



AIC Report

Prof. Dr. Hidayat ur Rahman

November 27, 2014

**Department of Plant Breeding & Genetics
Bacha Khan University, Charsadda**

Standards and Criteria for Agriculture Degree Program Evaluation

Sr. No.	Criteria	Points Assigned	Points Awarded
Major Criteria			
1	Strength and Quality of Faculty	250	175
2	Curriculum Design and Development	150	115
3	Infrastructure and Learning Resources	200	95
4	Students Support and progression	100	70
Sub - Total (a)		700	455
Minor Criteria			
5	Research and Consultancy Activities	150	90
6	Governance and Leadership	100	65
7	Recent Innovations and Best practices	50	20
Sub - Total (b)		300	
Grand Total (a+b)		1000	630

Name and Designation

Signature of Program Evaluator

Executive Summary

The Department of Plant Breeding and Genetics was established in 2011 as a constituent department of the Abdul Wali Khan University, Mardan at Palosa Campus which was latter on upgraded to a full fledged Public Sector University in 2012. The classes in Plant Breeding and Genetics were started in 2011. The Department has three Faculty members, all three having PhD degree. The faculty comprises one Associate Professor, and two Assistant Professors on Tenure Track System (TTS). Presently the Chairman and other related staff of the department are housed in the old building along with other departments. The department is engaged in teaching HEC approved curricula and research priorities are aimed at improving crop cultivars mostly under irrigated conditions of the province. The existing infrastructure of the department being insufficient certainly needs improvement and up-gradation to cope with the emerging needs for producing quality graduates, accompanied with qualified and well trained faculty members to embark on ambitious research programs.

Degree Programs Offered

B.Sc (Hons) Agriculture with major Plant Breeding and Genetics

Criterion Analysis

The University

The Bacha Khan University was established as a Public Sector University, at Palosa Campus, near Charsada at the premises of the formerly Palosa Campus of the Abdul Wali Khan University, Mardan in 2012. The University is offering degree programs in 13 different disciplines. The university is spread over 84 acres of farm land which has been marked for the proposed buildings and infrastructure in the developmental plan. The Agricultural component comprises the Departments of Agronomy, Entomology, Plant Breeding and Genetics and Human Nutrition, all being in the infancy stages of their growth and development. The Agricultural component is having a strength of 18 faculty members of which 10 are PhD degree holders and will be upgrading it as a Faculty of Agriculture in the near future.

Criteria 1: Strength and Quality of Faculty

The Department is one of the pioneering departments and early establishments of the Bacha Khan University, Charsadda. It was established in 2011 as a constituent department of the Abdul Wali Khan University, Mardan at the Palosa Campus which was later on upgraded to a full scale independent Public Sector University in 2012. The department has three Faculty members, all with PhD degree. The faculty comprises one Associate Professor, and two Assistant Professors on Tenure Track System (TTS). The three faculty members have varied experiences from 3-8 years. The members of the department are also rendering their services to other sections of the university in different capacities as additional responsibilities.

As there is only one Associate and two Assistant Professors working in the department, therefore there is a dire need of permanent/regular appointment of Assistant Professors, Associate Professors and at least one Professor to justify the work load and to fulfill the HEC criteria. The Faculty is using multimedia for teaching and evaluations techniques such as quizzes, assignments, projects, seminars plus presentations. PBG faculty has two offices with full internet and digital library access. Evaluations for mid and final examinations are in operation. Dean and HoD are there for monitoring the existing system. Participation of students in seminars and conferences is limited. Faculty research publications in National and International journals are minimum in number. Contribution toward publication of books, chapters and proceedings is also not encouraging and need further improvement. Faculty perception about degree program is clear. Annual calendar for academic activities is maintained. The student teacher ratio is not good; however, teacher can focus the students in a better way due to low strength of students and giving more session to question answer and presentations etc.

Criteria II: Curriculum Design and Development

The Department of Plant Breeding and Genetics, at Bacha Khan University, Charsadda is presently offering the HEC approved curricula designed for the of 4 years B.Sc (Hons) degree program. The curriculum is well defined with clear objectives. There is no separate library of the department and available one is for the whole university. The budget for books is available for main library of the Faculty

and not for the department. The library has sufficient space both for faculty and students. The library is also connected with HEC digital library service and equipped with a number of desktop computers for student's facilitation. There is urgent need for separate departmental budget for books plus research journals. Budget given for the research and other purposes is available from a project and need availability in a permanent and continuous manner. A separate budget for books and journals can provide better learning opportunities. Credit hours and contact hours are justified for existing staff. Course completion is a regular and encouraging process of the department.

There is a fully equipped seminar room and committee room in the university. All students of this department are well informed and fully aware about course program, admission policy, enrolment, withdrawal and course break up. Course files verified by the AIC are maintained but need some improvement that has been pointed out by the committee. QEC of the university is existing, although at very initial stage and has evaluation of the teachers and course contents by the student.

Criteria III: Infrastructure and Learning Resources

The department has the minimum infrastructure to cater to need of teaching and research to be required in a couple of years for higher classes of even B Sc degree program. However, lecture room facilities are up to the reasonable required standard. There is no separate sitting place for female students and canteen or cafeteria of the university. Teaching aids like multimedia, white boards and others are available but students did complain for the shortage of multimedia use due to intensive load shedding. The computer and internet facility available for students within the department is not sufficient and needs to be upgraded.

There is a very limited lab facility of the department, only one central lab existed. There were four class rooms equipped with multimedia in the university out of which two are allocated for PBG classes. Class rooms are not enough for the working of students. There is one central lab which contains some very basic equipment. The laboratory is run by inexperienced staff. The incharge of the lab and other lab staff were not up to the standard qualification. There is need of fully equipped more departmental labs and class rooms. Equipment available is insufficient and need more budget for research. Supporting staff is insufficient and also not properly trained. Provision of better equipment and trained supporting staff is urgent

need of this department. The share of the department, in annual budget of the Faculty for books, chemicals and glassware is insufficient. Practical work and write up of practical note books was reasonably good.

Criteria IV: Students Support and Progression:

Scholarship to the students are available on merit and need basis however, these are very limited and insufficient. Students are getting scholarships from different sources or donor agencies. Hostel accommodation for boys is available. Transport facility is adequate, comprising coasters (32 seats) and buses (55 seats) and limited sports facilities are available. Field visits and study tours are regularly arranged for the students. There is a good atmosphere for co-curricular activities. Student attendance is being taken regularly and there is restriction for of 75 % attendance requirement. Medical and transport facilities are adequate. However, there is need in improvement of computing facilities, research funds, and internship allowances.

Students Perception: The undergraduate students were contacted to have their opinion about the contents of the courses, method of teaching, use of teaching aids, conduct of practical and field exposure, examinations, grading and awards. The students were satisfied with the teaching methodology which was very well covered both by theoretical as well as practical components of the courses. The laboratory facilities were adequate as the number of graduates taken in each class is minimum. According to the students view point the young teachers are having excellent interaction with students and encourage maximum student's participation.

2. SWOT Analysis of Degree Program B.Sc (Hons)

Major Strength:

- Faculty members have reasonable publications in HEC recognized journals.

Major Weaknesses:

Following weaknesses were observed during the visit and interaction with all concerned.

- Serious shortage of experienced and senior Faculty members as Professor and Associate Professors (having only two faculty members).
- Limited infrastructure as teaching facilities, offices, seminar rooms, staff rooms.
- Separate Laboratory with required equipment as well as research field is un-available.
- Lack of access to the international Journals and reference material.
- Relevant course books and reference books are very few.
- The discipline has very low intake and needs special efforts to enroll optimal size of students in B.Sc (Hons) PBG.
- Limited and unskilled supporting staff for the laboratories.
- Student's complaints for the non-availability of scholarships were genuine, even the merit scholarships were insufficient.
- Functional tutorial groups and counseling for students at the campus is lacking.
- Student's sports and extra-curricular activities were badly lacking.

ACTIONABLE RECOMMENDATIONS

- Teaching staff is grossly inadequate. There is need to provide two Associate Professors and at least one Professor and two lecturers.
- Limited research facilities especially scientific equipment, instruments and chemicals. Special funds may be arranged to strengthen these facilities.
- Shortage of experienced and trained supporting staff, especially laboratory staff.
- Lack of seminar room, staff rooms and department library with computer/internet facilities.
- There is need for the well-equipped Green House and Glass House.
- Library facilities need to be strengthened by purchasing more books and Journals.
- System of students' scholarships from the University sources and other donor agencies needs to be broadened.
- The computer and internet facilities for the students may be upgraded and strengthen.
- The students support and co-curricular activities/ facilities must be provided

On the basis of the inspection/evaluation process, the Accreditation Inspection Committee (AIC) recommends that discipline of PBG at present is at very initial stages. Thus, it is too early to review the degree program BSc (Hons) for accreditation purposes. The AIC therefore recommends that as per decision of NAEAC/HEC, the degree program of PBG may avail in-terim of period of 1.5 years (18 months) to strengthen the faculty, improve the facilities and teaching-learning infrastructure and other key academic resources to upgrade the level of degree program. Presently, the degree program B.Sc (Hons) is evaluated in ‘Y1’ category of HEC with 63% score with the expectation that standard of teaching-learning resources of the discipline would be upgraded in due course of time.

Signatures of AIC Members

Name and Designation

Signatures

Prof. Dr. Hidayat ur Rahman Chairman, Department of Plant Breeding & Genetics, The University of Agriculture, Peshawar	(Convener)	
Mr Naseer Alam Khan Secretay NAEC	(Member)	
Dated: December 11, 2014		