



National Agriculture Education Accreditation Council

29

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

Prof. Dr. Fayyaz ul Hassan

Prof. Dr. Mushtaq Hussain Kazmi

**Department of Agronomy
KPK, Agriculture University
Peshawar**

ACKNOWLEDGMENT

The evaluation committee immensely acknowledges the hospitality, support and cooperation of Vice Chancellor, and Chairman Department of Agronomy, KPK, Agricultural University, Peshawar. They made every effort to make us comfortable during our work. We also want to mention the services of Dr. Amanullah Junior, Assistant Professor Agronomy, which he extended towards us during this evaluation visit. The guidance and logistic support of Mr. Naseer Alam Khan (Secretary), and Malik Muhammad Kashif Anwar (IT Coordinator), NAEAC Secretariat is appreciated.

Accreditation Inspection Committee (AIC), NAEAC

Preamble

The Accreditation Inspection Committee (AIC) formulated by the National Agriculture Education Accreditation Council (NAEAC) for the peripheral judgment of the various Degree Programs {B.Sc (Hons); M.Sc (Hons) and Ph.D} offered by the Department of Agronomy, KPK, Agricultural University Peshawar, visited the department on May 13-14, 2011. The AIC members along with NAEAC officials were welcomed by the Vice Chancellors in his office. The Director, QEC introduced AIC members with the Vice Chancellor. After that, the AIC members went to Chairman's office and briefed by the Chairman about the department. The tentative schedule provided by the NAEAC was followed by the AIC and detailed interviews and discussions were made with the Chair, faculty members, chief librarian and senior students of the department. Visits were also made to review the laboratory facilities, research programs, classrooms, offices and research farm. The report of the AIC is:

Accreditation of Agriculture Education Institutions in Pakistan

In accomplishing the mandate specified by the HEC under clause 10 subsections (d) and (1) of the byelaws of NAEAC, an Accreditation Inspection Committee (AIC) was setup having following academicians for the evaluation of the Department of Agronomy of KPK Agricultural University Peshawar for its assessment and accreditation of degree programs:

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| i) Prof. Dr. Fayyaz Ul Hassan
Department of Agronomy
PMAS-UAAR
Rawalpindi, Pakistan | Convener |
| ii) Prof. Dr. Mushtaq Hussain Kazmi
Department of Agronomy, Faculty of Agriculture, Rawalakot
The University of Azad Jammu & Kashmir
Muzaffarabad, Pakistan | Member |

Terms of References (TORs)

The AIC members visited the University from May 13-14, 2011 as per itinerary at Annex-I.

- To authorize the Self Assessment Report prepared by the Department
- To review external evaluation of the degree programs for assessment and accreditation
- To put forward synthesized and consolidated analytical report based on interaction with Dean, Chairman, Faculty members, students and supporting staff as well as detailed visits of infrastructure and other learning resources.
- To propose accreditation recommendations to NAEAC Chairman

Department of Agronomy

Introduction

Agronomy was the only major parent Department when agriculture classes started back in 1933 at Islamia College, Peshawar. The Department gave birth to several other Departments when in 1968 it was declared as a full fledged separate Agriculture College, then Faculty in 1976 and ultimately a University in 1981. From its beginning, Department of Agronomy has been known as the parent department in KPK Agricultural University Peshawar. Agronomy Department is actively involved in teaching, research and outreach activities. The department offers specialized courses leading to Bachelor's, Master's and Doctorate degrees in Agronomy. It has been widely accepted and it has attracted a large number of students for admission every year. The department, due to the shortage of space and funds has not been able to accommodate all the interested applicants. However, students with good academic records have never been discouraged. The department reserves around 20 Acres of Open Experimental Area to conduct problem oriented research at graduate and postgraduate level. The faculty members are running various research projects funded by National Organizations and donor agencies. The department conducts problem oriented research and provides educational and research linkages for uplifting the living standards of the agricultural community in the province.

Mission Statements of the Department

To establish and promote high quality teaching, problem oriented research and technology transfer in the field of Agronomy in order to address the primary questions of Crop Production.

Objectives

The curriculum is designed to train undergraduate and postgraduate as professional crop scientists and prepare them to apply knowledge of plant and soil sciences for sustainable crop production.

The main objectives of the Agronomy Department are as below:

- To enable Agronomy graduates to gain and apply relevant knowledge and skill for the improvement of crop production.
- To build capacity of Agronomy graduates for solution of farmer's problems related to crop production.
- To enable Agronomy graduates to gain knowledge of the subject as per international standards to pursue their careers.

Main elements of strategic plan to achieve mission and objectives

1. To build capacity of the graduates through implementation of an up-dated curriculum consisting of core, major and elective subjects based on modern trends in Agronomy for the improvement of Crop Productivity.
2. To build capacity of the graduates through conceptual teaching and laboratory work, home assignments, group discussions, projects, presentations, etc
3. To improve professional skills of the graduates through mandatory laboratory and field based internships and co-curricular activities such as departmental quizzes, exhibitions and competitions.

Degree plan

Currently three programs are offered by the Department:

B.Sc (Hons) Agriculture with specialization in Agronomy

B. Sc (Hons) is a four years degree program. During the first two years, the students are exposed to different areas of agriculture. In the third year, however, the students choose various departments and become full time students of the Department. The courses offered at B.Sc (Hons) have been approved by National Curriculum Revision Committee, HEC, Islamabad, which is in-line with the international standards. As a whole, a student has to study 144 total credit hours. For each course 10% marks are reserved for the assignments, 30% marks are 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 (course) following by comprehensive examination and internship report submission and presentation.

M.Sc (Hons) in Agronomy

M. Sc (Hons.) is two years degree program after four years B. Sc (Hons) degree program. During the first two semesters of the Degree Program, students are exposed to highly professional course work covering almost all areas of specializations of Agronomy. A student has to study 35 credit hours with 10 credit hours (research work and thesis writing) consisting of total 45 credit hours. 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 in Agronomy

The Ph.D degree program was started in the Department of Agronomy, KPK, Agricultural University Peshawar in 1997. The program designed for quality research completely coherent with HEC standards. The Ph.D degree programme consists of three academic years (6 semesters). As per HEC rule, a student has to complete 18 credit hours for course work. Degrees are awarded after the completion of 18 credit hours course work, comprehensive exam, 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 17 regular faculty members having 3:1 ratio with students for B.Sc and 2:1 for M.Sc specialization in Agronomy. The faculty members are highly qualified as out of 17, 15 are Ph.Ds and 10 of them already equip themselves with PostDoc. The faculty is specialized in diverse disciplines of Agronomy with covering almost every aspect of the crop management and production technology. The following table shows qualification and specialty of the faculty members:

Name	Ph.D.	Post Doc	Cell Number	E-mail Address
Prof. Dr. M. T. Jan	UK	UK	03339233273	mtariqjan@yahoo.com
Prof. Dr. S. K. Khalil	USA	UK	03219083769	shadkh2005@yahoo.com
Prof. Dr. M. Akmal	Germany	Japan	03339151015	kailama@brain.net.pk
Prof. Dr. B. Ahmad	USA	China	03049006134	bashir1259@yahoo.com
Prof. Dr. A. Z. Khan	Pakistan	Japan	03028833695	drazkhan2021@yahoo.com
Prof. Dr. M. Shafi	Pakistan	China	03329221807	mshafi60@yahoo.com
Dr. Amanullah Jan	UK	Malysia	03009366821	amanullahjan@yahoo.com
Dr. Habib Akbar	Pakistan	UK	03139513127	habib_aakbar@yahoo.com
Dr. Hamayun Khan	Japan	--	09062868637	agricola17@yahoo.com
Dr. Zahid Hussain	UK	--	0303892336	drzahid97@gmail.com
Dr. Muhammad Arif	Pakistan	UK	03339348849	marifkhan75@yahoo.com
Dr. Amanullah Jr.	Pakistan	USA	03005741363	draman_agronomist@yahoo.com
Dr. Inamullah	Japan	--	03459464319	inamullah72@yahoo.com
Dr. Shaheen Shah	Japan	--	03337822664	shaheens98@yahoo.com
Miss. Shazma Anwar	Pak (in progress)	--	03018804575	shazma_anwar@yahoo.com
Dr. Ahmad Khan	Pakistan	--	03339136792	ahmad0936@yahoo.com
Mr. Asad Khan	Pak (in progress)	--	03005705005	asad_g04@yahoo.com

Position, Qualification and area of Specialization of Faculty

The teaching load in the Department is distributed according to the faculty's position i.e. four credit hours per week for professor, 4 for Associate Professor, 8 for Assistant Professor and 8 for lecturer. Similarly, graduate students are equally distributed amongst the faculty members for the conduct of research required for the fulfillment of the degree. Beside the teaching and research, the faculty is also shouldering various administrative responsibilities in various capacities i.e. Departmental administration, students counseling, hostel warden ship, sport in-charge, farm management etc.

All the academic staff of the department takes quizzes, assignments, projects/seminars, mid-term and final exams regularly as a part of student's evaluation programme during the running semester. Similarly, course review report is prepared and submitted regularly by each faculty member. The program monitoring systems exist and exercised by the department. An Quality Enhancement Cell (QEC) is established in the University to facilitate course review and monitoring system, but practically the task is assigned to the faculty. This exercise seems an extra burden on the department and must be addressed and assured to accomplish by the QEC. There is no provision of training facilities or arrangement at present for newly inducted faculty members, they learn by teaching. Majority of the faculty is Ph.D. and the rest are enrolled in the department for acquiring Ph.D. The salaries and other fringe benefits seem attractive to the fresh and young faculty whilst senior faculty has been deprived from many benefits which are admissible in other Universities. Majority of faculty members believed that the working environment in the department is good with exception to few. The faculty stability index is good and option for the job in University is a top priority. Admirable international scholarship/fellowship awards are won by the faculty. The participation of faculty members in international and national professional seminars/conferences/workshops is maximum. Six books have been written by the faculty.

Graduate research supervision by the faculty is satisfactory as 16 Ph.D students are supervised so far. , Similarly, HEC approved Professors/Associate/Assistant Professors

supervised 150 M.Sc (Hons.) students. The job satisfaction was comparatively greater in the young faculty to the senior and was found very much involved in their jobs.

Criteria II. Curriculum Design and Development

The courses for various degree programs are developed by the HEC constituted committee and adopted by the Department (Annex-II). The objectives of curriculum are well clear and in accordance with the HEC guidelines. The curriculum is revised periodically and restructured through different bodies at departmental level i.e. Board of Studies which comprised of senior faculty. The senior faculty is also made responsible for suggesting and revising the courses from time-to-time and submitting to the BOS for Approval. The approval of revised curriculum needs approval of the Board of Faculty and Academic Council. The meetings of various bodies take place on regular basis. The student input in the course is materialized by their evaluation of the course at the end of subject exams. The department has insufficient text and reference books in the departmental library and the students depend on main library. The length of the semester (19 weeks) is within 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 strictly followed as per University rules. Course evaluation is regularly been collected by the feedback from the students at the end of each semester. The admission policy is well defined and is adopted without any discrimination. All faculty members maintained course files and some were randomly checked by the AIC. Meetings of the Board of Studies and Board of Faculty are conducted at regular intervals.

Criteria III. Infrastructure and Learning Resources

The Department of Agronomy has seven teaching and research laboratories. Five of these laboratories (Lab-110, 118, 128, and 129) are located in the Plant Science Building of the University while the other three (Lab-33, and two theaters) are located in the Old Building of the University. These laboratories are adequately equipped where safety regulations, imperative for the proper use of chemicals and equipments, are properly followed and properly utilized by faculty members and students. The students are found to be satisfied with the labs. Moreover, the department has trained lab staff however there number should be increased. The departmental library lacks

sufficient text and reference books and relies on central library. The departmental library has adequate space and looks like a library. The central library has insufficient supporting facilities such as photocopiers, scanners and video-audio equipments. The department has no subscription of foreign journals and relies on HEC- library. Besides this the students have sufficient access to various facilities available in the department. The department has adequate computer facilities/services and administrative staff to support its faculty, students in their academic and research activities. The Department has two multimedia and three overhead projectors. The university has informative and dynamic website which is updated on daily basis. All information regarding new activities and examination results is available on the website. Senior faculty members have independent offices but most of the other faculty members have shared offices. Some space is converted inside the laboratories to accommodate few faculty members. The department has a well-established research farm where most of the field trails are conducted. KPK University did not provide direct budget to any of the department, rather demands are made on need base and facilitated by the University administration. However, university provides Rs. 4,000 and Rs.10000. for M.Sc.(Hons) and Ph.D. student respectively.

Criteria IV. Students Support and Progression

The department of Agronomy receives huge number of application for its various degree programs every year. However, limited numbers of student (25-30) are selected by following strict criteria developed by the department. This is also done to maintain a healthy teacher student ratio as same numbers of students are leaving the department every year. The limited intake of students, enable faculty member to concentrate on each student which yields no drop puts, good CGPA and quality learning and enhanced abilities to do research. In addition to this, need based scholarships are also available to students at B.Sc(Hons.) and M.Sc(Hons) level. However, the department requires starting programs such as scholarships for Ph.D student and collaboration with banks for providing interest free loan to needy and competent students. Hostel, auditorium, academic counseling, internship facilities are encouraging while transport and medical facilities requires attention.

Criteria V. Research and Consultancy activities

The faculty is actively conducting various research projects. The faculty through open competition wins these projects. Many project worth millions rupees are completed and some are still going on. The University sponsored various projects of the faculty from its Research Promotion Funds. The finding and outputs of these research projects as well as post graduate students research is regularly published in HEC approved / impact factor journals. The research grants are regularly coming in the department through its faculty members. At the moment, department had completed fifteen projects and another fifteen are in the process of completion. The department claims six books and five chapters in books written by the faculty members so far.

The department has developed collaborations with many national and international organizations. The department has no budget for participation and organizing conferences and seminars. The task mostly accomplished by the donor agencies. Some of the senior faculty provides advisory services to various organizations from time to time. The dissemination of research work is done by publications in national and international journals.

Criteria VI. Governance and Leadership

The administrative authorities and governance of the University as well as of the department are clearly defined. The implementations of statutory rules / regulations are intact. All the statutory bodies like syndicate, academic council, board of faculty, board of studies etc are properly functioning. The academic set up of the departments acts on its own while financial matters controlled by the Finance Directorate. The department is dependent on the treasurer office in financial matters. The department does not have its own funds generating resources. The financial resources of the department are mainly depended on the University. The University has its funds generating resources and gets grant from HEC. Departmental placement bureau and Alumni's association has not yet developed. The Departmental calendar for various activities is well organized.

Criteria VII. Adoption of Best Practices

A Quality Enhancement Cell (QEC) has been developed in the University to ensure the quality of the degree programs. The students and courses assessment are well adopted and operated through the questioners provided by QEC as per HEC directives. The AIC members observed that the compilation of data generated through questioners is assigned to the faculty members. These tasks are an extra burden on the faculty and suppose to be done by the QEC staff.

The Department of Agronomy is having the highly qualified faculty in the University. These faculty members look very enthusiastic toward teaching and research. During visit, the involvement in some new dimensions of the research in Agronomy like biotechnology and quest for nanotechnology was noticed.

Criteria VIII. Overall Analysis

1. Strengths of Degree Programs

- Highly qualified and dynamic faculty with sound experience in various field of Agronomy
- Highly sophisticated instrument such C: N analyzer, Solari-meters in labs.
- Precisely leveled and developed experimental farm area of 20 acres for field research.
- Students' preference for admission in the department
- Highly motivated and friendly environment for research and learning's

2. Weaknesses of Degree Programs

- Inadequate office, lecturing and laboratory space with relevant qualified lab. Staff.
- Lack of co-curriculum, due to non-availability of common room.
- No departmental library, old edition books in the main library.
- High strength of faculty (17) but low intake ratio as well as lesser teaching load.
- Despite highly qualified and experienced faculty (15 Ph.Ds) no considerable research agenda in hand.

- Formal course files for each offered course are prepared and maintained by a few faculty members.
- Final semester undergraduate internship program has not provided the desired exposure and training to the students.

3. Opportunities for Degree Program:

- Strong and highly qualified faculty there is opportunity for winning projects from national and international donors.
- Highly qualified and experienced faculty can provide advisory services to community for sustainable development in the area.
- Program may organize trainings for capacity building of professionals and farmers.

4. Threats to Degree Program:

- Lack of active collaboration and interaction with leading research and teaching institutions such as NARC, AARI in the province/country
- Lack of financial resources for running departmental matters independently.
- Security is a big threat to staff and students under present circumstances.

5. Actionable Recommendations:

- Each faculty member should provide well equipped separate office.
- Class rooms needs restructuring along with provision of latest equipment for providing conducive learning environment.
- Faculty development program for young faculty members should be initiated.
- The student should be encouraged to visit farmer's field for on-site problems analysis.
- Academic/graduate research may be reviewed through weekly seminars in the department.
- Departmental library may be established with the provision of latest reference and text books as well as peer reviewed journals.

- Students meeting with the supervisors should be regular at least on weekly basis.
- Alternate arrangement for electricity should be available at campus and at the hostels.
- Interaction of students with other universities/institutes of the country may be promoted.

Based on the inspection/evaluation, the AIC unanimously recommends Accreditation of the Degree Programs of Department of Agronomy, KPK Agricultural University Peshawar, in the upper band (76%) of “X” category of National Agriculture Education Accreditation Council/HEC.

4.3 Signatures of AIC Members

Name and Designation

Signatures

Prof. Dr. Fayyaz Ul Hassan
 Department of Agronomy
 PMAS Arid Agriculture University Rawalpindi.

(Convener)

Prof. Dr. Mushtaq Hussain Kazmi
 Department of Agronomy,
 Faculty of Agriculture, Rawalakot
 The University of Azad Jammu & Kashmir

(Member)

Dated:

4.4 Comments and Signatures of Chairman

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