



National Agriculture Education Accreditation Council

16

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

**Dr. Masood Ahmad Quraishi
Dr. Ahmad Hussain**

**Department of Agro-Forestry and Range Management,
Pir Mehr Ali Shah Arid Agriculture University,
Rawalpindi**

The Secretary
National Agriculture Education Accreditation Council (NAEAC)
NAEAC Secretariat
Islamabad

Subject: **Accreditation Inspection Committee for Accreditation of Degree Programs**

Reference your office communication Dy No. 424/NAEAC/HEC-2010 dated 29-10-2010 on the subject noted above.

The Accreditation Inspection Committee (AIC) constituted by the Chairman NAEAC consisted of the following:

- I. Professor Dr. Masood Ahmad Quraishi (Convener)
- II. Dr Ahmad Hussain (Member)

The AIC visited the Department of Forestry and Range Management, Pir Mehr Ali Shah (PMAS) Arid Agriculture University, Rawalpindi from November 11-12, 2010 and carried out the external assessment and accreditation process of degree programs (B.Sc, M.Phil and Ph.D). Based on on-site visit of the physical infrastructure (faculty offices), facilities (Teaching, lab, research and field facilities,) and other learning resources available for degree programs, the draft report has been prepared as per TORs.

The draft report is submitted within stipulated time for further necessary action and record.

Dr Masood Ahmad Quraishi
Convener
Accreditation Inspection
Committee (AIC)
26-11-2010.

Distribution

1. Secretary, National Agriculture Education Accreditation Council (NAEAC)
2. The Chairman, Department of Forestry and Range Management, PMAS Arid Agriculture University, Rawalpindi

EXTERNAL ASSESSMENT AND EVALUATION REPORT OF
ACCREDITATION INSPECTION COMMITTEE (AIC) FOR
ACCREDITATION OF DEGREE PROGRAMS

(November 11-12, 2010)

of the Department of Forestry and Range Management,
Pir Mehr Ali Shah (PMAS) Arid Agriculture University, Rawalpindi

The Department of Forestry and Range Management (F&RM) is offering the degrees of B.Sc (Hons.) Agriculture major in Forestry & Range Management, M.Phil and Ph.D (in Forestry & Range Management). The department has been mandated to focus arid and semiarid regions in teaching and research and take into account the dynamics of land degradation, with special emphasis on improving / solving the problems of rangeland degradation, deforestation and proper management of the natural resources. The Program mission of the department is in consonance with outlined objectives and the elements of the strategic plan to achieve mission and objectives of degree programs are clearly spelled out. Various criteria have been in place to assess the program objectives within the institutional framework/set up.

The Self Assessment Report (SAR) of the degree programs prepared by the Department of F&RM reflects well the ambition of fulfilling the criteria set by HEC for the award of the degree programs. It is silent about the name and number of CBO's involved in R&D and their significant willingness / contribution if any, in accepting the research guidance and recommendation of the department with whom effective collaboration of the Department exists. However the increasing number of workshops and seminars organized by the department are indicative of the progression in this regards.

The quantitative assessment of the department for the last three years is impressive in various categories of the degree programs thus fulfilling the HEC criteria. Various surveys based on QEC questionnaires conducted by the Department are indicative of the successful attempts of the department to achieve degree program objectives. Each faculty member has been evaluated in terms of teaching experience, research, publications and satisfaction level depicted by the students.

Faculty stability computed index was found corroborative with the working environment which was rendered good and qualitative. Full time faculty requirements include one Timber Technology Expert, one Watershed Management expert and one Forest / Range Field Officer. At present, there is only one leave vacancy. Teaching load on faculty members is variable and justified as per HEC standard. Students Assessment instruments are adequately used by the faculty members. No system of teachers training is in place at the University / department level. So far, two Ph.D students were supervised by HEC approved professors. At present four M.Phil students are being supervised by each faculty member on an average.

Faculty has been learnt to use variety of appropriate instructional techniques and dialogue and discussion in class rooms is predominantly followed. Faculty performance summary as reflected in the SAR was impressive.

Curriculum contents of the offered degree programs are compatible with changing and emerging need to the extent of 10% and its objectives are supportive to the degree programs. The curriculum of undergraduate as well as post graduate level is revised regularly in the light of HEC and international requirements. Textbooks and reference material are available in the University library but inadequate to cater for the demand by students and lack recent new editions. Course evaluation system is effective and in place in the department and has been aptly reflected in the SAR. Course files are regularly and properly maintained and submitted to QEC for timely appraisal and record. Record is indicative of the Meeting of Board of Studies / Faculty which is held regularly and in the last two years, changes in the curriculum and subsequent updating has been suggested thrice. Stakeholders feedback is incorporated in the curriculum as reflected in HEC Performa 8 in SAR. The SAR is silent on the courses of agriculture for first three semesters taught to students of the B.Sc Hons majoring in Forestry and Range Management as Curriculum requirement for the degree offered.

Laboratory manuals for some important instruments were not available in laboratory. The lab support staff for adequate and timely instructions / supervision, in-situ work and maintenance of laboratory is lacking. Annual budget allocation for operation and maintenance of lab is negligible (Rs. 10000 only). No chart exhibiting precautionary steps / measures while using sophisticated instruments and chemicals in laboratory was on display. The budget for department library is highly inadequate and annual allocation is negligible (Rs. 5000 only). The Book Bank does not exist even at the University level.

The department computing infrastructure and facilities were inadequate to the faculty members. Students' access to various facilities was found insufficient, limited and restricted in the Central Library of the University. Local and foreign journals pertaining to the department discipline are either non-existing or available in meager number.

The department building infrastructure (covering an area of 2686 sq ft), as per academic and administrative requirements is inadequate. The experimental area under the administrative planning of the department is 15 acre. It is located some 80 km away from the department and other university campus. The experimental area consists of one laboratory. It is in the making, however, the details of farm machinery and list of equipments was not available.

The department average intake in B.Sc (Hons) 5th semester, M.Phil, Ph.D is 15-18, 13-15 and 2-4 students respectively per year which is indicative of the trust of Pakistan society at large. The average CGPA of the students of the degree program of the F&RM in in B.Sc (Hons) 5th semester, M.Phil, Ph.D for the last three years is 3.3, 3.5 and 3.6 respectively. No financial support is generally available to the students and scholarship opportunities are limited. Hostel accommodation, Convocation Hall / Auditorium, medical and transport facilities are inadequate. Sports facilities are adequately furnished. Though occasional academic counseling is facilitated to the students from teachers and faculty members beyond teaching hours, students interaction with teachers is vry encouraging.

SWOT Analysis

Strength

The Department of Forestry and Range Management (F&RM) has following items attributed to its strength

- First ever university department in Pakistan to produce Forest and Range scientists / managers with special focus in arid and semi-arid areas of the country
- Full time highly qualified, experienced and enthusiastic faculty
- Field oriented four years degree program at under graduate and research based post graduate program according to approved HEC criteria
- Affordable forestry study courses encompassing both theory as well as practical field training
- Geographical position of PMAS Arid Agriculture University is ideal for undertaking teaching Forestry, Range Management and Watershed for most students
- Envisaging changes in courses regularly with emerging trends and challenges

Weakness

- ✓ Insufficient funds for laboratory-cum-field research, library / reference books (in the field of Forestry, Range Management, Timber Technology etc.)
- ✓ No faculty in the area of Timber technology and Watershed Management
- ✓ Insufficient and ineffective transport facilities for study tours and research
- ✓ No Forest / Range Field officer for developing department forest area and facilitating student field research and study tours
- ✓ Lack of adequate infrastructure for advanced research and teaching facilities
- ✓ Insufficient scholarship / funds for faculty training and students
- ✓ Insufficient IT devices Multimedia, computers, etc

Opportunities

- ❖ The Faculty / department members and students can have effective contact, conversation, collaboration, and closer partnership with local employees and NGOs owing to peculiar geographical location of the University / department.
- ❖ The quality of teaching and research at this department can be highly improved and made meaningful / field oriented by having frequent contact, collaboration and closer partnership with farmers, agroforesters, graziers and other related field persons.
- ❖ Having Agriculture degree, the graduates are eligible to apply in multiple (brown and green) sectors e.g., Agriculture, Forestry, Environment, Banking, corporate sectors
- ❖ Outstanding students and those with high caliber may opt for Competitive Exams

- ❖ The graduates may change their professional career from one field to other e.g., from agriculture to wildlife, environment, ecology etc.

Threats

- Department failure to provide readily available transport for conducting study tours as well as field studies
- Department failure to provide relevant text books and practical manuals in various areas covered by this department
- Lack of pictorial presentations of forestry, range management and watersheds from all parts of Pakistan
- Degree is not getting priority sometimes in the PPSC because of the monopoly of Forestry department
- Loss of potential faculty staff if no incentives in future in the field of Forestry and range Management
- There appears to be no external threats to the department other than above mentioned internal threats

Actionable Recommendations

- System based and result oriented research topics must be given due priority in the discipline of Forestry & Range Management. The efficiency, proficiency and development of farmer, agroforester grazier should be the focus of research studies for developing degraded forests and rangelands, conserving water and improving livestock.
- A pragmatic and scientific system for training newly inducted teachers should be introduced at the department level encompassing important aspects of teaching and research. Orientation as well as refresher courses for the teaching and supporting staff may be arranged on regular grounds.
- Two new labs are recommended to be established; one for teaching / research requirement of undergraduates and other for post graduate students.
- Annual budget allocation for operation and maintenance of lab is recommended to be increased to the extent of Rs. 100,000.
- The need of field / study tours in Forestry & Range Management cannot be overemphasized. Therefore, the Department of Forestry & Range Management should have its own transport vehicles (two) one **bus** and one **coaster**, that can be used instantly as and when required without involving administrative approval. Six tents may be provided to the department for overnight stay during study tours.

- The annual budget for department library is recommended to be to the allocation tone of Rs. 150000 especially for printing / photocopying, vitally needed (rare and not available in the market) professional books .
- Subscription of at least two foreign journals of international repute most related to the department needs are recommended.
- A provision to be made to enable the M.Phil and Ph.D candidates in the department to provide Teaching assistance to the faculty members especially in the practical classes.
- Latest multimedia facility with all the accessories and photography along with a full time IT Technician / Multimedia expert may be provided to the department to cater on-site study tour record which is very vital for imparting quality education and field experience in this discipline.
- Short foreign visits for teachers for boosting up research activities may be arranged.
- Credit for writing professional books may be granted as special incentive equivalent to 10 research papers.
- Special arrangements be made to cater specific requirements of female students such as a separate counseling / study room, 4 portable lavatories for study tours.

Rating Recommendation for accreditation

The Department of Forestry and Range Management, Pir Mehr Ali Shah (PMAS) Arid Agriculture University, Rawalpindi has earned a fame at domestic fronts in the categories of academic institutions with a repute to cater the professional edge in generating Forest and Range Field scientists equipped with update knowledge and necessary skills for developing arid and semiarid areas. However some deficiencies / weakness have been pinpointed in this report that merit further consideration.

In view of the above narrated findings, the AIC Committee recommends that the department be graded as “X” category (i.e., the classification of the degree program with minor shortfalls expected to meet the criteria as set by the Council for Accreditation) with scope for up-gradation to category “W” after appropriate improvement in due course of time.