



**Report of the
Accreditation Inspection Committee
(AIC)**

AIC Team:

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KPK University of Agriculture, Peshawar**

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Acknowledgment

The evaluation team acknowledges the support and cooperation of the honourable Vice Chancellor, Dean, Faculty of Crop Protection, Chairman and faculty/staff members of the Department of Weed Science, KPK University of Agriculture, Peshawar. The immense help, guidance and logistic support of Mr. Naseer Alam Khan (Secretary) and other staff of NAEAC Secretariat is acknowledged.

Accreditation Inspection Committee (AIC), NAEAC

Prologue

The Accreditation Inspection Committee (AIC) constituted by the National Agriculture Education Accreditation Council (NAEAC) for the external assessment of the degree programs of B. Sc. (Hons) and M. Sc. (Hons) offered by the Department of Weed Science, KPK University of Agriculture, Peshawar, visited the department on April 11-12, 2011. The NAEAC secretary and the AIC members met in the office of the Vice Chancellor, KPK University of Agriculture, Peshawar and Dean, Faculty of Crop Protection. The secretary Naseer Alam Khan highlighted the aims and objectives of this review process. Prof. Dr. Gul Hassan, ex-chairman of Weed Science department briefed about the academic activities of the department. The tentative schedule provided by the NAEAC was followed by the AIC and detailed interviews and discussions were made with the acting Chairman, faculty members and senior and junior students of the department. Laboratories, on going Research Programmes, Class Rooms and Staff Offices were also visited to review the lab facilities, research programs, classrooms and offices.

a) Accreditation of Agriculture Education Institutions in Pakistan

In pursuance to its mandate given by the HEC under clause 10 subsections (d) and (1) of the byelaws of NAEAC, an Accreditation Inspection Committee (AIC) was constituted comprising of the following scientists to review the Department of Weed Science, KPK University of Agriculture, Peshawar for assessment and accreditation of their degree programs:

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|-----|---|----------|
| i) | Prof. Dr. Zahid Ata
Chairman, Department of Agronomy,
University of Agriculture, Faisalabad. | Convener |
| ii) | Dr. Rashid Ahmad Shad
Chief Scientific Officer (retired)
Pakistan Agricultural Research Council, Islamabad. | Member |

b) Terms of References of the Committee (TORs)

The team visited Weed Science department on April 11-12, 2011:

To validate the Self Assessment Reports of Weed Science Department.

To carry out external evaluation of the academic programs for rating and accreditation. To synthesize and submit consolidated report based on interaction with the Vice Chancellor, Dean, Chairman, Faculty Members and students as well as detailed visits of infrastructure, facilities and activities.

To submit recommendations to NAEAC Chairman.

The Department of Weed Science

The Weed Science Department is a new department established in 2000. M.Sc. (Hons) class was admitted in 2000-2001. One year later i.e. 2001-2002 the B.Sc. (Hons) class was started. Started with only two teachers, the department has made a good progress by recruiting new faculty. Presently there are thirteen teachers, most of them, Assistant Professors. KPK University, Peshawar is the only university in the country, where independent Weed Science Department has been established.

Degree plan

Presently three programs are being offered by the department.

B. Sc. (Hons) Weed Science

B. Sc. (Hons) degree program consists of 4 academic years (8 semesters). As a whole, a student has to study 149 total credit hours. For each course 10% marks are reserved for the assignments, 30% marks for mid-term examination while 60% marks for final examinations as per university rules. Degrees are awarded after completing the required number of credit hours (courses) following by internship report submission and presentation.

M. Sc. (Hons) Weed Science

The M. Sc. (Hons) degree program consists of 2 academic years (4 semesters). A student has to study 45 credit hours including research work and thesis writing. Degrees are awarded after completing course work, one year research work, thesis writing and comprehensive examination. For each course 10% marks are reserved for the assignments, 30% marks are for mid-term examination while 60% marks for final examination as per university rules.

Ph. D Weed Science

The Ph. D. program has been designed for quality research completely coherent with HEC standards. The Ph.D. study program consists of three academic years (6 semesters). A student has to complete 50 credit hours for course work, two-year research work, thesis writing and after the recommendation/approval of thesis from foreign examiners of technologically developed countries.

Criterion Wise Analysis

Criteria I: Strength and Quality of Faculty

The department has 13 faculty members with different specializations in Weed Science. Ten faculty members hold Ph.D. degree. The faculty is specialized in diverse disciplines of Weed Science.

Each faculty member in the department takes 2 courses in a semester each of 3 or 4 credit hours. Workload is less than the minimum standard of HEC. Graduate students are equally distributed amongst the faculty for research of their degree programs giving consideration to the aptitude as well as the mutual understanding of the faculty and student. Beside the teaching and research, the faculty is also shouldering various administrative responsibilities in various capacities i.e. vice chancellorship, departmental administration, students counseling etc.

Faculty members in the department take assignments, mid-term and final exams for student's evaluation during the active semester. Similarly, course review report is prepared and submitted regularly by each faculty member. The program monitoring systems exist and are effectively exercised by the department. A Quality Enhancement Cell (QEC) has been established in the university to facilitate course review and monitoring system. All the faculty members are hard working and well-qualified and some of them have their post doc training. The salaries and other fringe benefits seem reasonable. Majority of faculty members believe that the working environment in the department is good. The faculty stability index is excellent and option for the job in university is a top priority.

Graduate research supervision by the faculty is satisfactory, M. Sc. (Hons) degree has been awarded to 34 students so far, and 7 students have completed their Ph.D degree. Student teacher ratio is quite narrow. There were 5-6 M.Sc. (Hons) and 5-9 B.Sc. (Hons) students in the department with 13 teachers.

The job satisfaction was reasonable and opportunities for academic progress are abundant. The existing faculty members are satisfied with the department degree programs. The teaching-learning techniques and implementation seem professional.

Criteria II: Curriculum Design and Development

The curriculum is revised regularly and upgraded through different bodies at departmental level i.e. Board of Studies.

The department is lacking the latest text books and reference books. The length of semester (16 and 18 weeks for fall and spring, respectively) is below than the desired requirement of HEC. Completion of theory and practical courses are well in time as observed from faculty course files. The course registration and withdrawal policy is well defined and is adopted without any discrimination. All faculty members maintain course files and some were randomly checked by the AIC. The standard of course record was up to the mark practically. The curriculum adopted in the department for degree program is below satisfaction; some of the postgraduate courses [e.g., (WS-706-Herbiceds and rabi crops, WS-707-Herbicides and kharif crops) are too poor. Meeting of Board of Studies and Board of Faculty is a permanent feature and conducted regularly.

Criteria III: Infrastructure and Learning Resources

The available space for faculty offices is by no mean enough and appropriate. Most of the faculty has to share the offices with colleagues. Some space in labs has been partitioned to accommodate faculty members. The department has three labs and each of these is being used for teaching purposes as well. Labs have a few working equipments/computers, however the qualification/training of the labs staff is not relevant to their job. There is no research area and field lab in the department. No specific budget allocation is made for labs.

Departmental and university library facility is very poor. The budget allocated for the purchase of books and subscription for foreign journals for the departmental library is insufficient. Computers and internet facilities are available for faculty.

Criteria IV: Students Support and Progression

Nine students took admission in Weed Science major in B.Sc. (Hons) degree program in the university and 5-6 opt for M.Sc. (Hons) program in the department after graduation. The intake for Ph. D is approximately 1-2 students per session. The graduation percentage at B. Sc. (Hons) and M. Sc. (Hons) from 2007-2009 was more than 90 percent. Five students got M.Sc. (Hons) degree from this department from 2006-2008. Hostel facilities are insufficient for the students at the campus; however some private hostels are present near the campus. University lacks sports grounds and suitable medial facilities for the students. The student's interaction with the teachers is good. The student's attitude towards studies, their attendance and perception about degree program was very positive.

Criteria V: Research and Consultancy Activities

The faculty is actively conducting various research projects. The faculty members have won these projects through open competition. The number of projects being run by the faculty in the weed science department is five. The detail of research projects is given in annexure 1. The findings and outputs of these research projects as well as post graduate students research is regularly published in HEC approved/ impact factor journals

The department has quite effective academic collaboration with all agricultural research institutes in the province, National Agricultural Research Center, Islamabad/Pakistan Agricultural Research Council, Nuclear Institutes of Food and Agriculture and with all the agricultural universities/colleges of the country. The collaboration with many other national and international organizations/professionals societies has been established by the faculty of this department. The headquarter of Weed Science Society of Pakistan and the Pakistan Ethnobotanical Society lies in the premises of the department. The department also publishes Pakistan Journal of Weed Science under the auspicious of Weed Science Society of Pakistan. However the department has no working relations with the department of agronomy at the campus.

Criteria VI: Governance and leadership

The Vice chancellor is the chief executive of the university and is assisted by the Deans of the Faculties, Chairmen of the Departments and Principal Officers of the University. The administrative authorities/governance of the university and department is clearly defined. University catalogue is published every year. The implementations of statutory rules/regulations are intact. All the statutory bodies like Senate, Syndicate, Academic Council, Department Board of Studies, Faculty Board of Studies, Board of Advanced Studies and Research etc. are properly functioning. The academic setup rests with the departments while financial matters are controlled by the Treasurer office.

The department does not have its own funds generating resources. The financial resources of the department mainly depend on the university. University has its funds generating resources and gets grant from HEC. Departmental placement bureau and alumni's association has not yet been established. The departmental calendar for various activities was not observed.

Criteria VII: Adoption of Best Practices

A quality enhancement cell (QEC) has been established by the university authorities to ensure the quality of degree programs. Distribution of all taught courses is well balanced in terms of theory and practical classes. The allotted credit hours to theory and practical are satisfactory

and well maintained. The classes are being taught regularly and course contents are completed within the stipulated period of time. The students-teacher assessment is well adopted and operated through the questionnaires provided by QEC as per HEC directives.

The departmental faculty members showed an enthusiastic look towards teaching and research.

SWOT Analysis

1. Major strengths

- Department of Weed Science has very competent and hardworking faculty members holding PhD degrees (expect three) and has also won national and international awards. Many of the teachers have completed their Post-doc from higher seats of learning abroad. Young teachers are enthusiastic about their career development.
- The classes are being taught regularly and course contents are completed within the stipulated period of time. Computer and internet facilities are available for the faculty in the department.
- The department also publishes Pakistan Journal of Weed Science under the auspicious of Weed Science Society of Pakistan.

2. Major weakness

- Inadequate office space for the faculty, shortage of communication facilities and lack of controlled environment facilities etc.
- Research area/student farm is not present in the department. Department is facing difficulties in practical training of students.
- Lab maintenance budget has not been specified and funds for the purchase of books are insufficient. Lack of qualified and trained laboratory staff.
- No lecture rooms.
- Herbarium is not properly organized.
- Lack of well-maintained and well-equipped labs.
- Poor library
- Untrained Lab staff.
- Poor Faculty/Student ratio.
- Poor Hostel facilities.
- Poor Play ground and other recreational facilities for the students.

3. Major opportunities

- Good job opportunities for the graduates of the department in different government and non-government organizations.
- Technical guidance for students is available from different research groups for their undergraduate and post-graduate studies.
- Technical faculty of the department has an opportunity of training leading to PhD and post-doctorate for their career development.
- An opportunity to win projects from national and international donors.

4. Major threats

- No coordination with the Department of Agronomy for course work and research.
- Trend of shifting emphasis from teaching to publications is developing.
- Some courses are superfluous.

General Recommendations

- The department needs more space for faculty offices. It is proposed that more offices may be constructed for the faculty.
- Lab's supporting staff must be selected on the basis of relevant qualification/experience for handling the scientific instruments/equipment safely. A qualified electronic engineer may be appointed at faculty level to look after the working and maintenance of lab equipment.
- Budget allocation for development, research, library and labs may be specified and be increased at least two times.
- Enough land be given to the department for field experiments.
- A field lab should be established.
- The latest editions of the books should be purchased, international journals be subscribed and communication facilities be upgraded.
- Steps to attract students be taken to balance the Faculty/Students ratio.

Final Recommendation

The department has highly qualified teaching faculty but lacks proper lecture room, research farm, well-equipped laboratories, library to cater the needs of students in B.Sc. (Hons), M.Sc. (Hons) and Ph.D.

The student number is very low, which is to be increased. Multidisciplinary courses must be included in the B.Sc. (Hons) programme. Course contents should be revised and improved.

On the basis of the inspection/evaluation, the AIC recommended accreditation of the degree programs department of Weed Science, KPK University of Agriculture, Peshawar in the “X” category as per HEC rating system i.e. Degree Program not meeting some of the criteria.

Signatures of AIC Members

Name and Designation

Signatures

Prof. Dr. Zahid Ata

(Convener)

Chairman, Department of Agronomy,
University of Agriculture, Faisalabad.

Dr. Rashid Ahmad Shad

(Member)

Chief Scientific Officer (retired)
Pakistan Agricultural Research Council, Islamabad.

Comments and Signatures of Chairman

I agree with the observations and recommendations made by the peer team in this report.

Chairman

Department of Weed Science
KPK Agricultural University,
Peshawar.

Research Projects

Annexure 1

The detail of the research projects is as under:

S #	Amount	Title	Funding Agency
1	12.7 million	International linkage project with University of Queensland, Australia on Study of Parthenium, its managing and Ecology.	Higher Education Commission.
2	0.3 million	Domestic, foreign and religious surveys of NWFP.	Ministry of Tourism, Islamabad
3	0.2 million	Soil solarization: a non-chemical weed management approach in cash crops	Higher Education Commission.
4	0.9 million	Soil fertility and economic benefits of maize-legume intercropping and weed suppression by inter-row cultivation	Higher Education Commission.
5	2.3 million	Integrated weed management in chickpea	Higher Education Commission.
Total worth of the research projects (Million rupees) = 16.4			