

# 3.2 Resource Mobilization for Research

**3.2.3** Key Indicator: Research projects funded by the Government and Non-Government/ Agencies

# Index (Academic Year 2019-2020)

S.No.	Name of the Scheme/Project/ Endowments/ Chairs	Name of the Principal Investigator/ Co Investigator (if applicable)	Department	Name of the Funding agency	Funds provided (INR in lakhs)	Supporting Document Page No.
1	Man Animal conflict Study	Prof. Neelu Jain Gupta	Zoology	Samajik Prani Vaniki Vibhag	3	1
2	Core Research Grant	Dr. Anil K. Malik	Physics	SERB-DST	21.27	2
3	Core Research Grant	Prof. Neelu Jain Gupta	Zoology	SERB-DST	52.90	4
4.	Germplasm Characterization and Trait Discovery in Wheat using Genomics Approaches and its Integration for Improving Climate Resilience, Productivity and Nutritional quality	Sharma, Dr. SS Gaurav	Genetics and Plant Breeding	Department of Biotechnology	3931.87	6
5	Effects of Illuminated Night Environment on Metabolismand	Prof. Sanjay Kumar BhardwajCo- PI: Prof. Vinod	Zoology	SERB-DST	48.62	17

6	Reproduction in ContinuouslyBreedingDiurnalVertebrate:AStudy on ZebraFinchesCentreCentreofexcellenceontraining & skilldevelopmentonfood science	Kumar PI: Dr. S.S Gaurav	Genetics and Plant Breeding	UP higher education council, Lucknow	4.5	19
7	technologyRice-basedfunctionalcharacterizationofimportantwheatgenesinvolved in ironuptake,translocation,andregulation.MentorProf.ShailendraSharma(DBTRA PROJECT)	PI: Dr. Ritu Batra; Mentor: Dr. Dr. Shailendra Sharma	Genetics and Plant Breeding	Department of Biotechnology	14.08	22
8	Third year release of grant for project "Pyramiding of Rust Resistance Genes into High Grain Quality Wheat Lines Developed Through Marker-assisted Selection		Genetics and Plant Breeding	DBT	14.91	23
9	Third year release of grant for project "Marker- Assisted Breeding and Mapping of QTLs for Drought Tolerance in Wheat	Prof. P.K. Sharma	Genetics and Plant Breeding	DBT	8.44	24
10	"Epigenetic regulation of host-pathogen genetics in leaf rust resistance in wheat "	(Emeritus	Genetics and Plant Breeding	NASF-ICAR	3	25

		Sharma					
11	Release of Final			Genetics	SERB - DST	50.6	26
	grant for project			and Plant			
	- Identification		.S	Breeding			
	of Quantitative	Balyan					
	Trait Loci and						
	Underlying						
	Candidate Genes						
	for Seed						
	Dormancy and Pre-harvest						
	Sprouting Tolerance in						
	Common Wheat						
12	Second year	PI: D	r.	Genetics	DBT	16.06	27
	release of grant			and Plant	221	10100	
	for project			Breeding			
	"Deciphering			C			
	Genetic and						
	Epigenetic						
	Regulation of						
	Cereal Cyst						
	Nematode						
	(CCN)						
	Resistance in						
	Wheat						

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कार्यालय प्रमागीय निदेशक, सामाजिक वानिकी प्रमाग, मेरठ। पत्रांक २३९। /5-3 दिनांक ०७- दिसम्बर 2020.

कुलपति, चो० चरण जिंह

चौ० चरण सिंह विश्वविद्यालय) मेरठ।

विषय- हस्तिनापुर वन्य जीव विहार हेतु Conducting studies on causes and remedies of man animal conflict के संबंध में।

# महोदय,

सेवा में

उपरोक्त विषय पर हस्तिनापुर वन्य जीव विहार के लिए एक अध्ययन कराया जाना है। इस्तिनापुर, वन्य जीव विहार की सीमाएँ प्रदेश के 5 जनपद—मेरठ, मुजफ्फरनगर, बिजनौर, अमरोहा (जे0पी0 नगर) व हापुड़ में स्थित है। इस अध्ययन हेतु उत्तर प्रदेश सरकार से 50 3.00 लाख की धनराशि प्राप्त हुई है। उक्त अध्ययन हेतु अपनी स्वीकृति प्रदान करने का कष्ट करें, ' जिससे की अग्रिम कार्यवाही की जा सके।



प्रभागीय निदेशक सामाजिक वानिकी प्रभाग , 🗡 📩 मेरव

Annox.

<u>संख्या २९९१। / दिनांकित।</u> प्रतिलिपि निम्नलिखित को सूचनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित--

2- वन संरक्षक एवं क्षेत्रीय निदेशक, सामाजिक वानिकी मेरठ क्षेत्र, मेरठ।

3-प्रो0 नीफ जैन गुप्ता Head Department of Zoology Department of Hospital Administration Chaudhary Charan Singh University Meerut.

Honomable NC sir, This money shall include hiring logistics, BA, represhments and report Writing/videography Charges. I shall be coordinating this project. सामाजिक वानिकी प्रभाग, मेरत । 107 9571727 370 412720 50 EB Project 320 41373 41 4750 50 १० जुल्म्यात JKLetter 4. STOOTO FIT TIS A STEL OTO FITATA केंग्रना चाहे। प्रहननित जपप विष्ठवियाला 37.07 XY 05 271 - 412 0 - 1 (2 21)27 - 2 5 GIAT ZAINIAL ZUA STI The IN THE AS

FILE NO. CRG/2019/003236 SCIENCE & ENGINEERING RESEARCH BOARD(SERB) (A statutory body of the Department of Science & Technology, Government of India)

5 & 5A, Lower Ground Floor Vasant Square Mall Plot No. A, Community Centre Sector-B, Pocket-5, Vasant Kunj New Delhi-110070

### Dated: 08-Jan-2020

### ORDER

Subject: Financial Sanction of the research project titled "Development of Tunable and Bright Terahertz Source: Applications in Communications and Imaging" under the guidance of Dr. Anil Kumar Malik, Physics, Choudhary Charan Singh University, University main rd,Ramgarhi, Meerut, Uttar pradesh-250005 and by Dr. Updesh Verma, ASST PROFESSOR, PHYSICS, Manyawar Kanshiram Government Degree College - Release of 1st grant.

Sanction of Science and Engineering Research Board (SERB) is hereby accorded to the above mentioned project at a total cost of Rs. 2127400/- (Rs. Twenty One Lakh Twenty Seven Thousand Four Hundred Only) with break-up of Rs. *350000/-* under Capital (Non-recurring) head and Rs.*1777400/-* under General (Recurring) head for a duration of 36 months. The items of expenditure for which the total allocation of Rs. 2127400/- has been approved are given below:

S. No	Head	Total (in Rs.)
A	Non-recurring	
1	Equipment -> Computer and accessories	350000
A'	Total (Non-Recurring)	350000
В	Recurring Items	
1	Recurring - I : (Manpower) Recurring - II : ( Consumables, Travel, Contingencies) Recurring - III : Scientific Social Responsibility	1164000 400000 20000
2	Recurring - IV : (Overhead Charges)	193400
B'	Total (Recurring)	1777400
С	Total cost of the project (A' + B')	2127400

2. Sanction of the SERB is also accorded to the payment of Rs. 350000/- (Rupees Three Lakh Fifty Thousand only) under 'Grants for creation of capital assets' and Rs. 606000/- (Rupees Six Lakh Six Thousand only) under 'Grants-in-aid General' to Vice Chancellor, Choudhary Charan Singh University, University Main Rd,Ramgarhi being the first installment of the grant for the year 2019-2020 for implementation of the said research project.

3. The expenditure involved is debitable to Fund for Science & Engineering Research (FSER) This release is being made under Core Research Grant. (PAC Physics-2 (Lasers Optics Atomic & Molecular Physics,Plasma High Energy Nuclear Physics Astronomy & Astrophysics and Nonlinear dynamics))

4. The Sanction has been issued to Choudhary Charan Singh University, University Main Rd,Ramgarhi with the approval of the competent authority under delegated powers on 02 January, 2020 and vide Diary No. SERB/F/8470/2019-2020 dated 03 January, 2020

5. Sanction of the grant is subject to the conditions as detailed in Terms & Conditions available at website (www.serb.gov.in).

6. Overhead expenses are meant for the host Institute towards the cost for providing infrastructural facilities and general administrative support etc. including benefits to the staff employed in the project.

7. While providing operational flexibility among various subheads under head Recurring-II, it should be ensured that not more than Rs. 1.5 lakh each should be spent for travel and contingency.

8. Budget sanctioned under Scientific Social Responsibility (SSR) is meant only for activites enlisted under SSR norms and under no circumstances it can be reappropriated.

9. As per rule 211 of GFR, the accounts of project shall be open to inspection by sanctioning authority/audit whenever the institute is called upon to do so.

10. The sanctioned equipment would be procured as per GFR and its disposal of the same would be done with prior approval of SERB.

11. The release amount of Rs. 956000/- (Rupees Nine Lakh Fifty Six Thousand only) will be drawn by the Under Secretary of the SERB and will be disbursed by means of RTGS transaction as per their Bank details given below:

PFMS Unique Code	ccsu Page 3
Account Name	M/s. C.C.S. University Grant Account
Account Number	20195822304
Bank Name & Branch	Allahabad Bank Allahabad Bank, Meerut University Branch, CCS University Campus, Meerut (UP)-250004
IFSC/RTGS Code	ALLA0210144
Email id of A/C Holder	registrar@ccsuniversity.ac.ain
Email id of PI	anilmalikiitd@gmail.com

12. The institute will furnish to the SERB, separate Utilization certificate(UCs) financial year wise to the SERB for Recurring (Grants-in-aid General) & Non-Recurring (Grants for creation of capital assets) and an audited statement of accounts pertaining to the grant immediately after the end of each financial year.

13. The institute will maintain separate audited accounts for the project. A part or whole of the grant must be kept in an interest earning bank account which is to be reported to SERB. The interest thus earned will be treated as credit to the institute to be adjusted towards further installment of the grant.

14. The project File no. CRG/2019/003236 may also be mentioned in all research communications arising from the above project with due acknowledgement of SERB.

15. The manpower sanctioned in the project, if any is co-terminus with the duration of the project and SERB will have no liability to meet the fellowship and salary of supporting staff if any, beyond the duration of the project

16. As this is the first grant being released for the project, no previous U/C is required.

17. The institute may refund any unspent balance to SERB by means of a Demand Draft favoring "FUND FOR SCIENCE AND ENGINEERING RESEARCH" payable at New Delhi.

18. The organization/institute/university should ensure that the technical support/financial assistance provided to them by the Science & Engineering Research Board should invariably be highlighted/ acknowledged in their media releases as well as in bold letters in the opening paragraphs of their Annual Report.

19. In addition, the investigator/host institute must also acknowledge the support provided to them in all publications, patents and any other output emanating out of the project/program funded by the Science & Engineering Research Board.

Niladpal S (Dr. Nilotpal Ghosh)

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To,

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Under Secreta	
SERB, New De	nd for information and necessary action to: -
Lopy lotwarde	The Principal Director of Audit, A.G.C.R.Building, IIIrd Floor 1.P. Estate, Delhi-110002
2.	Sanction Folder, SERB , New Delhi.
3.	File Copy
4.	Dr. Anil Kumar Malik Physics Choudhary Charan Singh University , University main rd,Ramgarhi, Meerut, Uttar pradesh- 250005 Email: anilmalikiitd@gmail.com Mobile: 919654557573 Dr. Updesh Verma PHYSIC3 Manyawar Kanshiram Government Degree College (Start date of the project may be intimated by name to the undersigned. For guidance, terms & Conditions etc. Please visit <u>www.serb.gov.in.</u> )
5.	Vice Chancellor, Choudhary Charan Singh University, University Main Rd,Ramgarhi
	(Receipt of Grant may be intimated by name to the undersigned)

(Dr. Nilotpal Ghosh) MS nilotpal@serb.gov.in

### FILE NO. CRG/2019/002542 SCIENCE & ENGINEERING RESEARCH BOARD(SERB)

(A statutory body of the Department of Science & Technology, Government of India)

5 & 5A, Lower Ground Floor Vasant Square Mall Plot No. A, Community Centre Sector-B, Pocket-5, Vasant Kunj New Delhi-110070

Dated: 27-Feb-2020

### ORDER

Subject: Financial Sanction of the research project titled **"Molecular correlates of metabolic changes during migration in adult male** redheaded buntings, Emberiza bruniceps" under the guidance of Dr. Neelu Jain Gupta, ZOOLOGY, Choudhary Charan Singh University , University main rd,Ramgarhi, Meerut, Uttar pradesh-250005 - Release of 1st grant.

Sanction of Science and Engineering Research Board (SERB) is hereby accorded to the above mentioned project at a total cost of Rs. 5290240/- (Rs. Fifty Two Lakh Ninety Thousand Two Hundred and Forty Only) with break-up of Rs. 1800000/- under Capital (Non-recurring) head and Rs.3490240/- under General (Recurring) head for a duration of 36 months. The items of expenditure for which the total allocation of Rs. 5290240/- has been approved are given below:

S. No	Head	Total (in Rs.)
A	Non-recurring	
1	Equipment -> Nanodrop -> Cold storage unit -> Chronocubicle and aviary -> RT-PCR	1800000
A'	Total (Non-Recurring)	1800000
B	Recurring Items	
1	Recurring - I : (Manpower) Recurring - II : (Consumables, Travel, Contingencies) Recurring - III : Scientific Social Responsibility	1350240 1650000 10000
2	Recurring - IV : (Overhead Charges)	480000
Β'	Total (Recurring)	3490240
С	Total cost of the project (A' + B')	5290240

2. Sanction of the SERB is also accorded to the payment of Rs.1800000/- (Rupees Eighteen Lakh only) under 'Grants for creation of capital assets' and Rs. 1200000/- (Rupees Twelve Lakh only) under 'Grants-in-aid General' to Vice Chancellor, Choudhary Charan Singh University, University Main Rd,Ramgarhi being the first installment of the grant for the year 2019-2020 for implementation of the said research project.

3. The expenditure involved is debitable to Fund for Science & Engineering Research (FSER) This release is being made under Core Research Grant. (Organismal and Evolutionary Biology(Animal Sciences))

4. The Sanction has been issued to Choudhary Charan Singh University, University Main Rd,Ramgarhi with the approval of the competent authority under delegated powers on 26 February, 2020 and vide Diary No. SERB/F/10558/2019-2020 dated 26 February, 2020

5. Sanction of the grant is subject to the conditions as detailed in Terms & Conditions available at website (<u>www.serb.gov.in</u>).

6. Overhead expenses are meant for the host Institute towards the cost for providing infrastructural facilities and general administrative support etc. including benefits to the staff employed in the project.

7. While providing operational flexibility among various subheads under head Recurring-II, it should be ensured that not more than Rs. 1.5 lakh each should be spent for travel and contingency.

8. Budget sanctioned under Scientific Social Responsibility (SSR) is meant only for activites enlisted under SSR norms and under no circumstances it can be reappropriated.

9. As per rule 211 of GFR, the accounts of project shall be open to inspection by sanctioning authority/audit whenever the institute is called upon to do so.

10. The sanctioned equipment would be procured as per GFR and its disposal of the same would be done with prior approval of SERB.

11. The release amount of **Rs. 3000000/-** (Rupees Thirty Lakh only) will be drawn by the Under Secretary of the SERB and will be disbursed by means of RTGS transaction as per their Bank details given below:

PFMS Unique Code	ccsu
Account Name	C.C.S. University Grant Account
Account Number	8580101004528
Bank Name & Branch	Canara Bank Canara Bank, Meerut University Road, M-178-2, ShriNath ji Complex, Meerut
IFSC/RTGS Code	CNRB0008580
Email id of A/C Holder	registrar@ccsuniversity.ac.in
Email id of PI	drneelujgupta@hotmail.com

12. The institute will furnish to the SERB, separate Utilization certificate(UCs) financial year wise to the SERB for Recurring (Grants-in-aid General) & Non-Recurring (Grants for creation of capital assets) and an audited statement of accounts pertaining to the grant immediately after the end of each financial year.

13. The institute will maintain separate audited accounts for the project. A part or whole of the grant must be kept in an interest earning bank account which is to be reported to SERB. The interest thus earned will be treated as credit to the institute to be adjusted towards further installment of the grant.

14. The project File no. CRG/2019/002542 may also be mentioned in all research communications arising from the above project with due acknowledgement of SERB.

15. The manpower sanctioned in the project, if any is co-terminus with the duration of the project and SERB will have no liability to meet the fellowship and salary of supporting staff if any. beyond the duration of the project

16. As this is the first grant being released for the project, no previous U/C is required.

17. The institute may refund any unspent balance to SERB by means of a Demand Draft favoring "FUND FOR SCIENCE AND ENGINEERING RESEARCH" payable at New Delhi.

18. The organization/institute/university should ensure that the technical support/financial assistance provided to them by the Science & Engineering Research Board should invariably be highlighted/ acknowledged in their media releases as well as in bold letters in the opening paragraphs of their Annual Report.

19. In addition, the investigator/host institute must also acknowledge the support provided to them in all publications, patents and any other output emanating out of the project/program funded by the Science & Engineering Research Board.

Harish Kumar) Scientist E hs\_as@serbonline.in

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To, Under Secretary SERB, New Delhi Copy forwarded for information and necessary action to: -The Principal Director of Audit, A.G.C.R.Building, IIIrd Floor I.P. Estate, Delhi-110002 1. Sanction Folder, SERB, New Delhi. 2 3. **File Copy** 4. Dr. Neelu Jain Gupta ZOOLOGY Choudhary Charan Singh University , University main rd, Ramgarhi, Meerut, Uttar pradesh-250005 Email: drneelujgupta@hotmail.com Mobile: 919873900878 (Start date of the project may be intimated by name to the undersigned. For guidance, terms & Conditions etc. Please visit www.serb.gov.in.) 5. Vice Chancellor, Choudhary Charan Singh University, University Main Rd, Ramgarhi (Receipt of Grant may be intimated by name to the undersigned)

Dr. Harish Kumar) Scientist É ms\_as@serbonline.in

No. BT/Ag/Network/Wheat/2019-20 Ministry of Science & Technology Department of Biotechnology Government of India

Block 2, 6-8th Floors CGO Complex, Lodhi Road, New Delhi- 110 003 Dated: 29.02.2020

### ORDER

Sanction of the President is hereby accorded, under Rule 18 of the Delegation of Financial Powers Rules, 1978, for the implementation of the project entitled "Germplasm Characterization and Trait Discovery in Wheat using Genomics Approaches and its Integration for Improving Climate Resilience, Productivity and Nutritional quality" under mission programme of "Characterisation of Genetic Resources" for a period of 5 Years at a total cost of Rs.393174460.00 (Rupees thirty nine crore thirty one lakh seventy four thousand four hundred and sixty only) as per details in Para's below: The Project: 2.

Title: Characterisation of Genetic Resources: Germplasm Characterization and Trait Discovery in Wheat 2.1 using Genomics Approaches and its Integration for Improving Climate Resilience, Productivity and Nutritional quality

Project Coordinator: Dr. Kuldeep Singh, NBPGR, New Delhi. 2.2

Project Co-coordinator: Dr. Sundeep Kumar, NBPGR, New Delhi. 2.3

Principal Investigators and Coordinators of the Sub-projects: 2.4

Sub Project - 1: Germplasm genomics for trait discovery: Dr. Sundeep Kumar (Coordinator), NBPGR, New A. Delhi. There are six (06) components in this sub-project:

- Component-1: NBPGR, New Delhi i.
  - PI Dr. Sundeep Kumar & Dr. Amit K. Singh
  - Co-PI -Dr. Jyoti Kumari & Dr. Sherry R. Jacob
- Component-2: IARI, New Delhi. ii.
  - PI Dr. Kiran B. Gaikwad
  - Co-PI Dr. Rajbir Yadav & Dr. S.S. Rathore .
- Component-3: PAU, Ludhiana iii.
  - PI -Dr. V.S. Sohu Co-PI -Dr. Satinder Kaur, Dr. Praveen Chhuneja & Dr. Achla Sharma
  - Component-4: NIPGR, New Delhi
  - PI -Dr. Manoj Prasad

iv.

ii.

Co-PI - Dr. Swarup Kumar Parida& Dr. Debasis Chattopadhyay

Component-5: IASRI, New Delhi.

- PI Dinesh Kumar
- Co-PI Dr. UB Angadi, Dr. Sarika, Dr. Mir Asif Iquebal, Dr. D.C. Mishra, Mr. Neeraj Budlakoti & Dr V.R. Akbari
- Component-6: BISA, Ludhiana vi.
  - PI -Dr. Uttam Kumar .
  - Co-PI -Dr. A. K. Joshi & Dr. P. K. Bhati .

Sub Project-2: Characterization and evaluation of wheat germplasm lines for biotic stress resistance: B. Dr. Vinod (Coordinator), ICAR-IARI, New Delhi. There are eleven (11)components in this sub-project:

- Component-1: ICAR-IARI, New Delhi i.
  - PI-Dr. S. K. Jha
  - Co-PI-Dr. Niharika Malik.

Component-2: IARI-RS, Wellington (T.N.) PI -Dr. V.K. Vikas

- Co-PI Dr. M Sivasamy
- iii. <u>Component-3</u>: IIWBR RS, Shimla
  - PI Dr SC Bhardwaj
  - Co-PI Dr. O. P. Gangwar, Dr. Pramod Prasad
- iv. <u>Component-4</u>: PAU, Ludhiana
  - PI Dr. Satinder Kaur
  - Co-PI-Dr. Praveen Chuneja, Dr.Achla Sharma, Dr.Jaspal Kaur, Dr.RituBala&Dr.Harinderjit Kaur
  - <u>Component-5</u>: BHU, Varanasi
  - PI Dr. V.K. Mishra

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- Co-PI Dr. Ramesh Chand & Dr. Sandeep Sharma
- vi. <u>Component-6</u>: CSKHPKV, Palampur
  - PI Dr. H.K. Chaudhary
  - Co-PI Dr. Daisy Basandrai, Dr. AshwaniBasandrai& Dr. B.K. Sharma
- vii. <u>Component-7</u>: IARI, New Delhi
  - PI Dr. M.S. Saharan
  - Co-PI- Dr. RashmiAggarwal, Dr. MalkhanGurjar& Dr. Atul Kumar
- viii. <u>Component-8</u>: IARI, RS-Indore
  - PI Dr. Sai Prasad
  - · Co-PI -Dr. J.B. Singh, Ms. Divya Ambati & Mr. Prakasha T.L.
- ix. <u>Component-9</u>: SKUAST, Kashmir
  - PI Dr. R.R. Mir
  - Co-PI Dr. M.K. Khan
- x. <u>Component-10</u>: ANDUAT, Ayodhya
  - PI Dr. S.P. Singh
    Co-PI Dr. Subhash Chandra
- xi. <u>Component-11</u>: BISA, Samastipur
  - PI Dr. Uttam Kumar
  - Co-PI Dr. Arun Kumar Joshi

C. <u>Sub Project-3:</u>Evaluation of wheat germplasm for abiotic stresses: Dr. GyanendraPratap Singh (Coordinator), Director, IIWBR, Karnal. There are eleven (11) components in this sub-project:

- i. <u>Component-1</u>: IIWBR, Karnal PI – Dr. SK Singh Co-PI - Dr. SindhuSareen, Dr. Arun Gupta, Dr. Charan Singh, Dr. Vikas Gupta & Dr. Sonia Sheoran
- ii. <u>Component-2</u>: NBPGR, New Delhi
  - PI –Dr. JyotiKumari
  - Co-PI Dr. M.C. Yadav, Dr. Sundeep Kumar, Dr. Ruchi Bansal &Dr. Sherry R. Jacob
- iii. <u>Component-3</u>: Punjab Agricultural University, Ludhiana.
   PI -Dr. Achla Sharma
  - O DI D O U L K
  - · Co-PI-Dr. SatinderKaur, Dr. V.S. Sohu, Dr. Puja Srivastava&Dr. Gurvinder Singh Mavi
- iv. <u>Component-4</u>: MPKV, Rahuri
  - PI Dr. Pawan L. Kulwal
    Co-PI- Dr. S. S. Dodake
  - Co-ri- Dr. S. S. Dodake
- v. <u>Component-5</u>: SKAUST, Jammu
  - PI-Dr. Ravinder Singh
  - Co-PI Dr. Bikram Singh & Dr. Anjani Kumar Singh
- vi. <u>Component-6</u>: CSSRI, Karnal

PI- Dr. Arvind Kumar

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vii. <u>Component-7</u>: IARI, New Delhi (Trait: Nutrient use efficiency) • PI - Dr. RenuPandey

- Co-PI -Dr. Lekshmy S
- viii. <u>Component-8</u>: IARI, New Delhi (Trait: Salinity tolerance) • PI - Dr. Lekshmy
  - Co-PI -Dr. Renu Pandey
- ix. <u>Component-9</u>: IARI, Indore
  - PI Dr. Sai Prasad
     Co-PI Dr. J.B. Singh, Ms. DivyaAmbati&Mr. Prakasha T.L.
- x. <u>Component-10</u>: ARI, Pune
  - PI Dr. YashavanthaKumar K.J.
  - Co-PI -Dr. Sudhir

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- xi. <u>Component-11</u>: BISA, Ludhiana
  - PI Dr. Uttam Kumar
  - Co-PI -Dr. A.K. Joshi&Dr. PradeepBhati

D. <u>Sub Project-4</u>: Evaluation of wheat germplasm for quality traits: Dr. GyanendraPratap Singh (Coordinator), Director, IIWBR, Karnal. There are five (05) components in this sub-project:

- i. <u>Component-1</u>: IARI, New Delhi
  - PI Dr. Anju Mahendru
  - Co-PI Dr. Neelu Jain
- ii. <u>Component-2</u>: IIWBR, Karnal
  - PI Dr. Seva Ram
  - Co-PI -Dr. B.S. Tyagi, Dr. Gopal Reddy& Dr. O.P. Gupta
- iii. <u>Component-3</u>: NBPGR, New Delhi
  - PI Dr. Sundeep Kumar
  - Co-PI Dr. Rakesh Bhardwaj, Dr. Sandeep Kumar & Mr. NandLalMeena
- iv. Component-4: NABI, Mohali
  - PI Dr. Monika Garg
  - Co-PI Dr. KoushikMajumdar
  - Component-5: CCS University, Meerut
  - PI Dr. Shailendra Sharma
  - · Co-PI Dr. S.S. Gaurav& Dr. P.K. Sharma

E. <u>Sub Project-5:</u>Capacity building in the area of genomic selection and high throughput phenotyping and its integration in national breeding programs: NBPGR, New Delhi (Coordinating institute). There are two (02) components in this sub-project:

- i. <u>Component-1</u>: NBPGR, New Delhi (Coordinating institute)
  - PI Dr. Sundeep Kumar
  - Co-PI Dr. Amit Kumar Singh &Dr. M.C. Yadav
  - Component-2: BISA, Ludhiana
- ii. <u>Component-2</u>: BISA, Lud
   PI Dr. Uttam Kumar
  - CO-PI Dr. A.K. Joshi & Dr. P.K. Bhati
- F. Sub Project-6: Coordination Unit (NBPGR, New Delhi): Co-ordinator: Dr. Kuldeep Singh.
- i. <u>Component-1</u>: National Bureau of Plant Genetic Resources, New Delhi
  - PI Dr. Sundeep Kumar
  - Co-PI Dr. Amit Kumar Singh

## 2.5 Overall Objectives of the Network project:

Agro-morphological characterization of wheat germplasm including landraces and germplasm available with Indian researchers and National GeneBank

Page 9

- Genotying of the selected wheat germplasm set using high density SNP array to understand the extent and pattern of genome level diversity in the indigenous collection and identification of marker based core set
- Whole genome re-sequencing of landraces and elite lines for the large scale discovery of the sequence variants, gene copy number variations and genome level selection pattern
- Multi-location evaluation of unique and iterative core sets for various biotic stresses including rusts, spot blotch, karnal bunt, powdery mildew and Fusarium head blight
- Multi-location evaluation of unique and iterative core sets for various abiotic stresses including drought, heat and salt tolerance
- > Multi-location evaluation of unique and iterative core sets for various grain and end use quality traits
- GWAS for identification of genes/QTLs conferring resistance against selected biotic and abiotic stresses, nutrient use efficiency and key quality traits
- Capacity building in the area of genomic selection and development of genomic selection models for integration in national breeding programs

### 2.6 Sub-Project/component and institutional objectives:

### Sub Project - 1:

A.

## Overall objectives:

- Acquiring of wheat germplasm from other institutes/sources.
- Agro-morphological characterization of initial set for key descriptors for generating genomic resources.
- > Genotyping of initial set of wheat germplasm using high density SNP array for identification of unique germplasm.
- > Development of 'Iterative core' set from initial set.
- > Genome wide association analysis for the identification of QTLs/genes for biotic, abiotic, quality and yield traits.
- Validation of identified genomic regions in germplasm lines/biparental populations.
- Development of high density gene based SNP array using novel SNPs discovered using exome sequencing, pan genome sequencing and markers identified in GWAS.

### i. <u>Component-1</u>: NBPGR, New Delhi

- > Acquiring of wheat germplasm from other institutes/sources
- Agro-morphological characterization of initial set for key descriptors for generating genomic resources
- Genotyping of initial set of wheat germplasm using high density SNP array for identification of unique germplasm
- > Development of 'Iterative core' set from initial set
- > Genome wide association analysis for the identification of QTLs/genes for biotic, abiotic, quality and yield traits
- > Validation of identified genomic regions in germplasm lines/biparental populations
- Development of high density gene based SNP array using novel SNPs discovered using exome sequencing, pan genome sequencing and markers identified in GWAS

### ii. <u>Component-2</u>: IARI, New Delhi

- > Evaluation of selected wheat germplasm lines for yield and its component traits
- Validation of identified germplasm lines for yiled and yield component traits over the years
- Genome wide association analysis for the identification of QTLs/genes for yield and its component traits

## iii. <u>Component-3</u>:PAU, Ludhiana

- > Agro-morphological characterization of initial set for key descriptors for generating genomic resources
- > Evaluation of selected wheat gcrmplasm lines for yield and its component traits
- > Genome wide association analysis for the identification of QTLs/genes for yield and its component traits
- > Validation of identified genomic regions in germplasm lines/ biparental populations

## iv. <u>Component-4</u>:NIPGR, New Delhi

- Genome resequencing of ~50 wheat germplasm lines/landraces to identify novel SNPs/ indels selection pattern at the whole genome level
- Allele mining to discover novel allelic varients for agronomically important traits using exome sequencing of 'Iterative core' set
- Genome wide association analysis for the identification of QTLs/genes for yield and its component traits using exome sequencing data

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# Component-5: IASRI, New Delhi

Development of wheat SNP database

Development of genomic data analysis pipelines/tools for marker-trait-association analysis

## Component-6: BISA, Ludhiana

- Evaluation of 'Unique set' of wheat germplasm lines for yield and its component traits A
- Validation of identified germplasm lines for yiled and yield component traits over the years A
- Genome wide association analysis for the identification of QTLs/genes for yield and its component traits >

### Sub Project-2:

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- **Overall Objectives:**
- Multi-location evaluation of available "Wheat Core Set' and 'Unique sets', wild germplasm for various biotic stresses > including rusts, spot blotch, karnal bunt, powdery mildew and Fusarium head blight
- Validation of promising donors for various biotic stresses under controlled conditions P
- Component-1: LARI, New Delhi
- Evaluation of available "Wheat Core Set' and 'Unique set'against prevalent pathotypes of leaf rust (77-5, 77-9) at Þ seedling and adult plant stage under field conditions
  - Single race testing of selected resistant lines against other prevalent pathotypes
- Validation of identified germplasm lines for rust resistance under controlled condition
- To establish the test of allelism for leaf rust among different resistance sources

# Component-2: IARI-RS, Wellington (T.N.)

- Evaluation of available "Wheat Core Set' and 'Unique Set'against prevalent races of leaf rust and stem rust, powdery > mildew and fusarium head blight under field conditions.
- Validation of identified germplasm lines for rust resistance under controlled condition D

#### Component-3: IIWBR RS, Shimla iii.

- Evaluation of available "Wheat Core Set' and 'Unique Set'against prevalent races of leaf rust, stem rust and stripe rust P under field conditions
- Validation of identified germplasm lines for rust resistance under controlled condition A

#### Component-4: PAU, Ludhiana iv.

- Evaluation of available "Wheat Core Set' and 'Unique Set'against prevalent races of stripe rust at seedling and adult 4 plant stage under field conditions
- Evaluation of 'Iterative Core' for Karnal bunt resistance P
- Evaluation of 'Iterative Core' for Fusarium head blight resistance

### Component-5: BHU, Varanasi

- Preparation of inoculum for the evaluation of 'Unique set' of germplasm lines against spot blotch Þ
- Evaluation of available "Wheat Core Set' and 'Unique Set' against most virulent isolate of spot blotch disease Þ
- Validation of identified germplasm lines for spot blotch resistance over the years V

## Component-6: CSKHPKV, Palampur

- Evaluation of available "Wheat Core Set' and 'Unique Set'against virulent races of powdery mildew A
- Validation of identified germplasm lines for powdery mildew resistance over the years P

#### Component-7: IARI, New Delhi vii.

Evaluation of 'Iterative/dynamic core' for Karnal bunt, and 'Unique set' of germplasm lines for spot blotch and A Fusarium head blight resistance

Component-8: IARI, RS-Indore viii.

- Evaluation of available "Wheat Core Set' and 'Unique Set'against prevalent races of stem rust
- Evaluation of available "Wheat Core Set' and 'Unique Set'against prevalent races of leaf rust

#### Component-9: SKUAST, Kashmir ix.

- Evaluation of 'Iterative Core' for powdery mildew
- Evaluation of available "Wheat Core Set' and 'Unique Set'against prevalent races of stripe rust at seedling and adult 8 plant stage

## Component-10: ANDUAT, Ayodhya

Evaluation of 'Unique set' of germplasm lines against most virulent isolate of spot blotch disease Evaluation of 'Unique set' of germplasm lines against leaf rust over the years

xi. Component-11: BISA, Samastipur

- Evaluation of available "Wheat Core Set' and 'Unique Set' for spot blotch resistance in replicated yield trails
- A To establish the test of allelism for spot blotch among different resistance sources ×
- Evaluation of 'Unique set of germplasm' for tan spot under artificial inoculated condition
- 2 Evaluation of selected lines varying for disease resistance level under replicated yield trials in standard plots to measure yield loss due to individual allele/gene

#### C. Sub Project-3:

### **Overall Objectives:**

- × Multi-location evaluation of 'unique' and 'iterative core sets' for various abiotic stresses including drought, heat and salt tolerance
- A Validation of promising donors for various abiotic stresses under controlled conditions

i. Component-1: IIWBR, Karnal

- > Evaluation of 'Selected lines' for heat tolerance based on 1st year trial at three location and 'Iterative' core set of germplasm lines for terminal heat stress tolerance under normal and late sown conditions
- A Evaluation of 'Selected lines' for drought tolerance based on 1st year trial at three location and 'Iterative' core set of germplasm lines under normal and drought condition for the identification of novel sources of drought stress tolerance

#### ii. Component-2: NBPGR, New Delhi

- A Evaluation of 'Unique set' for the identification of novel sources drought stress tolerance undernormal and drought stress conditions
- A Evaluation of 'Selected lines' for drought tolerance based on 1st year trial at three location and 'Iterative' core set of germplasm lines under normal and drought condition for the identification of novel sources of drought stress tolerance Collection and maintenance of evaluation data of various abiotic stresses received from different centers P

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#### iii. Component-3: PAU, Ludhiana

- A Evaluation of 'Unique set' for the identification of novel sources drought stress tolerance under normal and drought stress conditions
- Evaluation of 'Selected lines' for drought tolerance based on 1st year trial at three location and 'Iterative' core set of Þ germplasm lines under normal and drought condition for the identification of novel sources of drought stress tolerance

#### iv. Component-4: MPKV, Rahuri

Þ Evaluation of 'Selected lines' for heat tolerance based on 1st year trial at three location and 'Iterative' core set of germplasm lines for terminal heat stress tolerance under normal and late sown conditions

#### Component-5: SKAUST, Jammu ¥.

A Evaluation of 'Selected lines' for drought tolerance based on 1st year trial at three location and 'Iterative' core set of gemplasm lines under normal and drought condition for the identification of novel sources of drought stress tolerance.

#### vi. Component-6: CSSRI, Karnal

A Evaluation of 'Iterative' core set of germplasm lines under normal and salinity stress condition for the identification of novel sources of salt stress tolerance

#### Component-7: IARI, New Delhi (Trait: Nutrient use efficiency) vii.

A Evaluation of 'Iterative core' for identification of promising lines with high Nutrient Use Efficiency

#### viii. Component-8: IARI, New Delhi (Trait: Salinity tolerance)

Þ Evaluation of 'Iterative core' for identification of promising lines with high salinity tolerance.

#### ix. Component-9: IARI, Indore

A Evaluation of 'Selected lines' for heat tolerance based on 1st year trial at three location and 'Iterative' core set of germplasm lines for the identification of novel sources of heat tolerance.

#### X., Component-10: ARI, Pune

- > Evaluation of 'Unique set' for the identification of novel sources drought stress tolerance under normal and drought stress conditions
- P Evaluation of 'Selected lines' for drought tolerance based on 1st year trial at three location and 'Iterative' core set of germplasm lines under normal and drought condition for the identification of novel sources of drought stress tolerance
- xi. Component-11: BISA, Ludhiana
  - × Evaluation of "Unique set' for the identification of novel sources heat stress tolerance under replicated trials in timely and late sown conditions

Evaluation of 'Selected lines' for heat tolerance based on 1st year trial at three location and 'Iterative' core set of germplasm lines for the identification of novel sources of terminal heat tolerance Evaluation of lines in replicated trials in standard yield plots for heat tolerance in three environments D

### Sub Project-4:

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- **Overall Objectives:**
- Evaluation of 'Unique set' for zinc and iron content Þ
- Characterization of diverse wheat lines for test weight and flour recovery 2 Multilocation evaluation of 'Unique set' for above traits and identification of high and low lines stable across the environments

## Component-1: IARI, New Delhi

- Evaluation of 'Unique set' of germplasm line for zinc and iron content, grain amylose content, and grain protein content
- Multilocation evaluation of 'Unique set' for above traits and identification of high and low lines stable across the P environments

## Component-2: IIWBR, Karnal

- Evaluation of 'Unique set' for zine and iron content
- Characterization of diverse wheat lines for test weight and flour recovery
- Multilocation evaluation of 'Unique set' for above traits and identification of high and low lines stable across the environments

## Component-3: NBPGR, New Delhi

- Evaluation of 'Unique set' for zinc, iron and grain protein content P
- Evaluation of 'Unique set' for grain amylose content D

## Component-4: NABI, Mohali

- Screening of 'Unique set' for Zn & Fe content and 'Grain Protein Content' Multilocation evaluation of 'Iterative core set' for fructans and identification of high and low lines stable across the > environments
- Component-5: CCS University, Mecrut v.
  - Screening of 'Iterative core' for grain protein content
  - Screening of 'Iterative core set' for fructan content and identification of related genetic loci in wheatwith preferred P nutritional and biochemical profiles and development of reference set.

#### Sub Project-5: E.

- **Overall Objectives:**
- Þ Screening of 'Iterative core' for grain protein content
- Screening of 'Iterative core set' for fructan content and identification of related genetic loci in wheat X
- Component-1: NBPGR, New Delhi (Coordinating institute)
- Provide genotyping and phenotyping data of 'training population' and 'test population' to be used in prediction models Arranging 2-3 months training to six persons in the area of 'Genomic selection' in the institutes working on 'Genomic > Selection' in abroad

# Component-2: BISA, Ludhiana

- Phenotype candidate wheat varieties for yield and agronomic performance under heat stress
- Management and curation of phenotypic data and submit to IASRI >
- Selection of candidate varieties/lines with high yield and abiotic stress tolerance ×
- Development and testing of genomic selection models using elite exotic and Indian germpalsm in Indian conditions and A cross validation.

#### F. Sub Project-6:

### Overall Objectives:

- To manage and monitor overall programme. A
- Timely disbursement of funds through development of research contracts and financial reporting to DBT.
- Development of monitoring strategy establish the program advisory committee (PAC) and undertake periodic meeting of P the PAC.
- To engage need based international consultant to guide and support the project. P
- To undertake specific capacity building exercise for the researchers of the project in relevant areas
- To prepare operational reports for DBT
- To organize scientific symposium / conference.

i. <u>Component-1</u>: NBPGR, New Delhi

Provide genotyping and phenotyping data of 'training population' and 'test population' to be used in prediction models
 Arranging 2-3 months training to six persons in the area of 'Genomic selection' in the institutes working on 'Genomic Selection' in abroad

- 3. Budget of the network project (Sub project wise): Details of the budget are in Annexure I.
- 4. Consolidated budget of the network project (Sub project wise) for five years:

Name of the	NR Grant	Manpowe r	Consu- mables	Trave l	Conting ency	Field & Farm	Over- head	Out- sourcin	Trainin g	Review Meeting	Rs. in Lakh) Publicati on	Total
Institute		1			Sub	-Project 1		g	L	1	Charges	l
NBPGR	42.00	228.406	80.00	2.50	2.50	38.00	5.00	484.00	0.00	0.00	0.00	882.406
IARI	6.40	51.6336	10.244	2.50	2.50	20.00	2.50	0.00	0.00	0.00	0.00	95.7776
PAU	0.00	18.3744	4.00	2.50	4.50	22.50	2.050	0.00	0.00	0.00	0.00	53.9244
NIPGR	90.99	138.384	23.00	2.50	2.50	0.00	0.00	490.00	0.00	0.00	0.00	747.374
IASRI	5.00	66.6624	0.00	1.25	2.50	0.00	0.90	0.00	0.00	0.00	0.00	76.3124
BISA	0.00	8.63	12.00	3.00	1.50	45.00	1.20	0.00	0.00	0.00	0.00	71.33
	0.00		12100	1 3.00		-Project 2					0.00	11
IARI	4.98	59.6666	17.00	2.50	2.50	10.00	2.50	0.00	0.00	0.00	0.00	99.1466
IARI, Wellington	5.00	44.9712	10.00	2.50	2.50	7.50	2.50	0.00	0.00	0.00	0.00	74.9712
IIWBR, Shimla	0.00	44.9712	10.00	2.50	2.50	7.50	2.50	0.00	0.00	0.00	0.00	69.9712
PAU	4.956	18.3744	12.00	2.50	2.50	17.00	2.50	0.00	0.00	0.00	0.00	59.8304
BHU	3.50	18.3744	3.00	2.00	2.00	5.00	2.00	0.00	0.00	0.00	0.00	35.8744
CSKHPKY	3.80	21.6432	6.00	2.00	2.00	6.00	2.00	0.00	0.00	0.00	0.00	43.4432
IARI, New Delhi	3.90	30.3552	4.00	1.00	2.00	4.00	2.00	0.00	0.00	0.00	0.00	47.2552
IARI, Indore	2.00	18.3744	3.00	2.00	1.50	4.50	1.50	0.00	0.00	0.00	0.00	32.8744
SKUAST	5.00	18.3744	6.00	2.00	1.50	6.00	1.50	0.00	0.00	0.00	0.00	40.3744
ANDUAT	5.00	10.368	3.00	2.00	2.00	6.00	2.00	0.00	0.00	0.00	0.00	30.368
BISA	0.00	35.7696	7.50	1.50	2.25	30.00	2.00	0.00	0.00	0.00	0.00	79.0196
			- 		Sul	o-Project 3				×		
HWBR, Karnal	8.30	35.7696	24.00	2.50	2.50	20.00	2.50	0.00	0.00	0.00	0.00	95.5696
NBPGR	16.72	30.3552	6.00	2.00	2.50	20.00	2.00	0.00	0.00	0.00	0.00	79.5752
PAU	4.80	18.3744	8.00	2.00	2.00	20.00	2.00	0.00	0.00	0.00	0.00	57.1744
MPKV	1.30	26.4384	10.00	2.00	2.00	7.50	2.00	0.00	0.00	0.00	0.00	51.2384
SKAUST, Jammu	3.50	26.4384	7.50	2.00	2.00	7.00	2.00	0.00	0.00	0.00	0.00	50.4384
CSSRI	2.50	17.1072	6.00	2.00	2.00	15.00	2.00	0.00	0.00	0.00	0.00	46.6072
IARI, New Delhi- Nutrient	3.90	19.6416	17.00	2.00	2.50	12.00	2.00	0.00	0.00	0.00	0.00	59.0416
IARI, New Delhi- Salinity	3.40	19.6416	12.00	1.00	3.00	0.00	2.00	0.00	0.00	0.00	0.00	41.0416
IARI, Indore	4.00	28.3968	3.00	2.00	1.50	4.50	1.50	0.00	0.00	0.00	0.00	44.8968
ARI, Pune	2.50	29.1648	6.00	2.00	2.00	18.00	1.50	0.00	0.00	0.00	0.00	61.1648
BISA, Ludhiana	2.50	46.4928	15.00	2.50	2.50	168.00	5.00	0.00	0.00	0.00	0.00	241.992 8
LARI, New Delhi	30.50	30.3552	18.00	2.00	2.50	b-Project 4 0.00	1.70	0.00	0.00	0.00	0.00	85.0552
IIWBR, Karnal	20.00	27.4752	26.00	2.50	2.50	0.00	2.50	0.00	0.00	0.00	0.00	80.975
NBPGR	14.00	23.3616	9.00	1.50	2.00	0.00	1.50	0.00	0.00	0.00	0.00	51.3610
NABI,	0.00	43.5456	30.00	1.50	1.50	0.00	1.50	0.00	0.00	0.00	0.00	78.0450

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Mohali				2.00	2.00	0.00	1.50	0.00	0.00	0.00	0.00	49.1692		
CCSU,	4.65	21.0192	18.00	2.00		1								
Meerut	1				Su	b-Project 5				1	0.00	48.00		
						0.00	1.00	0.00	41.00	0.00	COAS-14			
10.00	0.00	0.00 0.00	0.00	0.00	4.00	2.00	and the second second	A CONTRACT	0.00	0.00	0.00	0.00	42.5224	
NBPGR	-		4.00	7.00	0.00	1.50	0.00	0.00		in the second se				
BISA,	12.00 10.0224		12.00 10.0224 8.00		1.00			1	A Designation					
Ludhiana	1				S	ub-Project 6	5			-	1 00 00	127.121		
Set and set of set	100 - K. (		1	15.00	5.00	0.00	2.50	0.00	0.00	15.00	23.00	6		
NBPGR	13.50	53.1216	0.00	13.00	5.00	1.000	A CONT	net en	-	17.00	23.00	3931.24		
ADI OK	15.00	1	1	10000	88.25	521.00	72.85	974.00	41.00	15.00	23.00	46		
Total	330.596	1340.0546	434.244	91.25	88.45	541.00		1		- Andrews		1,13		

			Care vien ret		(Rs. in la	khs)
Consolidated head wise h	oudgetary details	for period of Year II	Vear III	Year IV	Year V	Total
Head	Year I	I car II	0.0	0.0	0.0	330.596
Non-recurring Equipment's*	330.596	0.0	0.0		0(0.019	1340.0546
	147.8634	298.7418	308.6632	315.9682	268.818	434.244
Recurring Manpower**	30.00	115.00	112.00	130.00	0.0	
Consumable	684.00	190.00	100.00	0.0	0.0	974.00
Outsourcing Services	001.00				17.75	91.75
	8,75	21.75	21.75	21.75		
Travel	116.50	122.5	151.5	107	23.5	521.00
Field & Farm	110.50			1	0.00	
and the second second second second	0.00	20.50	20.50	0.00	0.00	41.00
Training	0.00				3.00	1 2 2 2 2
	3.00	3.00	3.00	3.00	3.00	15.00
Review Meeting	5.00		1	5.00	5.00	
The second second second second	3.00	5.00	5.00	5.00		88.25
Publication Charges	8.50	21.5	21.00	21.00	16.25	- I - I - I - I - I - I - I - I - I - I
Contingency		17.65	17.95	17.95	12.60	72.85
Overhead	6.70			621.6682	394.162	3931.744
	1338.9094	815.6418	761.3632	041.0002		
Total						

# 6.

<u>Head of Account:</u> The expenditure for recurring is debatable to: i.

I He was	
Demand No. 87	Department of Biotechnology
	Other Scientific Research 2019-2020
3425	Others (Sub Major Head)
3425.60	Assistance to other Scientific Bodies (Minor Head)
3425.60.200	Biotechnology Research and Development
3425.60.200.29	Assistance for Research and Development
3425.60.200.29.17	Grants -in-Aid General
3425.60.200.29.17.31	orano man

# The expenditure for Non-recurring is debatable to: ii.

	Department of Biotechnology
Demand No. 87	
3425	Other Scientific Research 2019-2020
	Others (Sub Major Head)
3425.60	Assistance to other Scientific Bodies (Minor Head)
3425.60.200	Assistance to out and Development
3425.60.200.29	Biotechnology Research and Development
3425.60.200.29.17	Assistance for Research and Development
3425.60.200.29.17.35	Grants for creation of capital assets
11/5 00.200.23.11.33	

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Terms & Conditions:

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- i. In case the whole or a part of the amount of the grant in aid is being refunded, an interest at the rate of ten percent per annum thereon shall be recovered.
- ii. The Non-recurring amount should be utilized within18 months from the date of Sanction Order.
- iii. No Utilization Certificate is pending with the implementing Institute. All the Utilization Certificates due for rendition have been received and accepted by the head of Division/Competent Authority.
- iv. A Memorandum of Agreement (MoA) will be signed between the Department of Biotechnology and the grantee institution on Non-Judicial stamp paper Rs. 100/- in the enclosed format and the second release/installment will be made only after signing of MoA by the grantee institutions and its acceptance by DBT. In case of NGO or Private Institution, MOA signed is mandatory first release.
- v. The Institute/Agency will keep the whole of the grant in a Bank Account earning interest, and the interest so earned should be reported to DBT in the Utilization Certificate and Statement of Expenditure. The Interest so earned will be treated as created to the institute/Agency and shall be adjusted towards further installment of the grant and or at the time of Final Settlement of Accounts.
- vi. As per Rule 236 (1) of GFR 2017, the accounts of all Grantee Institutions of Organizations shall be open to inspection by the sanctioning authority and audit, both by the Comptroller and Auditor General of India under the provision of CAG(DPC) Act 1971 and internal audit by the Principal Accounts Office of the Ministry or Department, whenever the Institution or Organization is called upon to do so.
- vii. PI's of DBT sponsored projects can consider appointment of JRF from Category-II merit list of DBT-BET exam so that candidates can be paid fellowships at par with NET/GATE/BET qualified candidates as per DST OM No. SR/S9/Z-08/2018 dated30.01.2019. However, there is no compulsion on PI's to select candidates for JRF in their projects from Category-II of DBT-BET. PI can also recruit project staff as per approved institutional/organizational normsor as perDST O.M. SR/S9/Z-05/2019 dated 21.08.2019.

## 8. Other Terms & Conditions:

- i. The Director, NBPGR, New Delhi shall be responsible for submission of Statements of Expenditure (SoE), utilization certificates (UC), Assets Certificates, Manpower staffing & expenditure details in prescribed DBT formats to DBT in respect of grants released in this project from time to time.
- ii. The Director, NBPGR, New Delhi shall be responsible for upload consolidated GFR 19 (UC) in PFMS.
- iii. Grant of all participating Institutes/ Universities shall be released to NBPGR, New Delhi. It shall be the responsibility of NBPGR, New Delhi to debit grant to the respective participating components as per grants sanctioned by the DBT within fifteen days.
- iv. NBPGR, New Delhi shall be responsible for overall account management and timely releases & submission of annual reports.
- v. All partnering institution shall enter in to a MoA and sign MTAs. However, institutions are required to send MoA as per DBT format within 30 days of order as detailed para 8 (iv).
- vi. PMU shall function under coordinator of the project and DBT for monitoring /evaluation of research progress and implementation of the project.
- vii. The accounts of grantee institution shall be open to inspection by the sanctioning authority/audit whenever the institute is called upon to do so by the sanctioning authority.
- 9. This issues under the power delegated to this Department and with the concurrence of IFD vide their SAN No.102/IFD/SAN/3963 /2019-20 dated 29.02.2020.
- 10. This sanction order has been noted at serial no. 216 in the Register of Grants.

Sanjay Kalia)

Scientist 'E'

\*

To,

The Pay & Accounts Officer, Ministry of Science & Technology Department of Biotechnology New Delhi – 110 003.

### Copy to:

- 1. The Principal Director of Audit (Scientific Departments), DACR Building, New Delhi- 110 002
- 2. The Director, NBPGR, New Delhi.
- 3. Dr. Sundeep Kumar, NBPGR, New Delhi.

- 4. Dr. Amit K. Singh, NBPGR, New Delhi
- 5. Dr. Kiran B. Gaikwad, IARI, New Dolhi.
- 6. Dr. V. S. Sohu, PAU, Ludhiana
- 7. Dr. Manoj Prasad, NIPGR, New Delhi
- 8. Dr. Dinesh Kumar, IASRI, New Delhi
- 9. Dr. Uttam Kumar, BISA, Samastipur/Ludhiana
- 10. Dr. Vinod, IARI, New Delhi

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- 11. Dr. S. K. Jha, IARI, New Delhi
- 12. Dr. V. K. Vikas, IARI-RS, Wellington (T.N.)
- 13. Dr. S.C. Bhardwaj, IIWBR-RS, Shimla
- 14. Dr. Satinder Kaur, PAU, Ludhlana
- 15. Dr. V. K. Mishra, BHU, Varanasi
- 16. Dr. H. K. Chaudhary, CSKHPKV, Palampur
- 17. Dr. M. S. Saharan, IARI, New Delhi
- 18. Dr. S. V. Sai Prasad, IARI, RS-Indore
- 19. Dr. R. R. Mir, SKUAST, Kashmir
- 20. Dr. S. P. Singh, ANDUAT, Ayodhya
- 21. Dr. S. K. Singh, HWBR, Karnal
- 22. Dr. JyotiKumari, NBPGR, New Delhi
- 23. Dr. Achla Sharma, PAU, Ludhiana
- 24. Dr. Pawan L. Kulwal, MPKV, Rahuri
- 25. Dr. Ravinder Singh, SKAUST, Jammu
- 26. Dr. Arvind Kumar, CSSRI, Karnal
- 27. Dr. Renu Pandey, IARI, New Delhi
- 28. Dr. Lekshmy, IARI, New Delhi
- 29. Dr. Yashavantha Kumar K. L., ARI, Pune
- 30. Dr. Anju Mahendru, IARI, New Delhi
- 31. Dr. Sewa Ram, IIWBR, Karnal
- 32. Dr. Monika Garg, NABI, Mohali
- 33. Dr. Shailendra Sharma, CCS Univeristy, Meerut
- 34. Sanction Folder.
- 35. File Copy.

(Dr. Sanjay Kalia) Scientist 'E'

FILE NO. CRG/2019/000321 SCIENCE & ENGINEERING RESEARCH BOARD(SERB) (A statutory body of the Department of Science & Technology, Government of India)

5 & 5A, Lower Ground Floor Vasant Square Mall Plot No. A, Community Centre Sector-B, Pocket-5, Vasant Kunj New Delhi-110070

Dated: 16-Mar-2020

### ORDER

Subject: Financial Sanction of the research project titled "Effects of Illuminated Night Environment on Metabolism and Reproduction in Continuously Breeding Diurnal Vertebrate: A Study on Zebra Finches" under the guidance of Prof. SANJAY KUMAR BHARDWAJ, DEPARTMENT OF ZOOLOGY, Choudhary Charan Singh University , University main rd,Ramgarhi, Meerut, Uttar pradesh-250005 and by Dr. Vinod Kumar, Professor, Zoology, University Of Delhi,

Sanction of Science and Engineering Research Board (SERB) is hereby accorded to the above mentioned project at a total cost of Rs. 4862720/- (Rs. Forty Eight Lakh Sixty Two Thousand Seven Hundred and Twenty Only) with breakup of Rs. 0/- under Capital (Non-recurring) head and Rs.4862720/- under General (Recurring) head for a duration of 36 months. The items of expenditure for which the total allocation of Rs. 4862720/- has been approved are given

S. No	Head	Construction of the Constr
A	Non-recurring	Total (in Rs.)
1	Equipment	
A' 5	Total (Non-Recurring)	0
B	Recurring Items	0
1 . 	Recurring - I : (Manpower) Recurring - II : (Consumables, Travel, Contingencies, Other Cost) Recurring - III : Scientific Social Responsibility	1962720 2400000
2	Recurring - IV : (Overhead Charges)	60000
B'	Total (Recurring)	440000
2	Total cost of the project (A' + B')	4862720
		4862720

2. Sanction of the SERB is also accorded to the payment of Rs. 1670000/- (Rupees Sixteen Lakh Seventy Thousand only) under 'Grants-in-aid General' to Vice Chancellor, Choudhary Charan Singh University, University Main Rd,Ramgarhi being the first installment of the grant for the year 2019-2020 for implementation of the said research

3. The expenditure involved is debitable to Fund for Science & Engineering Research (FSER) This release is being made under Core Research Grant. (Organismal and Evolutionary Biology(Animal Sciences))

4. The Sanction has been issued to Choudhary Charan Singh University, University Main Rd, Ramgarhi with the approval of the competent authority under delegated powers on 12 March, 2020 and vide Diary No. SERB/F/10971/2019-2020 dated 13 March, 2020

5. Sanction of the grant is subject to the conditions as detailed in Terms & Conditions available at website

6. Overhead expenses are meant for the host Institute towards the cost for providing infrastructural facilities and general administrative support etc. including benefits to the staff employed in the project.

7. While providing operational flexibility among various subheads under head Recurring-II, it should be ensured that not more than Rs. 1.5 lakh each should be spent for travel and contingency.

8. Budget sanctioned under Scientific Social Responsibility (SSR) is meant only for activites enlisted under SSR norms and under no circumstances it can be reappropriated.

9. As per rule 211 of GFR, the accounts of project shall be open to inspection by sanctioning authority/audit whenever the institute is called upon to do so.

10. The sanctioned equipment would be procured as per GFR and its disposal of the same would be done with prior

11. The release amount of **Rs. 1670000/-** (Rupees Sixteen Lakh Seventy Thousand only) will be drawn by the Under Scoretary of the SERB and will be disbursed by means of **RcuSc**raheaction as per their Bank details given below:

CCSU
C.C.S. University Grant/Account
8580101004528
Canara Bank Canara Bank Meerut University Road M-178-2 Shri Nath ji Complex Meerut
CNRB0008580
registrar@ccsuniversity.ac.in
drskumat7@yahoo.com

12. The institute will furnish to the SERB, separate Utilization certificate(UCs) financial year wise to the SERB for Recurring (Grants-in-aid General) & Non-Recurring (Grants for creation of capital assets) and an audited statement of accounts pertaining to the grant immediately after the end of each financial year.

13. The institute will maintain separate audited accounts for the project. A part or whole of the grant must be kept in an interest earning bank account which is to be reported to SERB. The interest thus earned will be treated as credit to the institute to be adjusted towards further installment of the grant.

14. The project File no. CRG/2019/000321 may also be mentioned in all research communications arising from the above project with due acknowledgement of SERB.

15. The manpower sanctioned in the project, if any is co-terminus with the duration of the project and SERB will have no liability to meet the fellowship and salary of supporting staff if any, beyond the duration of the project

16. As this is the first grant being released for the project, no previous U/C is required.

17. The institute may refund any unspent balance to SERB by means of a Demand Draft favoring "FUND FOR SCIENCE AND ENGINEERING RESEARCH" payable at New Delhi.

18. The organization/institute/university should ensure that the technical support/financial assistance provided to them by the Science & Engineering Research Board should invariably be highlighted/ acknowledged in their media releases as well as in bold letters in the opening paragraphs of their Annual Report.

19. In addition, the investigator/host institute must also acknowledge the support provided to them in all publications, patents and any other output emanating out of the project/program funded by the Science & Engineering Research Board.

r. Harish Kumar) Scientist E ms\_as@serbonline.in

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To,

Under Secretary SERB, New Delhi

Copy forwarded for information and necessary action to: -

1	The Principal Director of Audit, A.G.C.R.Building, Illrd Floor I.P. Estate, Delhi-110002,	
2.	Sanction Folder, SERB , New Delhi	
3.	File Copy	
<b>4.</b>	Prof. SANJAY KUMAR BHARDWAJ DEPARTMENT OF ZOOLOGY Choudhary Charan Singh University, University main rd Ramgarhi, Meerut, Uttar pradesh-250005 Email: drskumar7@yahoo.com Mobile: 919412209675	
arit annaith agus chuid agus chui	Dr. Vinod Kumar Zoology University Of Delhi, North Campus (Start date of the project may be infimated by name to the undersigned. For guidance, terms & Conditions etc. Please visit <u>www.serb.gov.in</u> .)	
5.	Vice Chancellor, Choudhary Charan Singh University, University Main Rd,Ramgarhi (Receipt of Grant may be intimated by name to the undersigned)	

प्रेषक,

योगेन्द्र दत्त त्रिपाठी, विशेष सचिव, उ०प्र० शासन।

सेवा में.

कुलसचिव/वित्त अधिकारी

चौधरी चरण सिंह विश्वविद्यालय, मेरठ। उच्च शिक्षा अनुभाग-4

Ch. Charan Singh University Meetrus

विषय- वित्तीय वर्ष 2020-21 में "सेंटर आफ एक्सीलेंस की स्थापना" हेतु अनुदान की स्वीकृति। लखनऊ: दिनांक28जनवरी, 2021

उपर्युक्त विषय के संबंध में मुझे यह कहने का निदेश हुआ है कि वित्तीय वर्ष 2020-21 में प्रदेश के विभिन्न राज्य विश्वविद्यालयों से प्राप्त सेंटर ऑफ एक्सीलेंस योजना के प्रस्तावों का पर्राक्षण एक्सपर्ट पैनल से कराया गया। अपर सचिव, उ0प्र0 राज्य उच्च शिक्षा परिषद, लखनऊ के पत्र संख्या-0.8/रा0उ0शि0प0/4/10 ॥, दिनांक 08.01.2021 द्वारा एक्सपर्ट पैनल की संस्तुतियां उपलब्ध करायी गयी। उ0प्र0 राज्य उच्च शिक्षा परिषद उपलब्ध करायी गयी एक्सपर्ट पैनल की संस्तुतियों पर सम्यक विचारोपरांत चौधरी चरण सिंह विश्वविद्यालय, मेरठ को सेंटर आफ एक्सीलेंस योजना के अंतर्गत निम्नलिखित विवरण के अनुसार रू० 4,50 लाख (रूपये चार लाख पचास हजार मात्र) का अनुदान/ वित्तीय स्वीकृति प्रदान की जाती है:-

फ्र0 सं0	ावभाग का नाम	समन्वयक का नाम	शीर्षक	अनुमोदित अनुदान	स्वीकृत धनराशि
1	Department of Agriculture	Prof. Shailendra Singh Gaurav	Center of Excellence on Training & Skill Development on Food Science and Technology	4.50 लाख	4.50 लाख

(रूपये चार लाख पचास हजार मात्र)

सेंटर ऑफ एक्सीलेंस योजना के अंतर्गत स्वीकृत की जा रही धनराशि का व्यय शोध सहायक/केमिकल, 2-ग्लासवेयर आदि/यात्रा व्यय एवं डाटा कलेक्शन आदि/आकस्मिक व्यय पर किया जाएगा। प्रोजेक्ट प्रारम्भ करने के पूर्व कुल स्वीकृत धनराशि का उक्त मदों में मदवार फांट का अनुमोदन विश्वविद्यालय के कुलपति से प्राप्त कर लिया जाएगा। 3-

प्रश्नगत योजना से संबंधित कार्यों हेतु किसी भी दशा में कोई भी नियुक्ति नहीं की जाएगी तथा कोई डिप्लोमा/प्रशिक्षण कोर्स संचालित नहीं किये जाएंगे। 4-

योजनांतर्गत पूर्व में स्वीकृत धनराशि का मदवार उपयोगिता प्रमाण पत्र व प्रगति आख्या वित्तीय वर्षवार शासन को संकलित रूप में उपलब्ध कराया जायेगा।

सेंटर आफ एक्सीलेंस योजनांतर्गत राज्य सरकार द्वारा समय-समय पर निर्मत दिशा-निर्देश प्रभावी रहेंगे। विश्वविद्यालय स्तर पर योजना के दिशा-निर्देशों के अनुसार कार्यक्रमों की मानीटरिंग की जायेगी तथा शासन को अवगत कराया जायेगा। योजनांतर्गत जो भी बुक्स/प्रकाशन किये जाएँगे उसमें योजना का नाम एवं उच्च शिक्षा विभाग, उत्तर प्रदेश शासन का उल्लेख अवश्य किया जायेगा। 6-

एक्सपर्ट पैनल द्वारा परियोजना प्रस्ताव का किये गये परीक्षण/मूल्यांकन की प्रत्नि संलग्न है। 7-

धनराशि के व्यय के सम्बन्ध में वित्तीय नियमों का पालन सुनिश्चित किया जारेगा। योजनांतर्गत सामग्री क्रय हेतु सुसंगत वित्तीय नियमों का पालन किया जायेगा। सामग्री के अनुरक्षण आदि पर होने वाला व्यय विश्वविद्यालय

HE 4 2019 पत्रलेखन (अन्य)

द्वारा वहन किया जायेगा। इस प्रस्ताव पर यदि और धनराशि की आवश्यकता होती है तो विश्वविद्यालय द्वार. व्यय प्रबन्धन एवं शासकीय व्यय में मितव्ययिता के सम्बन्ध में वित्त विभाग द्वारा समय-समय पर निर्गत का वहन अपने स्रोतों से किया जायेगा। आदेशों, सुसंगत वित्तीय नियमों एवं स्टोर परचेज रूल्स आदि का अनुपालन सुनिश्चित किया जायेगा। उक्त स्वीकृति इस प्रतिबन्ध के अधीन होगी कि अवमुक्त की जा रही धनराशि का कोषागर से आहरण तत्काल आवश्यकता होने पर किया जायेगा। स्वीकृत धनराशि का उपयोगिता प्रमाण-पत्र शासन को यथा समय 8-

उपलब्ध कराया जायेगा। यदि वित्तीय वर्ष की समाप्ति पर स्वीकृत की जा रही धनराशि का कोई अंश शेष बचता है इस अनुदान को उपयोग अनुमोदित मदों पर ही किया जायेगा। अस्थ ई रूप से भी इसका कोई भाग अन्य तो वित्तीय वर्ष के अंतिम माह मार्च में शासन को समर्पित किया जायेगा। अनानुमोदित मदों, अवकाश नकदीकरण, चिकित्सा भत्ता, सवारी भत्ता व मानदेय कार्यों के लिए तथा दैनिक वेतन भोगी कर्मचारियों के वेतन पर व्यय नहीं किया जायेगा। उक्त धनराशि का व्यावर्तन किसी भी दशा में अनुमन्य नहीं होगा। यह भी स्पष्ट किया जाता है कि इस धनराशि में उन्ही मदों में उतनी ही धनराशियाँ व्यय हेतु अनुमन्य होगी, जो शासनादेश संख्या-1075/70-4-99/46(21)/99 दिनांक 29 अप्रैल, 2000 की संलग्न तालिका में प्रत्येक मद हेतु अनुमन्य की गई है। इसका उल्लंघन करने पर विश्वविद्यालय अधिनियम, 1973 की धारा 55ए के अनुसार कार्यवाही

इस अनुदान पर वित्तीय नियम संग्रह खण्ड-05 भाग-01 के नियम 16ए में निहित अनुदान के नियम लागू की जायेगी। 11-होंगे।

इस अनुदान पर राज्य विश्वविद्यालयों को ब्लाक ग्राण्ट देने की व्यवस्था विषयक शासनादेश संख्या-12-1371/15(15)/95-46(55)/94 दिनांक 04 मई, 1995 द्वारा निर्धारित नियम व शर्ते लांगू होंगी। तदनुसार ही विश्वविद्यालय द्वारा व्यय किये जायेंगे और व्यय के विवरण तत्काल शासन को उपलब्ध कराये जायेंगे।

उक्त पर होने वाले व्यय चालू वित्तीय वर्ष 2020-21 के आय-व्ययक के अनुदान संख्या-73 के अधीन 13-लेखा शीर्षक "2202-सामान्य शिक्षा-03-विश्वविद्यालय तथा उच्चतर शिक्षा-102-विश्वविद्यालयों को सहायता-49-सेंटर आफ एक्सीलेंस की स्थापना-20-सहायता अनुदान-सामान्य (गैर वेतन)" के नामे डाला जायेगा।

यह आदेश वित्त (आय-व्यंयक) अनुभाग-1 के कार्यालय ज्ञाप संख्या-1/2020/बी-1-149/दस-2020-14-231/2020, दिनांक 24 मार्च, 2020 में प्रतिनिधानित अधिकारों के अन्तर्गत निर्गत किए जा रहे हैं।

N., .

भवदीय, (योगेन्द्र दत्त त्रिपाठी) विशेष सचिव।

# संख्या एवं दिनांक तदैव:-

# Page 21

प्रतिलिपि निम्नलिखित को सूचनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषितः-

- 1. महालेखाकार (लेखा परीक्षा-1), उत्तर् प्रदेश, प्रयागराज।
- 2. निदेशक, उच्च शिक्षा, उत्तर प्रदेश, प्रयागराज।
- 3. निदेशक, स्थानीय निधि लेखा परीक्षा विभाग, उत्तर प्रदेश, प्रयागराज।
- 4. संबंधित कोषाधिकारी।
- 5. संबंधित, क्षेत्रीय उच्च शिक्षा अधिकारी।
- अपर सचिव, उ0प्र0 राज्य उच्च शिक्षा परिषद, छठा तल इन्दिरा भवन लखनऊ को वेबसाईट पर अपलोड करने हेतु।
- 7. वित्त (व्यय-नियंत्रण) अनुभाग-11
- 8. अनुभाग अधिकारी (लेखा), उच्च शिक्षा विभाग को इस निर्देश के साथ प्रेषित कि स्वीकृत धनराशि को तत्काल आनलाइन Grid (Budget) Allotment कर उसकी हार्ड कापी उच्च शिक्षा अनुभाग-4 को उपलब्ध कराने का कष्ट करें।
- 9. गार्ड फाइल।

आज्ञा से. ( सर्वेश कुमार सिंह ) उप सचिव।



**DBT Research Associateship Program In Bio Program 2 and Life Sciences** Department of Molecular Reproduction, Development & Genetics New Biological Sciences Building, Ground Floor, A Wing, Indian Institute of Science, Bangalore 560012, India Off Tel: 080-2293 2462; Email : <u>dbtra.mrdg@iisc.ac.in</u> Web: <u>http://www.mrdg.iisc.ernet.in/dbt-ra-program/</u>

Date: Sept 15, 2020

Dear Dr. Ritu Batra,

I am delighted to inform you that you have been selected for the Post of **Research Associate-I** funded by the Department of Biotechnology, GOI, New Delhi, to work with **Prof. Shailendra Sharma, Department of Genetics** & **Plant Breeding, Ch. Charan Singh University, Meerut – 250004.** 

You are advised to indicate your acceptance, or otherwise, of this offer by September 25, 2020, via an email message with a copy to your proposed mentor.

The terms and conditions of the fellowship are as follows. For additional terms and conditions, see Annexure I.

1. The DBT-RA fellowship starts from October 1, 2020. To avail the Research Associateship, you should report for duty by October 1, 2020.

2. You will be designated as **DBT-Research Associate-I** with a stipend of **Rs.47,000/- p.m.** and a contingency grant of **Rs.50,000/- per year**. The contingency grant should be utilized with approval of your mentor. If an accommodation is not provided by your institution, you will be entitled to HRA as per GOI rules. The fellowship is awarded initially for a period of 2 years, with annual renewal based on the assessment of research progress.

3. Your stipend and contingency grant will be released to the host institute/university after you report for duty and <u>on the receipt of joining documents (email copy) at the DBT-RA Program Office at IISc, Bangalore</u>. You should send your joining report with following documents:

- A formal letter mentioning your date of joining, signed by your mentor& HOD.
- Filled Data Sheet (refer attachment)
- Certificate of undertaking (should be on the letter head of host institute) (refer attachment)
- Bank account details of your Institute / University (refer attachment)

All the above documents (a single pdf copy) should be emailed to us on or before October 15, 2020.

Kindly note that the support beyond 31st March, 2021 is subject to appraisal and approval of DBT-RA Program by Competent Authority.

Warm wishes,

Sincerely,

Kumir

Prof. Arun Kumar, Ph.D.

Prof. Arun Kumar, Ph.D National Program Coordinator DBT-RA Program in Biotechnology & Life Sciences NEW Biological Sciences Building Indian Institute of Science, Bangalore -560012

# No. BT/PR21024/AGIII/103/925/2016 GOVERNMENT OF INDIA MINISTRY OF SCIENCE & TECHNOLOGY DEPARTMENT OF BIOTECHNOLOGY

Block 2, (6-8th Floors) CGO Complex, Lodhi Road, New Delhi- 110 003 Date: 26.10.2020

## RELEASE ORDER

In continuation of this Department's sanction order of even number dated 19.03.2018, sanction of the President is hereby accorded, under Rule18 of the Delegation of Financial Powers Rule, 1978, for the release of Rs. 1490803.00 (Rupees Fourteen Lakhs Ninety Thousand Eight Hundred and Three Only) being the third year release for the project entitled "Pyramiding of Rust Resistance Genes into High Grain Quality Wheat Lines Developed Through Marker-assisted Selection", being implemented by:

Prof. Pardeep Kumar Sharma, Department of Genetics & Plant Breeding, Ch. Charan Singh University, Meerut, Meerut - 250004, Uttar Pradesh.

The detailed break-up is as given below:

						Total Release Amount (Rs)		
	laine	Manpower	Consumable	Travel	Contingency	Others	Overhead	
1	Chaudhary Charan Singh University Meerut	805600.00	498987.00	53203.00	<u>4</u> 1427.00	0.00	91586.00	1490803.00

 The amount of Rs. 1490803.00 /-(Rupees Fourteen Lakhs Ninety Thousand Eight Hundred and Three Only) will be directly credited by the Pay & Accounts Officer, DBT in the account as detailed below:

The Registrar, Chaudhary Charan Singh University, Meerut - 250004, Uttar Pradesh

Bank Name: Canara BankBranch Name: Canara Bank, University Road , MeerutA/c No.: 8580101004528IFSC Code: CNRB0008580MICR Code: 250015004

3. The expenditure involved is debitable to:

Demand No. 88	Department of Biotechnology			
3425	Other Scientific Research 2020-2021			
3425.60	Others (Sub Major Head)			
3425.60.200	Assistance to other Scientific Bodies (Minor Head)			
3425.60.200.29	Biotechnology Research and Development			
3425.60.200.29.17	Assistance for Research and Development			
3425.60.200.29.17.31	Grants -in-Aid General			

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**যা**য়াপ্রন্থার্জের জন যিশন থ্যা ফলা ব

# No. BT/PR15781/AGIII/103/910/2015 GOVERNMENT OF INDIA MINISTRY OF SCIENCE & TECHNOLOGY DEPARTMENT OF BIOTECHNOLOGY

Block 2, (6-8th Floors) CGO Complex, Lodhi Road, New Delhi- 110 003 Date: 26.11.2020

# **RELEASE ORDER**

In continuation of this Department's sanction order of even number dated 26<sup>th</sup> March, 2018 sanction of the President is hereby accorded, under Rule18 of the Delegation of Financial Powers Rule, 1978, for the release of Rs. **1907502.00** (Rupees Nineteen Lakhs Seven Thousand Five Hundred and Two Only) being the third year release for the project entitled "Marker-Assisted Breeding and Mapping of QTLs for Drought Tolerance in Wheat", being implemented by

1. Dr. Gyanendra Singh, Indian Institute of Wheat and Barley Resaerch, Karnal - 132001, Haryana.

2. Dr. Pradeep Kumar Sharma, Chaudhary Charan Singh University, Meerut - 250004, Uttar Pradesh.

The detailed break-up is as given below:

SNo	Institute Name							Total Release Amount (Rs)
		Manpower	Consumable	Travel	Contingency	Others	Overhead	
1	IIWBR, Karnal	919200.00	*54529.00	39640.00	50000.00		and the second se	
2	CCSU, Meerut	398000.00	299597.00	21774.00	49901.00	0.00	74861.00	844133.00
	*Rs. 4.40473 lakh	s balance und	ler NR head i	s re-appro	priated into con	nsumable h	ead.	

- 2. The amount of Rs. 1907502.00 /-(Rupees Nineteen Lakhs Seven Thousand Five Hundred and Two Only) will be directly credited by the Pay & Accounts Officer, DBT in the account as detailed below:
  - 1. Rs.1063369.00/- (Rupees Ten Lakhs Sixty Three Thousand Three Hundred and Sixty Nine Only) to The Director, Indian Institute of Wheat and Barley Resaerch, Karnal 132002, Haryana

Bank Name: State Bank of IndiaBranch Name: Main Branch, The Mall RoadA/c No.: 10868324195IFSC Code: SBIN0000665MICR Code: 132002102

 Rs.844133.00/- (Rupees Eight Lakhs Fourty Four Thousand One Hundred and Thirty Three Only) to The Registrar, Chaudhary Charan Singh University, Meerut - 250004, Uttar Pradesh

Bank Name : Canara Bank Branch Name : Shrinath Ji Complex A/c No. : 8580101004528 IFSC Code : CNRB0008580 MICR Code : 250015004

डॉ. संकथ कालिसा/Dr. Sanjay Xara देशारेफा ई / Science: E एन्ट्रेन्ट्रसामाठी किंगन / Der L of Scientiach/237 दिकार और प्रोहो, भयालय, 199 Science & विकोर काल जाकार, मई दिस्सो/ Gow जे स्वान्य 19 20 है।



National Agricultural Science Fund Indian Council of Agricultural Research Room No. 707, KAB -I, Pusa, New Delhi - 110012

F.No. NASF/ABP-6006/2016-17

To,

Dated: 28.02.2020

The Vice-chancellor, Ch.Charan Singh University, Meerut, 250004, Uttar Pradesh

Subject: Revised Sanction letter in view of the enhancement of emoluments of the contractual staff and extension of the project upto December 2020 with an additional budget for the project entitled, "Epigenetic Regulation of Host-Pathogen Genetics in Leaf Rust Resistance of Wheat" under the National Agricultural Science Fund (NASF).

Reference: NASF letter no. F.No. NASF/ABP-6006/2016-17 dated 27.03.2018.

Sir,

In partial modification of our sanction letter dated 27.03.2018 for the award of the above-cited project, I am enclosing the revised sanction as Annexure I-III in view of sanction of additional budget of ₹ 3.07230 lakhs, due to the enhancement of the emoluments of the contractual staff vide Council's letter OM F. No. Ag. Edn. 6/27/2014-HRD dated 30.7.2019, under recurring cost under contractual staff head. The revised emoluments for the contractual staff are effective from 01.01.2019. However the effective date for the revised House Rent Allowance (HRA) is

Further, The EC approved the extension of Lead Centre- CCSU, Meerut and Cooperating Centres -IARI, Delhi and IIWBR, Shimla for one year (Jan.2020- Dec. 2020 with an additional budget of Rs.43.69360 lakh in its 39th meeting held on 18.01.2020. This additional budget should be strictly spent within this financial year and it will not be revalidated or fresh sanctioned in next financial year in any case. The revised budget of the project is now Rs. 332.8183 lakhs instead of the original amount of Rs. 286.05240 lakhs. All other terms and conditions as communicated earlier remains the same.

Yours faithfully,

(Sanjeev Saxena) ADG (NASF)

Copy for information and necessary action to:

(i) PI/CCPIs of the project.

(ii) F&AO, NASF Secretariat

FILE NO ECR/2016/001774 SCIENCE & ENGINEERING RESEARCH BOARD(SERB)

(A statutory body of the Department of Science & Technology, Government of India)

10

5 & 5A, Lower Ground Floor Vasant Square Mall Plot No. A, Community Centre Sector-B, Pocket-5, Vasant Kunj New Delhi-110070

Dated: 26-Mar-2021

ORDER

Subject Financial Sanction of the research project titled "Identification of Quantitative Trait Loci and Underlying Candidate Genes for Seed Dormancy and Pre-harvest Sprouting Tolerance in Common Wheat" under the guidance of Dr. Sachin Kumar, GENETICS AND PLANT BREEDING, Choudhary Charan Singh University, University main rd, Ramgarhi, Meerut, Uttar pradesh-250005 and by Dr. Harindra Singh Balyan, Emeritus Professor, Genetics And Plant Breeding, Choudhary Charan Singh University - Release of final Installment.

Sanction of Science and Engineering Research Board (SERB) is hereby accorded to the above mentioned project at a total cost of Rs. 5060747/- (Rs. Fifty Lakh Sixty Thousand Seven Hundred and Forty Seven Only) with break-up of Rs. 1435565/- under Capital (Non-recurring) head and Rs. 3625182/- under General (Recurring) head for a duration of 36 months.

In continuation of the sanction order of even no dated "22 March, 2017". The sanction of Science and Engineering Research Board (SERB) is hereby accorded to the above mentioned project at a revised cost as defined below: The following budget may be considered for Choudhary Charan Singh University, University Main Rd,Ramgarhi

S. No	Head	Total (in Rs.)
A	Non-recurring	
1	Equipment -> Falling Number determination apparatus {Other Cost: INR 35000 } -> Power Supply -> High-through agarose gel electrophoresis -> Refrigerated Centrifuge {Other Cost: INR 25000 }	. 1435565
A'	Total (Non-Recurring)	1/25555
B	Recurring Items	1435565
1	Recurring - I : (Manpower) Recurring - II : (Consumables, Travel, Contingencies) Recurring - III : Scientific Social Responsibility	1150561 1997833
2	Recurring - IV : (Overhead Charges)	0
B'	Total (Recurring)	476788
C	Total cost of the project (A' + B')	
		5060747

2 Sanction of the SERB is also accorded to the payment of. Rs. 347044/- (Rupees Three Lakh Forty Seven Thousand and Forty Four only) under 'Grants-in-aid General' to Finance Officer, Choudhary Charan Singh University, University Main Rd, Ramgarhi being the last and final installment of the grant for implementation of the said research project.

3. The expenditure involved is debitable to Fund for Science & Engineering Research (FSER) This release is being made under Early Career Research Award. (EC Life Sciences)

4. The Sanction has been issued to Choudhary Charan Singh University, University Main Rd,Ramgarhi with the approval of the competent authority under delegated powers on 25 March, 2021 and vide Diary No. SERB/F/9000/2020-2021 dated 26 March, 2021

5. Sanction of the grant is subject to the conditions as detailed in Terms & Conditions available at website (<u>www.serb.gov.in</u>).

6. As per rule 211 of GFR, the accounts of project shall be open to inspection by sanctioning authority/audit whenever the institute is called upon to do so.

7 The sanctioned equipment would be procured as per GFR and its disposal of the same would be done with prior approval of SERB.

PFMS Unique Code	nount of Rs. 347044/- (Rupees Three Lakh Forty Seven Thousand and Forty Four only) will be drawn by the Uno SERB and will be disbursed by means of RTGS transaction as per their Bank details given below: ccsu
Account Name	M/s. C.C.S. University Grant Account
Account Number	20193822304
Bank Name & Branch	Indian Bank (Allahabad Bank) Indian Bank (Allahabad Bank), Meerut University Campus, Meerut City, Meerut 250004, Uttar Pradesh, Phone No 0121 2762529
IFSC/RTGS Code	IDIB000M690
Email id of A/C Holder	fc.ccsu@ginail.com
Email id of Pl	sachinkpsingh@gmail.com

# No. BT/PR30730/BIC/101/1175/2018 GOVERNMENT OF INDIA MINISTRY OF SCIENCE & TECHNOLOGY DEPARTMENT OF BIOTECHNOLOGY

Block 2, (6-8th Floors) CGO Complex, Lodhi Road, New Delhi- 110 003

Date: 13.01.2021

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# RELEASE ORDER

In continuation of this Department's sanction order of even number dated 26.04.2019, sanction of the President is hereby accorded, under Rule18 of the Delegation of Financial Powers Rule, 1978, for the release of Rs.1605148.00 (Rupees Sixteen Lakhs Five Thousand One Hundred and Fourty Eight only) being the second year release for the project entitled "Deciphering Genetic and Epigenetic Regulation of Cereal Cyst Nematode (CCN) Resistance in Wheat", being implemented by:

Dr. Shiveta Sharma, Chaudhary Charan Singh University, House No - 15, Sector - 6 Jagrati Vihar, Meerut - 250004, Uttar Pradesh.

The detailed break-up is as given below:

SI	Institute Name		Recurring					
		Manpower	Consumable	Travel	Contingency	Others	Overhead	а. 
	Chaudhary Charan Singh University Meerut					900000.00		
	<ul> <li>i) An amount of Rs.16,035/-balance under NR head has been re-appropriated to manpower head.</li> <li>ii) The total unspent balance with PI, upto 31.03.2020 was Rs.1,82,748/-, out of which the interest earned amount of Rs.30,543/- has been remitted by the Institute to the Consolidated Funds of India through Bharatkosh vide receipt No.3110200001181. Accordingly carry forward approval has been taken for the remaining amount.</li> </ul>							

2. The amount of Rs.1605148.00/-(Rupees Sixteen Lakhs Five Thousand One Hundred and Forty Eight only) will be directly credited by the Pay & Accounts Officer, DBT in the account as detailed below:

The Registrar, Chaudhary Charan Singh University, CCS University - Meerut, Meerut - 250004, Uttar Pradesh.

Bank Name	: Canara Bank
Branch Name	: Meerut University Road
A/c No.	: 8580101004528
IFSC Code	: CNRB0008580
MICR Code	: 250015004

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