C. Name of the Programme: M. Sc. (Horticulture) Vegetable Science

6.4.1. Brief history of the Programme:

Master's degree programme of the Department of Vegetable Science (erstwhile Department of Vegetable Crops) was initiated in 1996 with the establishment of the establishment of the Faculty of Horticulture in the University to strengthen the academic transactions including research works and extension activities in Horticulture as a whole and Vegetable science in particular. Among the different states in India, West Bengal ranks top contributing 16% of the total production. Large pool of small and marginal farmers has taken vegetable farming as their viable livelihood security. The Department is also functioning as an effective linkage for the vegetable farmers, research and extension workers of various stakeholders, Govt., Semi-Govt. and Non-Govt. Organizations.

Objectives:

o To equip post graduate students with strong theoretical base and research acumen in different aspects of vegetable science

o To equip the students with knowledge for modern technology vegetable production, protection and improvement

o To equip the students with knowledge and skill for effective transfer of technology for vegetable farming and seed production

o To upscale the perception and skill on research methodology on different important aspects of vegetable science

Accomplishment:

o Seventy eight (78) students have successfully completed M Sc (Hort) programme during last 5 years.

o The pass out PG students from the Department clearing ICAR NET and SRF, have joined premier institutions/ Universities like IARI, IIHR, TNAU, UHS, Baghalkot, YSPUHF, Solan, GBPUAT, Pantnagar, PAU, Ludhiana etc.

o About 30 PG students succeeded to earn prestigious fellowships at All India level like INSPIRE Fellowship, National Fellowship for Higher Education (NFHE) of SC and ST students, Maulana Azad National Fellowship for Minority Students, National Fellowship for students of OBC and Swami Vivekananda Single Girl Child Scholarship for Research in Social Sciences for pursuing Ph. D. degree in last 5 years.

o About twenty numbers of students of our PG programme have been placed in several prestigious jobs like Assistant Director of Horticulture (8), Govt. of West Bengal, Food safety officer, Govt. of West Bengal (5), Agriculture officer in Nationalized Banks (13), Insurance organization, Horticulture Development officer of other state (1), Teacher in Govt. of West Bengal (1), Block Technology Manager, Govt. of WB (1), etc.

o The students of the master degree program published the research findings of their PG thesis as research articles in standard journals.

6.4.2. Faculty Strength

SL. No.	Type of Faculty	Sanctioned Faculty	Faculty in place	Vacant position	Faculty recommended by the ICAR
1.	Professor	1	0	1	1
2.	Associate Professor	3	2	1	1
3.	Assistant Professor	5	5+1*	0	4

* Faculty placed in AICRP on Vegetable Crops

6.4.3. Technical and Supporting staff

SL No.	Category of Staff	Sanctioned Staff	Staff in place	Vacant position	No. of Staff recommended by the ICAR
1.	Technical Assistant	1	1	0	2 (Lab Assistant)
2.	Laboratory Attendant/ Assistant	1	0	1	1 (Field assistant)
3.	Office Assistant	1	1	0	2 (Office Assistant)
4.	Store keeper				
5.	Field worker	1	0	1	

6.4.4. Classrooms and Laboratories:

6.4.4.1. Number of Classroom: 2

Room	Purpose (Class/Practical)	Area (Square-metre)
2.	Class room (PG & PhD)	25
3.	Class room (PG & PhD)	15

6.4.4.2. Number of Functional Laboratories:

Sl No.	Name of Laboratory/ Facility	Area (Square-metre)	No. of Supporting Staff
1.	PG and Ph.D. laboratory - 1	55.74	01
2.	PG and Ph.D. laboratory - 2	29.73	
3.	Laboratory of AICRP Vegetable crops	25.00	

6.4.4.3. List of major equipments, laboratories, farm facilities, workshops and other instructional units.

SL. No.	Name of Laboratory/ Facility	List of major equipments and facilities
1.	PG . laboratory -1	1. Precision balance 2. Single Pan Balance 3. Hot air oven 4. Hot Plate 5. Leaf area meter 6. Digital micro-centrifuge 7. Digital Lux meter 8. Spectrophotometer 9. Digital pH meter 10. Refractometer (Digital + manual)
2.	PG laboratory – 2 & Vegetable Lab	1. Cold centrifuge 2. Refrigerator 3. Deep Freezer 4. Compound Microscope with photographic attachment 5. Binocular microscope 6. Digital moisture meter, 7. Double Distillation Set 8. Digital thermometer 9. Digital slide callipers 10. UV- Vis Spectrophotometer
3.	Farm facility	Well-equipped poly houses and net house facilities for growing different vegetable crops Germplasm blocks for different vegetable crops Hybridization blocks Well arranged Research fields with irrigation and machinery facilities

6.4.4.4. Justify whether these facilities are sufficient to meet the course curricula requirement

The present infrastructure facilities in the farm and laboratories are sufficient to meet the course curricula requirement for Master degree programme in Vegetable Science. Expenditure required for different research programme leading to thesis work for the fulfilment of the degree programme is incurred from the monthly contingent grant of the University. However, separate financial grant for persuasion of research programme for the thesis would be beneficial for the student.

6.4.4.5. Number of theory batches for the Degree Programme: 01 (12-15 students)

6.4.4.6. Number of Practical Batches for the Degree Programme: 01 (12-15 students)

6.4.5. Conduct of Practical and Hands-on-Training:

The practical syllabi are successfully catered with the available facilities. Facilities are given individually to all the students to make them skilful enough for the entire practical. Horticulture Research Station, Mondouri, Central Research Farm, Gayeshpur and C-Block farm for AICRP Vegetable crops are available for taking practical and doing research works for thesis work.

6.4.6. Supervision of students in PG Programmes:

6.4.6.1. Total Number of Students perusing the Degree at Present: 28

6.4.6.2. Total number of faculties supervising the students: 08

Status	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021
No. of Students	2	23	23	23	28
No. of Teachers	9	9	9	8	8

Eligible Criteria to become a PG Advisor:

(Clause 4.08 of the BCKV Regulations regarding Masters' Degree Programme, 2019)

4.08 Advisement:

A Chairperson shall be assigned to each student by the Head of the Department in consultation with the Board of Studies (BOS) from amongst the internal member of BOS in which the student is registered. The chairperson must be associated with regular post graduate teaching program of the concerned department. The students should be allotted to the Chairpersons following the norm as a laid down below.

(i)   Head of the Department, in consultation with the Board of Studies, will prepare a list of eligible teachers according to seniority, keeping continuity of the previous years.

(ii)   Student will not be allotted to the teachers having less than (2) two years of regular service in the Viswavidyalaya at the time of allotment of the student.

(iii) Student will not be allotted to a teacher when he /she is on lien.

* Documentary evidence attached as annexure at the end

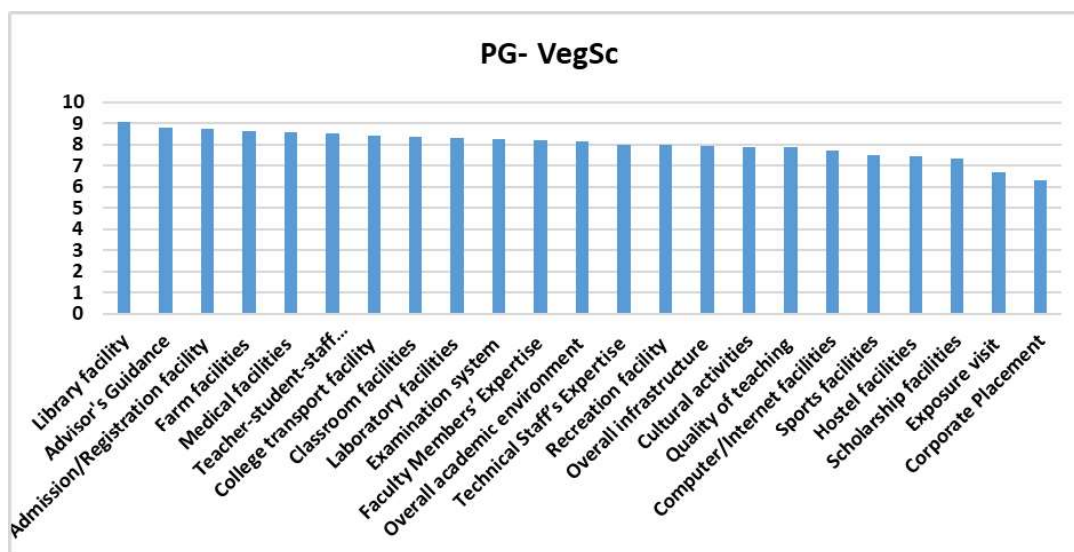### 6.4.7. Feedback of stakeholders:

6.4.7.1. Mention the feedback mechanism

Feedback Mechanism

Feedback from the students was conducted in Google Forms using standard questionnaire (24 questions) developed on the basis of comprehensive dimension of

Agricultural Education in BCKV campus. The dimension covered all the physical and academic facilities provided by the University. The responses were collected on a 10-point scale (1 denotes poorest facility and 10 denotes excellent facility) from the students of this programme. Individual responses were analyzed statistically (by computation of weighted average of every facility as perceived by the students) for the programme and the result was graphically presented in the SSR. As a documentary evidence, individual responses collected from the students' email ID through Google Forms have been stored in our computer (Google Drive). On demand, of ICAR Peer Review Team, the link for the individual responses can be shared.

Comment: Masters' degree students of Vegetable Science Programme are happy with nearly all the facilities provided by the University. Though, facilities like Corporate Placement and Exposure Visit have the scope for improvement.

6.4.7.2. What action the University has taken to address the issues raised in the feedback?
Action taken

The feedback reports were shared with concerned sections of the university. Students responded very positively with regards to majority of the facilities provided by the university. However, with respect to timely publication of results and corporate placement, there are ample scopes of improvement. Considering this feedback, the university has taken administrative actions for publication of results within stipulated period as reflected in the circulars of the concerned authorities. As corporate placement, to a great extent, is beyond the purview of the

university itself, the Placement Cell continuously in touch with the potential employers to utilize the vacancies in favour of BCKV

Impact

We are expecting very positive impacts in near future on these issues as some steps have already been taken in recent times as mentioned above.

6.4.8. Student intake and attrition in the programme for last five years

Academic Year	Sanctioned strength	Actual intake	Attrition (%)
2016-17	12	12	0.0
2017-18	12	12	0.0
2018-19	12	12	0.0
2019-20	12	15	0.0
2020-21	12	15	0.0

6.4.9. Information Communication Technology Application in Curricula Delivery:

The systematic use of ICT tools in classroom instruction makes the teaching learning process more effective and highly interactive. Generally, in the pre-pandemic condition the use of ICT was limited to classroom lecture through power point presentation using LCD projector. The use of ICT tools became more dominant as the pandemic situation started. The University has to run the teaching and learning process completely in distance mode *via* electronic networks. The ICT tools used for the curriculum delivery for different theory and practical classes at regular basis are Google meet, Zoom and Microsoft Team. E-mail, Whatsapp etc. has been used for delivering lecture notes to the students.

I, the **Dean**, **Pallab Datta**, hereby certify that the information contained in the Section 6.4.1 to 6.4.9 are furnished as per the records available in the college, and degree awarding university.

Place: Mohanpur
Date: 02-11-2021

Pallab Datta

DEAN
Faculty of Horticulture
Bidhan Chandra Krishi Viswavidyalaya
P.O.- Krishi Viswavidyalaya- 741252
Dist.- Nadia, West Bengal

(Signature of Dean of the Faculty with Date & Seal)