Funded by FAO, Rome.
UC Sud, Tauqueer Ahmad, Prachi Misra Sahoo, Ankur Biswas, Kaustav Aditya, Vandita Kumari, Raju Kumar, Anil Rai and Man Singh: 18.12.2014-17.06.2016