6.6. Self-Study Report of Bidhan Chandra Krishi Viswavidyalaya (University)

6.6.1. University Governance

6.6.1.1. Vision, Mission and Goals:

Whether the University has published vision document and has developed the plan of implementation with time frame and proposed financial arrangement: Yes Whether the University has planned, developed, implemented, and evaluated intentional and purposeful programs/services that may facilitate students and other stakeholders of the University: Yes

The Bidhan Chandra Krishi Viswavidyalaya, established in 1974 vide West Bengal Act XLIS of 1974, has already completed more than four decades of its existence as the pioneer seat of agricultural education, research and extension. The university offers UG, PG and Doctoral programmes. All the three teaching faculties namely, Faculty of Agriculture, Faculty of Horticulture and Faculty of Agricultural Engineering offer 4-years under graduate degree programme leading to the degree of B.Sc. (Hons.) Agriculture, B.Sc. (Hons.) Horticulture and B. Tech. (Hons.) Agricultural Engineering respectively. There are twenty-five (25) departments distributed over the three Faculties of which sixteen (16) fall under the Faculty of Agriculture, five (5) under the Faculty of Horticulture and four (4) under the Faculty of Agricultural Engineering. While all the aforesaid departments offer Undergraduate (UG) and Doctoral programmes, the Master degree courses are being offered from twenty-four (24) departments. The intake capacity for UG studies across the Faculties of Agriculture (including the extended campus atBurdwan and Bankura), Faculty of Horticulture and faculty of Agricultural Engineering is 178, 32 and 36 respectively. Similarly, for Master degree programme, as offered from various teaching departments of the faculties of Agriculture, Horticulture and Agricultural Engineering are 185, 48 and 12 respectively.

The university has three Regional Research Stations and three Regional Research Sub-Stations all of which have well defined farms to carry out mandated research activities on location specific and problem focused areas of production systems. The University currently runs 21 AICRPs and 3 AINPs, and 220 nos. of ad-hoc research projects from various funding agencies of State Government, ICAR and other Central Government agencies as well as private enterprises. The outreach delivery system of the University is comprised of five Krishi Vigyan Kendras (KVKs); training units attached to the Directorate, Regional Research Stations & Substations; Agricultural Technology Information Centre (ATIC); well dispersed Extension Education Units (EEUs); Farm Information & Publication Unit and a well-equipped Exhibition Unit. In the year 2016, the Viswavidyalaya has been accredited for five years by Indian Council of Agricultural Research.

VISION

The vision of the Bidhan Chandra Krishi Viswavidyalaya is to bring about qualitative and quantitative changes in the livelihood of farmers and other relevant stakeholders through human resource development, technological advancement and dissemination of technologies related to agriculture and allied activities and contributes in agricultural development of the country and the world through enriching in the knowledge pool.

MISSION

The mission of the Bidhan Chandra Krishi Viswavidyalaya is to create conducing ecosystem of imparting education, conducting research and dissemination of knowledge and skills towards relevant and meaningful development for the country and world in agriculture.

Goals

- 1. To provide contemporary quality education in the areas of agriculture and allied fields
- 2. To create opportunities for basic, applied and adaptive research so as to offer proper solution to the emerging problems in agriculture and development of relevant technology befitting the needs of the farmers and other stake-holders.
- 3. To foster technology transfer to the farming community and different agricultural organizations through various extension education and outreach programme for bringing about equitable targeted growth in all spheres of rural economic activities

Objectives

- 1. To provide facilities for study of agriculture and allied subjects to the prospective students at Under Graduate and Post graduate levels
- To conduct research in agricultural and allied sciences in farms, laboratories and farmers' field

- 3. To undertake outreach education programmes concerning agriculture and allied pursuits for the stakeholders' of agriculture, especially farmers.
- 4. To provide appropriate technology support and consultation to the state government and its activities for development of agriculture

Mandate of the University

In accordance with the University Act, Bidhan Chandra Krishi Viswavidyalaya has the following mandate:

- To provide facilities for the study of agriculture, both basic and applied sciences relating to terrestrial and aquatic crops agricultural engineering and technology, horticulture, marketing and processing, land use and management, soil and water management and all matters collected therewith and incidental thereto.
- To conduct researches in these sciences and undertake the educational and extension programmes in agriculture among the rural clientele base, keeping in view the requirements of the state.
- To provide appropriate technical and consultative support to the state government towards its implementation of agricultural development programme.

APPROACHING GOALS

In accordance with the mandate and goals, the University has been consistently performing in all the areas of providing quality education, conducting demand driven basic, applied and adaptive research, and outreach education programmes pertaining to participatory technology assessment, required refinement, due validation and capacity building for effective technology application and opening of extended campuses of the main faculties of Mohanpur. The quality of education in the agriculture, horticulture and agricultural engineering can be measured in terms of students' performance in the state and national level competitive examinations towards obtaining fellowships for higher studies and also in terms of employment. The research facilities in all the disciplines have been enhanced including those in the Regional Research Stations and Substations which can be measured not only through the publications of quality research work in national and international journals, but also through acceptance of outcome of such research

work by the farming community as reflected from the steady growth in production front as well as rural employment scenario of the state.

6.6.1.2. Statutes and Regulations:

The Act in 1974 (Registration number West Bengal act XLIX of 1974. The Calcutta Gazette, West Bengal Act XLIX of 1974, Registered No. WB/SC-56), by virtue of which the BCKV came into existence, has been amended many times as follows

- 1. The Bidhan Chandra KrishiViswaVidyalaya (Amendment) Act, IV 1977
- 2. The Bidhan Chandra KrishiViswaVidyalaya (Temporary Supersession) V 1978 Act, 1978
- 3. The Bidhan Chandra KrishiViswavidyalaya (Amendment) Act, XXXI 1981 1981
- 4. The Bidhan Chandra KrishiViswavidyalaya (Amendment) Act, IX 1982 1982
- 5. The Bidhan Chandra KrishiViswavidyalaya (Amendment) Act, VIII 1986 1986
- 6. The Bidhan Chandra KrishiViswavidyalaya (Second Amendment) XXI 1986 Act, 1986
- 7. The Bidhan Chandra KrishiViswavidyalaya (Amendment) Act, V 1996 1996
- 8. The Bidhan Chandra KrishiViswavidyalaya (Second Amendment) XXI 1996 Act, 1996
- 9. The Bidhan Chandra KrishiViswaVidyalaya (Temporary Supersession) XXIV 2012 Act, 2012
- 10. The West Bengal Krishi Viswavidyalaya Laws (Amendment) Act, 2014.
- 11. The West Bengal Krishi Viswavidyalaya Laws (Amendment, Bill No 2) Act, 2021.

BCKV has a statute in place. The statute was published to accommodate the time-to-time amendments of different sections of the said Act, a revised statute is in the verge of completion. After completion, it should have to be approved by the State Govt. In 1990, Govt. of West Bengal handed over six Regional Stations and Sub-Stations were handed over to BCKV and Two Associate Director of Research at Hill Zone and Jhargram were officiating. In 1996, BCKV was bifurcated and separate university, West Bengal University of Animal and Fishery sciences (WBUAFS) was established. Later, in 2001 Pundibari Campus of BCKV was emerged as separate Uttarbanga Krishi Viswavidyalaya (UBKV) and the physical jurisdiction of two Regional Stations and Sub-Stations in North Bengal came under UBKV and the BCKV Act was amended and Faculty of Horticulture and Faculty of Agricultural Engineering was established.

- 1. In 2014, terms of selection of Vice Chancellor of BCKV amended through Search Committee.
- 2. University authority has repeatedly communicated to the Agriculture Department, Govt. of West Bengal for getting necessary approval to appoint the officers. The resolution of

the Executive Council unanimously confirmed the immediate need of filling up the vacant posts under various categories and the authority sent the letter to the Govt. of West Bengal to obtain approval, vide letter Nos. VC/BCKV/24/65/188 dated 25/9/2017; VC/BCKV/24/65/49 dated 22/5/2018; VC/BCKV/24/359 dated 08/01/2019.; VC/BCKV/24/65/39 dated 01/02/2019; VC/BCKV/24/541 dated 16/10/2020.

- 3. The Act in 1974, by virtue of which the BCKV came into existence, has been amended many times in 1996, 2001, 2014 and likewise. But as per the amendment of different sections of the said Act, the Statute is in the verge of completion. After completion, it should have to be approved by the state Govt.
- Action has already been taken to engage the Deans of the Faculties on regular basis and the letter for necessary approval for election was sent to the Agriculture Department, Govt. of West Bengal vide letter No. VC/BCKV/24/21 dated 27/4/2018; VC/BCKV/24/359 dated 08/01/2019 etc.
- 5. Apart from that, decision for inclusion of the clause for selection of Deans of the Faculties in lieu of selection/election of the same has been taken in meetings of the different Executive Council, BCKV. As per V Dean Committee Report, the proposal for appointing Registrar and other officers and creation of post of Deans of respective faculties have been included in the Act which has been approved by the 250 Executive Council meeting held on 11th July 2021 and communicated to the Agriculture Department, Govt. of West Bengal.

6.6.1.3. University Statutory officers and their selection process:

Sl. No.	Name of the	Selection process and date of joining
	position	
1	Vice Chancellor	In 2014, terms of selection of Vice Chancellor of
		BCKV amended through Search Committee
		Date of Joining: 14/12/2020
2	Registrar	Nominated by Vice Chancellor 01/6/2021 for six
		months
		Date of joining:01/6/2021 for six months tenure
3	Director of Research	Nominated by Vice Chancellor 01/6/2021 for six
		months (Annexure)
		Date of joining:01/6/2021 for six months tenure



4	Director of	Nominated by Vice Chancellor for six months			
4		5			
	Extension Education	Date of joining: 19/8/2020			
5	Director of Farms	Selected through interview			
		Date of joining:07/5/2015, (permanent)			
6	Comptroller	The Govt. of West Bengal has appointed			
		Comptroller of the university.			
		Date of joining: 23/9/2019			
7	Assistant	Appointed: Permanent			
	Comptroller	Date of joining: 15/12/2008			
8	Assistant Registrar	1. 31/12/2015			
		2. 08/01/2016			
9	Law Officer	Appointed Permanent			
		Date of joining:01/6/2021			
10	Deputy Director of	Appointed Permanent			
	Research	Date of joining:11/5/2015			
11	Associate Director of	Vacant			
	Research				
12	Senior Economist	Appointed (Permanent)			
		Date of joining:09/12/2015			
13	Editor	Appointed (Annexure) Permanent			
14	Librarian	Appointed Permanent			
		Date of joining:17/7/2015			
15	Deputy Librarian	Appointed Permanent			
		Date of joining: 06/5/2015			
16	Assistant Director of	Vacant			
	Farms				
17	S.O. Development	Nominated by the Vice Chancellor for six months			
18	University Engineer	Vacant			

Decision for selection of the vacant post of officers have been taken in Executive Council meetings and the letters from Vice Chancellor and Registrar have been sent to GOWB from time to time for getting approval for the appointment in vacant posts.

6.6.1.4. Decentralization of power:

The university was established in 1974 through the Act 49 passed by the West Bengal Legislative Assembly, entitled the Bidhan Chandra Krishi Viswavidyalaya Act, 1974. Since

then, it has undergone several amendments, the latest being in 2021 Amendments. According to the Act, the following statutory bodies are in place:

- 1. The Court: The highest level of policy making body with Governor of the State and the Chancellor as Chairman. The Court is constituted of Ex-Officio, Nominated and Elected members with the tenure of four years, excepting the Ex-Officio members. It is empowered to exercise all the power and perform all the functions of the university. The Court also holds the power to review the actions of the Executive Council (EC).
- 2. The Executive Council (EC): The EC is empowered to execute the policies framed at the highest level with Vice-Chancellor as the Ex-Officio Chairman and the Registrar as the member secretary. There are Ex-Officio, nominated and elected members for maximum duration of four years. It has the power to approve the recommendations of all the appointments, create posts under the university after obtaining approval of the State Government providing accepting, acquiring, holding and disposing of property, making financial provision, conferring degrees and any other business for the sake of the university.
- 3. The Finance Committee: The Finance Committee under the chairmanship of VC and the Comptroller being the member secretary comprised of ex-officio and nominated members are having the responsibility of keeping watch on the progress of income and expenditure under the budgetary provision and to provide advice on the financial matters.
- 4. The Faculty Councils for PG and UG studies: There are three faculty councils in three faculties empowered to frame rules with respect to teaching and learning in the respective faculties and recommending EC for academic regulations, degrees etc.
- 5. Board of Studies (BOS): The BOS for each department with Head of the department as Chairman and other nominated external members and the faculties are there to take decision and recommend the Faculty Councils about teaching and learning of the departments.
- 6. The Research Council (RC): The RC is the policy making body for researchers of the university with VC as Chairman and Director of Research as Secretary. Nominated, Ex-Officio members from both in and outside the university, in and outside the state, ICAR representative constitute the RC to frame the research policy.

7. The Extension Education Council (EEC): The EEC formulates the policy for extension education activities being carried out in collaboration with the state government with ex-officio, nominated members from in and outside the university and the state.

Delegation of Powers of statutory officers:

Vice-Chancellor

- The Vice-Chancellor shall be the principal executive and academic officer of the University and shall, in the absence of the Chancellor, preside over the meetings of the Court. He shall, by virtue of his office, be a member and the Chairman of the Executive Council and the Faculty Councils for postgraduate and undergraduate studies and also the Chairman of any other authority or body of the University of which he may be a member. He shall also be entitled to be present at and to address any meeting of any other authority or body of the University of the University of which he may be entitled to be present at and to address any meeting of any other authority or body of the University of which he may not be a member, but shall not be entitled to vote thereat].
- The Vice-Chancellor shall have the powers to convene meetings of the Court, the Executive Council and the Faculty Councils for postgraduate and undergraduate studies and of any other authority or body of the University.
- It shall be the duty of the Vice-Chancellor to ensure that the provisions of this Act, and the Statutes, the Ordinances and the Regulations are faithfully observed, and to take such action as may be necessary for this purpose.
- The Vice-Chancellor shall have the power to exercise general control and supervision over all other officers of the University and over all teachers and employees of the University and generally over all the affairs of the University.
- The Vice-Chancellor shall exercise such other powers and discharge such other duties as may be delegated to him by any authority or body of the University or as may be prescribed by Statutes, Ordinances or Regulations.
- The Vice-Chancellor may take on behalf of the University such action as he may deem expedient in any matter which, in his opinion, is either urgent or of an emergent nature and shall report the same for confirmation at the next meeting of the authority or body which, in the ordinary course, would have dealt with the matter:

Registrar

- The Registrar shall be responsible for the due custody of the records and the common seal of the University. He shall keep a permanent record of all courses, curricula and other information as may be deemed necessary.
- The Registrar shall be responsible go maintaining a permanent record of the academic performance of students including the courses taken, grades obtained, degrees awarded, prizes or other distinctions won, and any other items pertinent to their academic performance.
- The Registrar shall perform such other duties as may be prescribed or which may be assigned by the Executive Council or the Vice-Chancellor.

Director of Research.

- There shall be a Director of Research who shall be a whole-time officer of the University. He shall be appointed by the Vice-Chancellor with the prior approval of the Executive Council and the Chancellor in accordance with the Statutes made in this behalf. The Director of Research shall be responsible to the Vice-Chancellor for carrying out the Research Programmes.
- The Director of Research shall exercise such other powers and perform such other duties as may be conferred or imposed on him by the Statutes.

Director of Extension Education.

- There shall be a Director of Extension Education who shall be a whole-time salaried officer of the University responsible to the Vice-Chancellor. He shall be appointed by the Vice-Chancellor with the prior approval of the Executive Council and the Chancellor in accordance with the Statutes made in this behalf.
- The pay, allowances and other terms and conditions of service of the Director of Extension Education shall be such as may be prescribed.
- The Director of Extension [Education] shall be responsible for the execution of agricultural extension programme drawn up under this Act. He shall exercise such other powers and perform such other duties as may be conferred or imposed on him by the Statutes.

Dean of Post-Graduate Studies.

• There shall be a Dean to be designated as the Dean of Post-Graduate Studies who shall coordinate all the activities relating to post-graduate studies in all the Faculties. He shall be appointed on such terms and conditions as may be prescribed.

• The salary, allowances and other terms and conditions of service of the Dean of Post-Graduate Studies shall be such as may be prescribed.

Dean:

- The Dean shall be elected by the members of the Faculty Council and shall act as the Vice-Chairman of the Faculty Council] and shall be responsible to the Vice-Chancellor for the faithful observance of the Statutes and regulations relating to the Faculty. In carrying out his responsibilities the Deans shall work in close collaboration with other officers including the Associate Deans, Directors of Research and Extension and shall generally work through the Heads of the Departments of the Faculty.
- The Deans shall have such other duties and perform such other functions as may be assigned to them by the Statutes.
- The Dean shall be the Chairman of the Faculty and be responsible for the faithful observance of the Statutes and regulations relating to the faculty and for the organisation and conduct of the teaching, research and extension work of the departments comprised therein. [He shall be responsible for the integration of the three functions of teaching, research and extension at the faculty level.]. In carrying out the research and extension programmes he shall work in close co-operation with the Associate Deans, Directors of Research and Extension respectively.

Comptroller

- The Comptroller shall manage the funds and investments of the University and shall advise in regard to its financial policy.
- The Comptroller shall be responsible to the Vice-Chancellor in the preparation of the budget and the statement of accounts of the University.
- The Comptroller shall be responsible to the Vice-Chancellor for ensuring that expenses are made in terms of authorisation in the budget. When any revision of the budget is needed in connection with any new programmes or changed requirements or for other reasons he shall prepare a revised or supplementary budget and cause it to be placed before the appropriate authority for approval. He may disallow any expenditure which may contravene the terms of any Statute or for which provision is required to be made by a new Statute.

Director of Farms

• The Director of Farm in in charge of all Farms of the university. He is to act as facilitator for research and other activities of the university at the farm levels

Dean, Students' Welfare

- The Dean, Students' Welfare is in charge of promoting ambient students' friendly education and research environment within the university and to protect and safe guard students' overall development.
- He is in the charge of all the students' hostels
- He is also the facilitator of all sports and extra-curricular activities related to the overall development of the students'

Librarian

- The Librarian shall be appointed by the Vice-Chancellor subject to the approval of the Executive Council and shall be responsible for all matters concerning the library.
- The salary, allowances and other conditions of service of the Librarian shall be such as may be prescribed.

6.6.1.5. Supporting Units:

Whether the University has established Maintenance cell, SC/ST Cell and Health facility and what is the present mode of functioning of these units to support the student, staff and University infrastructure? Yes.

Maintenance Cell: The maintenance of the university has been entrusted to the Estate Office and Office of the Works Department. An Estate Officer looks after and maintain the assets (land, building and other infrastructures of the university whereas the Works Department is entrusted with the maintenance, repair/renovation, development of university properties under the leadership of University Engineer (Presently Vacant). There are sub-assistant engineers and other supporting technical and official staffs to take care of the responsibilities.

SC/ST Cell: There has been an SC/ST/Backward Class Reservation Committee comprising of the Dean, PG Studies as Chairman, the Registrar as member Convener and the Deans of three faculties along with Prof. F. K. Bauri, and Dr. S. Murmu as the members of the Committee to suggest majors for general upliftment and reservation of constitutional rights of the members

from SC/ST/ Backward Class community working in this Viswavidyalaya (Notification No. Admn./BCKV/G-284/Pt.-III/L-39 dated 11.4.2017)

Health Facility:

The medical unit was initially housed in ground floor of the Administration Building for a long period since inception of BCKV, Mohanpur in the year 1974. The unit was later separated and shifted to the newly constructed Health Centre in the year of 2001 and named as "Prof. S. B. Chottopadhyay Memorial Health Centre" in 2012. The Health Centre provides free medical advices, free investigations along with required medicine to the students of this viswavidyalaya. Staff and their family members are benefited with free medical advice, investigations with nominal charges along with emergency medicine only. A small parallel unit is also functioning in the Directorate of Research Complex Building, Kalyani, where the patient are nurtured & rendered with medicines as per the advice of the doctor who has been attending that unit. Lady Doctor (on contact basis) visits the Unit once a week to render medical advices.

Medical Officers – Medical Officer & In-Charge

Lady Medical Officer (on Contract) – The proposal for creation of one Lady Medical Officer has been proposed to Govt. of west Bengal

The Medical Unit also has support staff as Sr. Suptd. (Acting), Sweeper, Field Worker, Jr. Peon, Head Mali. Few contractual technical support staff including Lab Technician, ECG cum X-Ray Technician, Pharmacist, Physiotherapist, ECG & X-Ray Attendant and Lab Attendant. Health Centre has A/C ambulance in emergency service for 24x7.

6.6.1.6. Technology Support

Over the years, BCKV has harnessed the benefit of incorporating frontier technologies in fostering effecting learning among the students.

The university has developed a computer network among various establishments of the Viswavidyalaya to promote academic work on digital platform so that faculty members and students of each department can have access to e-journal (CeRA) resources of ICAR using 300+ terminals across the campus using 200-mbps Internet bandwidth.

Four Smart Classrooms containing advanced learning tools like Large Interactive Flat panel, Short Throw Interactive Projector, Desktop Document camera etc. to create new age learning experience for students.

Support service have been developed in most of the departments for conducting regular classes using popular presentation suite like PowerPoint using LCD projectors and large screen and sharing copies of presentations with the students for further reading.

The computer and networking related service support has been provided by the ARIS cell.

6.6.1.7. Institutional Data Base and Website Update:

Detailed department wise/ research unit wise activities of the viswavidyalaya along with preferred area of research interest of the faculty members are available in the university website <u>www.bckv.edu.in</u>. Any research worker/ organization interested in partnering with BCKV can utilize this information for furthering the collaborative programme.

Periodicity of Website updating:

The website of the BCKV tends to be web portals of public or scientific information with a high volume of contents and permanently updated in various information of the Viswavidyalaya. Website maintenance is the act of regularly checking the website for issues and mistakes and keeping it updated and relevant. BCKV is doing it regularly to keep our website healthy, encourage continued traffic growth, and strengthen our SEO.

In this respect the following task we are maintaining with professional agencies as stated below.

- 1. Check that all of our pages are loading without errors.
- 2. Run a backup and make sure a previous version of our site is stored.
- 3. Check our pages to see if there are any broken links.
- 4. Search for 404 errors and fix or redirect

The website of the Viswavidyalaya is also enabled with SSL certificates as an SSL certificate creates a secure tunnel through which information including usernames, passwords, credit/debit card numbers and more can pass safely. The site is also running with professional agencies and one person is onsite engaged in updating the regular updates from the Viswavidyalaya end.

6.6.1.8. Interdepartmental Linkages:

The University has been adopting decentralized, participatory, adaptive and multifarious demand-supply side extension research- academics approach; involving public, private and third sector (civil society) in research and extension programmes and strengthening capacity of framers, researchers and extension workers. Provide a note on interdepartmental linkages the University is currently having in practice.

The university has been maintaining close linkage with the farming community who are the major stake holders of the technologies developed by the university through its Krishi Vigyan Kendras at different places. At the same time the university is having linkage with the State Department of Agriculture as well as other line departments. Thus, the overall policies of the university show the reflection of the need of all stake holders.

Is the University cultivating the collaborative culture within subject and across subjects? Yes.

- 1. Twenty-five ICAR- AICRPs are running under multi-disciplinary subjects.
- Several ad-hoc projects under collaboration mode and multi-disciplines funded by the Govt. (Central/Sate), NGOs are running at BCKV
- 3. Several courses at undergraduate level are also conducted in collaborative mode involving the teachers from different departments.

6.6.1.9. Monitoring Mechanism:

The teaching activities and outcomes are being closely monitored at the department level by the Heads of the respective departments. There are Board of studies (CC/Departmental Committee) for each department which is responsible for ensuring effective deliberation of theory and practical classes and timely completion of course

The Deans of the faculties are looking after smooth functioning of teaching activities in all the departments under their purviews.

The Faculty Council (Academic Council) takes care of regular monitoring, resolving any issue related to teaching and examination as well as recommending for policy framing

6.6.1.10. Institute Quality Assurance Cell /PME Cell:

The Director of Research is in charge of monitoring and supervising all research projects operating in the university. There exists a University Research Council under the chairmanship of the Director of Research which evaluate all research activities carried out in the university. University has been maintaining the Project Information Management System (PIMS) as designed by the ICAR under NAHEP. The Deputy Director of Research is the Nodal Officer of the PIMS. The system is aimed at archival of all information related to the Government sponsored projects operation in the University.

6.6.1.11. Collaboration with Academic Institutions and Industry:

The university has long term collaboration with several Institutions and Govt. (Central and State) agencies, agrochemical Companies, NGOs. Apart from this BCKV has the research collaboration with several International Organizations

Sl.	Name of the ICAR			
No	Institute	Teaching/ Training	PhD Guidance/ Collaborative research	Lab Facilities
1.	ICAR-NCIPM, New Delhi			
2.	ICAR- IIRR, Hyderabad			
3.	ICAR-DMR, Solan, HP			\checkmark
4.	ICAR-NBAIR, Bengaluru			
5.	NBSSLU&P, Regional Station, Kolkata	Soil Science		-
6.	ICAR: CIFRI, Barrackpore, WB			NAIP 2 lab Facilities
7.	ICAR- ATARI, Kolkatta	Training in KVKs		
8.	ICAR-CRIJAF, Barrackpore, WB	Training		
9.	India Meteorological Department (IMD)	Weather Forecasting	GKMS project	
10.	NCIPM	Training	-	
11.	Tamil Nadu Agricultural University			
12.	University of Kalyani			ν
13.	Burdwan University			
14.	Indira Gandhi Open university		\checkmark	



15	Jahn Inns Centre, UK	 	
0			

List of Collaborators:

Sl.	Name of the organizations (National)	Type of		
No.		organization		
1.	Indian council of Agricultural Research (ICAR)Govt. of			
2.	Department of Biotechnology, Ministry of Science and	Govt. of India		
	Technology (DBT)			
3.	Department of Science and Technology (DST)	Govt. of India		
4.	Central for Scientific and Industrial Research (CSIR)	Govt. of India		
5.	Protection of Plant Variety and Farmers Right, Ministry of	Govt. of India		
	Agriculture (PPV & FRA)			
6.	Ministry of Ayush	Govt. of India		
7.	Ministry of Economics and Statistics	Govt. of India		
8.	Mission for Integrated Development of Horticulture (MIDH), Govt. of Ir			
	Ministry of Agriculture & Farmers Welfare			
9.				
	Farmers Welfare			
10.	Department of Science and Technology	Govt. of WB		
11.	Rashtryo Krishi Vikash Yojona	Govt. of India		
12.	NABARD	Govt. of India		
13.	India Meteorological Department	Govt. of India		
14	National Horticultural Mission	Govt. of India		
	Name of the organizations (International)	I		
14.	The International Center for Agricultural Research in the Dry Areas (ICARDA)			
15.	The International Maize and Wheat Improvement Center (CIMMYT)			
16.	CSIRO: Commonwealth Scientific and Industrial Research Organization (CSIRO)			
17.	International Potato Centre (CIP)			
18.	Australian Centre for International Agricultural Research (ACIAR)			

	Agrochemical companies			
19.	All Indian and other Multinational companies, manufacturers and exporters of			
	agrochemicals in India have the strong collaboration with BCKV. They provide			
	fund for research, student fellowships and jobs.			
20.	Indian Farmers Fertilizers Cooperative Society (IFFCO)			

6.6.2. Academic Support

6.6.2.1. Academic Council:

Academic issues are addressed in the Faculty Councils of respective colleges.

a) The composition of the Faculty Council:

SL No.	Composition	Status in the Faculty
		Council
1.	Vice-Chancellor, BCKV	Chairman
2.	Dean-Faculty of Agriculture	Vice Chairman
3.	Secretary- Faculty Council- (UG & PG Studies)	Convener
4.	Dean-Post Graduate Studies	Member
5.	Director of Research	Member
6.	Director of Extension Education	Member
7.	Dean-Faculty of Horticulture	Invitee
8.	Dean-Faculty of Agricultural Engineering	Invitee
9.	Associate Dean, Bankura College of Agriculture	Member
10	(Extended Campus of BCKV)	N. 1
10.	Associate Dean, Burdwan College of Agriculture (Extended Campus of BCKV)	Member
11.	Nominated External Members (02)	Nominated Member
12.	Heads of the sixteen Departments (16)	Member

c) Date of conduct of meetings of Faculty Council for last five years with recommendations

SL	Date of Meeting	Major Recommendations		
No.				
1.	134 th Faculty Council	To consider students' evaluation procedure for the		
	meeting held on	forthcoming semester due to Covid-19 pandemic situation.		
	29.06.2021			
2.	133 rd Faculty Council	To consider the evaluation procedure of ELP sources for 8 th		
	meeting held on	semester students due to Covid-19 pandemic situation.		
	17.07.2020	-		
3.	132 nd Faculty Council	To review the examination rules and to consider the request		
	meeting held on	for allotment of PG and PhD students and courses for class		

	30.09.2019	teaching at Mohanpur to the teachers of College of Agriculture, Burdwan and Bankura.			
4.	131 st Faculty Council	To consider the proposal for offering three courses for the post			
	meeting held on 11.03.2019	graduate students under CAAST on conservation agriculture.			
5.	130 th Faculty Council	Approval of the academic calendars for Masters and PhD			
	meeting held on 09.03.2018	degree programme for the academic session 2017-2018.			
6.	129 th Faculty Council	To consider the proposal for establishment of an examination			
	meeting held on	department of the university.			
7	10.11.2017				
7.	128 th Faculty Council meeting held on	To consider the matter of attachment of faculties of this Viewovidualays to other reputed institutions			
	20.09.2017	Viswavidyalaya to other reputed institutions.			
8.	127 th Faculty Council	To consider the recommendation of the Syllabus Committee			
0.	meeting held on	for introduction of new UG courses and curricula as per			
	17.05.2017	recommendation of the V Dean's committee, ICAR.			
9.	126 th Faculty Council	Proposal for consideration of further improvement of			
	meeting held on	standards of PhD degree programme.			
	18.01.2017				
10.	125 th Faculty Council	Recasting of admission policy of the UG students and rules			
	meeting held on	and regulations relating to PG education.			
	16.09.2016				
11.	124 th Faculty Council	Approval of PhD degree of students of the Faculty of			
	meeting held on	Agriculture for conferring the degrees at the next convocation.			
	16.05.2016				
12.	123 rd Faculty Council				
	meeting held on	of the year 2013, 2014 and 2015 for conferring the degrees			
29.04.2016 along with medals and book prizes at the next convoca					

6.6.2.2. Innovation and Best Practices

- a) Introduction of Online Class using Google Meet and other similar platforms
- b) Preparation of UG video lecture and uploading in YouTube
- c) Using Learning management System like Google Classroom for academic exchanges
- d) Conducting examination and student feedback using Google Forms

6.6.2.3. Library:

College Library

The Central Library of is an integral part of academic endeavour in the Viswavidyalaya and is being constantly enriched by the acquisition of latest books and journals keeping pace with changing times. The Central Library of Bidhan Chandra Krishi Viswavidyalaya holds a unique position by contributing to the academic excellence and research competence in all segments of the university's academic structure. It is housed in a colossal four-storied eye-catching building in the Mohanpur campus. Being in the center of the campus, it is easily accessible from all corners of the university. This building has a carpet area of about 81,000 sq ft.

The library caters services to satisfy the study and information needs of students, faculty members, scientists, research scholars, extension personnel, officers and other staff members of the university. The library also provides consultation facilities to outside scholars, teachers and students of other universities as well as ex-students of this university as per the Library Rules.

a) Location of the Library: Central Library, Mohanpur

- b) Present staff position (in place): 19
- c) Availability of Wi-Fi facilities: Yes
- d) No. of Books and other reading materials:113685
- e) No. of periodicals and research journals:1191
- f) Latest publications in the fields of relevant subjects: Advances, Annual Reviews, Methods, Society Publications, Collection of Acta Horticulture (Proceedings of ISHS), Standards (Indian& ISO), E-books and e-resources through CeRA.
- g) Status of subscriptions (Number)
 - i) Journals (National and International):29
 - ii) National dailies :11
 - iii) Magazines :38
- h) No. of computers with Internet facilities:28
- i) Seating Capacity:424
- j) Status of employing the latest technology in library sciences, stacking arrangements: Uses latest Version (21.05.01.003) of Koha Library Management System
- k) Extent of automation and userservices through computer: Delivers e-content; OPAC Services; Computerised Circulations; Remote Access to e-learning resources and databases; Document Delivery Services through CeRA;

l) Opening hours of the library:10.30 AM - 5.30 PM (Monday- Saturday) Different Sections

For smooth functioning of the library, it is divided into eighteen inter-linked sections:

- Circulation
- ✤ Reference & Reading
- Career Corner
- Acquisition & Processing
- Newspaper Zone
- CABI Access Zone
- Internet / CeRA Zone
- Bound Periodicals
- Report Section

- Current Periodicals
- Thesis and Dissertation
- Reprography Units
- Loose Journal Zone
- Old & Rare Books
- Conference Room
- Book Exhibition Arena
- Book Stack Unit
- Binding Section

Learning Resources

The Central library has a rich collection of **78,200** + Books, **1191** Journals Titles, 6050 Loose Journals & Periodicals and **25,043** Volumes of Bound Journals, **35** Popular Magazine, **5404**Ph.D. & M. Sc. Thesis, more than **4220** Reports, 818 Non-Book Materials and many other reference materials. The library is further enriched by its own subscription of e-books & databases and the vast collection of CeRA initiative of ICAR.

e-Books& e-Journals @ CeRA (Consortium for e-Resources in Agriculture)

Most of the agriculture related e-journals and highly demanded e-books from selected publishers are available in CeRA. Users access these online resources through IP authentication. Using this online platform library patrons place demand to the other libraries under CeRA umbrella for journal articles. Through the 'Admin' link, the Librarian of concerned institution can access this module by providing the unique Username and Password to fulfill the requests received from other Institutes/Universities. This library also extends the same service to other institutions.

Facilities & Services

Utilizing its vast collection of learning resources, the central library provides following offline and online services through eighteen well defined sections:

- Photocopy
- Audio-visual
- Internet surfing
- Inter-Library Loan
- Database Search
- Online Electronic books & journals
- Reference and Referral
- Computerized Circulation

- Current Awareness
- Book Bank
- WiFi Facilities
- Current and Bound Journals (Print)
- Thesis and Dissertation
- delivery service under CeRA

Library Extension Activities

The Central Library does not remain confined to the traditional library services only, but takes the privilege of providing library extension services in various ways for the benefit of the user community. Some of the defining activities of the library include - Library Orientation programmes and faculty interaction programmes.

Footfalls & Library Usage Statistics: 2020

Library statistics gives quantitative information involving collection, analysis, presentation and interpretation of data. It helps to determine the growth of the library.

- Library Visitor (Student) :24709
- Library Visitors (Teacher & Others) :1124*
- Reading Section :1470
- Career Corner :1683
- Membership: UG +PG +PhD/Others :1625
- Book Circulations :8422
- Book Accessioned and Processed :563+

- Thesis Digitized :3518+
- Users of Internet :1553
- Users of Thesis & Dissertation :439
- Users of CAB (CD-Rom) :452
- Krishiprabha Thesis Uploaded :192
- Krishikosh (D-Space) Thesis Uploaded :794
- Total Hits in CeRA Access:19241+

6.6.2.4. Center for Excellence/Advance Studies/Centre for Advanced Faculty Training:

- Niche Area of Excellence & Arsenic Research lab, Kalyani (Fund: ICAR)
- Regional Nuclear Research Centre (RNRC)
- Survey, Selection and Mass Production (Fund: GOWB)
- Quality Control APEDA Laboratory, Mohanpur (Fund: GOI)
- Model Center for Floricultural Excellence, Mondouri (Fund: GOI)
- Advanced Plant Virus Research Centre, Kalyani (Fund: RKVY)
- CAAST Project in Conservation Agriculture (Funding Agency: World Bank through ICAR)

6.6.2.5. Incubation Center/Start up units/ Venture capital:

Incubation centre for Agri-Business under RIDF:

An Incubation Centre has been developed by the university with funding support from NABARD under Rural Infrastructure Development Fund. Several technology ventures (listed below) have been promoted by the Incubation Centre as a Demonstration Unit

- Ventures: Organic plate from Arecanut leaf
- Production of Banana chips
- Processing of spices
- Production of Mushroom spawn
- Micropropagation of banana
- Vermicompost production
- Organic matter decomposes and biopesticides

6.6.2.6. Technology Enabled Learning Resources:

The university has developed a computer network among various establishments of the Viswavidyalaya to promote academic work on digital platform so that faculty members and students of each department can have access to e-journal (CeRA) resources of ICAR using 300+ terminals across the campus using 200-mbps Internet bandwidth. Some of the technology tools adopted over the years are as follows:

- Adopted online UG class platforms (with Google Meet) to deliver uninterrupted UG teaching activities during COVID-19 pandemic time.
- The teachers have developed Course-wise and Lecture-wise video lecture for all UG semesters and uploading those videos in popular multimedia platform like YouTube for trouble free access by students.
- Four Smart Classrooms containing advanced learning tools like Large Interactive Flat panel, Short Throw Interactive Projector, Desktop Document camera etc. to create new age learning experience for students.
- LMS tool like Google Classroom has been used by the teachers for UG and PG classes for pre- and post-classroom academic exchanges with the students.

- Video-conferencing platform like Google Meet, Zoom have been used to conduct seminar, Practical Viva-voce and evaluation of PG/PhD dissertations.
- Conducting MCQ based mid-term examinations of UG students and regular semester quizzes for PG and PhD students using Google Forms for instant evaluation.
- Conducting regular classes using popular presentation suite like PowerPoint using LCD projectors and large screen and sharing copies of presentations with the students for further reading.
- Procurement of e-books by the Central Library on various subjects to empower students with modern way of learning.
- During COVID-19 pandemic, students were encouraged to participate in various webinars organised either by BCKV or by other institutions.

6.6.2.7. Integrated Learning Systems (Experiential Learning):

Experiential Learning Programme

Agriculture:

- Production of Bio-Agents and Botanicals pesticides
- Commercial Seed Production
- Mushroom cultivation
- Soil, Plant and Water testing
- Commercial Beekeeping
- Organic Production
- Commercial Sericulture
- Plant Tissue Culture

Horticulture:

- Commercial Horticulture,
- Processing of Fruit and vegetables for value addition,
- Model farm for production of Medicinal Plants

Agricultural Engineering

• Model Rice Based Agro Processing Unit,

- Design fabrication & testing of agricultural machinery
- Drip Fertigation to Fruit Crops for Better Yield and Economy
- Maitenance and custom hiring of Farm Mechanics and Equipments

The students from the Colleges of Agriculture, Bankura are getting ELP program from Main campus support.

Name of Unit (Sanctioned by ICAR)	Mode of Impleme ntation	Learning outcome	Profit sharing mechanism (amount)
1. Commercial Apiculture	Business mode	 73 students in last 5 years have been trained in handling & management of honeybees, harvesting, processing, packaging and marketing of honey. 1 (One) student had picked up Apiculture as enterprise in 2018. 	50% profit is shared with the students amounting about Rs. 18,000/-/student
2. Commercial Horticulture	Business mode	 125 students in last 5 years have been trained on i) 'Nursery production of fruit crops. ii) Nursery production of ornamentals. iii) Protected cultivation of vegetables and flowers. 	Due to lack of revolving fund, large scale nursery production was not possible. Following the 50% profit sharing mechanism, each student got only Rs. 624/
3. Processing of Fruits and Vegetables for Value Addition (Fruit Beverage Unit)	Full- fledged Business mode	Newly established Unit. Will be functional from this year. 20-25 students will be trained in each batch, if the situation improves and physical mode starts.	50% profit will be shared with the students amounting about Rs. 84,000/-/student/programme @ Rs. 14,000/- /student/month.
4. Maintenance and custom- hiring of Farm Machinery and Equipment	Skill mode	Till date, 76 students have been trained on - i) Maintenance of farm machinery and tractors. ii) Calculation of operational cost of tractors and other machinery and determination of effective cost for rental purpose.	NA
5. Design, fabrication and testing of Farm machinery	Skill mode	 Till date, 73 students have been trained on - i) Design, fabrication and testing of farm Machinery following conventional design procedure. ii) Training on CNC lathe. iii) Computer aided design using Autocad. 	NA

6. Model rice based Agroprocessin g Unit	Skill mode	Till date, 73 students have been trained on – i) Rice processing ii) Maintenance of modern rice processing unit.	NA
7. Drip Fertigation to Fruit Crops for Better Yield and Economy	Skill mode	 Till date, 76 students have been trained on – i) Design, operation and maintenance of drip irrigation system to fruit crops. ii) Adjustment of different machine settings for optimizing water application in order to maximize yield and profit. 	NA

6.6.2.8. Academic Industry Interface:

Agrienterpruneurs visit the university for collection of necessary technologies. Apart from that national and multinational companies provide funds for research in the university and university submitted the research report after completion of the study.

Details has been given under Research Support subheading.

6.6.2.9. National Ranking (ICAR/MHRD):

Mention about the rank of the University in last five years in the NIRF from ICAR/MHRD.

6.6.2.9. National Ranking (ICAR/MHRD): Mention about the rank of the University in *last five years in the NIRF from ICAR/MHRD*.

Sl.No.	Name of the	Year	Rank	National Institutional Ranking
	SAU		ICAR	Framework (NIRF)
1.	BCKV	2016-2017	43	31
2.	BCKV	2017-2018	40	03
3.	BCKV	2018-2019	26	-
4.	BCKV	2019-2020	15	-
5.	BCKV	2020-2021		-

Ranking status of Agricultural University by ICAR

6.6.3. Research Support

The Research Directorate supervisees the mandated research and the research on thrust areas identified by the University, State Government, the ICAR and other national bodies. Such mandates and thrust are usually revisited periodically for improvisations and changes. The statute of the Viswavidyalaya entrusts the Research Council for redefining the areas and making such changes. Research on major crops like rice, pulse, oil seeds etc. is under the State department of Agriculture. During implementation of National Agricultural Research Project, State handed over a few farms to the Universities which help in the development of regional

research stations and substations. Under the umbrella of the Research Directorate of the Universities, these Regional Research Stations (RRSs) and Regional Research Sub-Stations (RRSS) are working to address agro-ecological region-specific researchable issues of New Alluvial Zone, Costal-Saline Zone, Red-Lateritic Zone, Terai and Hill zone. The Regional Research Stations and Substations developed with the implementation of the NARP were scaled up with the funding from the respective projects of RKVY and RIDF. Apart from research endeavors, training facility development is also a priority to initiate capacity building and human resource development for livelihood issues across the various agroclimatic zones under the jurisdiction of the university.

6.6.3.1. Research Council:

The First Statutes framed in relation to establishment of authorities of the University, provided for constitution of (a) Research Council; (b) Extension Education Council; and (c) Council of Students' Welfare, in addition to the Authorities defined in Section 9 of Bidhan Chandra Krishi Viswavidyalaya Act, 1974 (West Bengal Act XLIX of 1974).As per the provisions of the University Statute, the Research Council shall be a policy making body for research in the faculties and in the Research Stations of the University. One of the major activities of the University is to undertake research in the field of agriculture and its allied sectors.

The nature of composition of Research Council as stipulated in the University's First Statutes, is as follows –

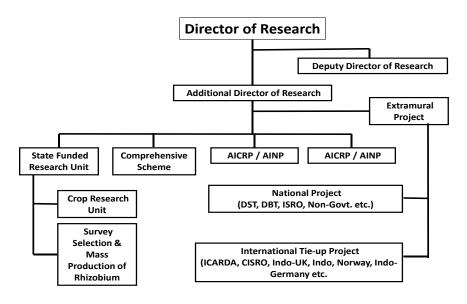
1.	Vice-Chancellor, BCKV	-	ex-officio Chairman
2.	Director of Research, BCKV	-	ex-officio Secretary
3.	Deans of three Faculties, BCKV	-	ex-officio Members
4.	Dean, Post Graduate Studies, BCKV	-	ex-officio Member
5.	Director of Extension Education, BCKV	-	ex-officio Member
6.	Director of Agriculture, GoWB	-	ex-officio Member
7.	Director of Animal Husbandry, GoWB	-	ex-officio Member
8.	Director of Veterinary Services, GoWB	-	ex-officio Member
9.	Milk Commissioner, GoWB	-	ex-officio Member
10.	Director of Fisheries, GoWB	-	ex-officio Member
11.	Chief Conservator of Forest, GoWB	-	ex-officio Member
12.	Directors of ICAR Institutes located in WB	-	ex-officio Members
13.	Heads of the Departments, BCKV	-	ex-officio Members

14.	Five teachers not below the rank of Professor to be nominated by the Vice-Char	- ncellor	Members
15.	Head of the College of Agriculture, Calcutta University	-	ex-officio Member
16.	A representative of Visva-Bharati, not below the rank of Professor	-	Member
17.	A representative of Bose Institute, Calcutta not below the rank of Professor	-	Member
18.	Four eminent Scientists to be nominated by the Executive Council	-	Members
19.	Two Progressive Farmers to be nominated by the Executive Council	-	Members

However, after the enactment of the West Bengal Act XVIII of 2014 [THE WEST BENGAL KRISHI VISWAVIDYALAYA LAWS (AMENDMENT) Act, 2014], the First Statutes also need to be amended accordingly to suit the requirements of changing times. In view of the same, the composition of the Research Council also a recasted. Hence, an Interim Research Committee in the line of Research Council was constituted maintaining the statutory provisions in the 250th meeting of the Executive Council, held on 07.07.2021, with the objective of framing comprehensive research policy, along with prioritizing University's research agenda. The Interim Research Committee will be entrusted to frame the research policy guidelines for the University.

Directorate of Research:

The Directorate of Research is responsible for all research activities of the university. It monitor, supervise and evaluate the activities of all research programmes/projects/units under the university. The Directorate is presently located at Kalyani. Many of the Research units are located in different stations of the university as desirable for the respective agroclimatic situation. The Scientists of the directorate are also shouldering a part of teaching activities in their respective departments.



Structure and Research Coordination mechanism of the Directorate of Research

Staff pattern:

Sl. No.	Posts	Sanctioned post	Filled up post	Vacant post
1.	Administrative	5	3	2
2.	Technical			
3.	Supportive	33	11	22

Status of sanctioned post, existing and vacant manpower in RRS/RRSS

Name Of			Division of Sanctioned Post		Division of Man in Post		Vacant	Division of Vacant Acant Post	
Research Station	ed Post	Teaching	Non- Teaching	Position	Teaching	Non- Teaching	Post	Teaching	Non- Teaching
Gayespur	10	10	0	7	7	0	3	3	0
Chakdaha	4	4	0	4	4	0	0	0	0
Sekhampur	12	7	5	5	4	1	7	3	4
Jhargram	25	13	12	13	6	7*	12	7	5

Raghunath-pur	8	3	5	3	3	0	5	0	5
Kakdwip	29	7	22	12	6	6	17	1	16
Survey selection and mass production	43	13	30	12	9	3	31	04	27
Crop Research Unit	10	03	07	03	03	00	07	00	07
TOTAL	141	60	81	59	42	17	82	18	64

List of ICAR- All India Coordinated Research Project (AICRP)/ All India Network Project (AINP)

Sl No.	Name of the AICRP	Location	Date of start
	AICRPs on Natural Resource Management		
1	AICRP on Integrated Farming Systems	Kalyani	1968
2	AICRP on Investigation on Soil Test Crop Response	Kalyani	1994
3	AICRP on Irrigation and Water Management	Goyeshpur	1982
4	AICRP on Weed Management	Kalyani	2016
5	AICRP on Agroforestry	Jhargram	1983
	AICRPs on Field Crops		
6	AICRP on Forage Crops & Utilization	Kalyani	1972
7	AICRP on Groundnut	Jhargram	1994
8	AICRP on Pulse Seed Hub	Kalyani	2016
9	AICRP on Wheat and Barley Improvement	Kalyani	1973
10	AICRP on Maize	Kalyani	2015
11	AICRP on Chickpea	Kalyani	2011
12	AICRP on Mungbean, Urdbean, Lentil, Lathyrus, Rajmash& Pea (MuLARP)	Kalyani	2015
13	AICRP on Jute and Allied Fibres	Kalyani	1973
	AICRPs on Horticultural Crops		
14	AINP on Medicinal & Aromatic Plants and Betelvine	Kalyani	1983
15	AICRP on Palm	Kalyani	1981
16	AICRP on Potato	Kalyani	1971
17	AICRP on Cashew	Jhargram	1980
18	AICRP on Vegetable crop	Kalyani	1975
19	AICRP on Tuber Crops (Other than Potato)	Kalyani	1976
20	AICRP on Floriculture	Kalyani	1977
21	AICRP on Fruits	Kalyani	1988
	AICRP/AINP on Crop Protection		
22	AINP on Acarology	Kalyani	1988
23	AICRP on Nematology	Kalyani	1988
	AICRP/AINP Environmental Sciences		
24	AINP on Pesticide Residues	Kalyani	1984

Sl.	Name of the AICRP/AINP	Sanctio	n Post	Ma	n in	Vacant Position	
No				Posi	tion		
		Teaching/	Non-	Teaching	Non-	Teaching	Non-
		Research*	Teaching	/Res*	Teaching	U U	Teaching
1	AICRP on Fruits	7	15	7	10	0	5
2	AICRP on Wheat & Barley	3	2	1	1	2	2
3	AICRP on Tuber Crops	2	1	2	1	0	0
	AICRP on MuLLaRP	3	2	2	0	1	0
	AICRP on Agro-Forestry	2	3	2	2	0	1
	AICRP on Integrated Farming	5	6	4	4	1	2
	System						
	AICRP on Chickpea	2	1	1	1	1	0
	AICRP on Vegetables	2	2	2	1	0	1
	AICRP on Maize	3	4	2	2	1	2
	AICRP on Forage Crops	2	5	1	4	1	1
	AICRP on Nematodes	1	0	1	0	0	0
	AICRP on Irrigation & Water	3	4	3	3	0	1
	Management						
	AICRP on Weed Management	2	1	2	1	0	0
	AICRP on Agro-Meteorology	2	2	2	1	0	1
	AICRP on Groundnut	2	2	1	1	1	1
	AICRP on STCR	3	6	3	3	0	3
	AICRP on Floriculture	3	0	3	0	0	0
	AICRP on Potato	5	5	3	4	2	1
	AICRP on Palms	1	1	1	0	0	1
	AICRP on Cashew	3	3	1	0	2	3
í.	AICRP on MAP &Betelvine	3	4	3	3	0	1
j.	AICRP on NSP-Crops	0	1	0	0	0	1
.	AINP on AgriAcarology	2	1	1	0	1	1
	AINP on Jute & Allied Fibres	2	1	2	0	0	1
).	AINP on Pesticide Residues	3	1	2	1	1	0
	Total	66	73	52	43	14	29

Status of Sanction post, Existing and Vacant Man Power in AICRP/AINP

*All the Teachers placed/deputed in the AICRPs/AINPs are the member of the Board of Studies of respective Departments and engaged in both teaching, research activities.

List of ICAR- All India Coordinated Research Project (AICRP)
Voluntary centre

Sl.	Name of the voluntary centres, ICAR	Location	Date of start
No.			
1.	AICRP on Micro and Secondary Nutrients and Pollutant	Kalyani	2009
	Elements in Soils and Plants		
2.	AICRP on National Seed Project (NSP)	Kalyani	2014

3.	AICRP on Spices	Kalyani	2009
4.	AICRP on Rapeseed and Mustard		
5.	AICRP on Mushrooms	Kalyani	2012
6.	AICRP on Honey bee and Pollinator	Kalyani	2015
7.	AICRP on Onion and Garlic	Kalyani	

Reginal Research Stations at three Agroclimatic Zones

Sl. No.	Name of the Regional Research Station (RRS)/ Regional Research Sub-station (RRSS)	Location
1	RRS, Red Laterite Zone, Jhargram	Jhargram District
2	RRSS, Red Laterite Zone, Raghunathpur	Raghunathpur, Purulia District
3	RRSS, Red Laterite Zone, Sekhampur	Sekhampur, Birbhum District
4	RRS, New Alluvial Zone, Gayeshpur	Gayeshpur, Nadia District
5	RRSS, New Alluvial Zone, Chakdaha	Chakdaha, Nadia District
6	RRS, Coastal-Saline zone, Kakdwip	Kakdwip, South 24-Paraganas district

Govt. of West Bengal funded Substantive Scheme

Sl. No.	Name of the Scheme	Location
1	Crop Research Unit	BCKV, Mohanpur
2	Survey Selection and Mass Production	BCKV, Mohanpur

Research

The Regional Research Stations at three agroclimatic Zones were established for location specific need-based research in agriculture and allied fields with the following mandates:

- Identification of existing and potential crop sequences under different farming situations
- Optimizing crop production and economic benefits.
- Production of good quality seed of cereals and pulses and sapling materials of fruit crops for farmers.

- Popularisation of green manure like sesbania in *kharif* season and vermicompost in *Rabi*/summer season and Bio-Fertilizer for improving soil health as well as crop productivity
- Screening of varieties for suitability and yield augmentation of crops like rice, mustard, sunflower, lentil, green gram, black gram, potato etc. under different land situations.
- Establishment of cashew, citrus and agroforestry in Red & Laterite zones and its popularization and sapling production
- To popularize the agro-technologies among the farmers for stabilizing and maximizing the productivity of crops.
- Organizing farmers' training and capacity building programmes for promoting scientific agricultural practices and use of high quality inputs including planting material.
- Outline of the on-going research programme

Survey, Selection and Mass production of Nodule Bacteria (SSMP)

Survey, Selection and Mass production of Nodule Bacteria (SSMP) has been strengthened under RKVY funded project entitled, "Establishment of Biofertilizer Production Unit" is an infrastructure-based laboratory and production unit of quality biofertilizers under the brand BCKV. The aim of this project is to provide quality assured biofertilizers to farmers either directly or through Government agencies in order to meet demand and generate trust of the users. This would at the same time increase the yield of legumes, and other crops and improves soil health. For augmenting production of major legumes, *Rhizobium* biofertilizers are considered, and biofertilizers for other crops, viz., *Azotobacter*, *Azospirillum* and Phosphate solubilizing bacteria are considered. Special emphasis is given for preparing liquid formulation (through an automated bottle washing-filling-capping machine) for longer shelf-life of organisms and easy maneuverability.

Biofertilizer Production Key / Flagship Projects which have started functioning/output: A joint venture is under progress with the Department of Agriculture, through the State Seed Corporation of the Government of West Bengal for delivering the entire production of biofertilizers at this unit.

Beneficiary (General/SC/ST): The project is entirely infrastructure based for production of quality biofertilizers. The project is expected to cater all categories of community people in the state of West Bengal.

Crop Research Unit

Crop Research Unit maintains more than 500 rice genotypes and 170 of them are mostly land race or land race-derived genotypes. They are in use for the discovery of new traits and development of new varieties. Rice line, IET28360, developed from a cross between Vandana x IET25701 with three drought tolerance QTLs from Vandana and 2 PD-tolerance genes from IET25701 is ready for giving release-proposal under SVRC. The line B07 (IET28360) compared with Sahabhagi; yield data and reaction to disease and insect.

The Regional Nuclear Agriculture Research Centre (RNARC)

The RNARC at Bidhan Chandra Krishi Viswavidyalaya is established by financial support for four years from the Board of Research in Nuclear Science (BRNS) under the Bhaba Atomic Research Station (BARC) with the following major goals a) Genetic improvement of crop plants, especially for West Bengal region, through induced mutations, conventional breeding etc. b) Use of nuclear technique for food preservation and tracer technique to improve plant nutrition monitoring. c) Evaluation and multiplication of improved BARC released varieties and distribution thereof in parts of West Bengal. d) Creation of Central facility.

The university has established NABL Accredited Laboratory (ISO/IEC17025:2005) for Pesticide Residue analysis provides guideline for safe waiting period determination being used by the regulatory authority for granting registration of pesticides in the country in the field of Chemical Testing regard to Food commodities and Environmental samples. It had been designated as Core Laboratory in Eastern India by the DAC, Ministry of Agriculture, GOI.

BCKV has developed an ICAR approved centre with CTCRI, ICAR having DNA finger printing facilities and plant virus advanced diagnostic laboratory.

The university maintains Model Centre for Floricultural Excellence (MCFE) equipped with naturally ventilated hi-tech polyhouse with fogger, drip and sprinkler irrigation system, Master Fertigation Control Unit, tissue culture laboratory, potting shed, grading–sortingpackaging unit and training hall. The MCEF also maintains a rich germplasm repository of Gerbera, *Dendrobium* and *Phalaenopsis* orchid, Chrysanthemum, Rose, Adenium, Gladiolus, Dahlia, Anthurium, Shrubs, Flowering trees, Marigold, Tube rose, Climbers, House plants, Ferns, Palms, Turf grass. This centre has taken a step forward to promote the technological advancements, entrepreneurship development, linkages to commerce and industry and to act as a physical and service infrastructure.

The university has been providing leadership in arsenic research in the country and maintains the state-of-art (mainly sponsored by World Bank, ICAR, Dept. of Agriculture and Farmers Welfare, Govt. of India). The lab is having LC-ICP-MS, which helps in speciation of arsenic and other heavy metals.

The laboratories under the Directorate of Research contain wide range of instruments to working on DNA finger printing, molecular cataloguing, GC-ECD/FPD, HPLC, GC-MS, LC-MS, ICPMS, Atomic Absorption spectrophometer, modern Tissue Culture facilities, GIS and Remote sensing facilities as well as field measurement of micrometeorological parameters and mapping with.

The university prepares the medium range weather forecast and Weather-based Agroadvisory Bulletin at District-level under GKMS project to India Meteorological Department which is disseminated to the farmers through mass media and free SMS-Service at RRS, Coastal Saline Zone and Directorate of Research, Kalyani. The present weather crop and weather scenario, drought or flood condition and Contingent crop planning along with agro-advisory bulletin for the South Bengal districts finds place in the website "Crop weather outlook".

Projects under Rashtriya Krishi Vikas Yojana (RKVY)

Thirteen projects under RKVY are being operational for reinforcement of regional station activities covering areas under promotion of medicinal aromatic plants, biofertilizer production unit, testing laboratories, Training and Testing Institute on Agricultural mechanization, ground water supported safe irrigation, crop diversification in western tracts, mango orchard model and organic farming since 2015. Six new RKVY projects have been implemented at BCKV during 2021.

Sl. No	Name of the Project	Year of Implementation
1.	Infrastructure support for Agricultural Mechanization of State Farm	2015
	Machinery Training and testing Institute	
2.	Laboratory for testing soil and water quality at RRS for Red and	2015
	laterite Zone, Jhargram	



3.	Laboratory for testing quality of compost and organic manures at RRS, New Alluvial Zone, Chakdah;	2015
4.	Laboratory for testing soil and water quality at College of Agriculture, Extended campus of B.C.K.V., Burdwan, West Bengal	2015
5.	Solar Assisted Vapour Absorption Refrigeration System for on- Farm Cooling of Fruits and Vegetables	2015
6.	Promotion of medicinal and aromatic plants through cultivation and entrepreneurship deelopment in West Bengal	2016
7.	Establishment of Bio-Fertilizer Production Unit	2016
8.	Management of Ground Water irrigation in Gangetic Alluvium of West Bengal, Gayeshpur	2016
9.	Popularization of the diversified crops in Red & Lateritic Zones of West Bengal	2016
10.	Developing a model for canopy management and training of Mango Orchard for yield and quality improvement and export promotion	2016
11.	Organic farming based Integrated farming system-Promotion, Production and Marketing of Organic Produce through Self Help Groups	2016
12.	Mechanisation of different farms under BCKV to supply the seed to the farmers for improving their livelihood	2019
13.	Boosting Bio-Plate Industry in West Bengal for Clean Environment and Entrepreneurship	2019
14.	Establishment of Advanced virus and other pathogens diagnostic and testing service for plant propogation materials for the benefit for te farmers Entrepreneurs in West Bengal	2021
15.	Upgradation of Infrastucture facilities for quality seed production in different farms under BCKV to meet the need of farmers and good research work.	2021
16.	Empowering the women by generating wealth from waste by cashew apple processing	2021
17.	Post harvest processing of marigold and other flowers for income generation of the farming community of West bengal	2021
18.	Establishment of a state-of-art soil-water testing facility and service centre	2021
19.	Development of a soil, plant and water testing laboratory for sustaining soil health and agricultural productivity in the Red and Laterite Zone of West Bengal	2021
20.	Development of a Mechanized Modern Farm for Promotion, Development and Dissemination of Improved Technologies	2021
21.	Utilization of Fallow Land Using Mulch (Jute Agro Textiles & amp; Straw) and Unused Seepage Water for Enhancement of Groundnut andMaize Productivity in Red & amp; Lateritic Zone of West Bengal: A Pilot	2021

Rural Infrastructure Development Programme (RIDF)

The university also runs seventeen projects (funded by NABARD) under RIDF with a total outlay of Rs. 66.2 crore (in 3 years) with the focus on developing Bio-control, utilization of renewable energy, Development of organic farming protocols and Resource mobilization for livelihood development of Sundarbans

Sl. No.	PIC	Name of the Project	Year of Impleme ntation
1	R201900353	Promotion of Improved Technologies of Crop production for livelihood security & sustainable agriculture through strengthening of information	2015
2	R201900354	Strengthening of infrastructures & on farmers' participatory paddy and lentil seed production & demonstration in Birbhum district.	2015
3	R201900355	Establishment of three different processing unit for high quality fruit plants, enriched compost & integrated fish farming in the Dist. of Nadia, WB	2015
4	R201900356	Mobilizing local resources for Improving quality of rural people of Sundarban Delta	2015
5	R201900357	Agricultural Development & livelihood security for farming community of Raghunathpur	2015
6	R201900358	Development of protocol for organic farming systems and it's popularization	2015
7	R201900370	Farmer service for soil testing	2015
8	R201900371	Establishment of testing training centre for fodd&water quality	2015
9	R201900372	Establishment of a centre for biological control	2015
10	R201900373	Transfer of Innovative fruit based Agro Forestry Model for crop production and poverty alleviation of farming community in Red and Laterite zone of West Bengal	2015
11	R201900374	Development of Farm & Tissue culture units	2015
12	R201900410	Infrastructural Development using the renewable source of energy for agriculture and agro-based farms	2015
13	R201900411	Infrastructure development using the renewable sources of energy for agriculture at Jhargram	2015
14	R201900412	Infrastructure development using the renewable sources of energy for agriculture at Suri - II	2015
15	R201900413	Infrastructure development using the renewable sources of energy for agriculture at Raghunathpur - I	2015
16	R201900414	Infrastructure development using the renewable sources of energy for agriculture at Kakdwip	2015
17	RIDF 23	(FBMC)	2017

Research projects funded by State/Central Government

- Water management in Citrus and Vegetables
- o Socio-economic up-liftment SC/ST
- o Jute Agro- Textiles (JAT) for Growth of plants and Suppression of Weeds
- Economic empowerment of rural women belonging to SC through introduction of smallscale fish culture in homestead ponds
- Improvement of nutritional status of economically backward SC community through duckcum-fish culture in house hold pits
- Development of low-cost technology for small-scale culture of non-conventional fresh water fishes
- Capacity building of economically backward rural women through participatory training on integrated fish farming with improved backyard poultry breeds in homestead ponds
- Women empowerment through small-scale integrated fish farming in homestead ponds and linking up with Self Help Groups
- Cropping systems intensification in the salt affected coastal zones of Bangladesh and West Bengal, India
- o Influence of bagging on fruit quality and mineral composition of litchi
- Nutritional security and Socio-economic upliftment of rural women belongs to SC / ST community through homestead kitchen garden, zero-energy cool chamber and small-scale processing unit
- Radiation technology in conjunction with pre-harvest management practices for extending the shelf life of mango and litchi grown in West Bengal.
- Researches on developing a model for canopy management andtraining and pruning strategies of high density management for yield and quality improvement and export promotion
- Exploring the possibility of growing Millets in Red and Laterite zone of West Bengal with an emphasis to market linkages
- Generation of virus resistant rice for India: Diversifying Transgenic Resistance to popular varieties studying virus –host Interactions and new marker free Transgenics against Tungro disease
- o Detoxed grasspea: sustainable sustenance for stressful environments
- o Herbal Pesticide Formulations for Sustainable Crop Protection
- o Value Addition and luctin extraction of Marigold
- o Yeast based liquid bio-control product to manage post-harvest diseases of fruits

- Adaptability and Improvement of cow pea in West Bengal
- Adaptability and Improvement of pointed gourd in West Bengal
- Development of Hybrids in Vegetable crops
- Exploration and utilization of biodiversity for improvement of some Vegetable crops in West Bengal
- o Export Oriented Vegetable Production under low-cost Poly house
- Standardization of agro-techniques for quality seed production of onion under Gangetic alluvial plain of West Bengal
- Development of export quality green and dry chilli with long staying high colour and oleoresin content
- Analysis of constraints for intra-state imbalance in productivity of vegetable crops for microlevel planning
- Indo-Bulgaria Inter-Governmental project "Developing tomato germplasm possessing economically important traits
- Isolation of mutant with exerted stigma and anther non-dehiscence characterin*ps-2* functional male sterile line of tomato for utilization in hybrid seed production
- Molecular and biochemical characterization of three fruit pigment enhancing mutantgenes (hp, og^{c} and dg) and introgression of these genes with the fruit shelf-life enhancing mutant gene *in* in respective dihomozygote condition to develop breeding line with extended shelf-life and elevated carotenoids in the fruits of tomato (*Solanum lycopersicum*);
- Enhancement of nutritional quality of tomato by increasing lycopene and anthocyanin contents through mutant genes
- Nuclear-intervened molecular breeding and *in-vitro* culture for increasing yield and phytomedicine production in bitter gourd (*Momordica charantia*)
- Viruses of Crops and Weeds in India (A higher education link project between IACR and Rothamsted Plant Health Clinic Project (National Horticultural Mission)
- Sustainable farming system to enhance and ensure livelihood security of the poor in Purulia, Bankura and West Midnapore districts of WestBengal.
- Bioefficacy and phytotoxicity studies of insecticides against insect-pests of vegetable crops
- Evaluation of some hybrid vegetable varieties
- Model development for sustainable babycorn-vegetables intercropping system
- Development of early high yielding, multiple disease resistant and drought tolerant Faba bean early varieties in India

- Applied mutagenesis by gamma rays in Snake gourd (TrichosanthesanguinaL.)
- Study the effect of AgrisilicaTM Liquid (Orthosilicic acid 20%) on growth and yield of tomato.

Research Priority:

- With the establishment of Regional Nuclear Research Centre and with the human resources existing, the university will work towards providing leadership in the frontier areas of agriculture like, effective application of nuclear technology for crop improvement, postharvest technology, plant nutrition etc. Currently, seven collaborative research projects (Four mega projects, two regular research projects and one project one valuation BARC released mustard varities) are approved on the basis of recommendation of RTAC of BRNS. Cost involved with all these projects is approximately 5.0 crores. Following achievements were approved by BARC-project review committee (PRC) in their last meeting: a)One semi-dwarf, drought and P-deficiency tolerant rice line is selected from the advance segregating lines of irradiated F1s which is performing better than the national check Sahabhagi dhan (released by IRRI) in drought prone acid soil. b) Mutant mustard line, TM204 showed15-20% more yield than of national control, Kranti and zonal control, Pusa those Bold as evidentfromtheaverageoffouryearsinfouragro-ecologicallocationsofWestBengal.
- Considering the need of the farming community the basic services like digital soil map for precision nutrient application and management of problem soil is one of the priority areas of the university.
- The wide range of genetic resources of different crops opens the scope of development of varieties required for the existing diversity of crop, climate and growing conditions of the state.
- The university is planning to utilize the potentiality of Remote sensing and GIS tools for scaling up technologies generated by the scientists at the farm level in the diverse agroclimatic condition. The university has initiated work on GPS based soil characterization with as a step toward generation of digital soil map at block level that would help in site-specific crop management.
- The climate change issue has got priority in recent years. The scientists of the university has been actively working on downscaling future climate scenario for smaller spatial and temporal extent that can be applied to region specific crop management strategy development

for the state in given scenario. The university has put climate change and crop adaptation research programmes at priority for the forthcoming years.

- The livelihood security of the farmers in the problematic regions like, Red and Lateritic zone and Coastal saline Zone is facing serious threat from hydro-meteorological disasters and more so, under changing climate scenario. Few international agencies like ACIAR, ICARDA, CSIRO, CIMMYT etc. have started extending financial and technological support for the development of cropping strategies in these problematic regions. This has set the priority to develop sustainable and profitable farming strategies and improve the livelihood of the poor and backward farmers in these problematic zones.
- In increasing arsenic pollution has an adverse influence on human health and nutrition in the vast Gangetic regions. The university has been able to set up Niche Area of Excellence in Arsenic Research. Given the available modern facilities and richly expert group of scientists working in this field, the university has kept the management of Arsenic in food chain as a priority area of research.

Seed production centers:

The university has nucleus and breeder seed production program of paddy, mustard and pulses and ICAR-AICRP on NSP, Mega Seed Project and Pulse Seed hub also have been operating at BCKV. Bidhan Chandra KrishiViswavidyalaya, Mohanpur, Nadia was working as a voluntary centre of AICRP – NSP (Crops) from last few years. From 2015-16, approval has been accorded to act as one of the centres of AICRP – NSP (Crops) vide No. DSR/DIR/2015/01-419 dated 31/01/2015 of DSR, Mau, UP.

Breeder	Seed	Production

Crop	Vraiety	Breeder Seed actually produced (In quintal)					
		2016-	2017-	2018-	2019-	2020-	Total
		17	18	19	20	21	
Paddy	Gontra Bidhan-1 (IET-17430)	45.00	86.50	96.00	58.90	60.00	346.40
	Gontra Bidhan-3 (IET-22752)	7.50	51.00	37.00	46.10	55.00	196.60
	BidhanSuruchi (IET-25701)	-	-	-	-	20.00	20.00



Lentil	Variety: HUL 57	-	3.25	2.30	-	-	5.55
	L-4727	-	-	0.30	-	-	0.30
	PusaAgeti (L-4717)				1.20	4.00	5.20
Chickpea	Variety: Bidisha (WBG- 29)	-	0.40	0.30	0.30	2.00	3.00
Sesamun	CUMS 17 (Suprava)	-	-	1.70	-	-	1.70
Lathyrus	Bidhan Khesari-1	-	-	-	1.10	6.00	7.10
Mustard	TrombayBidhan Mustard (TBM-204)	-	-	-	0.80	0.30	1.10
	Total=	52.50	141.15	137.60	108.40	147.30	586.95

Nuclear Seed Production

Crop	Vraiety	Nuc	leus Seed	actually p	oroduced	(In quint	al)
		2016-17	2017-18	2018-19	2019-20	2020-21	Total
Paddy	Gontra Bidhan-1	0.50	0.40	0.50	0.60	0.50	2.50
	(IET-17430)						
	Gontra Bidhan-3	0.60	0.50	0.45	0.60	0.50	2.65
	(IET-22752)						
	BidhanSuruchi	-	-	-	0.60	0.50	1.10
	(IET-25701)						
Lentil	Variety: HUL 57	-	-	0.30	-	-	0.30
	PusaAgeti (L-4717)				0.65	0.80	1.45
Chickpea	Variety: Bidisha	-	0.40	0.55	0.70	0.70	2.35
	(WBG-29)						
Lathyrus	Bidhan Khesari-1	-	-	-	0.75	1.0	1.75
Mustard	TrombayBidhan	-	-	-	0.05	0.05	0.10
	Mustard (TBM-204)						
	Total=	1.10	1.30	1.80	3.95	4.05	12.20

Seed production of different farms under the Directorate of Farm, BCKV

Year	Name of the Farms*	No. of	Production
		unit/farm	of seed
			(Q)
2016-2017	DSF (AB), C-unit, D-block, C-block, Teaching		4670
	farm, Balindi Research Complex RRSS Chakdah,	12	
	Canning BSF, Kakdwip, Raghunathpur RRSS,		
	Sekhempur RRSS, Gayeshpur CRF.		
2017-2018	DSF (AB), C-unit, D-block, C-block, Teaching	11	1927
	farm, , Raghunathpur RRSS, Sekhempur RRSS,		
	Gayeshpur CRF		
2018-2019	DSF (AB), C-unit, D-block, C-block, Teaching	10	
	farm, Kakdwip, Raghunathpur RRSS, Sekhempur		3847
	RRSS, Gayeshpur CRF		
2019-2020	DSF (AB), C-unit, D-block, C-block, Teaching	10	4135

	farm, RRSS Chakdah, Canning BSF, Kakdwip, Raghunathpur RRSS, Sekhempur RRSS, Gayeshpur CRF		
2020-2021	DSF (AB), C-unit, D-block, C-block, Teaching	10	3050
	farm, RRSS Chakdah, Raghunathpur RRSS,		
	Sekhempur RRSS, Gayeshpur CRF		

*From 2017-2018; Seed production in Canning BSF is done by Inhana Organic Research Foundation (IORF) &from 2018-2019; Balindi RC has been given under the Custodian of Dean, Faculty of Agriculture for CAAST project.

Сгор	2018-19	2019-20
Paddy	15.45	15.65
Elephant foot yam	1.70	00.50
Turmeric	-	00.13
Lentil	-	00.30
Blackgram	-	00.39
Mungbean	-	-
TOTAL	17.15	16.97

Seed production of different seeds (in quintal) in RRS, Kakdwip:

Contribution in academic programmes of the University:

Facilities developed through externally funded research project help the faculties to conduct Practical classes of UG, PG and PhD students. These facilities are also utilized by PG and PhD students for their dissertation works

6.6.3.3. Technology Developed and its Adoption: Provide the list of approved technologies developed in last five years along with their adoption and coverage in the jurisdiction of the University.

Varieties released, varieties in pipeline for release (2016-2017 to 2020-2021)

Since inception, researches are being carried out for the development of new region specific, high nutrient content, stress tolerant and other need-based varieties for different crops. Wide number of varieties have been released in the process having significant characteristics in the above direction. For effective breeding purpose, the scientists are also engaged in exploration, characterization, evaluation and maintenance of germplasm pools for different crops. Following are the glimpses prominent varieties released, varieties inpipeline, germplasm pool maintained at different AICRPs and research stations of the University.

Sl.No.	Name of the crop	Name of the variety	Released by	Year of release
1	Ricebean	Bidhan Rice bean-3	CVRC	2016
2	Jute	Sweta	CVRC	2018
3	Jute	Bidhan Pat-5	SVRC	2019
4	Jute	Kisan Pat (BCCO-6)	CVRC	2017

5	Grasspea	Bidhan Khesari-1	SVRC	2019
6	Marigold	BidhanBasanti	SVRC	2019
7	Marigold	Bidhan Gold	SVRC	2019
8	Rice	BidhanSuruchi	SVRC	2019
9	Cowpea	BidhanSadabahar	SVRC	2019
10	Chilli	BidhanChilli-4	SVRC	2019
11	Brinjal (Round)	BidhanSuper	SVRC	2019
12	Mustard	TrombayBidhanMustard-204	SVRC	2019

Name of the varieties are in pipeline for release

Sl. No.	Name of the crop	Name of the variety	Recommended by
1	Elephant Foot Yam	BCA-3	ICAR
2	Dasheen taro	BCB-2	ICAR
3	Eddoe taro	BCC-9	ICAR
4	Eddoe taro	BCC-2	ICAR
5	Eddoe taro	BCC-5 (for CVRC)	ICAR
6	Okra	Bidhan Saheb mukto	ICAR
7	Brinjal	BidhanSuphala	ICAR
8	Tomato	BCT-25	ICAR
9	Dolichosbean	DCDB-110	ICAR
10	Banana	BCB-1(Desserttype)	ICAR
11	Banana	BCB-2(Cookingtype)	ICAR
12	Banana	BCB-3(Desserttype)	ICAR
13	Betelvine	BidhanPan-1	ICAR

Technologies generated in the RRS/RRSS/ AICRPs for adoption in the farmers' fields

 Adoption of direct seeded rice cultivation: A method demonstration on direct seeded rice cultivation in low land situation covering an area of 0.5 acres of land was done with tractordrawn fertilizer-cum-seed drill. It significantly reduces the cost of cultivation by reducing the cost for seedbed preparation and transplanting of seedlings. It accounts for 40% reduction of overall rice cultivation with an increase of 15-20% yield as compared to conventional practice.

- Production technology for good quality seed of paddy, pulses (green gram, lentil, black gram, lathyrus etc.) and oilseed crops (rapeseed-mustard) for farmers in the locality.
- Elite salt-tolerant germplasm of paddy and foundation seeds of paddy are available at the farm which is being sold. The farm is currently maintaining almost 65 paddy germplasms which are salt tolerant.
- Identified improved mustard cultivars namely TM 143 (Early) and TM 204 (Late) for medium land situation suitable for coastal ecosystem of West Bengal.
- The recommended fertilizer dose for modern cultivars of mustard cultivars has been standardized as 100:50:50 kg N, P and K/ha for coastal eco-system of West Bengal.
- The farm has already come out with standard agro-techniques for pyra cropping with lentil, lathyrus and mustard in rice-fallow system. These three crops are grown successfully on residual soil moisture after harvesting of *kharif* paddy.
- The farm has already come out with standard agro-techniques for pyra cropping with lentil, lathyrus and mustard in rice-fallow system. These three crops are grown successfully on residual soil moisture after harvesting of *kharif* paddy.
- Successful onion cultivation in *kharif* season was first done at this farm, which has now been popularized among the farmers in Akshaynagar, Namkhana, Sagar, Patharpratima areas under under South 24 Parganas district with the technical support from the scientists of the RRS.
- This technology has now been popularized among the farmers in Akshaynagar, Namkhana, Sagar, Patharpratima areas under under South 24 Parganas district with the technical support from the scientists of the RRS.
- Identified promising mungbean cultivars suitable for cultivation during summer season in coastal belt
- Identified promising blackgram cultivar suitable for cultivation during summer season in coastal belt
- Identified promising groundnut cultivars suitable for cultivation during summer season in coastal belt

- Identified promising rice hybrids suitable for cultivation during summer season in coastal belt
- Validation of the "Standardization of Seed production technology in Green Manure Crops of Daincha". Recommendation was "Foliar application of DAP (20gm/L of Water)+Zinc Sulphate (5gm/L of Water)+Boric acid (3gm/L of Water) (%) gave better seed yield over control."
- Validation of the "Standardization of Seed production technology in Green Manure Crops of Sunnhemp".: Foliar application of DAP (20gm/L of Water) +Zinc Sulphate (5gm/L of Water) +Boric acid (3gm/L of Water) (%) gave max yield.
- Adoption of direct seeded rice cultivation: A method demonstration on direct seeded rice cultivation in low land situation covering an area of 0.5 acres of land was done with tractor-drawn fertilizer-cum-seed drill. It significantly reduces the cost of cultivation by reducing thecost for seedbed preparation and transplanting of seedlings. It accounts for 40% reduction of overall rice cultivation with an increase of 15-20% yield as compared to conventional practice.
- Production technology for good quality seed of paddy, pulses (green gram, lentil, black gram, lathyrus etc.) and oilseed crops (rapeseed-mustard) for farmers in the locality.
- Elite salt-tolerant germplasm of paddy and foundation seeds of paddy have been developed and provided to the farmers
- Production technology for good quality seed of paddy, pulses (green gram, lentil, black gram, lathyrus etc.) and oilseed crops (rapeseed-mustard) for farmers in the locality.
- Identified promising mungbean cultivars i.e., 'PM 05, IPM 99-125, Sukumar, Samrat'; black gram cultivar i.e. 'Sarada, PANT U31'suitable for cultivation during summer season in coastal belt.
- Use of Jute Agro Textiles as soil conditioner towards improvement of soil health through the processes of increasing the organic carbon, moisture availability (50 % water saving) and stabilization of soil aggregation on vegetables crops has been recommended.
- Three bacterial strains, Bacillus clausii (AOB5), Achromobacterxylosoxidens (AOB7) and Aeromonas cavie (AOB8) were isolated from poultry-cum-fish and duck-cum-fish farming homestead ponds and identified as potential nitrifiers in this organic manure treated ponds.

- Work has been done regarding validation of presence of genomic region coding serine/threonine proteinkinase controlling seed size in Medicago trancatula in lentil as well as detection of nucleotide polymorphism (SNP) between the microsperma (small seeded) andmacrosperma (large seeded) lentil regarding serine/threonine protein kinase sequence.
- Seven IC no. i.e., IC- 575540 to IC 575546 have been obtained against seven promishing Breeding lines of rice i.e CHR 1 to CHR 7 respectively during 2009. Elevan IC numbers are obtained from the NBPGR, New Delhi, against the eleven promising New Breeding Lines of rice, i.e., CHR 8 to CHR 18. The IC No. are IC- 0589904 to IC- 0589914 for CHR 8 to CHR 18 respectively.
- Finding permissible limits of arsenic in soil and irrigation water with regard to accumulation
 in rice grain and dietary risk- permissible limit of available arsenic (As) in soil from North
 24 Parganas, South 24Parganas Nadia, Murshidabad and Malda districts and irrigation water
 against permissible limit of as in rice grain cv. IR-36 was computed using Tobit regression
 model considering 0.5 and 1.0 mg/kg As in rice grain as the threshold values as regard to
 human dietary consumption.
- Wheat cultivation has been promoted inthis zone and few suitable varieties of wheat like, HD 3249, HD 3086, HD 2967, DBW187, HD 2733 K 0307, K 1006 and NW 5054 (32-40 q ha-1) are being cultivated inBirbhum and some other areas of this zone.
- Intercropping of jute in zero till green gram under deficit irrigation management
- Productivity of Indian mustard enhances 25to 42 % by improving water use efficiency of mustard under rainfed situation with the use of Hydrogel @ 2.5 kg ha-1 at the time of bed preparation and application of salicylicacid 200 ppm at flowering and siliqua formation stage.
- Studies are going on after the introduction (six-month observation) of lac cultivation atnew area.
- Enhancing pulsed production for food and nutritional security improvedlivelihoods and sustainable agriculture in West Bengal under ICARDA program.
- Finding permissible limits of arsenic in soil and irrigation water with regard to accumulation in rice grain and dietary risk- permissible limit of available arsenic (As) in soil.

- Breeding for yield, earliness and quality traits in Indian mustard under heat stress condition of red and laterite zone of West Bengal: Some of the Indian mustard has been screened for yield, earliness and quality traits under heat stress condition.
- Some of the genotypes have been identified as heat tolerant Evaluation ofvarietal performance of Lentil varieties under red and laterite zone of W.B.
- Performance of mustard crops under various doses of SSP fertilizers in Raghunathpurunder red & laterite zone of W.B.
 Paddy seed production of the varieties like Lalat,Gobindobhog, CSR, Pratiksha, Rajendra bhagabati have been enhanced
- 16 Prebreeding lines and One semi dwarf line of cashew have been developed and successfullyestablished.
- Technology with bio-formulations wasstandardized for increasing yield of groundnut
- Seed inoculation with phosphorus buildup strains of DGRC1 or DGRC2 is beneficial for enhancing the pod yield of groundnutand Some of the promising entries have been identified from initial and advancedvarietal trial materials in terms of high pod yield.

6.6.3.4. Research Publication: Provide the list of research articles (NAAS ranking 5.00 or more) published in National and International Journals (only based on the work conducted in the University).

2016 : Total = 551 Link:

https://scholar.google.com/scholar?q=%22Bidhan+Chandra+Krishi+Viswavidyalaya%22&hl=en&as_sdt=0%2C5&as_vis=1&as_ylo=2016&as_yhi=2016

2017 : Total = 708 Link:

https://scholar.google.com/scholar?q=%22Bidhan+Chandra+Krishi+Viswavidyalaya%22&hl=en&as_sdt=0%2C5&as_vis=1&as_ylo=2017&as_yhi=2017

2018 : Total = 610 Link:

 $\label{eq:linear} https://scholar.google.com/scholar?start=180&q=\%22Bidhan+Chandra+Krishi+Viswavidyalaya\%22&hl=en&as_sdt=0,5&as_ylo=2018&as_yhi=2018&as_vis=1$

2019 : Total = 512 Link:

https://scholar.google.com/scholar?q=%22Bidhan+Chandra+Krishi+Viswavidyalaya%22&hl=en&as_sdt=0%2C5&as_vis=1&as_ylo=2019&as_yhi=2019

2020 : Total = 666 Link:

https://scholar.google.com/scholar?start=180&q=%22Bidhan+Chandra+Krishi+Viswavidyalaya %22&hl=en&as_sdt=0,5&as_ylo=2020&as_yhi=2020&as_vis=1

6.6.3.5. Innovation and Best Practices: What are the innovative efforts of the University that help in its excellence in research?

6.6.3.5. Innovation and Best Practices:

Technologies, start-up program and ventures for farmers, stakeholders, SHGs

- Scaling up Zero tillage technology in potato for augmenting farm income and employment in Central saline Zone
- Oat-Lathyrus cropping System: A promising and Sustainable process in Kharif Fallow of West Bengal
- Production and use of enriched vermicompost for mitigation of arsenic contamination vis-àvis income generation in arsenic-stricken villages of West Bengal
- Cassava/Tapioca Starch and flour based Micro Food Processing for SHGs and entrepreneurs
- Establishment of Cashew Nurseries for the livelihood development of SHG and FPO
- Ready to use yeast based liquid bio-control product to manage post-harvest diseases of fruits.
- Herbal pesticide formulations for Sustainable crop protection

Incubation centre for Agri-Business under RIDF:

- Ventures: Organic plate from Arecanut leaf
- Production of Banana chips
- Processing of spices
- Production of Mushroom spawn
- Micropropagation of banana
- Vermicompost production
- Organic matter decomposes and biopesticides

Technologies for service to the farmers

- RIDF XX-Project: "Mobilizing local resources for improving quality of life of rural people of Sundarban Delta" has been implemented at RRS, Kakdwip.
- RIDF Project on Infrastructural support for establishment of laboratory for testing soil and water quality Soil testing Laboratory developed

- RIDF project on Transfer of Innovative Fruit Based Agro-forestry Models for Crop Production & Poverty Alleviation of Farming Community in Red & Laterite Zone of West Bengal.
- Infrastructure developed: Farmers' hostel, farmers' training hall, Soil testing lab and Agricultural development and livelihood security for the farming community of Raghunatpur-l, Purulia district.

6.6.3.6. IPR Cell/ ITMU:

BCKV does not have IPR Cell at present, the initiative has been taken to include in the amendment process of the satute. BCKV has MoU with National Research Development Cooperation (NRDC), Enterprise of Ministry of Science and Technology, Govt. of India and signed on 16th May 2011 for 10 years. The renewal of the MoU with NRDC is in progress for 2020 to 2031.

As per the MoU, BCKV and NRDC recognize the respective strength of the two organizations and accordingly agree to cooperate in the development of technologies and their successful transfer to industry for commercial exploitation and socio-economic benefits.By MoU, NRDC agrees to bear all the expenses in obtaining the patent(s)/design/copyright/ trademarks etc. In Indian on the invention(s)/process (es)/technology (ies) assigned to NRDC.

6.6.3.7. Central Instrumentation Unit: Is there a Central Instrumentation Unit in place? What are the facilities available in the unit? **Yes**

The centrally facilities for advanced research and service laboratories:

- Central Instrumentation Centre, Kalyani
- Arsenic Research lab, Kalyani
- Quality Control APEDA Laboratory, Mohanpur
- Model Center for Floricultural Excellence, Mondouri
- Farm Machinery Training and Testing Institute, Mohanpur
- Advanced Plant Virus Research Centre, Kalyani

Equipment under central facilities in APEDA, Central Instrumentation, advanced Virology laboratory:

Sl. No.	Name of the Instrument	Make	No.
1.	GC- MS/MS	Agilent	1
2.	LC – MS/MS	Agilent	1
3.	AAS	Varian	1
4.	UV-VIS	Varian	1
5.	Rotary Vacuum Evaporator	Tokyo Rikakikai	2
6.	Shaking Incubator	Shanghai Shenhong	1
7.	LC – MS/MS	Waters	1
8.	GC- MS/MS	Varian BV	1
9.	HPLC with PDA and Fluorescence Detectors	Jasco	1
10.	GC-ECD	Agilent	1
11.	Homogenizer	Kinematica AG	2
12.	N-Evaporator	Crescent Scientific	1
13.	Ultra Centrifuge	Brakeman Coulter	1
14.	Super Critical Fluid Extractor	Jasco	1
15.	SPE with Cartridges	Varian	2
16.	Gas Generators for N2, H2, and Air/O2	Domnick Hunter	2
17.	Gas Generators	H ₂ - 1	-
18.	Gas Generators	$N_2 + Air - 1$	
19.	Generator 50 KVA	Generator 50KVA, Make: Kirloskar	1
20.	ICP-OES		1
21.	AAS	Perkin Elmer	2
22.	Real time PCR (q PCR)	Agilent	
23.	Ultra Centrifuge (50,000 rpm)		2
24.	Fluorescence Microscope		1
25.	PCR, Gradient PCR	Eppendorf, Applied Biosystem	5
26.	Gel documentation system	Vilber Lour Mut Applied Biosystem	2
27.	Cold centrifuges		2
28.	Ultra-Deep fridges (-80°C, -50°C, -25°C)		4
29.	DNA concentrator	Eppendorf	1
30.	Gel Electrophoresis		5

31.	Digital Water Bath	2
32.	Spectrophotometer	2

6.6.3.8. Global support

Sl. No.	Title			Duratio	Duration		
		16-17	17-18	18-19	19-20	20-21	
1	Cropping systems intensifications in the salt-affected coastal zone of Bangladesh & W.B, ACIAR	5 yrs					
2	Enhancing lentil lathyrus &Chckpea productivity through improved technology under rice fallow areas of W.B. ICARDA	4 yrs					
3	Enhancing pulses production for food & nutritional security improved livelihoods & sustainable agriculture in W.B ICARDA		3 yrs				
4	Genetics improvement of lentil for rice fallow ecology: converging nutrient use efficiency for stemphylum blight registance ICARDA			3 yrs			
5	Economic impact assessment of improved technology adopted by lentil growers in WB, ICARDA				3 yrs		
6	Identification and genetic analysis of lentil mutants for Stemphylium blight resistance with adoptive plasticity					4 yrs	
7	Circular urban cultivation systems with re- usable textile growing substannces (Circultex) Indo-German					1 st yr	
8	Indo- UK collaborative project on Detoxed grass pea: sustainable sustenance for stressful environments funded by Department of Biotechnology	2 nd yrs	3 rd yrs				

6.6.4. Extension Support

6.6.4.1. The Extension Education Council

The Extension Education Council formulates the policies for extension education activities being carried out in co-operation with the concerned government departments and institution. The Vice-Chancellor is its ex-officio Chairman and the Director of Extension Education is ex-officio Secretary. It consists of both ex-officio and nominated members. The term of office for the nominated members is for three years. All the Deans of Faculty, Dean of Post Graduate Studies, Director of Research and Farm, Directors of the State Departments of Agriculture, Animal Resource Development, Veterinary Services and Fisheries, ICAR and Govt. of India representatives, Head of the Department of Extension Education, five nominated by the Executive Council are its members. The Extension Education Council frames necessary guidelines for the purpose of discharging responsibilities with regard to Extension Education and arranges annual evaluation of the extension education projects for taking final stock by the Executive Council.

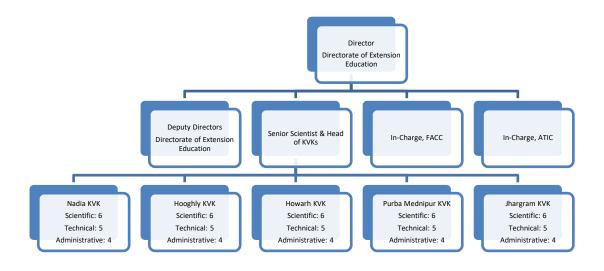
6.6.4.2. Directorate of Extension Education:

The Directorate of Extension Education performs as the apex facilitating organ to take care of outreaching various clientele groups and other stake-holders across the South Bengal districts of the states through its various delivery units like the Krishi Vigyan Kendras (KVKs), Agricultural Technology Information Centre (ATIC) and the Farmers' Academy and Convention Centre (FACC).

Outreach Delivery Systems

- Krishi Vigyan Kendras (KVKs) at Nadia, Hooghly, Howrah, East Medinipur and Jhargram districts of West Bengal are attached to the Directorate,
- Farmers' Academy and Convention Centre (FACC)
- Agricultural Technology Information Centre (ATIC) at Head Quarter i.e., Mohanpur, Nadia, West Bengal.
- Regional Research Stations & Sub-stations Extension
- Farm Information & Publication Unit at Mohanpur
- Exhibition Unit

Staff Pattern



Krishi Vigyan Kendra (KVK)

The University owns five KVKs for the districts of Nadia, Hooghly, Howrah, east Medinipur and Jhargram. While the KVK for the district of Nadia got established in 2004, Howrah and Hooghly KVKs subsequently came up in 2005, East Medinipur established in 2017 and Jhargram KVK adopted in 2021 with the vested responsibility to perform as district level knowledge-cumtechnology facilitation centres in agriculture and allied pursuits. Eight KVKs situated in the southern part of Bengal also run with the technological backstopping of this Directorate. In accordance with the mandates, the lead functions of the KVKs are as follows:

- Identification, assessment, refinement, validation and assimilation of location vis-à-vis target groups specific technology options for increased productivity, profitability and equitable targeted growth of the district
- Organizing Front Line Demonstrations for effective scaling up and assimilation of demand driven technologies as per locational suitability
- Pertaining long and short-term vocational training courses in agriculture and allied fields for the practicing farmers, rural youth and farm women
- Capability up-gradation of extension functionaries
- Production and supply of quality seeds and planting materials

For better functional efficiency and impact, the KVK system of the Viswavidyalaya works in close coordination with the Line Departments associated with development of the farming community.

KVK 1: Nadia Krishi Vigyan Kendra

Nadia, a district of West Bengal is situated in its eastern side with its headquarters in Krishnanagar. Geographically, the district lies at 23°47'N latitude, 88°56'E longitude, in the new alluvial gangetic plains of West Bengal.

Infrastructures available with Nadia KVK:

Training Hall (2 nos.), Conference Hall/ Meeting Room (1 no.), Soil Testing Laboratory (1 no.), Plant Diagnostic Laboratory (1 no.), Trichoderma production Laboratory (1 no.), Library (1 no.), Farmer's Hostel (1 no.), Farm Godown with threshing floor (1 no.), Farm Cottage (1 no.)

Demonstration units developed by Nadia KVK for technology show case-

- > Integrated Farming System Unit (Dairy, Goatery, Poultry, Fishery)
- > Poly house for Orchid flower and sapling production (1 no.)
- > Poly house for high value vegetable production (1 no.)
- Shade net house for Black pepper sapling production (2 nos.)
- Insect proof rapid seedling production unit (1 no.)
- Micro irrigation system with drip, sprinkler and fogger
- Nursery Hardening Unit (1 no.)
- Mother blocks of Mango, Guava, Lime and Banana
- Mushroom spawn production unit (1 no.)
- Compost and vermin compost production unit (1 no.)
- > Azolla production unit (1 no.)
- Vertical Farming units (For vegetables and ornamental crops)
- Roof top water harvesting structure
- > Multi-tier cropping system with Arecanut, Black pepper, Turmeric
- > Orchard of Malta orange, Guava, Coconut, Lime, Banana

KVK 2: Hooghly Krishi Vigyan Kendra

Hooghly KVK situated at its district headquarter Chinsurah (Chuchura). The geography location of the district is Latitude: 22 55' N Latitude: 88 24' E, under New alluvial zone of southern Bengal.

Infrastructures available with Hooghly KVK:

Training Hall (2 nos.), Conference Hall/ Meeting Room (1 no.), Soil Testing Laboratory (1 no.), Mushroom spawn production Laboratory (1 no.), Library (1 no.), Farmer's Hostel (1 no.), Farm Godown with threshing floor (1 no.), Farm Cottage (1 no.)

Demonstration units developed by Hooghly KVK for technology show case-

- Integrated Farming System Unit (Dairy, Duckery, Poultry, Fishery)
- > Poly house for high value vegetable production (1 no.)
- Shade net house for seedling production (2 nos.)
- > Micro irrigation system with drip, sprinkler and fogger.
- Nursery Hardening Unit (1 no.)
- Mother blocks of Mango, Guava
- Mushroom spawn production unit (1 no.)
- Compost and vermi compost production unit (1 no.)
- Azolla production unit (1 no.)
- Vertical Farming units (For vegetables and ornamental crops)
- Orchard of Mango, Banana

KVK 3: Howrah Krishi Vigyan Kendra

KVK is situated at Jagatballavpur village under Jagatballavpur Block within Howrah Sadar Subdivision and falls under the New Alluvial and Old Alluvial Agro-climatic zone of West Bengal. Jagatballavpur is located at 22°40′44″N 88°07′02″E.

Infrastructural facilities available:

Farmer's training hall, Conference Hall, Farmer's hostel, Farm godown, Threshing floor, Soil Testing Laboratory, Mushroom spawn production laboratory, Library, Farm implement shade, Automated weather station

Demonstration unit developed by Howrah KVK:

IFS Unit	Orchid House
Mushroom Production Unit	Crop cafeteria
Vermicompost Production Unit	Poultry Unit
Seedling Production	Goatery Unit
Fishary Unit	Dragon Fruit Unit

Azolla Production Unit

Vertical gardening unit

Medicinal Garden

KVK 4: PurbaMednipur Krishi Vigyan Kendra

The KVK is located at Mulakhop, Dayaldasi, Nandakumar, PurbaMedinipur (22.1794°

N, 87.8708° E) under the New Alluvial & Coastal Saline Zone of West Bengal.

Demonstration units developed by PurbaMedinipur KVK for technology show case-

- Pond based Integrated Farming System Unit (Poultry, Duckery, Fishery)
- Low-cost Poly house for high value vegetable cultivation (1 no.)
- Low-cost Poly tunnel for vegetable seedling production (1 no.)
- Medicinal plant block (1 no.)
- Mushroom production unit (1 no.)
- Compost and vermin compost production unit (1 no.)
- Azolla production unit (1 no.)
- Dragon fruit progeny block
- Crop cafeteria (1 no.)

KVK 5: Jhargram Krishi Vigyan Kendra

The KVK Jhargram is located at 22.45° N 86.98° Eat Vill. - Kadamkanan, P.O & Distt.: Jhargram, West Bengal – 721507 under Red & Lateritic Zone of West Bengal. The KVK has been adopted by the University in the year 2021.

MONITORING METHODOLOGIES OF THE DIRECTORATE TO THE KVKs

The Director of Extension Education and other officers made by made several visits to the KVK to monitor different activities:

KVK Activities:

Sl. No.	Year	Activities	No. of Activities
1.	2012-13		30
2.	2013-14		34
3.	2014-15	OFT, FLD& Others	26
4.	2015-16	OFT, FLD& Others	23
5.	2016-17		29
б.	2017-18		74



7.	2018-19	74
8.	2019-20	79

Technologies Implemented at KVKs:

Sl. No.	Year	No. of Technology	No. of KVK
1.	2012-13	7	3
2.	2013-14	4	3
3.	2014-15	5	3
4.	2015-16	20	3
5.	2016-17	20	3
6.	2017-18	23	4
7.	2018-19	21	4
8.	2019-20	27	4
9	2020-21		

Publication of Technology Inventory at DEE & KVKs:

Sl. No.	Year	Field	No. of Publications
1.	2012-13		8
2.	2013-14		10
3.	2014-15		7
4.	2015-16	News Bulletin / University Bulletin / Leaflets /	19
5.	2016-17	Brochures / Farm Publications	24
6.	2017-18		26
7.	2018-19		25
8.	2019-20		19

Farmers' Academy and Convention Centre (FACC)

The University imparts both institutional as well as off-campus training through its network of various training units attached to the KVKs, Regional Research Stations and ISOPOM cell. In order to further strengthen its on-campus training curricula, a Farmers' Training Centre (FTC) was set up in 1989 under operational control of the Directorate of Extension Education. For the

very purpose of scaling up the institutional training programmes, subsequently in 1995, the said Farmers' Training Centre was shifted to its present premises, which has gradually been transformed as a self-contained training complex to perform as operational hub for planning and management of institutional training programmes of the University. It is now well equipped to run four training courses at a time with comprehensive provision for interactive lectures through ICT appliances. It can house 130 inmates of which there has been a provision of 20 A.C. beds to conduct orientation and refresher courses for the Agri-Executives, Bank Officials and Corporate Managers on emerging areas of expert agriculture; 48 beds for the Govt. and other Institutional Officers attached to Technology Transfer vis-à-vis rural development and rest 46 are dormitory seats for farmers, SHG members etc. The FACC has a separate state of the art computer lab for pertaining training on computer literacy as well as ICT related vocational courses. Due to excellent facilities, this training centre has by now become to be an extremely busy venue for conducting various short and long duration courses with receipt of fund support from various government, nongovernment, private sector organizations as well as NGOs, engaged in the task of agricultural vis-à-vis rural development. Further, the Farmers' Training Centre has been identified by the National Institute of Management of Agricultural Extension (MANAGE) as one of the 58 Resource Centres in the country under Agri-clinics and Agri-business Management Scheme being jointly sponsored by the Ministry of Agriculture, Govt. of India, Small Farmers' Agri-business Consortium (SFAC) and NABARD. Under the aegis of said scheme, a fully equipped Video Interactive Communication System has been installed in a dedicated 30-seated Video Conference Hall to train up the prospective graduate agri-preneurs. The core functions of the training unit are as follows:

- Identification of needed areas of training
- Modulation of training programmes in terms of content, methodology and duration
- Selection of suitable Centres, Departments and course Directors for conducting various training programmes, coordination between sponsoring agency and the university
- Processing, development and documentation of appropriate technical materials for training
- Monitoring of the effectiveness of the training programmes and redesigning of those as per feed-back

Agricultural Technology Information Centre (ATIC)

The Agricultural Technology Information Centre schemes has been launched by ICAR with an intention of establishing a single window system to the farmers and other stakeholders for solutions to their location specific problems and make available all the technological information along with technology inputs and products for testing as well as use them at their level. The ATIC in the Viswavidyalaya is yet to become fully operational, activities at skeleton scale have already been initiated during the period under reporting. The following tables provide an account of achievements in respect of various services extended through ATIC. Various services extended through ATIC, ranges from offering the benefit of diagnostic services, sale of technological inputs among farmers, supply / sale of farm publications and organizing farmers' visit to various units as per interests of the farmers etc. The main focus of ATIC is

- To extend diagnostic and advisory services among the farmers through a team of Interdisciplinary scientists towards solving their problems.
- To provide consultancy services among the prospective entrepreneurs, aiming at establishing Agri- business enterprises of their own
- To facilitate easy access to the quality technological products and information materials development by the Viswavidyalaya
- To develop a self-sustaining process of resource generation through sale of various products of the Viswavidyalaya.
- To provide a platform for effective Institution-Village linkage and feed-back through the entire process.

ACTIVITIES OF ATIC:

• Details of Farmers' Visit at ATIC:

Sl. No.	Year	Purpose	No. of Farmers
1.	2012-13		5732
2.	2013-14		6954
3.	2014-15	Technology Information, Products, Museum,	5335
4.	2015-16	Information in Training Courses etc.	7123
5.	2016-17		8312
6.	2017-18		8355



7. 2018	7765
8. 2019	7575

• Publications Sold by DEE at ATIC:

Sl. No.	Year	Number of Publication	Amount (Rs.)
1.	2012-13	2950	46,500.00
2.	2013-14	3125	46,675.00
3.	2014-15	3321	56,186.00
4.	2015-16	6205	94,680.00
5.	2016-17	5325	1,06,500.00
6.	2017-18	8301	1,66,020.00
7.	2018-19	3420	68,400.00
8.	2019-20	2250	45,000.00

• Materials Sold by DEE at ATIC & Exhibition (Fairs):

Sl. No.	Year	Item	Amount (Rs.)
1.	2012-13		1,45,600.00
2.	2013-14		2,15,000.00
3.	2014-15	Soods Dianting Materials Livestock	2,55,900.00
4.	2015-16	Seeds, Planting Materials, Livestock, Vegetables, Fruits, Bio-products, Food Items	2,89,780.00
5.	2016-17	(Rice, Vegetable Oil etc.)	3,24,224.00
6.	2017-18	(Rice, Vegetable Officie.)	4,48,586.00
7.	2018-19		1,94,900.00
8.	2019-20		2,39,375.00

Farm Information and Publication Unit

The unit performs various activities to develop, document and effective dissemination of desired information to the clientele by way of maintaining close coordination with the centrally existing Information, Press and Publicity Cell of the University. Following are the important functions of the unit:

- Publication of package of Practices in Agriculture,
- Horticulture and Animal Husbandry for different agro-climatic zones Printing of folders on farm practices in vernacular language
- Publication of booklets and monographs on special technological practices having wider commercial vis-à-vis campaign value
- Bringing out University FARM MAGAZINE (in Vernacular) and NEWSLETTER (in English) on quarterly basis
- Providing news release to Press, AIR and Doordarshan time to time
- Telecasting various activities of the university through various channels of doordarshan
- Updating as well as new Production of display visuals, exhibition materials and video documents
- Arranging Exhibitions and Kissan Melas in the campus and the rural areas in coordination with KVKs and EEUs

Publication of Directorate of Extension Education

Sl. No.	Name of Publication
1.	Krishi Bidhan (News Magazine)
2.	Gharoyasabjibagan
3.	Dhan Chas
4.	MurgiPalan
5.	Broiler Palan
6.	Konda Fashler Chas
7.	Narkel Chas
8.	Kola Chas
9.	Siter Sabji
10	Ful chas
11.	Gopalan
12.	UparjanerTukitaki
13.	MatirSwasthaRakha
14.	Gobidabhog Chas

Exhibition Unit

The unit plays a complementary role to the Farm Information and Publication Unit so as to ensure effective dissemination of desired information to the intended stake-holders. It performs following important functions:

- Updating as well as new Production of display visuals, exhibition materials and video documents
- Undertaking lead role in arranging and organizing Exhibitions and Kissan Melas at the campus and the rural areas in coordination with KVKs and other relevant units
- Rendering technical assistance to KVKs, EEUs and ISOPOM cell in their bids to hold field and farmers' days

Contribution in academic programmes of the University: Facilities developed through various extension activities help the students in getting exposure of various outreach programme, organising farmers training programme, conducting RAWE programme etc.

6.6.4.3. Extension Planning and Technological Impact:

Extension Coordination and technology dissemination Mechanism

The Director, Directorate of Extension Education coordinates the entire technology dissemination progarmme of the southern part of the West Bengal to the following g mechanism:

Being the head of the main extension system of south Bengal districts, the Directorate is empowered to intervene into the technological backstopping of all the KVKs of 13 districts. The Directorate operates in the KVKs through scientific advisory committee (SAC) meeting and providing advisories while formulating the action plan of KVK.

Directorate also plays a lead role in providing updated technologies evolved through the University research system by organizing human resource development programmes of KVK scientists and extension personnel associated with the development of agriculture in the state and outside the state.

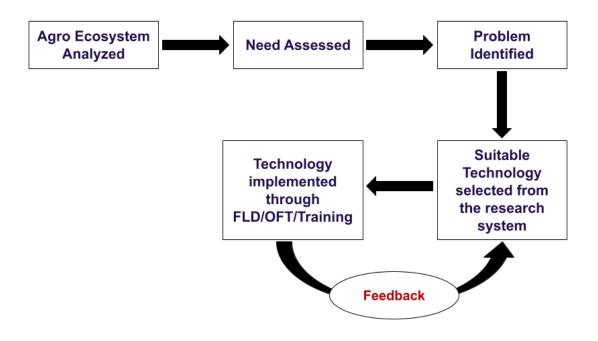
Research and Extension system interface Workshop / Capacity Building Programme Organized:

Sl. No.	Year	No. of Workshop	No. of KVKs Involved	No. of Participants
1.	2012-13	4	11	90
2.	2013-14	4	10	65

3.	2014-15	3	10	62
4.	2015-16	2	9	45
5.	2016-17	2	9	32
6.	2017-18	2	11	91
7.	2018-19	1	4	120
8.	2019-20	1	11	45

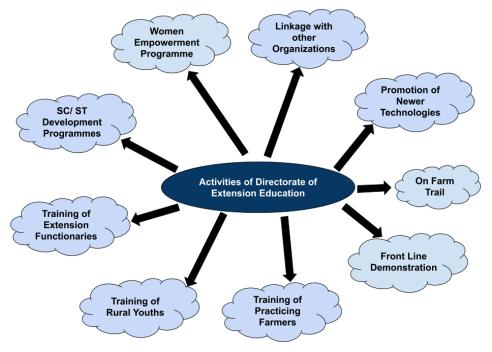
The establishment also supplies proven technologies to the state line department, farmers clubs, FPOs, FPCs, reputed NGOs through different publications, communication and skill development training programmes.

Field level feedback of problems and prospects are also accumulated and supplied by the Directorate to Research system of the University and the Research system of the state as well.



The Extension Directorate has been playing an important role in transfer of technology to farmers since inception through it's KVKs and other extension systems. Regarding technology transfer, it is essential to adopt and upgrade the technologies according to changing needs of the farming community. Krishi Vigyan Kendras (KVKs) conduct a variety of training programmes

for the benefit of farmers, rural youth and farm women of different districts under the jurisdiction of the University. The intervention of any KVK starts with the identification of training needs of the target group through baseline survey and agro-ecosystem analysis. Numerous technological interventions are also planned based upon the assessment of training needs.



Activities undertaken by Directorate of Extension Education

Sl. No.	Activities	Magnitude		
1.	On Farm Trial	281 No.		
2.	Front Line Demonstration	3415.2 ha/ 24,949 participants		
3.	Training of Practicing Farmers	94,078 participants		
4.	Training of Rural Youths	12,780 participants		
5.	Training of Extension Functionaries	12,977 participants		
6.	Skill development training	6,463 participants		
7.	Successful entrepreneurs developed	1,103 participants		
6.	Promotion of Newer technologies	127 no		
7.	SC/ST development programmes	41,595 participants		

Table: Technological	intervention through	different approaches
Tublet Teennological	meet vention in ough	amorene approaches

8.	Women Empowerment programmes	6,655 participants
9.	Seed Production at KVK farm	2,948.18 q
10.	Planting Material Produced	10,53,427 nos
11.	Participatory Seed Production	5,116.22 t
12.	No. of soil health card issued	2978

Mechanism for studying impact

Impact of the activities has been analysed to know the effectiveness of the different interventions taken by the respective extension units.

While doing so, the initial status, before introduction of any technology was studies with personal contact of the stakeholders. After completion of the intervention, at least three year later, another survey was conducted for respective technologies.

Analysing the information so gathered, the impact of the technologies were obtained for further assessment or refinement and necessary feedback to the source of the technology.

 Table: Impact of technology intervention

Sl. No.	Activities	Scale of adaptation
1.	Promotion of improved high yielding paddy variety Prateeksha (IET-15191)	3850 ha
2.	Promotion of Nematode resistant tuberose variety ArkaPrajjwal	6940 ha
3.	Promotion of protected cultivation (Flower, High value crops)	213 units (1000 sq.m./ 500 sq.m.)
4.	Plug tray &Off-season vegetable seedling raising through polytunnel	253 ha
5.	Banana bunch cover	22 ha
6.	Promotion of tissue culture plant material	465 ha
7.	Promotion of cucurbits crops in tralis	3217 ha
8.	Promotion of Guava bending technology for increasing yield	475 ha

9.	Low-cost onion storage structure	15 unit
10.	Onion Seed Production	533 ha
11.	Ethrel application in Cucumber for increasing production	1254 ha
12.	Improved technology of Potato late blight management	7564 ha
13.	Additional income generation through mushroom farming	350 unit
14.	Improved agro-techniques of elephant foot yam (Var. Bidhan Kusum)	47.5 ha
15.	Protective measures against blast of summer rice	176.6 ha
16.	Improved packages of practice of Ground Nut (Var. TG51)	225.5 ha

Sl. No.	Activities	Scale of adaptation
17.	Cultivation of Swarna Sub-1 under waterlogged condition	145.5 ha
18.	Protective measures against hollow heart of Cauliflower	54.5 ha
19.	Application of Gibberellic Acid to increase yield in Cucurbitaceous Crop	52.0 ha
20.	Backyard RIR chicken rearing as a part of village livelihood	856.0 unit
21.	Improved packages of practice of sesame (Var. Rama)	110.0 ha
22.	Media Coverage	135 no.

Resource and Revenue Generation by KVKs (In Lakh) (2010-2020)

Item	Nadia KVK	Hooghly KVK	Howrah KVK	Purba Medinipur KVK	Total
Resource Generation	89.48	151.49	125.64	241.09	607.7
Revenue Generation	43.29	9.20	3.28	1.82	57.59

1. Attracting and Retaining of Youth in Agriculture (ARYA)

The ARYA project has been implemented by Hooghly KVK at Hooghly district keeping its specific objectives for sustaining and maintaining rural youth in agriculture. The project has

four enterprises namely Nursery raising of vegetables, Backyard poultry production, Mushroom cultivation and Vermi-compost production technology. Total 100 rural youths were selected, 25 from each enterprise, from the whole district after though screening using extension tools like group discussion, training need identification, etc. and the youths are energetic, hard-working.

2. Mera Gaon Mera Gaurav

An innovative initiative "Mera Gaon Mera Gaurav" has been implemented to promote the direct interface of scientists with the farmers to hasten the lab to land process. The objective of this scheme is to provide farmers with required information, knowledge and advisories on regular basis by adopting villages.

Under this scheme, all the KVKs owned by the University working on several villages of the concerned districts. In these villages, all types of mandated activities including OFTs, FLDs, CFLDs and advisory services are rendered by the KVKs. Each KVKs have developed teams of scientists to do all activities in these villages under the scheme.

Name of the	No. of villages adopted under "Mera Gaon Mera Gaurav" initiative							
Unit	2015	2016	2017	2018	2019	2020	Total	3 C
NadiaKVK	4	4	4	4	5	5	26	luster
HooghlyKVK	5	5	5	5	5	5	30	Frontlin
Howrah KVK	4	4	5	4	4	4	25	e
PM KVK	_	_	_	-	2	4	6	Demons
Total	13	13	14	13	16	18	87	tration
								Progra

mme

Cluster Frontline Demonstration were conducted to study the evaluating the performance of improved cultivar, seed treatment, sulphur application, diseases, insect and pest management on production as well as productivity and profitability of different pulses and oilseeds in the districts. All the KVKs owned by the University are performing CFLD on various crops continuously over last seven years. The productions and productivities of major pulses and oilseeds of the district has been increased significantly through this programme.

Status of CFLD on Oilseed and Pulses

Name of the Programme	Coverage
CFLD on Oilseed	1445.5 ha
CFLD on Pulses	808.7ha

4. Swachh Bharat Mission

All the KVKs owned by the University are performing Swachh Bharat Mission since its inception to make the India clean. The KVKs regularly clean its campus and farm areas as well as with the help of local school children, farmers, farmers' club members clean the villages, other institutions etc. The KVK personnel always campaign for Swachh Bharat Mission. The status of Swachh Bharat Mission is as follows:

Name of the unit	No. of programme	Total Participants
H.Q. & FACC	4	1150
Hooghly KVK	53	4753
Nadia KVK	42	3694
Howrah KVK	47	5112
Purba Medinipur KVK	13	1790
Total	159	16,499

5. PPV& FRA

Nadia KVK, Hooghly KVK and Howrah KVK have worked under the scheme for several years and took pivotal role in registration of local germplasm of paddy.

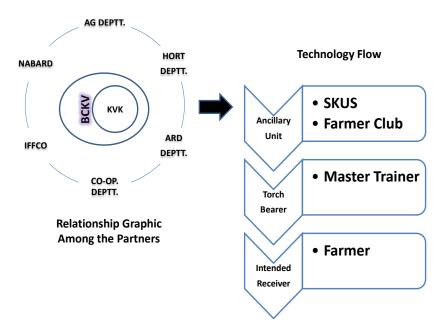
Status of PPV & FRA registration:

Name of the Unit	No. of Indigenous varieties	No. of certificate
	communicated	received
Nadia KVK	40	4
Hooghly KVK	24	-
Howrah KVK	7	-
Total	71	4

6.6.4.5. Innovation and Best Practices

1. Development of Technology proliferation model

Participatory Technology Proliferation Model for Nadia



2. Identification of Indigenous Technical Knowledge (ITK), refinement and proliferation

- Bending of Guava: To improve yield and productivity and need based harvest scheduling.
- Cultivation of Curcurbits in trellis.
- Tamarind seed dust as aquatic herbicide @37.5 kg/ha
- Top cover of Beletvine "Boroj" using paddy straw/ jute straw/ cloth to get rid from winter leaf fall and diseases.
- Identification of Farmer's Innovation and best practices and Innovative Farmer's meet.
- Preparation of Vision and Mission Documents.
- Development of Road Map on Horticulture Development and Organic Farming.
- Preparation of district wise technology compendium.
- Publication of season-based district wise crop/enterprise advisories.
- Publication of District level contingent planning.
- Micro crop planning at Block and panchayel level.
- Crop Cafeteria, Demo units and Models at Directorate, KVK farm and other regional units.
- Online evening training of farmers through NGOs, FPOs, Farmer's Cluster and Private Organisation.
- Short Video preparation and dissemination through Facebook pages and Whattapp grs.
- Website and mobile based SMS service.
- Dedicated Whattapp grs viz. KVK/Centre wise, FPO/NGO/SKUS based, Subject domain based.

6.6.4.6. Consultancy/Certification/Testing

1. Diploma in Agricultural Extension Services for Input Dealers (DAESI)

The Extension directorate has been implementing Diploma in Agricultural Extension Services for Input Dealers (*DAESI*) course in collaboration with SAMETI and MANAGE. 5 units under the directorate are implementing the course as Nodal Training Institute (NTI) viz. FACC, Hooghly KVK, Nadia KVK, Howrah KVK and Purba Medinipur KVK.

Name of the NTI	No of batch completed	Ongoing batch	Total Participants	Resource Generation
				(In Lakh)
FACC	4	2	240	48.00
Hooghly KVK	7	2	360	72.00
Nadia KVK	4	2	240	48.00
Howrah KVK	3	2	200	40.00
Purba Medinipur KVK	-	2	80	16.00
Total	18	10	1120	224.00

The detail of the DAESI courses during last 5 yrs:

2. Consultancy and outreach programmes

Faculties, Scientists and Extension Specialists are participating several consultancy and outreach programmes for different stalkholders viz. private enterprise, young entrepreneurs, SKUS, NGOs, FPOs etc.

The summary of the consultancy and outreach activities of the extension directorate for last 10 yrs:

Sl. No.	Name of the activities	No. of the activities
1	Advisory Services	7893
2	Diagnostic visits	1189
3	Outreach programme as resource person	587
	Total	9669

6.6.5. Faculty and Staff Development

6.6.5.1. Recruitment and Promotional Avenue:

The recruitment of Teachrs/Scientists, Officers and Non-teaching employees is done through interview. The university publishes advertisement in the leading national and regional news papers and university website. The applications are scrutinized and candidates are shortlisted. The final selection is done through interviews. The composition of interview board for different posts is given below.

Selection Committee for the post of Professor Stage - 5

Vice Chancellor- Chairman

Chancellor's Nominee

Vice-Chancellor's Nominee

Two External experts of respective discipline (senior Professor/retired Professor)

Dean of respective faculty - Member

Selection Committee for the post of Associate Professor Stage - 4

Vice Chancellor- Chairman

Chancellor's Nominee

Vice-Chancellor's Nominee

Two External experts of respective discipline (Professor/retired Professor)

Dean of respective faculty - Member

Selection Committee for the post of Assistant Professor Stage - 1

Vice Chancellor- Chairman

Chancellor's Nominee

Vice-Chancellor's Nominee

Two External experts of respective discipline (Professor/senior Associate Professor)

Dean of respective faculty - Member

Selection criteria under CAS to the post of Professor Stage - 5

The selection process for CAS follows submission of Self-Appraisal in ICAR format by the candidate followed by interview. As per the criteria the minimum qualification for each category. For Associate Professor it is 100 out of 125. For Assistant .Professor to Professor minimum score is 75 from the self-appraisal assessment and viva-voce (interview)

6.6.5.2. Participation of Faculty in Symposia/Workshops:.

International / national Seminar / Symposium attended by the Students / Faculties of the University during the reporting period

- "Characterization and Economic Evaluation of Predominant Farming Systems in Birbhum District of West Bengal" paper submitted in the International Conference on "Agriculture, Food Science, Natural Resource Management and Environmental Dynamics: The Technology, People and Sustainable Development" Organized by Department of Agricultural Extension, BCKV and Krishi Sanskriti, New Delhi, India on 13th and 14th August, 2016
- Attended "IV Biennial Workshop of AICRP on IFS (XXXII of project)" at SKUAS&T, Jammu during 20-23 December, 2016 organized by ICAR-IIFSR and SKUAS&T Jammu
- 3. Best Presentation Award for oral presentation entitled "An Extent of Technological Change in Rice Cultivation over Eastern India during last four decades using Malmquist Index Approach" in International Conference on Economics and Development "Inclusive Economic Growth: Rethinking the Development Process in a Time of Paradigm Shift" 15th-16th June 2017, Colombo, Sri Lanka organized byThe International Institute of Knowledge Management (TIIKM) and University of Jawavardhana Colombo Sri Lanka
- 4. Participated in the National Workshop of "Potential application of quantitative analysis tools in farming systems using Farm Design" 17th-18th March 2017 at ICAR-IIFSR Modipuramorganised by ICAR-IIFSR ,Modipuram
- Participated in the CIMMYT-WURJOINT WORKSHOP on "Science of Farming Systems: Moving from Prototyping to Model Based Assessment and Designing of Sustainable and Resilient Farming Systems in South Asia" 22-24 August 2017 organised by CIMMYT-WURJOINT with ICAR-IIFSR, Modipuram, Meerut, U.P. India
- 6. A Study on Growth and Instability in Potato Production in West Bengal—paper submitted in the International Symposium on "ECO – EFFICIENCY IN AGRICULTURE & ALLIED RESEARCH" Organized by Crop and Weed Science Society (CWSS), Bidhan Chandra Krishi Viswavidyalaya (BCKV) on January 20-23, 2017
- A study on the performance of SHGs of Punjab -- paper submitted in the International Symposium on "ECO – EFFICIENCY IN AGRICULTURE & ALLIED RESEARCH" Organized by Crop and Weed Science Society (CWSS), Bidhan Chandra Krishi Viswavidyalaya (BCKV) on January 20-23, 2017
- Status of Retail Industries in India- paper submitted in the International Conference on "Agriculture and Allied Sciences: The productivity, Food Security and Ecology" Organized by Department of Agricultural Extension, Bidhan Chandra Krishi Viswavidyalaya (BCKV) on August 13th and 14th, 2018
- 9. "PROTOTYPING OF INTEGRATED FARMING SYSTEMS IN GANGETIC ALLUVIAL PLAIN OF WEST BENGAL USING FARM DESIGN MODEL" in the ICAR-IIFSR-AICRP-IFS-CIMMYT Joint Workshop on "Science of Farming Systems:

Moving from Prototyping to Model Based Assessment and Designing of Sustainable and Resilient Farming Systems in South Asia" at Udaipur, Rajasthan during 19th-23rd March 2018 organised ICAR-IIFSR-AICRP-IFS-CIMMYT

- 10. Dr. S. Chatterjee participated in the ICAR-IIFSR-CIMMYT Joint TRAINING WORKSHOP SERIES on "Quantitative farming systems typologies applications with the R statistical computing software" at East Zone ICAR-RC-ER Patna, Bihar during 24th-28th September 2018organised byICAR-IIFSR-CIMMYT with ICAR-RC-ER Patna, Bihar
- 11. 11. Dr. S. Chatterjee attended and presented "On-Station Prototype Farming Systems using FarmDesign Model and also Farming System Typology results for On-Farm IFS Model" in the "V Biennial Workshop (XXXIII of the project) of "AICRP on Integrated Farming Systems" at University of Agricultural Sciences, GKVK campus Bengaluru, Karnataka during 20th and 23rd December, 2018.
- 12. Attended and presented paper on "A Temporal Economic Analysis of Prototype Farming System Options in West Bengal India" in National Seminar on "Agro-Chemical Inputs and its Extension Approaches towards Food-Security and Bio-Safety: Prospects & Challenges" 15-16 November, 2019 organised by State Agricultural Management and Extension Training Institute-West Bengal, Integrated Rural Development and Management Faculty Centre & Sasya Shyamala Krishi Vigyan Kendra, Ramakrishna Mission Vivekananda Educational and Research Institute and Ramakrishna Mission Ashrama, Narendrapur, West Bengal-700 103.
- **13.** Dr. A. K. Nandi, Lead Speaker at Global Conference on Emerging Agricultural Research On Agricultural Education in India: Future Perspective, AESSRA, 12-13 December 2020.
- 14. Prof. Amitava Basu 4th International Conference on Sustainable Agriculture, Food & Energy(SAFE 2016) Oct 20-22,2016 organized by , UNIVERSITY OF RUHUNA Colombo Sri Lanka- Attended as Invited Plenary Speaker on topic entitled, "silver nano particles and their role in phytopathogen management under sustainable agriculture"
- 15. Prof. Amitava Basu 38th Annual ISMPP Conference and National Symposium -2016 on Challenges towards Plants Health under Changing climate scenario for Sustainable Agriculture. Jointly organized by the Dept. of Plant Pathology, Bidhan Chandra Krishi Viswavidyalaya, WB, India and Indian Society of Mycology and Plant Pathology, Udaipur, Rajasthan, India held at FACC, Lake Hall, BCKV, Kalyani, Nadia - 741 235, WB on November 24-26, 2016.-Attended as Organizing Secretary
- 16. Prof. Amitava Basu National Symposium cum IPS East Zone Meet entitled "Plant Health Management for Food Security and Safety" during 8-9th December, 2016 at FACC of Bidhan Chandra Krishi Viswavidyalaya, Lake Hall, Kalyani, Nadia, West Bengal, India. Attended as Invited lead lecture in the session iv.

- 17. Dr. A.K. Mandal attended National Symposium on " Impact of Climate change, biodiversity and good plant protection practices on crop productivity" organised by Association for Advancement in Plant Protection, on December 22 to 23, 2016 at Farmers' Academy and Convention Centre, BCKV, Kalyani, Nadia (W.B.).
- 18. Dr. A.K. Mandal attended East Zone Meet cum National Symposium on "Plant Health Management for Food Security and Safety" organised by Indian Phytopathological Society (IPS), on December 8-9, 2016 at Farmers' Academy and Convention Centre, BCKV, Kalyani, Nadia (W.B.).
- 19. Dr. A.K. Mandal attended International Symposium on " Eco-Efficiency in Agriculture & Allied Research" organised by Crop and Weed Science Society (CWSS), on December 22 to 23, 2016 at Farmers' Academy and Convention Centre, BCKV, Kalyani, Nadia (W.B.).
- 20. Dr. A.K. Mandal attended Annual Workshop of AICRP on Vegetable Crops at New Delhi, on May, 2016.
- Dr. S. Mahapatra attended National Symposium on Microbial Diversity and Its Impact, 18-19 February,2016 Calcutta University, Indian Mycological Society
- 22. Dr. S. Mahapatra attended National Seminar on "Environment Concern for fertilizer use in Future" 26th February,2016
- 23. Dr. S. Mahapatra International Conference on Agriculture, Horticulture and Plant Science, 25-26th June, 2016, New Delhi, International Journal of Tropical Agriculture
- Dr. S. Mahapatra National symposium on Challenges towards plant health under changing climate scenario for sustainable agriculture, 24 - 26th November, 2016, ISMPP, Udaipur, Rajasthan
- 25. Dr. S. Mahapatra National symposium on Plant Health Management for Food Security and safety, 8-9th December, 2016, FACC, BCKV, Kalyani, Indian Phytopathological Society and Dept. of Plant Pathology, BCKV
- 26. Dr. S. Mahapatra International Symposium on "ECO EFFICIENCY IN AGRICULTURE & ALLIED RESEARCH, 20-23rd January' 2017, FACC, BCKV, Kalyani, CROP AND WEED SCIENCE SOCIETY
- 27. Dr. S. Dutta attended National Symposium on Impact of Climate Change , Biodiversity and Good Plant Protection Practices on Crop Productivity , Organized by AAPP, BCKV held on Dec 22-23, 2016
- 28. Dr. S. Dutta attended 38th National Symposium of ISMPP Organized by ISMPP and BCKV held on Nov 24-26, 2016 at BCKV, Kalyani, W.B., India.
- 29. Dr. S. Dutta attended East zone cum National Symposium of IPS Organized by BCKV held on Dec 07-08, 2016 at BCKV, Kalyani, W.B., India.
- 30. Dr. S. Jash International conference on Agriculture, food science, natural resource management and environmental dynamics: The technology, people and sustainable

development organized by Department of Agricultural Extension, BCKV, Mohanpur, Nadia and Krishi Sanskrit, New Delhi on 13th and 14th August, 2016.

- 31. Dr. S. Jash ISMPP east zone meet cum national symposium -2016 on Challenges towards plant health under changing climate scenario for sustainable agriculture jointly organized by Department of Plant Pathology, BCKV, Mohanpur, Nadia and ISMPP, MPUAT, Udaipur
- 32. Dr. S. Jash IPS East zone meet cum national symposium-2016 on Plant Health Management for food security and safety organized by Department of Plant pathology, BCKV, Nadia on 8th& 9th December, 2016
- 33. Dr. S. Jash National symposium on "Impact of climate change, Biodiversity and good plant protection practice on crop productivity" organized by Association for advancement in plant protection, BCKV, Kalyani held on 22 and 23rd December, 2016 at BCKV, Kalyani, Nadia
- 34. Dr. S. Jash International symposium on Eco-efficiency in agricultural and allied research organized by Crop and weed science society, BCKV, Nadia w.e.f. 20-23rd January, 2017
- 35. Dr. P. Saha Presented the Poster entitled Assessment of Yield Loss Due to Leaf Curl Virus in Tomato" at the ISMPP 38th Annual Conference cum National Symposium-2016, held at Kalyani, FACC, Lake Hall, BCKV from 24-26 Nov, 2016.
- 36. Dr. P. Saha AttendedNational Symposium on Recent Trends in Agriculture and Allied Sciences for Better Tomorrow (NSRTAS 2016) at Palli Siksha Bhavana, Sriniketan on 4th December, 2016 (Sunday).
- 37. Dr. P. Saha Presented the Poster entitled "Correlation matrix between disease severity, white fly population and yield of tomato due to leaf curl virus (TLCV) infection" on "plant health management for food security and safety" organized by Indian Phytopathological society East zone meet cum National symposium-2016 held at Kalyani, FACC, Lake Hall, BCKV from 8-9 December, 2016.
- 38. Mr. R. Mandal International Conference on 'Plant, Pathogens and People Challenges in Plant Pathology to Benefit Humankind' during February 23-27, 2016, New Delhi, India.
- 39. Mr. R. Mandal International Conference & Indian Chapter of Asian PGPR Satellite Workshop PGPRs for Sustainable Crop productivity on February 25, 2016, NASC Complex, New Delhi, India.
- 40. Mr. R. MandalNational seminar entitled "National symposium on Microbial Diversity and its Impact", during 18-19th February, 2016, organized by Indian Mycological Society, Department of Botany, University of Kolkata, West Bengal.

- 41. Mr. R. MandalNational seminar entitled "Challenges towards Plants Health under Changing Climate Scenario for Sustainable Agriculture", Jointly organized by the Dept. of Plant Pathology, Bidhan Chandra Krishi Viswavidyalaya, WB, India and Indian Society of Mycology and Plant Pathology, Udaipur, Rajasthan, India held at Farmers Academy and Convention Center (FACC, Lake Hall), BCKV, Kalyani, Nadia - 741 235, WB on November 24-26, 2016.
- 42. Mr. R. MandalNational Symposium cum IPS East Zone Meet entitled "Plant Health Management for Food Security and Safety" during 8-9th December, 2016 at FACC of Bidhan Chandra Krishi Viswavidyalaya, Lake Hall, Kalyani, Nadia, West Bengal, India.
- 43. Mr. R. MandalNational Symposium 'Impact of Climate Change, Biodiversity and Good Plant Protection Practices on Crop Productivity' during 22-23rd December, 2016, organized by ASSOCIATION FOR ADVANCEMENT IN PLANT PROTECTION (AAPP), BCKV, Mohanpur, Nadia, West Bengal
- 44. Prof. P. S. Nath 3rd International Conference on Sustainable Agricultureand environment September 2016 at Warsaw University, Poland Presented Scientific Paper
- 45. Prof. P. S. Nath 38th Annual ISMPP Conference and National Symposium -2016 on Challenges towards Plants Health under Changing climate scenario for Sustainable Agriculture. Jointly organized by the Dept. of Plant Pathology, Bidhan Chandra Krishi Viswavidyalaya, WB, India and Indian Society of Mycology and Plant Pathology, Udaipur, Rajasthan, India held at FACC, Lake Hall, BCKV, Kalyani, Nadia - 741 235, WB on November 24-26, 2016.-Attended as Organizing President
- 46. S. Murmu attended Recent trends in Agriculture and Allied Sciences for Better Tomorrow, Department of Animal Science, Palli-ShikshaBhavana, Viswa-Bharati, Sriniketan& The Society of Biosecurity, Environment and Agricultural Research, Sanitation, Sriniketan
- 47. Mr. S. MurmuNational Symposium 'Impact of Climate Change, Biodiversity and Good Plant Protection Practices on Crop Productivity' during 22-23rd December, 2016, organized by ASSOCIATION FOR ADVANCEMENT IN PLANT PROTECTION (AAPP), BCKV, Mohanpur, Nadia, West Bengal
- 48. Mr. S. MurmuNational seminar entitled "National symposium on Microbial Diversity and its Impact", during 18-19th February, 2016, organized by Indian Mycological Society, Department of Botany, University of Kolkata, West Bengal.
- 49. Mr. S. MurmuNational seminar entitled "Challenges towards Plants Health under Changing Climate Scenario for Sustainable Agriculture", Jointly organized by the Dept. of Plant Pathology, Bidhan Chandra Krishi Viswavidyalaya, WB, India and Indian Society of Mycology and Plant Pathology, Udaipur, Rajasthan, India held at Farmers Academy and Convention Center (FACC, Lake Hall), BCKV, Kalyani, Nadia - 741 235, WB on November 24-26, 2016.
- 50. Dr. S. Debnath attended International Conference on "Agriculture, Food Science, Natural Resource Management and Environment Dynamics : The Technology, People and Sustainable Development" during 13th & 14th August, 2016.

- 51. Dr. S. Debnath ISMPP East Zone Meet cum National Symposium on "Challenges Towards Plants health under changing climatic Scenario for Sustainable Agriculture" during 24th-26th November,2016.
- 52. Dr. S. Debnath National symposium by IPS (E- Zone)- "Plant Health Management for Food Security and Safety" on 8th-9th December, 2016.
- 53. Dr. S. Debnath National Symposium on "Impact of Climate Change, Biodiversity and Good Plant Protection Practices on Crop Productivity" conducted by Association for Advancement of Plant Protection during 22nd – 23rd December, 2016.
- 54. Dr. S. Debnath Annual Maize Workshop 2016, held at Bengaluru during 10th 12th April, 2016.
- 55. Prof. B.N Panja "National symposium on Microbial Diversity and its Impact" during February 18 – 19, 2016 organized by Indian Mycological Society in collaboration with the Department of Botany, University of Calcutta
- 56. Prof. B.N Panja International Conference on "Plant, Pathogens and People" during February 23 – 27, 2016, New Delhi, India organized by ICAR, IARI, CPS and Indian Phytopathological Society (IPS0, New Delhi
- 57. Prof. B.N Panja National Symposium on "Challenges towards Plant Health under changing Climate Scenario for Sustainable Agriculture" during 24 – 26 November, 2016 organized by Dept of Plant Pathology, BCKV, Mohanpur, Nadia and Indian Society of Mycology and Plant Pathology, Udaipur, Rajasthan.
- 58. Prof. B.N Panja National Symposium on Plant Health Management for Food security and safety" during 8 – 9 December, 2016 organized by Dept of Plant Pathology, BCKV, Mohanpur, Nadia and Indian Phytopathological Society, IARI, New Delhi.
- 59. Prof. B.N Panja National Symposium on "Diagnosis and Management of Plant Diseases: integrated Approaches and Recent Trends" during 9 11, January 2017 organized by ICAR Research Complex for NEH Region, Umium, Meghalaya
- 60. Prof. A. Basu, Dr. S.K. Ray and Dr. S. Dutta attended ISMPP International conference on" Plant Health for Human Welfare" during November,1-4, 2017 at Department of Botany, University of Rajasthan, Jaipur, India Organized by Department of Botany, University of Rajasthan, Jaipur and Indian Society of Mycology and Plant Pathology, MPUAT, Udaipur.
- 61. Majority of the faculties of the Department attended National Symposium on "Challenges and Perspective in Plant Health Management Under Climate Change Scenario" during November, 23-24, 2017 at FACC, BCKV,Kalyani organized by IPS, New Delhi and Department of Plant Pathology, BCKV, Mohanpur, Nadia.
- 62. Prof. S. Das, Dr. S.K. Ray & Prof. B. N. Panja, Dr. J. Saha and Dr Poly Saha attended 70th Annual Meeting cum National Symposium on "Plant Health Management: Embracing Eco-Sustainable Paradigm" during February, 15-17, 2018 at Assam Agricultural University, Jorhat, i organized by IPS, New Delhi and AAU, Assam.

- 63. Dr. J. Tarafdar attended one day International *The International* Conference *on Advances in Agriculture and Crop Science 2017* on *09 October* in *New* Delhi at Hyatt Regency and delivered lead lecture on Food and Nutrition Security: Root and Tuber Crops may play major role under stressful environment (Jayanta Tarafdar, Surajit Mitra, James George and Archana Mukherjee).
- 64. Dr. Jayanta Tarafdar delivered invited lecture in the National Seminar on Challenges and Prospective in Plant Health Management under Climate Change Scenario & IPS (EZ) Meet November 23-24, 2017 and delivered lecture on Virus Diseases of Tuber Crops: Diagnosis and Management
- 65. Prof. Amitava Basu delivered invited lecture," in the National Seminar on Challenges and Prospective in Plant Health Management under Climate Change Scenario & IPS (EZ) Meet November 23-24, 2017 and chaired the technical session "Host pathogen interaction"
- 66. Dr. Poly Saha presented her "paper entitled Application of a new chemical molecule against diseases of corn." In International Conference on "Role of soil and plant health in achieving sustainable development goals." Held at Bangkok, Thailand 21-25, November, 2018. IPS and APPARI, Bangkok, Thailand
- 67. Dr. Raju Das attended National Seminar on 'Dr. B. R. Ambedkar and Social engineering' & 127th Birth Anniversary of Dr. B.R. Ambedkar, organised by SC, ST, OBC Employees Welfare Association of Visva-Bharati at Visva-Bharati, Santiniketan, WB on April 13-14, 2018.
- 68. Dr. Raju Das attended National Seminar on 'Mixed Farming-a traditional practice to enhance the income of farmers' organised by SBEAR, Visva-Bharati, held at Visva-Bharati, Santiniketan, WB on April 24-25, 2018
- 69. Dr. Raju Das attended INTERNATIONAL CONFERENCE ON LIVELIHOOD PROMOTION, BIO-DIVERSITY CONSERVATION AND SOCIAL SECURITY IN INDIAN SUNDARBANS 792 organized by Department of Plant, Visva-Bharati and Hiraanmoypur Agro-horticultural Society for Technology and Rural Development, Basanti, WB, held at Jharkhali, South 24 Parganas, West Bengal, India on 7-9 December, 2018.
- 70. Dr. Raju Das attended National Seminar on 'Use of agro-chemicals for a sustainable agriculture and environment' organised by the Society for Fertilizer and Environment in collaboration with BCKV and SFE on March 27, 2019 at FACC, BCKV, Kalyani, West Bengal
- 71. Delivered invited lecture entitled "Influence of soil temperature, moisture and weather variables on soil-borne diseases of vegetable crops" in the 71st National Symposium on Recent Challenges and Opportunities in Sustainable Plant Health Management at BHU, 26-28th February, 2019.
- 72. Sahar Murmu attended International Conference on "Agriculture and Allied Sciences: The Productivity, Food Security and Ecology" org. by Dept. of Agricultural Extension, Bidhan Chandra Krishi Viswavidyalaya, Mohanpur, Nadia, West Bengal, India and "Krishi Sanskriti, New Delhi, India" at Farmers' Academy and Convention Centre (FACC) (Lake

Hall, Kalyani), Bidhan Chandra Krishi Viswavidyalaya, Kalyani, West Bengal, India on 13th and 14th August, 2018.

- 73. Sahar Murmu attended National Symposium on "Role of Resource Management in Agriculture in the Context of Food Security, Nutrition and Economy" org. by The Agricultural Society of India in collaboration with Institute of Agricultural Science, University of Calcutta at Keneedy Hall, Institute of Jute Technology, University of Calcutta on December 15-17, 2018.
- 74. Sahar Murmu attended National seminar on "Sustainable Resource Management for Enhancing Farm Income, Nutritional Security and Livelihood Improvement" org. By Dept. of Agronomy, Palli Siksha Bhavana (Institute of Agriculture), Visva-Bharati, Sriniketan, West Bengal, held on 1-3 February, 2019.
- 75. Dr. Sunita Mahapatra attended 21 days training programme on "Plant Bio-security and its incursion management" conducted at NIPHM, Hyderabad from 5th to 25th June, 2018
- 76. Dr. Sunita Mahapatra attended CIMMYT for a training program on "Standardization of stem rust field notes and germplasm evaluation, with discussion on stripe and leaf rust" from 29.09.2018 to 9.10.2018 in Njoro, Kenya.
- 77. Dr. Sunita Mahapatra attended CIMMYT for a training program on "Wheat blast screening and surveillance training in Bangladesh" from 12.02.19 to 28.02.19 in Jassor, Bangladesh.
- 78. Dr. Sujit K.Ray presented paper in the "International Conference on "Livelihood Promotion, Biodiversity Conservation and Social Security in Indian Sundarbans" held at Jharkhali, December 7-9,2018
- 79. Prof. Amitava Basu attended 5 days training on Orientation of Post Entry Quarantine Inspection Authority at NIPHM, Hyderbad from 12th to 16th March, 2018
- 80. Attended Dr. Raju Das International Seminar on "AGRISKILLS FOR CONVERGENCE IN RESEARCH INDUSTRY& LIVELIHOOD (ACRIL)", during November, 28th to December, 1st, 2019, to be organized by the Crop and Weed Science Society (CWSS), Bidhan Chandra KrishiViswavidyalaya (BCKV) at Farmers' Academy & Convention Centre (FACC), BCKV, Kalyani, Nadia, West Bengal, India.
- 81. Dr. Raju Das attended International Seminar on "INTERNATIONAL SYMPOSIUM ON NATURE, MICROBES AND SOCIETY", during 6th February to 8th February, 2020 to be organized by the Indian Mycological Society (IMS), Department of Botany 35, Ballygunge Circular Road Kolkata- 700019, West Bengal, India
- 82. Dr. Raju Das attended International Seminar on "Ecological and Environmental Sustainability: way forward for Livelihood security", during September, 25-28, Held at Jharkhali Basanti, Organised by Department of Plant, Visva-Bharati and Hiraanmoypur Agro-horticultural Society for Technology and Rural Development

- 83. Dr. Raju Das attended National conference on 'Contribution of Dr. B. R. Ambedkar to modern India', organized by SC, ST, OBC Employees Welfare Association of Visva-Bharati at Visva-Bharati, Santiniketan, W.B. on February 1-2, 2020.
- 84. S. Patar, R. Kumar, K Kundu, S. Jash and R. Das 2020. Effectiveness of Pseudomonas flurescence in the management of early blight diseases of tomato. International Symposium on Nature, Microbes and Society organized by Indian Mycological Society, Department of Botany, University of Calcutta on 6-8 Frbruary, 2020 at Kolkata.
- 85. R. PATSA, A. SARKAR, G. MOINUDDIN, R. DAS AND S. JASH. 2019. Bio-efficacy of mefentrifluconazole based fungicide on leaf spot and rust disease of groundnut. International Seminar on "AGRISKILLS FOR CONVERGENCE IN RESEARCH, INDUSTRY& LIVELIHOOD (ACRIL)". organized by the Crop and Weed Science Society (CWSS), Bidhan Chandra KrishiViswavidyalaya (BCKV) at Farmers' Academy & Convention Centre (FACC), BCKV, Kalyani, Nadia, West Bengal, India during November, 28th to December, 1 st2019
- 86. Dr. Sujit K. Ray presented paper in the" 7th International Conference on" Phytopathology in Achieving UN Sustainable Development Goals" held at ICAR-IARI,New Delhi,January 16-20,2020.
- 87. Dr. Sujit K. Ray presented paper in the "International Symposium on" Nature, Microbes and Society" held at Kolkata, February, 6-8,2020.
- 88. Dr. Subrata Dutta presented Invited lecture in the "International Symposium on" Nature, Microbes and Society" held at Kolkata, February, 6-8,2020.
- 89. Prof. Amitava Basu (2020) attended 7th IPS CONF 2020 to present a research paper "Integrated approach foridentification of *Ralstonia solanacearum* free areas in major potato growing districts to boost export from West Bengal as Invited speaker at 7TH International IPS CONF. 2020 held at New Delhi, ICAR-IARI,PUSA, January 16-20,2020.
- 90. Dr. Sunita Mahapatraattendedthree days training through virtual mode on "Creation of epiphytotics for disease and insect pests, uniform data recording and reporting in wheat and barley crop protection trials" organised by Crop Protection, IIWBR, Karnal from January 28-30, 2021.
- 91. Dr. Sujit Kumar Ray, presented paper in the "7th International Conference on" Phytopathology in Achieving UN Sustainable Development Goals" held at ICAR-IARI,New Delhi, January 16-20,2020
- 92. Dr. Sujit Kumar Ray presented paper in the "International Symposium on" Nature, Microbes and Society" held at Kolkata, February, 6-8,2020
- 93. Dr. Subrata Dutta presented Lead paper in the "International Symposium on" Nature, Microbes and Society" held at Kolkata, February, 6- 8,2020
- 94. Dr. Subrata Dutta presented Lead paper in the IPS East Zone virtual symposium held on January 19-20, 2021 at ICAR- National Rice Research Institute, Cuttack, Odisha, India -753006

- 95. Dr. Poly Saha attended Training on Advanced Molecular Biology organized by SHRM Biotechnologies Pvt.Ltd., Kolkata from 20th January to 19th February, 2020
- 96. Dr. Poly Saha participated in the two days seminar (Webinar) Host-microbes interactions: Present and future perspectives School of Biotechnology and department of Life Sciences, University of Presidency, Kolkata, 6-7 August, 2020
- 97. Dr. Poly Saha participated in the six days virtual conference An international virtual conference on "Current advances in Rice Blast Research" (CARBR-2020) National Institute of Technology Durgapur, 1-5 December, 2020
- 98. Chhetri, S. and Mondal, G. (2021). In vitro evaluation of botanicals and bioagents for the ecofriendly management ofanthracnose disease of Sarpagandha (*Rauwolfia serpentine* L.) caused by *Colletotrichum gloeosporioides*. National e-Conference on "Plant Health and Food Security: Challenges and Opportunities" organized by Indian Phytopathological Society,ICAR-Indian Agricultural Research Institute, Indian Council of Agricultural Research at New Delhi. March 25-27, 2021. P. 69.
- 99. Oraon, S., Mondal, G. and Singh, S. (2021). Efficacy of different plant exctracts against Phyllostictacapitalensis, the causal agent of leaf spot disease of curry leaf plant (Murrayakoenigii). National e-Conference on "Plant Health and Food Security: Challenges and Opportunities" organized by Indian Phytopathological Society, ICAR-Indian Agricultural Research Institute, Indian Council of Agricultural Research at New Delhi. March 25-27, 2021. P. 74.
- 100. Mukherjee, S. and Mondal, G. (2021). Eco-friendly management strategy for leaf spot disease of Tulsi (Ocimumtenuiflorum) caused by Colletotrichum gloeosporioides. National e- Conference on "Plant Health and Food Security: Challenges and Opportunities" organized by Indian Phytopathological Society, ICAR-Indian Agricultural Research Institute, Indian Council of Agricultural Research at New Delhi. March 25-27, 2021. P. 75.
- 101. Mondal, G. and Singh, S. (2021). Biology of Erysiphe cichoracearum causing powdery mildew of Ivy gourd (Cocciniagrandis) from West Bengal, India. National e-Conference on "Plant Health and Food Security: Challenges and Opportunities" organized by Indian Phytopathological Society, ICAR-Indian Agricultural Research Institute, Indian Council of AgriculturalResearch at New Delhi. March 25-27, 2021. P. 149.
- 102. Mondal, G., Singh, S. and Mayanglambam, B. (2021). Occurrence of rust (Coleosporiumplumeriae) on Temple tree(Plumeria acuminata) in West Bengal, India. National e- Conference on "Plant Health and Food Security: Challenges andOpportunities" organized by Indian Phytopathological Society, ICAR-Indian Agricultural Research Institute, Indian Council of Agricultural Research at New Delhi. March 25-27, 2021. P. 150.
- 103. Tushnima Chaudhuri and Amitava Basu (2020)Detection of tolerance level of potato crop due to application of nano formulations synthesized from conventional chemicals and plant based products under green house condition. published in Abstract book of International conference on-Application of Nanotechnology for Sustainable, Productive and Safer Agriculture and Food System, TERI, Mumbai, India pp-71

- 104. Anannya Chakraborty (2016), presented paper on Occupational Stereotypes: A Static Phenomenon in this Dynamic World authored by Anannya Chakraborty and SK Acharya.in International Conference on Agriculture, Food Sciences, Natural Resource Management and Environmental Dynamics: The Technology, People and Sustainable Development
- 105. Anannya Chakraborty (2017) presented paper on The Hunger Poverty and Silence: The Entitlement and Empowerment Authored by Anannya Chakraborty and S K Acharya in National Symposium on Towards Climate Smart Agriculture-A Key to Livelihood Security
- 106. Anannya Chakraborty(2018) presented a paper on Monsoon Sociology: The Dynamics and Impact authored by Anannya Chakraborty and SK Acharya, Chethana. K in International Conference on Agriculture and Allied Sciences: The Productivity, Food Security and Ecology organized by Krishisankriti, New Delhi and BCKV
- 107. Guest Speaker, Prof S K Acharya(2018): Delivered on, Food Security and Sustainable Nutrition in India organized by Dept. of Biochemistry and Nutrition, APC College &All India Institute of Hygiene and Public Health, Kolkata, 15-16 September, 2016.
- 108. Guest Speaker, Prof S K Acharya: Delivered a speech on, Indian Agriculture-Challenges and Issues at MD I (Managemen Development Institute), Murshidabad, 26th Ferbruary, 2018.
- 109. Guest Speaker: Prof S K Acharya (2016)Delivered on , Social Entropy and Chaos in Social Metabolism in India, International Extension Education Conference on Education, Research and Services organized by Department of Agricultural Extension , Institute of Agricultural Sciences, Baranars Hindu University, Varanasi(27-30, January, 2016)
- 110. Invited Speaker, Prof S K Acharya(2020): On, Mind Training for the youth under stress (COVID19), organized by NAHEP, Central Agriculture University, Imphal, 26-27 June, 2020
- 111. Invited Speaker: Prof S K Acharya (2017) National Seminar on , Parenting in contemporary Indian society, organized by Dept. Of Home Science, Sambalpur University (17th March, 2017)
- **112**. Invited Talk on: Prof S K Acharya(2018) on Chaos, entropy and farmers in Stress at Dept. of Extension Education, Assam Agricultural University, Jorhat on 29th January, 2018.
- 113. Kabita Mondal and S.K.Acharya. 2016. "Energy Policy and Miicroplanning for Participatory Energy Management: The Issues and Understanding" published in the abstract book of International conference in "Agriculture, Food Science, Natural Resource Management And Environmental Dynamics: The Technology, People and Sustainable Development" from 13th – 14th August,2016 organized by Department of Agricultural Extension, Bidhan Chandra Krishi Viswavidyalaya, Nadia at FACC, BCKV, Kalyani and 'Krishi Sanskriti', New Delhi, India.
- 114. Kabita Mondal and S.K.Acharya. 2016. Paper entitled "Perceived Impact of Energy Consumption on Social Ecology of Two Districts" published in the abstract book of National Seminar on "Sustainable Family Farming for Food, Nutritional and Livelihood

Security" from 5-6th March, 2016 organized by the Department of Agricultural Extension, Agricultural Economics and Agricultural Statistics, Palli Siksha Bhavana (Institute of Agriculture), Visva-Bharati, Sriniketan, Birbhum co-sponsored by Karuna Shechen (Humanitarian Projects in the Himalayan Region), India.

- 115. Keynote Address by Prof S K Acharya (2017) International Seminar on ,Contemporary Development In Nutritional Research, organized BY Dept. Of Food and Nutrition, Barrackpore Rastraguru Surendranath College, Barrackpore(5-6 January, 2017)
- 116. Keynote Address by Prof S K Acharya(2020): National Seminar on, Holistic Approach for Enhancing Agricultural Growth in Changing Rural Scenario, Organized by ISEE(ICAR-IARI, New Delhi) at, SKR Agriculture University, Bikaner (14-16 November, 2020)
- 117. Keynote address by Prof Sagar Mondal(2019) on Transformation of Agricultural Extension in India in the International Conference on Recent Trend and Practices in Science, Technology, Management and Humanities for Sustainable Rural Development (STMH-2019) organized by Krishisanskriti, New Delhi and University of Science and Technology, Meghalaya,6-7th September,2019
- 118. Keynote Addressby Prof S K Acharya(2016) in International Conference on , Recent Advances in Agriculture, Aqua Culture....Climate Change, organized by Krishi Sankriti, at JNU, New Delhi(17 th January, 2016)
- 119. Keynote Lecture by Prof S K Acharya(2020): Virtual Conference on , Mathematics , Constraints and Optimizations, organized by I-manager's VCM: DPMCO2020(15th September, 2020)
- 120. Keynote Speaker by Prof S K Acharya (2020): International Symposium(on line) on Food security and the stand of civilization: The Agri-horti-livestock dynamics in changing global ecology organized by BCKV, LinkoIN University, Malayasia, University of Bengkulu, Indonesia(20-21 September, 2020)
- 121. Keynote Speaker by Prof S K Acharya(2018): On, The Social Ecology of Agriculture and Food Security: The vicissitudes and Intervention in One Day National Conference on Food and Nutrition Security: Thus far and further organized by Nutrition Society of India, Calcutta Chpter, JU, Kolkata, 15 th September, 2018
- 122. Lead speaker, Prof S K Acharya(2018): On, The Social Entropy and Social Disorder: Experimental Sociology in ISEE National Seminar, 5-7 December, Kolkata, 2018
- 123. Plenary Lecture by Prof S K Acharya(2020) in: International Webinar on, Environment in 2020: Vision and Mission organized by BCKV and LincoIn University, Malayasia (12 July, 2020)
- 124. Riti Chatterjee participated in National seminar of Indian Society of Extension Education on Holistic Approach for Enhancing Agricultural Growth inChanging Rural Scenario at SKRAU, Bikaner on 14th,15th and 16th November,2019.and was earned the best paper award

- 125. Riti Chatterjee, best paper awardee, participated in International Conference on Agriculture and Allied Sciences: The Productivity, Food Security and Ecology at Bidhan Chandra Krishi Viswavidyalaya, Mohanpur, West Bengal, India on 13th and 14th August, 2018.
- 126. Riti Chatterjee, participated and presented a paper in National seminar of Indian Society of Extension Education on Integrated farming system •for Enhancing farmers income and Nutritional Security at WBUAFS, Kolkata on 5th,6thand 7th December,2018. She was the best paper awardee.
- 127. Riti Chatterjee, participated and presented a paperin National seminar of Nutrition Society of India, Kolkata Chapter on Food and nutrition •security: Thus far and further on 15th September, 2019.
- 128. Riti Chatterjee, Participated in International conference on Sustainable Agriculture Development in Changing Global Scenario at Benaras Hindu University, UP on 11th to 13th October.and coerred with Best Masters Thesis Award.
- 129. Technical Session Chaied by Prof Sagar Mondal(2016) in the International Conference on Agriculture, Food Science, Natural Resource Management and Environmental Dynamics: The technology, people and sustainable development organized by Krishisanskriti and BCKV,13-14 August, 2016.
- 130. VIII-World Congress on Conservation Agriculture, 19th to 23rd June, 2021, Bern, Switzerland, Online Poster Presentation by SK Acharya. VIII-World Congress on Conservation Agriculture, 19th to 23rd June, 2021, Bern, Switzerland, Online Poster Presentation by Anwesha mondal
- 131. N. Mandal participated and presented a research paper entitled as "Development of phytophthora leaf blight resistance markers in taro through comparative screening from ESTs" in the **national seminar** on "Resource based inclusive agriculture & rural development: Opportunities & challenges" held on 15-16 January, 2016organized by Ramakrishna Mission Vivekananda University held at IRDM Faculty Centre, Narendrapur, Kolkata-700103.
- 132. N. Mandal participated and presented "PCR amplification, sequencing and *in silicosequence analysis of germine-like protein gene promoter in indicarice*" in the international conference on "Agriculture, food science, natural resource management and environment dynamics: The technology, people and sustainable development" Organised by Department of Agricultural Extension, BCKV, West Bengal and KrishiSanskriti, New Delhi, India on 13th and 14th August, 2016 at FACC, Lake Hall, Kalyani, West Bengal.
- 133. Md. Nasim Ali participated and presented a paper entitled as "Morpho-molecular characterization of *Bambusabalcooa*with a note on flower" in the **national seminar** on "Resource based inclusive agriculture and rural development: Opportunities and challenges" held on 15-16 January, 2016 organized by Ramakrishna Mission Vivekananda University held at IRDM Faculty Centre, Narendrapur, Kolkata-700103.

- 134. Md. Nasim Ali participated and presented a paper entitled as "PCA and cluster analysis for comparing the genetic diversity among selected greengram accessions under saline and non-saline condition" in the **national seminar** on "Recent advances in statistical tools for agriculture and allied sciences" held on March 3-5, **2016** at FACC, BCKV, Kalyani.
- 135. Md. Nasim Ali participated and presented a paper entitled as "Cross species transferability of rice SSR markers for their utilization in analysis of bamboo genome" in the iinternational symposium on "Eco efficiency in agriculture & allied research (EEAAR 17)" held on 20-23 January, 2017 organized by Crop and Weed Science Society (CWSS), BCKV, West Bengal held at Farmers' Academy and Convention Centre, BCKV, Kalyani, Nadia.
- 136. Md. Nasim Ali participated and presented a paper entitled as "Multivariate analysis and identification of bacterial isolates from *panchagavya*based on biochemical parameter" in the international seminar on "Recent trends in microbilogy" held on 14 January, 2017 organized by Department of Microbiology, Ramakrishna Mission Vidyamandir, Belur Math, Howrah.
- 137. Md. Nasim Ali participated and presented a paper entitled as "Molecular characterization of the bacterial population isolated from panchagavya, an organic biostimulant" in the **national symposium** on "Agriculture and food production today and tomorrow" at Institute of Agricultural Science, University of Calcutta during February 22-24, 2017.
- **138.** Md. Nasim Ali participated and presented a paper entitled as "Biochemical characterization of microbial population isolated from panchagavya, an ancient plant growth promoter" in the **national seminar** on "Maximizing fertilizer use efficiency and environmental health for posterity" organized by the Society for Fertilizers and Environment in collaboration with SasyaShyamalaKrishiVigyan Kendra, RKMVU at Narendrapur on 08 March, **2017**.
- 139. K. Pramanik participated and presented a paper entitled as "Maximizing fertilizer use efficiency and environmental health for posterity" in the **national seminar** on "Maximizing fertilizer use efficiency and environmental health for posterity" organized by the Society for Fertilizers and Environment in collaboration with SasyaShyamalaKrishiVigyan Kendra, RKMVU at Narendrapur on 08 March, **2017**.
- 140. Dr.NirmalMandal participated and presented a paper in the International Symposium on "Livelihood Promotion, Biodiversity Conservation and Social Security in Indian Sundarbans" held during December 7-9, 2018 at Jharkhali, South 24 Pgs organized by Dept of Plant protection, PalliSikshaBhavana, VisvaBharati, Sriniketan&Hiranmoypur Agrohorticultural Society for Technology and Rural development, Basanti, S-24 Pgs.
- 141. Dr. Md. Nasim Ali participated and presented a paper at International Conference on Advancement in Science & Technology (ICAST-2018) on 3rd & 4th September, 2018 at

Visva-Bharati, Santiniketan, India; Organized by Indian JSPS Alumni Association in association with Department of Physics, Visva-Bharati, Santiniketan.

- 142. Dr. Md. Nasim Ali participated and presented a paper in the **national seminar** on "Agrichemicals for a benign environment" organized by the Society for Fertilizers and Environment" in collaboration with Bidhasn Chandra KrishiViswavidyalaya, MohanpuratFarmers' Academy and Convention Centre (FACC), BCKV, Kalyani, Nadia on 29 March, **2018**.
- 143. Dr.NirmalMandal participated and presented a paper in the international Seminar on "Agriskills for convergence in research industry & livelihood (ACRIL)" held on 28 November to 1st December, 2019 organized by CWSS, BCKV at FACC, BCKV, Kalyani, Nadia.
- 144. Dr. Md. Nasim Ali participated and presented a paper in the **National Seminar** on "Agro chemical inputs and its extension approaches towards food and Biosecurity: Prospects and challenges" held on November 15-16, **2019** at SAMETI, Narendrapur, Kolkata-700103.
- 145. Dr. Md. Nasim Ali participated and presented a paper in the international Seminar on "Agriskills for convergence in research industry & livelihood (ACRIL)" held on 28 November to 1st December, 2019 organized by CWSS, BCKV at FACC, BCKV, Kalyani, Nadia.
- 146. Dr. Md. Nasim Ali participated inKosambiInternational Webinar series on Plant Genomics held on 31st July to 2nd August, 2020 organized by Department of Botany, SavitribaiPhule Pune University, Pune.
- 147. Dr. Md. Nasim Ali participated and presented a paper **National webinar** on "Plant Biological Interventions for climate smart agriculture" on 30th July **2020** organized by Bihar Agriculture University, Sabour, Bhagalpur.
- 148. Dr. Md. Nasim Ali participated in 7 days **online workshop** on "Gene cloning and its expression to produce Genetically modified Organism" from 26 June to 02 July **2021** organized by Cytogene Research &Developmnet ,Lucknow, UP.
- 149. Prof. S. Jha Chaired plant protection session in International conference on Agriculture, food science, natural resource management and environmental dynamics: The technology,people and sustainable development, held on 13-14th August ,2016. Organised by Krishisanskriti, New Delhi.
- 150. Prof. S. Jha Attended the UK-India Agricultural Ecology Initiative will host a two-day conference Ecology in Agriculture: perspectives from the UK and India held at Charles Darwin House (HQ of the BES), Bloomsbury, London on the 12 and 13th September, 2017.
- 151. Prof. S. Jha chaired session in National Symposium on Towards Climate Smart Agriculture - A Key to Livelihood Security organized by Institute of Agricultural Science, University of Calcutta dated 9-11th December, 2017
- 152. Prof. S. Jha attended to deliver a lead lecture and chaired a session in National Seminar on theme '*Crop protection: current trend and future perspective*' during November 16-

18, 2017 at School of Agricultural Sciences and Rural Development (SASRD), Medziphema campus, Nagaland University, Medziphema, Nagaland.

- 153. Prof. S. Jha attended in Biennial group meeting of AICRP (HB&P) and neonicotinoid project review meeting held on 7-9th March,2019 at School of Agricultural Sciences and Rural Development (SASRD), Medziphema campus, Nagaland University, Medziphema, Nagaland.
- **154**. Prof. S. Jha attended UGC Sponsored National Workshop on Beekeeping: Aspect & Prospect dated 6-7th June, 2019 in Vidyasagar University.
- 155. Prof. S. Jha attended QRT Meeting of AICRP (HB&P) held on 2-3rd December,2019 at FACC, Kalyani, BCKV, Nadia, West Bengal.
- 156. Prof. S. Jha attended Meeting of Pollinator Researchers in Asia: Towards building an Asian Pollinator Initiative dated 27-29th February, 2020 in University of Calcutta.
- 157. Prof. S. Jha organized Meeting of fruit fly workers of Eastern and North Eastern India on 7th of August 2016.
- 158. Prof. S. Jha organized 'National Symposium on Impact of climate change, bio-diversity and good plant protection practices on crop productivity during $22^{nd} 23^{rd}$ December, 2016 at BCKV.
- 159. Prof. S. Jha organized Farmers' training programme on Beekeeping and Awareness Development on Pollinators of Field and Horticultural crops at Dr. Khudrat e Khuda Gramin Bikas Kendra, Margram, Birbhum, West Bengal. (January 4 & 5,2020).
- 160. Prof. S. Jha organized 'Fruit fly awareness day on 8th of August in 2016,2017, 2018, 2019 and 2020.
- **161.** Prof. S. Jha organised of World Honey Bee Day at Commercial Apiculture Unit, BCKV on 20th May in 2018, 2019 and 2021.
- 162. Prof. S. Jha organised 10 days' Beekeeping training in collaboration with SBI-RSETI at BCKV in July, 2019.
- 163. Prof. S. Jha organised one day training on Beekeeping and Pollinators awareness at RRS, Kakdwip, BCKV on 27th January, 2021.
- 164. Prof. K. Karmakar Participated in XIV Group meeting of AINP on Agril Acarology, 19-21st April'16 at Assam Agril University, Jorehat, Assam.
- 165. Prof. K. Karmakar participated in National Training in "Integrated Pest Management in Rice" at Central Plant Protection Training Institute, Hyderabad from 1st September, 1993 to 8th September, 1993.
- 166. Prof. K. Karmakar participated in National Training on "Instrumentation in Entomological Research" held from 18th January to 7th February, 2000 at Department of Agril. Entomology, Tamil Nadu Agrilcultural University, Coimbatore-641003.
- 167. Prof. K. Karmakar participated in Summer School on "Training in Identification and Management of Mite Pests of Crops" held at Department of Agril. Entomology, UAS, GKVK, Bangalore-560065, Karnataka from 24th June to 14th July, 2001.

- 168. Prof. K. Karmakar participated in the "Summer Acarology Training program on the Introductory Acarology" at Ohio State University, 1315 Kinnear Road, Ohio, Columbus, USA during 27th June to 15th July' 2011.
- 169. Prof. K. Karmakar participated in the "Summer Acarology Training program on Agricultural Acarology" at Ohio State University, 1315 Kinnear Road, Ohio, Columbus, USA during 27th June to 15th July' 2011.
- 170. Prof. K. Karmakar participated in "A Training programme on Taxonomy of Phytoseiidae mites" at "Escola Superior de Agricultura Luiz de Queiroz", USP, Piracicaba Brazil from 13th April, 2012 to 20th June, 2012.
- 171. Dr. SK Ghosh acted as Co-Organizing Chairman in the International conference on Global perspective in Agriculture and applied Sciences for food and environmental Security (GAAFES-2019) held at Kumaun University, Nainital, Uttarakhand, on 1-2 December, 2019.
- 172. Dr. SK Ghosh acted as organizer for session 45: "Tackling climate change adaption in tropical and subtropical Forest" in the international conference "The IUFRO- Regional Congress for Asia and Oceania 2016" held in the China National Convension Centre, Beijing, China on 24- 27, October, 2016.
- **173.** Dr. SK Ghosh attended the Workshop of the project AINP on Agril. Acarology held in Assam Agriculture Universoity, Jorhat, Assam on 20-24 April, 2016.
- 174. Dr. SK Ghosh attended and presented the Workshop (xvth Groop meeting) of the project AINP on Agril. Acarology held in BCKV, Kalyani, West Bengal on 10-12 December, 2018.

175.

ttended " the 4th Asia Pacific Probiotics Workshop 2017 (APPW 2017))" held at Industrial University of Ho Chi Minh City, Vietnam on 22 November, 2017.

- 176. Dr. SK Ghosh acted as Organizing Secretary of the workshop (xv th Group meeting) of the project AINP on Agril. Acarology held in BCKV, west Bengal, India on 10-12 December, 2018.
- 177. Dr. SK Ghosh delivered a special Lecture as invited speaker in the National Seminar held in University of Royganj, West Bengal, India on 7th January, 2016.
- 178. Dr. SK Ghosh delivered a special Lecture as invited speaker in the National Seminar on "From Genome toBiome" held in University of Gour Banga, Malda, West Bengal, India on 8th January, 2016.
- 179. International conference on Agriculture, Food Science, Natural resource management and Environmental dynamics: The Technology, People and sustainable development, held at BCKV, Kalyani, West Bengal on July 13-14, 2016.
- 180. Dr. SK Ghosh delivered an oral presentation in the International conference "3rd Asian Food Safety and Food security Association (AFSA) conference on "food safety and food security" held at KIIT University, Bhubaneswar on September, 15-17, 2016.
- 181. Dr. SK Ghosh delivered an oral presentation in the International symposium on "Eco-

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Efficiency in Agriculture and Allied Research: held at BCKV, Kalyani, W. Bengal, India on January 20-23, 2017.

182. Dr. SK Ghosh delivered an oral presentation in the ASAR-International conference on Environment and Renewable Energy (ICERE) held at New Delhi, India on June 4, 2017.

183.

r. SK Ghosh delivered a special Lecture as invited speaker in the National Symposium on recent advances on Floriculture and Urban Horticulture in Globalperspective (NASARAFUH-18) held at BCKV, Kalyani, West Bengal, India on 4-5, January, 2018.

- 184. Dr. SK Ghosh delivered a special Lecture as invited speaker in the International conference held at Y.S. Permar Univ. of Horti and Forestry, Solan, H.P., India during Sep. 27-29, 2019 conferred by Agro Environmental Development Society (AEDS).
- 185. Dr. SK Ghosh delivered an invited lecture in The International conference on Global perspective in Agriculture and applied Sciences for food and environmental Security (GAAFES-2019) held at Kumaun University, Nainital, Uttarakhand, on 1-2 December, 2019 conferred by Agricultural and Environmental Technology Development Society, Uttarakhand., India,).

186.

SK Ghosh delivered an invited lecture in the "International Symposium on Food Security and Sustainable Development 2017 (ISFS- 2017)" held at Industrial University of Ho Chi Minh City, Vietnam on 23-24 November, 2017 (Keynote Speaker)

187.

SK Ghosh delivered an invited lecture in the The "7th International Science congress (ISC-2017)" held at College of Science and Technology, Chukka, Royal University of Bhutan, Bhutan on 8-9 December, 2017 (Guest Speaker).

188.

SK Ghosh delivered an invited lecture in the 8th International conference on Asia Agriculture and Animal (ICAAA-2018) held at Singapore National University, Singapore on 26-28 July, 2018.

189.

SK Ghosh delivered an oral presentation in the third ICSTR Dubai – International Conference on Science & Technology Research, 26-27 February 2019 in Dubai, UAE.

190.

SK Ghosh delivered an oral presentation as Plenary Speaker in the Second ICSTR Bali – International Conference on Science & Technology Research, 11-12 July 2019 in Bali, Indonesia.

191.

SK Ghosh delivered an oral presentation in theInternational Conference on "Agriculture, Forestry and Life Science", 6 February, 2020 in Male, Maldives.

192. Dr. SK Ghosh delivered an oral presentation in the International E-conference (online) on "Sustainability challenges and transforming opportunities : Amidst COVID-19" held on

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July 26-30, 2020 held at S.S. Khanna Girls' Degree College, Prayagraj, Uttar Pradesh, India.

- 193. Dr. SK Ghosh delivered an oral presentation in the International E-conference (online) on "Agriculture, Environmental and Food Research (AEFR-2020):" held on 8-9 September, 2020 organised by International Research and Development Centre for Publication (IRDCP), Jaipur, Rajastan, India.
- 194. Dr. SK Ghosh delivered an oral presentation in the International E-conference (online) on "Environmental, Agriculture and Rural development (EARD-2020):" held on 17-18 September, 2020 organised by International Research and Development Centre for Publication (IRDCP), Jaipur, Rajastan, India. International E-conference (online) on "Climate Change, Environment and sustainable Development 2020" held on 2-3 Oct, 2020 organised by International Multidisciplinary Research Foundationr Publication (IMRF), Andhra Pradesh, India. (Oral E-presentation).
- 195. Dr. SK Ghosh delivered an oral presentation in the International E-conference (online) on "Climate Change, Environment and sustainable Development 2020" 2nd Annual Meet of GESA 2nd International Conference on Environment and Society (ICES 2020) Theme: Socio-economic and Environmental Issues: Challenges and Future Prospects in Current Pandemic Situation" held on 26-28 Dec, 2020 organised by Glocal Environment and Social Association (GESA), New Delhi.
- **196.** Dr. SK Ghosh delivered an oral presentation in the International E-conference (online) on "Agriculture, Environment and Biotechnology (AEB-2020):" held on 17-18 Dec, 2020 organised by International Research and Development Centre for Publication (IRDCP), Jaipur, Rajastan, India.
- **197.** Prof. G. Chakraborty attended International Seminar on XXV International Congress of Entomology (ICE 2016) during 25th -30th September,2016 in **Orlando, Florida, USA**
- 198. Prof. G. Chakraborty attended The Biennial workshop of AICRP on Nematodes at University of agricultural and Horticutural Sciences, Shivamogga during February 8-10, 2016
- **199**. Prof. G. Chakraborty attended The XIII Annual Group Meeting of AICRP on Nematodes in cropping systems (ICAR) at ISI, Kolkata (West Bengal)
- 200. Prof. G. Chakraborty attended The XX Biennial Meeting of AICRP on Nematodes in cropping systems (ICAR) at Anand Agricultural University, Anand, Gujarat during 15-17th February, 2018
- 201. Prof. G. Chakraborty attended The Panel Discussion on Scouting Novelties for Nematode Management and Appraisal Meeting of AICRP on Nematodes in Agriculture
- 202. Dr K Roy delivered an oral presentation in the International Conference on Agriculture, Food Science, Natural Resource Management and Environmental Dynamics: The Technology, People and Sustainable Development was held at the Farmers' Academy & Convention Centre (FACC) BCKV, Kalyani-741235, Nadia, West Bengalduring 13th and 14th August, 2016.

- 203. Dr K Roy attended a World Coconut Day at the Directorate of Research, BCKV, Kalyani, Nadia, organized by the AICRP on Palms, BCKV on 2.09.2016.
- 204. Dr K Roy attended 2nd Soil Borne Pathogen Awareness Day, organized by the AAPP, BCKV, Kalyani, Nadia on 22.09.2016.
- 205. Dr K Roy delivered an oral presentation in the Indian Phytopathological Society (IPS) East Zone Meet cum National Symposium, 2016 on "Plant Health Management for Food Security and Safety" was held at the Farmers' Academy & Convention Centre (FACC) BCKV, Kalyani-741235, Nadia, West Bengal during 8 -9 December, 2016.
- 206. Dr K Roy delivered an oral presentation in the National Symposium, on "Impact of Climate Change, Biodiversity and Good Plant Protection Practices for Crop Productivity' was held at the Farmers' Academy & Convention Centre (FACC) BCKV, Kalyani-741235, Nadia, West Bengal during 22-23 December, 2016.
- 207. Dr K Roy delivered an oral presentation in the National Symposium on "Climate Smart Agriculture for Nematode Management" was held at the ICAR-Central Coastal Agricultural Research Institute Ela, Old Goa 403402 during 11-13 January, 2017.
- 208. Dr K Roy attended in the Spice Awareness and Skill Formation Programme held at the Directorate of Research, BCKV, Kalyani, Nadia(organized by the AICRP on Palms and CSS-MIDH Spices, BCKV) on 21-22 February, 2017.
- 209. Dr K Roy attended the 13th Annual Conference of Crop and Weed Science Society (CWSS) and Farmers Scientist Interaction was held at the Directorate of Extension Seminar Hall, Mohanpur, Nadia, WestBengal on 11th August, 2017.
- 210. Dr K Roy participated in the World Coconut Day held at the Directorate of Research, BCKV, Kalyani, Nadia(organized by the AICRP on Palms, BCKV) on 2.09.2017.
- 211. Dr K Roy participated in the 3rd Soil Borne Pathogen Awareness Day at BCKV (organized by the AAPP, BCKV, Kalyani, Nadia) on 22.09.2017
- 212. Dr K Roy participated in the Training cum Workshop for studies on Real Time Pest Dynamics under NICRA at NCIM, New Delhi on 13.10.2017
- 213. Dr K Roy participated and delivered oral presentation report in the 5th Group Discussion of ICAR-AICRP on Fruits at the ICAR-NRCB, Tiruchirapalli, Tamil Nadu. Technology developed through ICAR-AICRP on Fruits was also presented on 15-18 Feb, 2018.
- 214. Dr K Roy participated in the World Honey Bee Day (organized by the Apiculture Unit, Department of Agril. Entomology, BCKV, Mohanpur, Nadia) on **21.05.2018.**
- 215. Dr K Roy participated in the 14th Annual (7th Biennial) Conference of Crop and Weed Science Society (CWSS) and Farmers Scientist Interaction on the Present State of Agriculture was held at the Farmers' Academy & Convention Centre (FACC) BCKV, Kalyani-741235, Nadia, West Bengal on 30th June, 2018
- 216. Dr K Roy participated in the 15th Annual Conference of Crop and Weed Science Society (CWSS) and Farmers Scientist Interaction on the Present State of Agriculture was held at the Directorate of Extension Seminar Hall, Mohanpur, Nadia, West Bengal on 26th June, 2019

- 217. Dr K Roy convened International Seminar on Agriskills for Convergence in Research, Industry and Livelihood (ACRIL) was held at the Farmers' Academy & Convention Centre (FACC) BCKV, Kalyani-741235, Nadia, West Bengal during 28th November to 1st December 2019.
- 218. Dr K Roy delivered an **Invited Key NoteLecture** National Webinar on Challenges and Recent Initiatives on Sustainable Management on Fall Armyworm, organized by the Bihar Agricultural University, Sabour, Bhagalpur (Bihar) on 16th July, 2020 at 10.00-14.20
- 219. Dr K Roy participated in the Webinar on Host-Microbe Interactions: Present and Future Perspectives organized by the School of Biotechnology, Department of Life Sciences, Presidency University, Kolkata on August 6-7, 2020.
- 220. Dr K Roy participated in the 16th Annual (8th Biennial) Conference of Crop and Weed Science Society (CWSS) and Professor Anjan Bhattacharya Memorial Lecture (1st) was held at BCKV, Kalyani-741235, Nadia, West Bengal on 1st October 2020.
- 221. Dr K Roy participated in the Pest Management in Organic Farming : Options and Challenges, Organized by Krishi Vigyan Kendra, Sepahijala, CAU(I), Tripura on 30th July 2021
- 222. Dr K Roy Co-Chaired the Technical Session on Plant Protection in the International Conference on Agriculture, Food Science, Natural Resource Management and Environmental Dynamics: The Technology, People and Sustainable Development organised the Department of Agricultural Extension, BCKV, Mohanpur, Nadia, West Bengal and "Krishi Sanskriti, New Delhi during 13th and 14th August, 2016 at FACC, BCKV, Nadia, West Bengal
- 223. Dr K Roy Co-Chaired the Technical on Pests of Coconut and their Management in World Coconut Day organized by the AICRP on Palms and MIDH-Spices, Directorate of Research, BCKV, Kalyani, Nadia on 2nd September, 2016 at the Directorate of Research, BCKV, Kalyani, Nadia.
- 224. Dr K Roy Co-Chaired the Technical Session-III. Morphology, Taxonomy, Phylogeny and Classification in the National Symposium on "Climate Smart Agriculture for Nematode Management" organized by the Nematological Society of India during 11-13 January, 2017 at ICAR-Central Coastal Agricultural Research Institute Ela, Old Goa – 403402.
- 225. Dr K Roy Co-Chaired the Technical Session in the National Webinar on "Challenges and Recent Initiatives on Sustainable Strategy: An eco-friendly approach for management of Fall Armyworm" Bihar Agricultural University, Sabour, Bhagalpur (Bihar) on16th July, 2020
- 226. Dr. S. Mondal (Ghosh) attended the Biennial workshop of AICRP on Nematodes at University of agricultural and Horticutural Sciences, Shivamogga during February 8-10, 2016
- 227. Dr. S. Mondal (Ghosh) attended the XIII Annual Group Meeting of AICRP on Nematodes in cropping systems (ICAR) at ISI, Kolkata (West Bengal)

- 228. Dr. S. Mondal (Ghosh) attended the XX Biennial Meeting of AICRP on Nematodes in cropping systems (ICAR) at Anand Agricultural University, Anand, Gujarat during 15-17th February, 2018
- 229. Dr. S. Mondal (Ghosh) attended the The Panel Discussion on Scouting Novelties for Nematode Management and Appraisal Meeting of AICRP on Nematodes in Agriculture
- 230. Attended a group discussion at BARC, Mumbai 10-11th November, 2016-Dr. P.K.ManiAttended 82ndAnnual Convention and National Seminar on "Developments in Soil Science-2017" of ISSS held at Amity University, 11-14 December, 2017-Dr. P.K.Mani.
- 231. Attended National Conference on "Innovative farming for Food and Livelihood security under Changing Climate" held at BCKV, During 12-13th January, 2018-Dr. P.K.ManiAttended State level workshop on "Current strategies and emerging issues of soilwater-environmental management in agricultural system" held during February 26-27, 2019 at FACC. BCKV-Dr. P.K.Mani.
- 232. Attended National Seminar on "Agro-chemical inputs and its extension approaches towards food-security and bio-safety: Prospects & Challenges (AEFS-2019)" held at SAMETI, Narendrapur,West Bengal during 16th November, 2019 and delivered InvitedLecture on Impact of coated Nitrogenous fertilizer on Nitrogen and carbon dynamics in rice based cropping system-Dr. P.K.Mani.
- 233. Attended International Seminar on "Agriskills for Convergence in Research, Industry &Livelihood (ACRIL 2019)" held during November 28 December 01, 2019 organized by the Crop and Weed Science Society (CWSS), Bidhan Chandra Krishi Viswavidyalaya at the Farmers' Academy & Convention Centre (FACC), BCKV, Kalyani, Nadia, West Bengal, India-Dr. P.K.Mani
- 234. National seminar on "Environmental Concern for Fertilizer Use in Future" (2016)-Mr. Arindam Sarkar
- 235. International conference on "Agriculture, Food Science, Natural Resource Management and Environmental Dynamics: The Technology, People and Sustainable Development" (2016)-Mr. Arindam Sarkar
- 236. International Symposium on "Eco Efficiency in Agriculture and Allied Research" (EEAAR-2017)-Mr. Arindam Sarkar
- 237. International conference on "Contemporary Issues in Integrating Climate-The Emerging Areas of Agriculture, Horticulture, Biodiversity, Forestry; Engineering Technology, Fundamental/Applied Science and Business Management for Sustainable Development (AGROTECH-2017)"-Mr. Arindam Sarkar
- 238. National conference on "Innovative Farming for Food and Livelihood Security in Changing Climate" (2018)-Mr. Arindam Sarkar
- 239. National workshop on "Current Strategies and Emerging Issues of Soil-Water-Environmental Management in Agriculture System" (2019)-Mr. Arindam Sarkar

- 240. International Seminar on "Agriskills for convergence in research, industry& livelihood" (ACRIL) held during 28th November to 1st January, 2019 at FACC, BCKV, Kalyani, West Bengal-Mr. Arindam Sarkar
- 241. Participated in the National Seminar on "Environmental concern for fertilizer use in future" held at Farmers' Academy & Convention Centre (FACC), BCKV, Kalyani on February 26, 2016-Dr. Sushanta Saha.
- 242. Participated and presented a research paper in Oral Session in the International Conference on "Agriculture, Food Science, Natural Resource Management and Environmental Dynamics: The Technology, People and Sustainable Development" held at Farmers' Academy & Convention Centre (FACC), BCKV, Kalyani during 13-14 August, 2016-Dr. Sushanta Saha
- 243. Participated and presented a research paper in Poster Session in the National Seminar on "Nutrients and pollutants in soil-plant-animal-human continuum for sustaining soil, food and nutritional security way forward" held at Farmers' Academy and Convention Centre (Lake Hall), BCKV, Kalyani, West Bengal during 09-10 June, 2017-Dr. Sushanta Saha
- 244. Participated and presented a research paper in Oral Session in the 1st Farm Innovation Congress (FIC), 2018 & National Conference on "Innovative Farming for Food and Livelihood Security in Changing Climate" held during 12-13 January, 2018 at FACC, BCKV, West Bengal-Dr. Sushanta Saha
- 245. Participated and presented a research paper in the Poster Session of the Virtual National Seminar on "Agrochemicals for upkeeping environment" held on August 27, 2020-Dr. Sushanta Saha.
- 246. Participated in the "National Webinar on "Recent Advances in Soil Microbiological Research with a Special Thrust to Biofertilizer Technology"" organized by Bihar Agricultural University, Sabour, Bhagalpur held on 25th August, 2020 -Dr. Sushanta Saha
- 247. Participated in the International Webinar on "Soil Spectroscopy: An Emerging Technique for Rapid Soil Health Assessment Jointly organized by ICAR-Indian Institute of Soil Science, Bhopal & World Agroforestry (ICRAF), Nairobi on 01 October 2020-Dr. Sushanta Saha
- 248. Attended the 82nd annual convention and National Seminar of Indian Society of Soil Science at Amity University, Kolkata on 11th December, 2017-Dr. Abhijit Debnath.
- 249. Attended National Seminar on Development in Soil Science at Kolkata (2017)-Dr. P.K. Bandopadhyay
- 250. Attended National Seminar on Development in Soil Science at Benaras (2019) -Dr. P.K. Bandopadhyay
- 251. Attended International conference on Agriculture, Food Science, Natural Resource Management and Environmental Dynamics: The Technology, People and Sustainable Development (2016) at FACC, BCKV-Dr. S.K.Pal
- 252. Attended International conference on Eco-efficiency in Agriculture and Allied Research (EEAAR'17) at FACC, BCKV- Dr. S.K.Pal

- 253. Attended National Level Workshop on Arsenic Contamination of the Food Chain: Present Scenario and Future Projections (2017) at FACC, BCKV- Dr. S.K.Pal
- 254. Attended National Seminar on Development in Soil Science-2017" at Amity University Kolkata, New Town, Kolkata- Dr. S.K.Pal
- 255. Attended National Workshop on "Current Strategies and Emerging Issues of Soil-Water-Environmental Management in Agricultural System" (2019) at FACC, BCKV- Dr. S.K.Pal
- 256. Attended 84th Annual Convention & National Seminar on Development in Soil Science-2019" at Banaras Hindu University, Varanasi (2019) - Dr. S.K.Pal
- 257. Attended National Seminar on Development in Soil Science at Benaras (2019) -Dr.N. Saha
- 258. Attended International Conference of climate change, biodiversity and sustainable agriculture, Assam Agricultural University, Jorhat, 13-16, December, 2018- Dr N. Saha
- 259. Attended National Workshop on "Current Strategies and Emerging Issues of Soil-Water-Environmental Management in Agricultural System" on 7-8th March 2019 at FACC, BCKV, Kalyani in collaboration with AICRP on IWM and RKVY on Groundwater Management-Dr. Sudeshna Mondal.
- 260. Attended STCR Workshop on 9th March 2019 at FACC, BCKV, Kalyani- Dr. Sudeshna Mondal.
- 261. Dasgupta, S., Saha, N., Mondal, S. and Dey P.(2016). Evaluation of suitability of soil extratractant to predict plant available potassium for fertilizer recommendation in alluvial soils of West Bengal. International Conference on "Agriculture, Food Science, Natural Resource Management and Environment Dynamics: The technology, People and Sustainable Development". Organized by BCKV, Kalyani in association with Krishi Sanskriti, New Delhi. 13-14 August,2016 at FACC, BCKV, Kalyani.
- 262. Dasgupta, S., Saha, N., Mondal, S. and Dey, P. (2016). Evaluation of suitability of soil extractants to predict plant available Potassium for fertilizer recommendations in alluvial Soils of West Bengal. International conference on Agriculture, Food Science, Natural Resource Management and Environmental Dynamics held on, 13-14 August, B.C.K.V, West Bengal
- 263. Chakraborty, S., Dasgupta, S., Mondal, S., Saha, N. and Dey, P. (2017). Working Suitability of Extractants in Organic Nitrogen Estimation under Organic Production Nitrogen Estimation under Organic Production System in Nadia District, West Bengal, India. International Conference on Contemporary Issues in Integrating Climate-The Emerging Areas of Agriculture, Horticulture, Biodiversity, Forestry; Engineering Technology, Fundamental/Applied Science and Business Management for Sustainable Development
- 264. Mondal, S., Hazra, G.C. and Mani, P.K. (2017). Influence of phosphorus and zinc interaction on growth and nutrition of rice (Oryza sativa L.) in new alluvial zone of West Bengal. National Seminar on "Nutrients and pollutants in soil-plant-animal-human

Continuum for sustaining soil, food and nutritionl security- way forward" held at FACC, Kalyani, Nadia, West Bengal on June 9-10, 2017.

- 265. Mondal, S., Saha, N., Dasgupta, S. and Dey, P. (2017). Soil test based fertilizer recommendation for targeted yield of cauliflower (Brassica oleracea var. botrytis) in new alluvial zone of West Bengal. National Seminar on "Nutrients and pollutants in soil-plant-animal-human Continuum for sustaining soil, food and nutritionl security- way forward" held at FACC, Kalyani, Nadia, West Bengal on June 9-10, 2017.
- 266. Mondal, S., Saha, N., Dasgupta, S. and Dey, P. (2017). Fertilizer recommendation for onion (Allium cepa L) based on target yield concept in New Alluvial Zone of West Bengal. National Seminar on "Maximizing Fertilizer Use Efficiency and Environmental Health for Posterity" organized by Society for Fertilizers and Environment held at IRDM Faculty Centre, RKMVU, Narendrapur, Kolkata on 8th March 2017
- 267. Halder, N., Mondal, S., Saha, N., Dasgupta, S. and Dey, P. (2018). Nutrient Integration-A Novel Path to Improve Soil Quality and Functional Food Components of Cabbage. National Conference on "Innovative Farming for Food and Livelihood Security in Changing Climate" held at FACC, Kalyani, Nadia, West Bengal on January 12 and 13, 2018.
- 268. Dey, S., Dasgupta, S., Mondal, S., Gupta, S. and Saha, N. (2018). Experimental Approach for Improvement of Soil Fertility by Dose Administration of Chemical and Organic Fertilizers in Kharif Rice Field. National Conference on "Innovative Farming for Food and Livelihood Security in Changing Climate" held at FACC, Kalyani, Nadia, West Bengal on January 12 and 13, 2018.
- 269. Mondal, S., Gorai, D., Dasgupta, S., Bhattacharyya, K., Saha, N. and Dey, P. (2019). Integrated fertilizer prescriptions through targated yield model and prediction of postharvest soil test values for kharif rice in new alluvial zone of West Bengal. National Seminar on "Agro-Chemical Inputs and its Extension Approaches Towards Food-Security and Bio-Safety: Prospects and Challenges (AEFS-2019)" held at the Ramakrishna Mission Ashrama, Narendrapur, Kolkata, West Bengal, India on Nov. 15-16, 2019.
- 270. Swain, T., Mondal, S., Bhattacharyya, K., Dasgupta, S. and Dey, P. (2020). Evaluation of suitability of multinutrient extractant for estimating available potassium in some selected Inceptisols of West Bengal. National Webinar on "Agrochemicals for upkeeping environment" organized by the Society for Fertilizers and Environment in collaboration with Bidhan Chandra Krishi Viswavidyalaya on August 27, 2020.
- 271. A. Majumder participated and delivered a lecture as Invited Speaker on 8th International conference on Statistics organized by Int. Indian Statistical Association (IISA) held on June, 2017 at Hydrabad
- 272. A. Majumder participated and delivered a lecture as Invited Speaker on 72nd National Conference of Indian Society of Agricultural Statistics Held on December 2018, Bhopal

- 273. A. Majumder participated and delivered a lecture as Invited Speaker on Int. Conference of Agricultural Statistics organized by Directorate of Agriculture, Govt Of India Held on November 2019, New Delhi
- 274. Mr Sateesh Research Scholar of the department received ICAR-SRF for pursuing Ph. D in Agricultural Statistics at BCKV for tenure of 3years(2019-22).
- 275. Dr. D.K. Hazra, Asstt. Prof.; Dr. R. Karmakar, Asstt. Prof.; attended 10thAnnual Workshop of Monitoring of Pesticide Residues at National Level (MPRNL) and 24th Annual Workshop of AINP on Pesticide Residues at PAU, Ludhiana; May 25-27, 2016.
- 276. Dr. Sankhajit Roy, Asstt. Prof. attended 7th International Weed Science Congress and presented a research paper "Persistence and Dissipation of Penoxsulam and Butachlor in Transplanted Paddy" at Prague, Czech Republic, held on June 19-25, 2016.
- 277. Dr. D.K. Hazra, Asstt. Prof. attended 1st Regional Science and Technology Congress, and presented a research paper on "Rodent Menace, their Management and Role of Possible New Formulations to Combat Rodenticide Resistance" organized by NITTTR, Kolkata, held on November 13-14, 2016
- 278. Subrata Biswas, SRF, presented a paper on Persistence and degradation dynamics of Fipronil in sugarcane in the National Symposium on Plant Health Management for Food Security and Safety, Organised by Indian Phytopathological Society (E. Zone), FACC (Lake Hall), BCKV, Kalyani, December 08-09, 2016.
- 279. SoumenSaha, SRF, presented a paper on Chemical characterization of ClerodendrumInfortunatum leaf extract in relation to its fungicidal activity in the National Symposium on Plant Health Management for Food Security and Safety, Organised by Indian Phytopathological Society (E. Zone), FACC (Lake Hall), BCKV, Kalyani, December 08-09, 2016.
- 280. Sabyasachi Ghosh, SRF, presented a paper on Optimization of Physicochemical parameters for green systhesis of silver nanoparticles using plant extract in the National Symposium on Plant Health Management for Food Security and Safety, Organised by Indian Phytopathological Society (E. Zone), FACC (Lake Hall), BCKV, Kalyani, December 08-09, 2016.
- 281. Rahul Mondal, SRF, presented a paper on Distribution of Pesticide Residues in the Aquatic Environment in a Selected area under Hooghly River Basin in West Bengal in the International Symposium on Eco-Efficiency in Agriculture & Allied Research, Organised by Crop & Weed Science Society (CWSS), FACC (Lake Hall), BCKV, Kalyani, January 20-23, 2017.
- 282. Ayan Mukherjee, SRF, presented a paper onDegradation Dynamics of Fipronil Residues in Paddy Ecosystem in the International Symposium on Eco-Efficiency in Agriculture & Allied Research, Organised by Crop & Weed Science Society (CWSS), FACC (Lake Hall), BCKV, Kalyani,January 20-23, 2017.

- 283. Sabyasachi Ghosh, SRF, presented a paper onOne Step Green Method for Synthesis of Silver, Gold and Gold-Silver Alloy Nanapartticles using Plant Extract in the International Symposium on Eco-Efficiency in Agriculture & Allied Research, Organised by Crop & Weed Science Society (CWSS), FACC (Lake Hall), BCKV, Kalyani, January 20-23, 2017.
- 284. Dr. D.K. Hazra, Asstt. Prof.; presented a paper on Evaluation of New Formulation of Quizalofop ethyl (5% EC) for Residue and Persistence (Dissipation) Pattern in Onion in the International Symposium on Eco-Efficiency in Agriculture & Allied Research, Organised by Crop & Weed Science Society (CWSS), FACC (Lake Hall), BCKV, Kalyani, January 20-23, 2017.
- 285. Dr. D.K. Hazra, Asstt. Prof.; Dr. R. Karmakar, Asstt. Prof.; attended 12thAnnual Workshop of Monitoring of Pesticide Residues at National Level (MPRNL) and 26th Annual Workshop of AINP on Pesticide Residues at PJTSAU, Hyderabad July 11-13, 2018.
- 286. Rodas Worede Ezezew, Research Scholar, presented a paper on Development of botanical pesticide formulation and evaluation of its bio-efficacy in the All India Post Graduate Students' Research Convention in Soil Science, Organised by Bihar Agricultural University, Sabour, Bhagalpur, Bihar,15-16 March, 2019.
- 287. Sayan Pan, Research Scholar, presented a paper on Occurrence of Pesticide Residues in Rice Grown under Organic and Conventional Farming in West Bengal in the All India Post Graduate Students' Research Convention in Soil Science, Organised by Bihar Agricultural University, Sabour, Bhagalpur, Bihar, 15-16 March, 2019.
- 288. Dr. D.K. Hazra, Asstt. Prof.; Dr. R. Karmakar, Asstt. Prof.; attended 13thAnnual Workshop of Monitoring of Pesticide Residues at National Level (MPRNL) and 27th Annual Workshop of AINP on Pesticide Residues at KAU, Vellayani, 2-3rd August, 2019.
- 289. Dr. D. K. Hazra, Asstt. Prof, presented a paper on Role of Biostimulant Formulations in Conservation Agriculture: An Overview in the 4th Regional Science & Technology Congress" organized by Maulana Abul Kalam Azad University of Technology, Haringhata, Nadia, 23rd to 24th December, 2019.
- 290. Dr. D. K. Hazra, Asstt. Prof, presented a paper on Development of user & environment friendly vegetable oil based Nitrobenzene 35% EC formulation and evaluation as bio-stimulant on tomato (Solanum lycopersicum L.) in the International Seminar on "Agriskills for Convergence in Research, Industry & Livelihood (ACRIL)" organized by Farmers' Academy & Convention Centre (FACC), BCKV, Kalyani, Nadia, West Bengal, India, November 30-31 & December1, 2019.
- 291. Prof. RK Kole, was honored by inviting for a keynote address *in International Web Conference on Ensuring Food Safety, Security and Sustainability through Crop Protection* on "Improved pesticide formulation for sustainable crop protection". Organized by Bihar Agricultural University, Sabour, Bhagalpur, India. August 5 & 6 2020.

6.6.5.3. Incentives for Excellence/Faculty Recognition.

This will be initiated soon

6.6.5.4. Capacity Building and Training:

The Extension Education Directorate has conducted various types of Capacity Building Programmes through the KVKand Farmer's Training Centre (FACC) during last 5 years. Training courses on number of areas including management of field crops, traditional horticultural crops, high value crops, seed production and storage, seed certification process, planting material production, disease-pest and weed management, animal husbandry, forage crop production, nutrition gardening, food preservation, vermin-composting, soil health management, protected cultivation, Integrated Nutrient Management, Integrated Pest Management etc. were conducted with an average of 312 number of trainings per year. Among different training programmes majority of the programmes were conducted for the farmers and farm women (65.43%) followed by rural youth (17.94%) and extension personnel (9.25%).

Different category wise participants trained for last 5 years through the Extension Directorate:

Clients group	HQ & FACC	NadiaKVK	Hooghly KVK	Howrah KVK	Purba Medinipur KVK	Total
Practicing Farmers	6,270	24,554	39,951	24,280	5,293	1,00,348
Rural Youths	1,273	7,962	2,549	2,181	88	14,053
Extension Functionaries	127	4,913	1,558	6,506	-	13,104
Total	7,670	37,429	44,058	32,967	5,381	1,27,505

Vocational and Skill Development training:

Different long duration skill development training courses were conducted by the Directorate in different disciplines viz. Open field floriculture, Seed production technologies, Vermi-composting and Mushroom production technologies etc. to develop capacity building and to motivate rural youths for becoming successful entrepreneur.

Different component wise participants trained under Vocational and Skill Development training for last 5 years through the Extension Directorate:

Clients group	HQ & FACC	Nadia KVK	Hooghly KVK	Howrah KVK	Purba Medinipur KVK	Total
4 days skill trainings	323	972	1523	165	-	2,983
200 hrs skill training under ASCI	-	140	80	40	-	360
1 yrs diploma course for input dealers (DAESI)	240	240	360	200	80	1,120
Total	563	1,352	1,963	405	80	4,363

6.6.6. Student Development

University offers University Research Scholarship (URS) for the PhD students of all discipline funded by Govt. of West Bengal. Total URS strength is 150 and the amount of fellowship is Rs. 18,000 per month for first two years and Rs. 20,000 for 3rd year. Besides this many students under M.Sc. and PhD program receive Swami Vivekananda Merit cum means Fellowship sponsored by Govt. of West Bengal. Several students received the fellowship from ICAR/ JRF/SRF/ NET(ICAR/ICMR/ UGC/CSIR/ DBT):

Number of StudentsSelectedforJRF/SRF/NET(ICAR/ICMR/UGC/CSIR/DBT): 2016-2017

Sl.No.	NameofCollege/Faculty	JRF	SRF	NET	Others	Remarks
1	FacultyofAgriculture	20	0	24	1	One student selected through Prime Minister Scholarship
2	FacultyofHorticulture	2	0	6		
3	FacultyofAgriculturalEngineering	0	0	-	5(GATE)	
	Total	27	0	30		

SN	Name of College/ Faculty	JRF	SRF	NET	ARS
1.	Faculty of Agriculture	13	3	126	1
2.	Faculty of Horticulture	-	-	15	-
3.	Faculty of Agricultural Engineering	-	-	-	-
	Total	13	3	141	1

Number of Students Selected for JRF/SRF/NET (ICAR/ICMR/UGC/CSIR/DBT): 2017-2018

Number of Students Selected for JRF/SRF/NET (ICAR/ICMR/UGC/CSIR/DBT): 2018-2019

SN	Name of College/ Faculty	JRF	SRF	NET	Others/ Gate
1.	Faculty of Agriculture	25	02	65	Nil
2.	Faculty of Horticulture,	01	Nil	14	Nil
3.	Faculty of Agricultural Engineering,	Nil	Nil	Nil	06
	Total	26	02	79	06

Number of Students Selected for JRF/SRF/NET (ICAR/ICMR/UGC/CSIR/DBT): 2019-2020

SN	Name of College/ Faculty	JRF	SRF	NET	Others/	Gate
					UGC Net	
1	Faculty of Agriculture	16	3	33	14	
2	Faculty of Horticulture,	5	1	14		
3	Faculty of Agricultural	1	0	0	4	6
	Engineering,					
	Total	22	4	47	18	6

Number of Students Selected for JRF/SRF/NET (ICAR/ICMR/UGC/CSIR/DBT): 2020-2021

SN	Name of College/ Faculty	JRF	SRF	NET	GATE	Others/NTS UGC Net
1	Faculty of Agriculture	12				22
2	Faculty of Horticulture,		1	16		
3	Faculty of Agricultural	0			5	
	Engineering,					

			r		
Total	12	1	16	5	

6.6.6.2. Extra and Co-curricular Activities:

Whether the sports/games/cultural activities/NSS/NCC/ programmes are being organized? Yes

SL.	Year	ICAR sponsored events	No. of students	No. of award/medals
No.		(Agri-unifest/ Agri-	participated	received
		sports/ any other)		
1.	2016-17	1. Agri-unifest	25	Nil
		2. Agri-sports		Nil
2	2017-18	1. Agri-unifest	25	1 (Gold medal)
		2. Agri-sports	28	Nil
3.	2018-19	1. Agri-unifest	22	2 (Gold) + 1 (Silver)
		2. Agri-sports	25	Nil
4.	2019-20	1. Agri-unifest	20	3 (Silverl) + 3 (Bronzel)
		2. Agri-sports	25	Nil

Participation of students in ICAR sponsored events: (2016-17 to 2020-21):

A. Regular Programmes of NSS:

Celebration of -

- Independence Day Celebration (15th Aug)
- Republic Day (26 th January)
- Swachchha Bharat Aviyaan (since 2014)
- SwachhtaPakhwara
- Foundation Dayof BCKV (1st September)
- Gandhi Jayanti (2nd October)
- Tree Plantation Programme
- Blood Donation Camp
- World Aids Day (1st Dec)
- Vanmahatsava (Plantingof trees)
- National Youth Day (-12th Jan) Birthday of Swamii Vivekananda
- Netaji Birth Anniversary (23rd Jan)
- World Environmental Day (5thJune)
- International Day of Yoga (21 st June}
- Agriculture Education Day (Birthday of DrRajendra Prasad on 11 th Nov.)
- National Unity Day(Birthday of SardarBallavbhai Patel on 31 st October)
- Save water campaign
- BetiBachao- BetiPadao (Save and educate girl Children)
- Cultural Programmes

B. <u>Special/ Regular Camps Organised</u> :

- Awareness to HIV/AIDS
- Training on Yoga /Meditation
- First Aid
- Awareness to Parthenium weed
- Child Education (invillage}
- Adult Education
- Awareness to Road safety
- Vanamahotsava (in campus and in nearby villages)
- Awareness to Virus transmitted diseases
 - Nutrition Garden (inschool)PoshanAviyan

Special ProgrammeOrganised Due to covid situation (virtual Mode) 2020-21

- Quiz Programme "Awareness on Covid-19" (Online)
- Intewrnational Quiz contest (Online) on "Environment Intra University Article Writing & Video Making Competition on-1. Covid-19 And
 Amfaan Strom
- Online Quiz Event "Qurious", and International Workshop on Topic: Role Of Youth For Sustainable Food Production through Livestock and Health Management
- Organised ''Infiesta'' Intra University Article Writing Competition
- Voluteers Take Training on Covid-19 Via Diksha, Govt. Of India
- Volunteers Participated in the "Spitting Kills" Campaign by NSS West Bengal
- Celebrated International Yoga Day and Organised a Webinar on The Topic "Benefitsof Yoga"
- Organised International Webinar On"Environment In 2020: Visionand Mission"
- Organised A Cultural Get Together Via Online Platform "Tobu MoneRekho" Porbo-2, (KobiPronam), on The Occasion of The Death Anniversary of Kabiguru Rabindranath Tagore.
- Organised Online Quiz Competition for The School Students on Agriculture on Education Day.
- Webinar On the Awareness of Aids in Collaboration with Wbsap&Cs
 - Organised Fit India Cyclothon, Marathon& Walkathon for The Promotion of Fit India Campaign.

- Number and outlay of Green initiative projects from Education Division of ICAR: Several ICAR and in house program have been taken during last five years under National Service Scheme (NSS). Twelve Green initiative projects are being organized at BCKV and the students and staffs of the five units of BCKV:
- 1. Faculty of Agriculture, BCKV
- 2. Faculty of Horticulture, BCKV
- 3. Faculty of Agricultural Engineering, BCKV
- 4. College of Agriculture, Burdwan Campus, BCKV
- 5. College of Agriculture, Susunia Bankura Campus, BCKV

• Outlay of Green initiative projects

- i. Swachchha Bharat Aviyaan (since 2014)
- ii. Swachhta Pakhwara
- iii. Tree Plantation Programme
- iv. Vanmahatsava (Plantingof trees)
- v. Green India Clean India
- vi. World Environmental Day (5thJune)
- vii. International Day of Yoga (21 st June}
- viii. Agriculture Education Day (Birthday of Dr. Rajendra Prasad on 11 th Nov.)
- ix. Save water campaign
- x. Swachchha Bharat Aviyaan (since 2014)
- xi. Awareness to Parthenium weed
- xii. Nutrition Garden (inschool) Poshan Aviyan

Achievements of NSS BCKV& Awards (2016-2020):

Awarded As One of The Best Red Ribbon Club in Indiafrom West Bengal State by National Aids Control Organization, Ministry of Health & Family Welfare, Govt. of India in 2019 At New Delhi.

- NSS volunteer received certificate of distinction on video making competition in national YUVA contest, 2020 by NSS, Uttar Pradesh, India
- NSS volunteers, BCKV are awarded as district & state level champion and also as

regional level runners up in quiz competition organized by WBSAP&CS, 2020. and Ministry of Health and Family Welfare, Govt of India.

- NSS volunteer, BCKV. secured district level 3rd position in poster competition on cathch the rain when it falls, where it falls by NYKS and Ministry of Youth Affairs and Sports, Govt of India.
- NSS volunteers, BCKV secured 4th and 6th position in short film making competitionbyNACO&Ministry of Health and Family Welfare, Govt of India on the topic of blood donation and aids awareness promotion.
- NSS, BCKVwon certificate of appreciation from ministry of youth affairs & sports for successfully conducting fit India Cyclothon in promotion of fit India campaign.

Cultural centre:

BCKV has the core Cultural Group for performing drama, recitation, skit, painting, dance and singing. The students of all the colleges perform the all the cultural activities in the Annual Cultural Meet every year and on the eve of some national celebration program and birthday of legendries organized in BCKV. The students of BCKV regularly attend the East Zone Youth Festival and qualified performers attend the Central level competition in most of the events. No cultural program has been organized or attended during March 2020 to till date due to Covid pandemic.

6.6.6.3. Health Facilities: Provide the brief information about medical facilities available in the head quarter and off-campuses. A brief about Health Insurance scheme being implemented at theUniversity may be provided.

The present medical unit was housed in ground floor of the Administration Building for a long period since inception of BCKV, Mohanpur in the year 1974. The unit was later separated and shifted to the newly constructed Health Centre in the year of 2001 and named as "Prof. S. B. Chottopadhyay Memorial Health Centre" in 2012. The Health Centre provides free medical advices, free investigations along with required medicine to the students of this viswavidyalaya. Staff and their family members are benefited with free medical advice, investigations with nominal charges along with emergency medicine only. A small parallel unit is also functioning in the Directorate of Research Complex Building, Kalyani, where the patient are nurtured & rendered with medicines as per the advice of the doctor who has been attending that unit. Lady Doctor (on contact basis) visits the Unit once a week to render medical advices.

Medical Officers – Medical Officer & In-Charge

Lady Medical Officer (on Contract) – The proposal for creation of one Lady Medical Officer has been proposed to Govt. of west Bengal

The Medical Unit also has support staff as Sr. Suptd. (Acting), Sweeper, Field Worker, Jr. Peon, Head Mali. Few contractual technical support staff include Lab Technician, Ecg cum X-Ray Technician, Pharmacist, Physiotherapist, ECG & X-Ray Attendant and Lab Attendant. Health Centre has A/C ambulance in emergency service for 24x7.

6.6.6.4. Sports and Cultural Facilities: Give detailed report of sports and games facilities and auditoriums available for cultural events.

Year	Name of the University/ College/Faculty	Location of the facilities & District	List of Sports Facility
2016- 2017	BCKV	Mohanpur, Nadia	Supporting materials (football, volley ball, cricket batandballetc)ofoutdoorandIndoorgames
			Total
2017- 2018	BCKV	Mohanpur and Kalyani, Nadia	 Various sports items Maintenance of the University Play- ground and making of Structure for Cricket practice Participation in various All India Sports Meet
			Total
2018- E 2019	BCKV	Mohanpur, Nadia	Purchase of sports good
			Participation in Agrimet 18
			Participation in other All India Sports Meet
			Annual athletic meet
			Total
2019- 2020	BCKV	Mohanpur, Nadia	Purchase of sports good
			Participation in Agrifest 19
			Participation in other All India Sports Meet
			Annual athletic meet
The ind	oor sport facilities lik	e table tennis, badn	ninton are available at the hostels.
Gymnas	sium is built up near l	nostels.	

Year-wise	expenditure	on Sports	Fcaility

Year	Sports Facility Procured	Amount Spent
		(Rs. In Lakh)
2016-17	Supporting materials (football, volley ball, cricket batandballetc)ofoutdoorand indoorgames	1.34
2017-18	 Various sports items Maintenance of the University Play-ground and making of Structure for Cricket practice Participation in various All India Sports Meet 	14.083
2018-19	Purchase of sports good	11.752
	Participation in Agrimet 18	
	Participation in other All India Sports Meet	
	Annual athletic meet	
2019-20	Purchase of sports good	7.72
	Participation in Agrifest 19	
	Participation in other All India Sports Meet	
	Annual athletic meet	
2020-21	Purchase of sports good	7.72
	Participation in Agrifest 19	
	Participation in other All India Sports Meet	
	Annual athletic meet	

BCKV has the core Cultural Group for performing drama, recitation, skit, painting, dance and singing. The students of all the colleges perform the all the cultural activities in the Annual Cultural Meet every year and on the eve of some national celebration program and birthday of legendries organized in BCKV. The students of BCKV regularly attend the East Zone Youth Festival and qualified performers attend the Central level competition in most of the events. No cultural program has been organized or attended during March 2020 to till date due to Covid pandemic.

6.6.6.5. Student Counseling and Placement Cell:

The viswavidyalaya has established placement cell since 2010 with moderate infrastructure. Infrastructure-The cell has one office room with computers and accessories, one large room with audiovisual aids for conducting corporate presentations, interview and group discussions and one waiting room for students at the time of campus interview. Beside that computer lab of agricultural statistics department is utilized for arranging online examination and colloquium room of Agricultural Extension Department is used for offline examination purposes.

Manpower-The placement cell has a Chairman and three coordinators from three faculties who are being selected from the teachers and officers of the university. One contractual employee of the viswavidyalaya with computer knowledge maintains the cell and supports the interview process.

Annual Activities- Year round contact with the employers is maintained by the placement cell. Some of our Alumni are in senior positions of the corporate. The HRD cells of different corporate places their requirements to the placement cell. According the placement cell prepare the notifications and publish it in the websites of BIdhan Chandra Krishi Viswavidyalaya for wider circulations among the students. Besides it some notifications which are collected from different authentic sources are shared in students' whatsap groups .

Campus interview is organized according to the demand and procedures of the concerned corporate. Placement cell provides logistic supports for arranging company presentation, online and offline examination, group discussion, personal interview etc.

Selected candidates are informed and necessary supports for their joining are provided.

Placement of Internees in different institution is done based on the academic calendar of the viswavidyalaya.

Counseling and guidance- Interested candidates are groomed for different types of corporate for facing personal interviews, writing resumes, participating in group discussions by the placement cell.

Year.	Name of the University /College/Faculty	Location & District	ICAR	CAU/ SAU	Central Govt.	State Govt.	Pvt./ Others
2017	Faculty of Agriculture,Horticulture and Agril.Engineering	Mohanpur, Nadia	4	4	5	95	50*
2018	Faculty of Agriculture,Horticulture and Agril.Engineering	Mohanpur, Nadia	1	9	31	23	10

Details of Agencies /Organisation where student got Placement during the year:

2018- 2019	Faculty of Agriculture,Horticulture and Agril.Engineering	Mohanpur, Nadia	14		7	56	24
2019- 2020	Faculty of Agriculture,Horticulture and Agril.Engineering	Mohanpur, Nadia	4	14	17	68	34
2020- 2021	Faculty of Agriculture,Horticulture and Agril.Engineering	Mohanpur, Nadia	0	28	30	120	65

*Nationalised Banks and Private Corporations

6.6.6.6 Disabled Friendly Facilities: What kind of facilities is available for differently abled persons in the campus? Give a brief report.

University has the regular bus service to pick up the disabled students from hostel to the colleges. The Agriculture Faculty building has the facilities of lift to facilitate the disabled students

6.6.7. Infrastructure

The university is comprised of Mohanpur and Kalyani as major place of administrative, teaching, learning, research and extension head quarter. It has got three regional research stations, three regional research sub-stations and five KVKs spanning over the south Bengal. The major administrative and infrastructural facilities are Building: It is three storied building and area of 55025 sq ft area with all the administrative offices including Vice-Chancellor Secretariat, Registrar Department, Comptroller Department, DSW Department, Special Officer (Development) establishment, Directorate of Farms Office, Admission and Scholarship Sections, Leave Section, Common Service Section, University Works and Estate Office, Examination Section, Despatch and Security Office, University post office, Cooperatives and public bank

Academic blocks: Agriculture faculty building with Dean office, class rooms, laboratories and 16 departments; Horticulture faculty building with Dean Office, class rooms, laboratories and five departments; Agricultural Engineering faculty building with Dean Office, class rooms, workshops, laboratories and two departments

Research Units: Building of Survey Selection and Mass Production, Babha Nuclear Research Centre, ATIC, Museum, Student's canteen etc. The following table gives an idea about the major units with area.

Sl. No.	Name of the unit	Area in sq. m
1	Administrative building	5112
2	Faculty of Agriculture building	14327.63
3	Faculty of Horticulture building	3972
4	Faculty of Agriculture Engineering building	1075
5	Central library	5112
6	Directorate of Research Building	7200
7	Directorate of Extension Education Building	1980
8	Medical unit	280
9	ATIC	465
10	Agriculture Engineering Workshop	280
11	Total farm area in hectare	543.27 ha
12	Survey Selection and Mass Production Laboratory	1672
13	Quality Control Laboratory (APEDA)	496
14	BNRC	2000
15	Dean PG office	400
16	Gymnasium	1000
17	RIDF four buildings	4000
18	Canteen	120

6.6.7.2. IT Infrastructure. A brief report on University ARIS Cell shall be given. Give the information n LAN connectivity, Wi-Fi/internet facilities in campus and hostels; Computer based librarymanagement, videoconferencing facilities, smart class rooms and workshops etc.

Agriculture Research Information System (ARIS) Cell was established at Bidhan Chandra Krishi Viswavidyalaya during 2007 to promote and popularise computer/Internet based activities among students, researchers, teachers, scientists and administrative personnel. The major objectives of such an endeavour are:

- To develop a computer network among various establishments of the Viswavidyalaya to promote academic and administrative work on digital platform
- To extend the Local Area Network (LAN) so that faculty members and students of each department can have access to e-journal (CeRA) resources of ICAR.
- To make an e-governance initiative in the Viswavidyalaya
- To improve curriculum delivery system for UG and PG students of this Viswavidyalaya

Over the year various activities were undertaken to meet the objective of establishment of such facility. Some of which are mentioned below.

- 1. ARIS Cell (Room size: 20' X 20') was developed (with AC facility) with around 20 desktop computers and seating arrangement for faculties and students.
- Establishment and development of a LAN to connect various academic and administrative units of viswavidyalaya at Mohanpur and at Directorate of Research, Kalyani. Around 300 users are being benefitted through this network.
- 3. Maintenance of 200 mbps broadband (with 100 mbps backup) Internet to facilitate users to work with substantial internet speed.
- 4. Through this network, faculties (from home and campus) and students (from campus) can access ICAR-sponsored e-journals (through CeRA).
- 5. Development of three numbers of online UG class platforms to deliver UG teaching activities during COVID-19 pandemic time.
- 6. Holding various online meetings and webinars during COVID-19 pandemic time

6.6.7.3. Students and Staff Amenities: Give brief report on the sporting and recreational activities, employment and career advice, child care, financial advice and food services, entertainment avenues etc. available in the campus.

Annual sports are organized in university playground where both student, teachers and staff participate. Students organize Fresher's Welcome, Fairweall Programme and annual cultural programme where also all the members of BCKV join. A children park is situated within the campus for recreation of the children of BCKV employees staying in the campus. Caffetaria at the main campus and outstation campuses are utilized by students and employees of BCKV.

6.6.8. Financial Resource Management:

6.6.8.1. Budget allocation: Give the budget allocation (College wise) for salary, contingency and amount received through the ICAR development grant during last five years. Give a note on the sufficiency of the fund to meet the academic requirement **in last five years.**

Budgetary Support to the University: 2016-2017 (Rs. Inlakh)

Budget Heads		ll Fundin teGoverr	0		Suppor ICAR (1	Rs.lakh)	1		Any other central	Grand Total
				Educa- tion Division	AICRP	KVK	Any other ICAR support*	Total ICAR support	funding* *	
	Plan (1)	Non- Plan (2)	Total 1+2=3	4	5	6	7	(4+5+6+7) = 8	9	3+8+9
Salary	0.00	9963.75	9963.75	0.00	641.45	269.61	0.00	911.06	197.17	11071.98
Capital	2843.54	0.00	2843.54	116.20	24.28	4.86	0.00	145.34	0.00	2988.88
Revenue	503.77	0.00	503.77	212.97	124.21	291.30	200.79	829.27	178.85	1511.89
Total	3347.31	9963.75	13311.06	223.37	789.97	565.77	200.79	1779.90	375.32	15466.28

*includingNetworkProject,ExtraMural,etc. **includingDST,DBT,ICMR,RKVY

Budget Heads	Total F Govern	Funding for nment	rm State	Funding s lakh) Educati on Division	AICR P	om ICA KVK	R(Rs. Any other ICAR support *	Total ICAR support	Any other central funding* *	Grand Total
	Plan	Non- Plan	Total	4	5	6	7	(4+5+6+ 7)	9	
	1	2	1+2=3					= 8		3+8+9
Salary	81.00	10172.79	10253.79	-	739.68	300.00	-	1039.68	-	11293.47
Capital	788.55	-	788.55	282.67	105.31	96.74	-	484.72	-	1273.27
Revenue	287.04	233.05	520.09	225.93	0.70	62.05	221.44	510.12	48.58	1078.79
Total	1156.59	10405.84	11562.43	508.60	845.69	458.79	221.44	2034.52	48.58	13645.53

Budgetary Support to the University: 2017-2018 (Rs. In lakh)

* including Network Project, Extra Mural, etc **including DST, DBT, ICMR, RKVY

Budgetary Support to the University: 2018-2019 (Rs. In lakh)

Tot	0		Funding	support from	n ICAR(Rs. lakh)		Any	Grand
Government Educati AICRP KVF on Division		Government		KVK	Any other ICAR support *	Total ICAR support	other central funding **	Total	
Plan 1	Non-Plan 2	Total 1+2=3	4	5	6	7	(4+5+6 +7) = 8	9	3+8+9
79.8 0	9818.095 38	9897.895 38	00.00	965.9161 4	387. 00	17.955	1370.8 71	200.00	11468.76 638
-	-	-	526.69	3.29068	00.0 0	307.28 76	837.26 83	-	837.2683
20.9 5	410.27	431.22	268.99	185.6074 7	45.5	507.40 5	1007.5 02	233.96	1672.682
100. 75	10228.37	10329.11 538	795.68	1154.814 29	432. 5	832.64 76	3215.6 42	433.96	13978.71 738
	Plan 1 79.8 0 - 20.9 5 100. 75	Plan Non-Plan 1 2 79.8 9818.095 0 38 - - 20.9 410.27 5 100. 10228.37	2 1+2=3 79.8 9818.095 9897.895 0 38 38 - - - 20.9 410.27 431.22 5 - 10329.11	Government Educati on Division Plan Non-Plan 2 Total 1+2=3 4 1 1+2=3 00.00 0 38 38 0 - - - 526.69 20.9 410.27 431.22 268.99 5 - - 795.68 75 10329.11 795.68	Government Educati on Division AICRP Plan Non-Plan Total 4 5 1 2 1+2=3 4 5 79.8 9818.095 9897.895 00.00 965.9161 0 38 38 4 - - 526.69 3.29068 20.9 410.27 431.22 268.99 185.6074 5 - 7 7 7 100. 10228.37 10329.11 795.68 1154.814 75 538 29 29 29	Government Educati on Division AICRP AICRP KVK Plan Non-Plan 2 Total 1+2=3 4 5 6 1 1 1+2=3 00.00 965.9161 387. 79.8 9818.095 9897.895 00.00 965.9161 387. 0 38 38 4 00 - - 526.69 3.29068 00.0 20.9 410.27 431.22 268.99 185.6074 45.5 5 - 7 7 7 7 100. 10228.37 10329.11 795.68 1154.814 432. 75 538 29 5 5 5 5	Government Educati on Division AICRP AICRP on Division KVK Any other ICAR support Plan Non-Plan 2 Total 1+2=3 4 5 6 7 1 1 1+2=3 4 5 6 7 79.8 9818.095 9897.895 00.00 965.9161 387. 17.955 0 38 38 4 00 76 20.9 410.27 431.22 268.99 185.6074 45.5 507.40 5 - 7 7 5 5 5 5 5 100. 10228.37 10329.11 795.68 1154.814 432. 832.64 75 538 29 5 76	Government Educati on Division AICRP on Division KVK Any other ICAR support Total ICAR support Plan Non-Plan 2 Total 1+2=3 4 5 6 7 +7) 1 1 1+2=3 4 5 6 7 +7) 2 1+2=3 0 965.9161 387. 17.955 1370.8 79.8 9818.095 9897.895 00.00 965.9161 387. 17.955 1370.8 0 38 38 4 00 71 - - - - 526.69 3.29068 00.0 307.28 837.26 0 38 38 4 00 76 83 20.9 410.27 431.22 268.99 185.6074 45.5 507.40 1007.5 5 - 7 7 5 02 100. 10228.37 10329.11 795.68 1154.814 432. 832.64 3215.6	Government Educati on Division AICRP on Division KVK Any other ICAR support Total ICAR support other central funding ** Plan Non-Plan Total 4 5 6 7 +7) 9 1 1+2=3 4 5 6 7 +7) 9 79.8 9818.095 9897.895 00.00 965.9161 387. 17.955 1370.8 200.00 0 38 38 4 00 71 - - - 526.69 3.29068 00.0 307.28 837.26 - 20.9 410.27 431.22 268.99 185.6074 45.5 507.40 1007.5 233.96 5 - - 7 5 02 - - 100. 10228.37 10329.11 795.68 1154.814 432. 832.64 3215.6 433.96

Budgetary Support to the University: 2019-2020 (Rs. In lakh)

Budget Heads		tal Fundin te Govern	0	Funding su lakh)	ıpport fr	om ICA	AR(Rs.	Total ICAR	Any other central	Grand Total
				Education Division	AICRP		Any other ICAR support*		funding**	
	Plar 1	nNon-Plan 2	Total 1+2=3	4	5	6		4+5+6+7) = 8		3+8+9
Salary	0	10296.96	10296.96	7.56	768.18	610.60	119.12	1505.46	1623.87	13426.29

	282.18 10579.14	0,,,,,0		526.17 2564.57	807.50	1615.85 15912.21

* including Network Project, Extra Mural, etc **including DST, DBT, ICMR, RKVY

Funding support received from Education Division of ICAR are utilized for strenghthening of various facilities every year. However, more fund will be helpful in improving various facilities of students to procure small instruments, computational facilities and to meet contingent laboratory expenditure

6.6.8.2. Finance Committee: Provide the schedule of the meetings of the financial committee held in last five years.

Date of Meeting: 23.3.2017

Composition of Financial Committee of BCKV

Vice Chancellor- Chairman Secretary- Dept of Finance, Govt. of West Bengal Secretary- Department of Agriculture, Govt. of Westr Bengal One person with experience in financial matters nominated by the Chancellor Three members from the Executive Council nominated by the Chancellor Deans of all Faculties Dean Post- Graduate studies Director of Research Director of Farms Registrar Comptroller- The Member Secretary

6.6.8.3. Internal Resources Generation:

TotalamountofRevenueGenerationfromallSourcesbyAgricultureUniversity: 2016-2017 to
2020-2021(Rs.InLakh)

Financial Year	Student's Collection	Sale Proceed of farms	Sale Proceed other than farm	Misc.earnings	including off campus colleges
2016-2017	82.42	48.96	10.51	361.87	503.76
2017-2018	122.0	52.20	12.70	337.73	524.63
2018-2019					622.57
2019-2020					585.33
2020-2021					
			Т	otal in Five years	2236.39

6.6.8.4. External Funding: How much resources the University has mobilized from the external sources (give the list) based on the competitive mode in last five year? In lakh

Budget Heads	Any other o	central/state fur	nding (DST, DB	T, IMD, CSIR,	State DST)
	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021
Salary	11071.98	11293.47	11468.77	14271.86	13426.29
Capital	2988.88	1273.27	837.27	501.88	870.07
Revenue	1511.89	1078.79	1672.68	1078.71	1615.85
Total	15572.75	13645.53	13978.72	15852.45	15912.21

6.6.8.5. Financial Powers Delegation to Deans/Heads: Give a report on the financial autonomy to College Deans, University officers and Head of the Departments.

As per university Act, Comptroller is the sole custody of GFR. The DDOs normally

prepare the indents independently which is subsequently endorsed by Comptroller and the Vicw-

Chancellor.Director of Research is empowered to disburse all the fellowships of JRF and SRF

under Govt./Corporate/NGO/Internationally funded projects

6.6.8.6. Finance Utilization: Mention in brief about per cent finance utilization in last five years.

As per university annual budget **6.6.9. Accomplishments**

6.6.9. Accomplishments

6.6.9.1. Awards for the University: Provide the detailed list of Regional, National and International Awards received by the University in last five years.

National:

➢ GI tagging of Gobindobhog rice, 1st time in West Bengal on aromatic rice

➤ ICAR-AICRP Cashew, Jhargram received Best Centre award 2020-2021

6.6.9.2. Accreditation Report from ICAR/Other Agencies: Whether the University and its Colleges were accredited by the ICAR and other agencies in the past? What was the recommendation of the accreditation agencies? Whether the University has taken the action taken report and submitted the reply to the accreditation agencies? Provide the detailed action taken report for each observation.

Sl	Recommendation of	Action Taken Report
No	the Board (NAEAB)	
1	1.Some of the issues related to its Governance such as election of college Deans, non-existence of Academic Council permanent appointment of University officers till their retirement.	6. University authority has repeatedly communicated to the Agriculture Department, Govt. of West Bengal for getting necessary approval to appoint the officers. The resolution of the Executive Council unanimously confirmed the immediate need of filling up the vacant posts under various categories and the authority sent the letter to the Govt. of West Bengal to obtain approval, vide letter Nos. VC/BCKV/24/65/188 dated 25/9/2017; VC/BCKV/24/65/49 dated 22/5/2018; VC/BCKV/24/65/39 dated 08/01/2019.; VC/BCKV/24/65/39 dated 01/02/2019; VC/BCKV/24/65/39 dated 16/10/2020. The Govt. of West Bengal has already appointed Comptroller of the university.
		existence, has been amended many times in 1996, 2001, 2014 and likewise. But as per the amendment of different sections of the said Act, the Statute is in the verge of completion. After completion, it should have to be approved by the state Govt.
		Faculty Council is equivalent to Academic Council as per the system of this university. Though, the change of the nomenclature may be considered, if required.
		Apart from that, decision for inclusion of the clause for selection of Deans of the Faculties in lieu of election of the same has been taken in meetings of the different Executive Council, BCKV.
2	Casual appointment	Action has already been taken to engage the Deans of the
	of Deans with only	Faculties on regular basis and the letter for necessary
	for a period 4-6	approval for election was sent to the Agriculture
	months only in case	Department, Govt. of West Bengal vide letter No.
	regular election is not held in time.	VC/BCKV/24/21 dated 27/4/2018; VC/BCKV/24/359 dated 08/01/2019 etc.
	netu in time.	uaicu 00/01/2017 cit.

3	Degree nomenclature in faculties of Horticulture and Agricultural Engineering should follow the ICAR guidelines.	University authority had submitted the action taken report vide No. VC/BCKV/25/98 dated 03/7/2017 against the item No 3.2 and 3.3 in the proceeding of XVII proceeding of NAEAB, ICAR, accordingly the degree in M.Sc and Ph.D. in the faculty of Horticulture and Agricultural Engineering have been modified as per ICAR guidelines and PG program in the faculty of Horticulture and Agricultural Engineering have been approved and accredited
4	Student ready programme should be conducted as per the guidelines. RAWE and ELPs need to be conducted as per the guidelines	Action has been taken to conduct RAWE/In Plant Training/Internship under Student READY in the University according the ICAR guidelines. Action has been taken to conduct ELPs following ICAR guidelines and appropriate implementation of the Fifth Deans Committee Report. Accordingly, two ELPs, viz. Apiculture and Commercial Horticulture Programmes have been revamped. In recent past, development of four new ELP modules is catered to UG students of final semester of all colleges. The university has applied some new ELP modules to meet the pressing need. The sanction is awaited
5	There is need to conduct practical classes at UG, PG and PhD level in all colleges and facilities for Hands-on- Training need to be created	Curriculum developed and Practical/ Instructional Manuals developed and delivered. Infrastructural facilities been developed for practical classes to facilitate the UG, PG and PhD students in all colleges.
6	Outdoor games facilities, girls' Hostel, Placement cell, counseling and coaching facilities need to be in place.	Action has been taken to Strengthen Sports Facilities. The sports good have been purchased. Students have participating Annual athletic meet Agrifest and other All India Sports Meet in regular basis. Presently University has 19 hostels including five girls' and one International students' hostels. New Girls' Hostel (2 nd floor) is yet to be completed. Renovation of student canteen shed with some allied work of Rabindra Abas under B.C.K.V., Mohanpur, Nadia. Due to COVID outgoing batches still were vacated in due course in 2020 and newly admitted students were also allotted the hostels but due to COVID- 19, no physical presence was allowed.
		Placement cell is also working as well. Admission of UG, PG and PhD students are getting

		admission through counseling following ICAR guidelines.
7	Examination hall is required in all facilities.	Examination halls have been set up with requisite facilities. Establishment of smart class room in progress. All Information Technology equipment's including all Hardware/ Software (Computers/ Laptops/ Printers/ Scanners/ UPS/ Software etc) purchased/replaced out of the ICAR Development Grants.

6.6.9.3. Inter Institutional Standings: Status of the University in the ranking announced by

agencies for academics, research, extension, sports/games, cultural events etc.

Sl.No.	Name of the SAU	Year	Rank ICAR	National Institutional Ranking Framework (NIRF)
1.	Bidhan Chandra Krishi Viswavidyalaya, Mohanpur	2016-2017	43	31
2.	Bidhan Chandra Krishi Viswavidyalaya	2017-2018	40	_
3.	Bidhan Chandra Krishi Viswavidyalaya	2018-2019	26	75
4.	Bidhan Chandra Krishi Viswavidyalaya	2019-2020	15	-
5.	Bidhan Chandra Krishi Viswavidyalaya	2020-2021	Not applicable	-

6.6.9.4. Socio-economic Impact: Elaborate data-based impact of various activities/ recommendation on upliftment of the economics and social status of the farmers.

A. Intra institutional standing:

BCKV has seamlessly been with the process of inter institutional linkage to foster collaborative research, extension, teaching and entrepreneurial innovations. Through CAASTon Conservation Agriculture project supported by ICAR,NAHEP, eight Ph D students visited University of Milan, Italy, Ohio State University, Ohio, USA, Cornell University, New York, NEOMA Business School, Rouen, France, Texas A&M University, Texas, USA Kansas State

University, Kansas, USA (2019-2020) as visiting scholar and successfully built up academic network. The DAAD awarded student has ushered collaborative research with Germany based university, to cite an example.

One 7 days PG teaching programme organized by Dept of Agricultural Extension and Colorado State University, USA had been a glaring example of sharing PG teaching with foreign university.

The research programmes having a tie up with BAARC has paved up a new vista in Agrihorticultural research towards benefitting farmers' stakeholders.

Through the creation of market tie up with Govt of West Bengal organization, Sufol Bangla, the value-added products from BCKV have accessed direct market channel, beyond that a new partnership with state marketing department.

Students' participation in different regional and cultural meet have fetched plethora of prizes, (10 prizes between 2019-2020), beyond that it has been instrumental to instil a cultural bondage amongst participants from 60-66 agriculture universities across India.

RAWE, a student ready programme, has successfully organized in the adjoining village since 1998 and have already created an institutional linkage with rural institutions and organizations. To generate an indelible impact on farmers and their lifestyles, students have been steered to go deeper into the farm and family systems and come out with an linkage between class room education and experiential learning. At least, 50 villages in adjoining blocks, BCKV, a network relationship have been created so far.

The extension activities of BCKV under the aegis of DEE, and, KVKs at field level has been working with close collaboration with State's Department of Agriculture is series of programmes covering transferrable technologies, high value horticulture, aromatic rice, pulse crop promotion, conservation agriculture, anti stubble burning campaign, IPM and INM have gone deeper in creating acsharing platforms between BCKV and peoples institutions.

B. Socio-economic Impact

- Being integral to social echelons and community, the research and extension activities are attuned to the farmers' need and aspiration of the state, and the nation at large. The followings are the socio-economic impacts
- The array of training and campaign programme has generated significant cognitive impact on the farmer's overall psychic construct. Through series of farmers awareness programme on conservation agriculture, the ecological learning of selected villages have upscaled to 30-60 per cent over Bench Mark. The reflection more on stopping stubble burning, benefits of mulching and conservation of water.
- Through ICARDA project, a big number of farmers (17000) covering 9 districts of West Bengal, have socialized pulse crops in their cropping patterns, the change of yield has been 25-30 per cent over conventional practices.
- Aromatic rice cultivation has been extensively popularized in 13 districts, involving close to 1000 farmers; Six land races of non-Basmati aromatic rices have successfully been socialized by the farmers with happy return, good enough to go for further expansion.
- Consequent to up scaling of CA practices, 2.4 per cent of gaining over conventional cultivation, has been recorded. This is not just economic gain; the economics of environment has also been taken care of.
- The soil testing camps for farmers during RAWE programmes have been instrumental in creation liason with university. The diagnostics field visits have contributed to both the cognitive and executive skills of farmers.
- The rate of non-cognitive adoption of ecological farming has been reduced to adaptable practices by 30-35 per cent in a response to field campaingns in RAWE adopted villages.

C. Personality Development:

Inclusion of relevant knowledge and skills:

- Functional grammar in Standard English: The focus has been on structural foundation of English communication. We are aiming at bringing more clarity in phonetics, spelling, voice modulation and pronunciation along with supportive kinesics.
- Speaking communication: The practical exercises are increasingly focussing on business communication, conflict management and negotiation skills.

- Special session to promote personality: On line classwes have been organized on stress management, goal setting. We are also inducting business games, micro labs and role plays to shape up personality, out of box thinking and analytical skills.
- In RAWE programme, Ice breaking is a common approach being followed by students to initiate communication with rural people by stimulating them for using local dialects, farm practices and problem-solving skills.
- Scope: Opening up of personality lab (Microlab)
- Module generation for different business games, simulation studies, AV clippings and studio for interactive communication including brain storming, mock interview, Tedx Talk, performance appraisal etc.

6.6.9.5. International Collaboration: Mention the list of collaboration taken place during last five years with international agencies/universities/institutes for academic, research and others.

BCKV has long standing collaboration with several International Organizations and Institutions for collaborative research and exchange program as follows:

1.	The International Center for Agricultural Research in the Dry Areas (ICARDA)
2.	The International Maize and Wheat Improvement Center (CIMMYT)
3.	CSIRO: Commonwealth Scientific and Industrial Research Organization (CSIRO)
4.	International Potato centre (CIP)
5.	Australian Centre for International Agricultural Research (ACIAR)
6.	Jahn Inns Centre, Norwich, UK
7.	National Institute of Agricultural Botany (NIAB), Cambridge, UK
8.	University of Hohenheim, Institute of Crop Science (340), Department of Biobased
	Products and Energy Crops (340B), Fruwirthstr. 23, 70599, Stuttgart, Germany.
9.	German Institute of Textile and Fibre Research, 73770 Denkendorf, Germany.
10.	Eschler Textile GmbH, Max-Planck Street 10, 72336 Balingen, Germany
11.	Netherlands- India Collaborative project on tomato improvement

6.6.9.6.Fund Raising through CSR:

During last five years total Rs.3033.21 lakh collected from corporate sectors (Especially agrochemicals Companies) sponsored the projects on evaluation of pesticides, biostimulants, testing fee for insect and pathogens form seed /plant samples)

6.6.9.7.Alumni Support:

(a) Does the University have the activeAlumni Association? (Yes)

Yes, Alumni Association, BCKV is functional. A considerable number of representations in the executive body of the association are from the University teaching community. The association is active with its human, organizational and limited financial resources over the decades. The activities of the association are reflected in its website (<u>www.bckvalumni.org</u>) to a great extent.

(b) How much fund the Association has raised for the development of the University?

Alumni association runs on the basis of its principles laid down in its constitution. The university has never approached the association for such requirement. The association may consider this issue if request from the university is made in this regard. However, some of our members on individual initiative had sponsored awards, medals, scholarship in the university. Alumni association played facilitative roles in this endeavour.

(c)What the other areas where the Association is supporting to the University?

- 1. University is serving for the cause of the farmers of state in general. Alumni association too lend their hands in the inventiveness.
- 2. Farming communities of the state has been facing natural disasters like cyclone and floods in close successions. The association provides technological backstopping coupled with agricultural inputs namely seed, saplings and other relief materials to the distressed families at their doorsteps. It took part in mobilizing different organizations to do relief works for the farming communities with technical advisories after cyclone Amphan and Yash.
- 3. Alumni also help vulnerable sections of students particularly in this COVID pandemic for completion of their academic programme at University level by raising fund.
- The association regularly organizes seminars, meets and lecture series both offline and online mode. Among them two State level Seminars (a) "Leading Bengal in Agriculture: Green to Evergreen Revolution (28.09.2013) (b) Bengal Agripreunership–(05.04.2019) with

the 450 agriculture students of West Bengal and three Re-Unions (03.03.2011, 08.04.2012 and 23.01.2015) are mention worthy.

- The association has launched website (<u>www.bckvalumni.org</u>); Facebook (BCKV Alumni), e-mail (<u>alumni.bckv@gmail.com</u>) and Whats App groups for better networking among its members since 2014.
- 6. Alumni Association always keep in touch with the passed out students for their suitable placement by providing advisories, accessing advertisements of jobs and maintaining liaison with concerned organizations to support our students in need.
- 7. We maintain a good liaison with Eastern Zone Pesticide Association and Chambers of Commerce functioning in the state, various line Departments of Agriculture and allied sectors for creating space agri-enterpreneurships, lead by our members.
- Alumni Association also felicitated distinguished Alumni like Dr. Tapas Kundu, Bhatnagar Awardee (Director, CDRI, Lucknow), Murari Mohan Rakshit (Director of the film-"Reunion") and so on.
- 9. Alumni Association arranged various seminars by luminaries of Alumni like Dr. Arnab Pain (Welcome Sanger Institute, Cambridge University, UK), Dr. Prasanta C. Bhowmik University of Massachusetts; Amherst, USA), Dr. Tapas Biswas (CSIRO, Australia); Dr. Bishwajit Kundu (IIT, Delhi), Dr. D. Dutta (GM, Kolkata Centre, NRSC), and Dr. Kaushik Banerjee, Fellow of The Royal Society of Chemistry, UK (National Referral Laboratory, NRC, Grapes).

6.6.10. Certificate (Application when SSR in submitted for Programmes, Colleges and Agricultural University).

I, **Prof. Pradip Kumar Sahu**, **Registrar** of Bidhan Chandra Krishi Viswavidyalaya, hereby certify that the information contained in the sections 6.4, 6.5 and 6.6.1 to 6.6.9.7 arefurnished as per the records available in the University.

Place: Mohanpur Date: 02-11-2021

BCKV Accreditation. 2021

[Passed by the West Bengal Legislature.]

GOVERNMENT OF WEST BENGAL LEGISLATIVE DEPARTMENT

West Bengal Act XLIX of 1974 THE BIDHAN CHANDRA KRISHI VISWA VIDYALAYA

[Assent of the Governor was first published in the Calcutta Gazette, Extraordinary, of the 12th December, 1974.]

SSR-Univ-Annexure-1:

[12th December, 1974.]

An Act to establish and incorporate a University at Haringhata, in the district of Nadia, in West Bengal.

WHEREAS it is expedient to establish and incorporate a University at Haringhata, in the district of Nadia, in West Bengal, for providing facilities for the study of agriculture, animal husbandry and allied sciences and for conducting researches in those sciences;

It is hereby enacted in the Twenty-fifth Year of the Republic of India, by the Legislature of West Bengal, as follows:---

CHAPTER I

Preliminary

1. (1) This Act may be called the Bidhan Chandra Krishi Viswa Vidyalaya Act, 1974.

(2) It extends to the whole of West Bengal.

2. In this Act, unless the context otherwise requires,-

(1) "Academic Council" means the Academic Council of the University;

(2) "Agriculture" includes basic and applied sciences relating to crop and livestock production, veterinary and dairy sciences, fisheries, forestry including farm forestry, home economics, agricultural Engineering and technology, marketing and processing, land use and management, soil and water management and all

Short title and extent.

Definitions.

ACT, 1974.

C

Scanned copies of University Act and its amendments

Signature of Registrar

Registered No. WB/SC-247

Kolkata



Gazette

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WEDNESDAY, DECEMBER 31, 2014

[SAKA 1936

PART III-Acts of the West Bengal Legislature.

GOVERNMENT OF WEST BENGAL

LAW DEPARTMENT

Legislative

NOTIFICATION

No. 1969-L.—31st December, 2014.—The following Act of the West Bengal Legislature, having been assented to by the Governor, is hereby published for general information:—

West Bengal Act XVIII of 2014

THE WEST BENGAL KRISHI VISWAVIDYALAYA LAWS (AMENDMENT) ACT, 2014.

[Passed by the West Bengal Legislature.]

[Assent of the Governor was first published in the Kolkata Gazette, Extraordinary, of the 31st December, 2014.]

An Act to amend the Bidhan Chandra Krishi Viswavidyalaya Act, 1974 and the Uttar Banga Krishi Viswavidyalaya Act, 2000.

WHEREAS it is expedient to amend the Bidhan Chandra Krishi Viswavidyalaya Act, 1974 and the Uttar Banga Krishi Viswavidyalaya Act, 2000, for the purposes and in the manner hereinafter appearing; West Ben. Act XX of 2000.

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Registered No. WB/SC-247



Extraordinary Published by Authority

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PART IV—Bills introduced in the West Bengal Legislative Assembly; Reports of Select Committees presented or to be presented to that Assembly; and Bills published before introduction in that Assembly.

GOVERNMENT OF WEST BENGAL

LAW DEPARTMENT

Legislative

NOTIFICATION

No. 59-L .- 21st January, 2021.-The Governor having been pleased to order, under rule 66 of the Rules of Procedure and Conduct of Business in the West Bengal Legislative Assembly, the publication of the following Bill, together with the Statement of Objects and Reasons which accompanies it, in the *Kolkata Gazette*, the Bill and the Statement of Objects and Reasons are accordingly hereby published for general information:—

Bill No. 2 of 2021

THE WEST BENGAL KRISHI VISWAVIDYALAYA LAWS (AMENDMENT) BILL, 2021.

A

BILL

to amend the Bidhan Chandra Krishi Viswavidyalaya Act, 1974 and the Uttar Banga Krishi Viswavidyalaya Act, 2000.

WHEREAS it is expedient to amend the Bidhan Chandra Krishi Viswavidyalaya Act, 1974, and the Uttar Banga Krishi Viswavidyalaya Act, 2000, for the purpose and in the manner hereinafter appearing;

GOVERNMENT OF WEST BENGAL LEGISLATIVE DEPARTMENT

West Bengal Act V of 1978

THE BIDHAN CHANDRA KRISHI VISWA VIDYALAYA (TEMPORARY SUPERSESSION) ACT, 1978.

[Passed by the West Bengal Legislature.]

[Assent of the Governor was first published in the Calcutta Gazette, Extraordinary, of the 27th March, 1978.]

[27th March, 1978.]

An Act to Provide for the temporary supersession of the Bidhan Chandra Krishi Viswa Vidyalaya

WHEREAS it has become necessary to provide for the supersession of the Bidhan Chandra Krishi Viswa Vidyalaya for a temporary period and for the carrying on the administration of the said Viswa Vidyalaya during the period of supersession;

It is hereby enacted in the Twenty-ninth Year of the Republic of India, by the Legislature of West Bengal, as follows:----

1. (1) This Act may be called the Bidhan Chandra Krishi Viswa Vidyalaya (Temporary Supersession) Act, 1978.

Short title and commencement.

Definitions.

(2) It shall be deemed to have come into force on the 8th day of December, 1977.

2. (1) In this Act, unless the context otherwise requires,----

West Ben, Act XLIX of 1974. (a) "the Act" means the Bidhan Chandra Krishi Viswa Vidyalaya Act, 1974;

- (c) "Education Minister" means the Minister-in-charge of Higher Education of the Government of West Bengal;
- (d) "the University" means the Bidhan Chandra Krishi Viswa Vidyalaya constituted under section 3 of the Act.

C

⁽b) "the Council" means the Bidhan Chandra Krishi Viswa Vidyalaya Council referred to in clause (b) of section 4 of this Act;

GOVERNMENT OF WEST BENGAL LAW DEPARTMENT Legislative

West Bengal Act XXI of 1996

THE BIDHAN CHANDRA KRISHI VISWAVIDYALAYA (SECOND AMENDMENT) ACT, 1996.

[Passed by the West Bengal Legislature.]

[Assent of the Governor was first published in the Calcutta Gazette, Extraordinary, of the 13th August, 1996.]

[13th August, 1996.]

An Act to amend the Bidhan Chandra Krishi Viswavidyalaya Act, 1974.

West Ben. Act XLIX of 1974. WHEREAS it is expedient to amend the Bidhan Chandra Krishi Viswavidyalaya Act, 1974, for the purposes and in the manner hereinafter appearing;

It is hereby enacted in the Forty-seventh Year of the Republic of India, by the Legislature of West Bengal, as follows:----

 (1) This Act may be called the Bidhan Chandra Krishi Viswavidyalaya (Second Amendment) Act, 1996.

Short title and commencement.

West Ben. Ord. III of 1996. (2) It shall be deemed to have come into force on the date on which the Bidhan Chandra Krishi Viswavidyalaya (Amendment) Ordinance, 1996, ceased to operate.

 In section 2 of the Bidhan Chandra Krishi Viswavidyalaya Act, 1974 (hereinafter referred to as the principal Act),—

- in clause (2), for the words "crop and livestock production, veterinary and dairy sciences, fisheries,", the words "terrestrial and aquatic crop and animal production," shall be substituted;
- (2) after clause (3), the following clauses shall be inserted:----
 - '(3a) "Associate Dean" means the Head of the teaching wing of a campus;
 - (3b) "Associate Director of Research" means the Head of

Amendment of section 2 of West Ben. Act XLIX of 1974.

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	VERNMENT OF WEST BENGAL LAW DEPARTMENT		
	Legislative		
	NOTIFICATION	1.2.2.	
No. 1969-L	-The following Act of the West Bengal Leg r general information	islature, having	been assented to
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. THE WEST I	ENGAL KRISHI VISWAVIDYALAYA I (AMENDMENT) ACT, 2014.	LAWS	
. (P	assed by the West Bengal Legislature.]		
	Governor was first published in the Kolkans G aordinary, of the 31st December, 2014.]	azette,	
An Act to amend the Uttar Banga Krishi Visw	Bidhan Chandra Kriski Viswavldyalaya Act avidyalaya Act, 2000.	, 1974 and the	
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GOVERNMENT OF WEST BENGAL

LEGISLATIVE DEPARTMENT

West Bengal Act IV of 1977

THE BIDHAN CHANDRA KRISHI VISWA VIDYALAYA (AMENDMENT) ACT, 1977.

[Passed by the West Bengal Legislature.]

[Assent of the Governor was first published in the Calcutta Gazette, Extraordinary, of the 26th April, 1977.]

[26th April, 1977.]

An Act to amend the Bidhan Chandra Krishi Viswa Vidyalaya Act, 1974.

West Ben. Act XLIX of 1974, WHEREAS it is expedient to amend the Bidhan Chandra Krishi Viswa Vidyalaya Act, 1974, for the purposes and in the manner hereinafter appearing;

It is hereby enacted in the Twenty-cighth Year of the Republic of India, by the Legislature of West Bengal, as follows :---

 This Act may be called the Bidhan Chandra Krishi Viswa Shorttite. Vidyalaya (Amendment) Act, 1977.

2. In Section 2 of the Bidhan Chandra Krishi Viswa Vidyalaya Act, 1974 (hereinafter referred to as the said Act), after clause (13), the following clauses shall be inserted, namely :---

Amendment of the section 2 of West Ben. Act XLIX of 1974.

- '(13a) "revised scale" means any of the scales of pay sanctioned by the Government of West Bengal, Agriculture and Community Development Department order No. 946-Edn & Trg/2U-20/75, dated 2nd February, 1976, which is reproduced in Schedule 1 to this Act :
- Provided that the State Government may, by notification published in the *Official Gazette*, amend Schedule I, from time to time and the Schedule so amended shall