



AIC Report

**Prof. Dr. Sarwat Naz Mirza
Dr. Ahmad Hussain**

February 25-26, 2013

**Department of Forestry & Range Management
Bahauddin Zakariya University, Multan**

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

Subject: Report of Accreditation Inspection Committee for Accreditation of Degree Programs of the Department of Forestry, Range and Wildlife Management, Bahauddin Zakariya University, Multan

Reference: HEC letter No. 853-NAEAC/HEC/2013 dated February 11, 2013

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

1. Prof. Dr. Sarwat N. Mirza **(Convener)**
2. Dr. Ahmad Hussain **(Member)**

The AIC carried out two days visit to the Department of Forestry, Range and Wildlife Management, Bahauddin Zakariya University, Multan from February 25-26, 2013. The AIC conducted evaluation of the degree program of B.Sc. (Hons.) Agriculture major in Forestry, Range and Wildlife Management being offered by the Department of Forestry, Range and Wildlife Management. The AIC also carried out detailed visits to the infrastructure (faculty offices, teaching classrooms, laboratories, Library, Field area, nursery, etc.) being employed for various teaching and research processes of the Department. Based on the findings/evaluation, report is being submitted to NAEAC as per approved TORs for AIC.

(Prof. Dr. Sarwat N. Mirza)
Dean FRW/Convener AIC

(Dr. Ahmad Hussain)
Assistant Professor/Member AIC

Distribution:

The Dean/Chairman, Department of Forestry, Range and Wildlife Management,
Bahauddin Zakariya University, Multan

**EXTERNAL ASSESSMENT AND EVALUATION REPORT OF ACCREDITATION
INSPECTION COMMITTEE (AIC) FOR ACCREDITATION OF DEGREE PROGRAMS
OF THE DEPARTMENT OF FORESTRY, RANGE AND WILDLIFE MANAGEMENT,
BAHAUDDIN ZAKARIYA UNIVERSITY, MULTAN**

(February 25-26, 2013)

SECTION-1 Introduction, Mission and Objectives

1. Terms of Reference of the Committee

The team visited the Department of Forestry, Range and Wildlife Management, Bahauddin Zakariya University, Multan for external assessment and evaluation of B.Sc. (Hons.) degree programme in Forestry from February 25-26, 2013 with the following mission.

1. To validate the self-Assessment Report of B.Sc. (Hons.) degree programme. Prepared by the Department.
2. To bring external evaluation of the academic program of the Department for rating and accreditation.
3. To prepare consolidated report about the degree programme after meeting with Dean/Chairman of the Department, faculty members, students and visit to classrooms, laboratories and library, etc.
4. To submit recommendations about the degree programme to NAEAC chairman.

1.2. Introduction of Department/Degree Programme

Dr. Muhammad Zubair, Department Head, briefed the Accreditation Committee through presentation about the Department history, faculty, students, courses curriculum, examination/evaluation system, classrooms, labs, major equipment, students strength, students completed education, etc. BZU established college of Agriculture in 1989 and established the Department of Forestry, Range and Wildlife Management in 2010. Later on, the university College of Agriculture was upgraded to the Faculty of Agriculture Sciences and Technology in 2012 and the Department of Forestry also became part of this newly established Faculty in 2012.

1.3 Mission of the programme

The Department's main focus is to impart and promote education and research on the conservation and enhancement of Forest, Range and Wildlife resources in Changing climatic and environmental Scenario.

1.4. Programme Objectives

- To establish forestry as a major subject at UCA/FAST to offer courses and impart higher education in the field of forestry and allied disciplines and supervising students for the conduct of thesis as part of fulfillment of their degree programmes.
- To conduct research and capacity building of forestry professionals and farmers towards specific problem issues like shisham dieback, depleted rangelands, Rodh kohi area uplift, desertification etc towards sustainable development of forestry sector in the country.
- To develop linkages with forest department, forestry research organizations, universities and private sector for collaboration of research and education activities for sustainable natural resource management and student supervision.
- To publicize research and information dissemination through various tools i.e. seminars, field days, workshops, media etc. for the awareness of the community, practitioners and students for sustainable management of forestry sector in the country.

Section-2 Criterion Wise Analysis

2.1 Curriculum Design and Development

The Department of Forestry, Range & Wildlife Management has adopted program and courses of B.Sc. (Hons.) Agriculture major Forestry, Range & Wildlife Management from HEC National Curriculum approved for the degree programme. The B.Sc. (Hons.) degree in Forestry comprises of 148 credit hours with four years duration after F.Sc. The curriculum is regularly revised through HEC curriculum revision committee and is Approved through Departmental Board of Studies and Advanced Studies Research Board. All the courses are available in approved handbook of HEC Forestry National Curriculum and syllabus showing the courses semester wise adjustment with credit hours.

ANNUAL STUDENT'S INTAKE & PASS OUT IN LAST THREE YEARS

Sr. No	Year	Students intake	Annual pass out
01	2010	06	--
02	2011	04	06
03	2012	13	04
04	2013	09	13 expected

2.2 Strength and Quality of Faculty

There are three regular faculty members in the Department of Forestry, Range and Wildlife Management including one Associate Professor and two Assistant Professors. In addition, there are two part time Faculty members hired as Lecturers. The evaluation committee met with each faculty of the Department to know about their qualification, professional background, research field, salaries, allowances, teaching workload, research supervision, record of course, students attendance, examination result, papers setting, grading systems, opportunities for trainings, facilities available, facilities required, strengths & weakness, existing problems in the degree programs of the Department, etc. The outcomes of the meetings with the faculty were evaluated/marked in the evaluation manual (toolkit).

2.3 Students Feedback regarding Degree Program

The AIC members also met with a group of students pursuing their degree in B.Sc. (Hons.) major Forestry program. The Students showed their satisfaction regarding various components of degree programs including scheme of studies, course material, practical work, etc. The students especially mentioned the teaching methods including power point lecture presentations, case studies, etc. The students however, suggested that field visits should be a regular part of the courses to give them a chance to visit project sites and forest plantation activities, etc. Students also showed their satisfaction regarding classroom facilities, curriculum & teaching standard, teachers' behavior, library and computer laboratories, etc.

Section-3 Overall Analysis of the Degree Program (SWOT ANALYSIS)

3.1 Major Strengths

(A) Admission Criteria and Curriculum

- B.Sc. (Hons.) admission in 1st semester- Annual Intake after F.Sc.
- B.Sc. (Hons.) major allotment- 5th semester (on choice and merit)
- Admission and Withdrawals are governed by the University Uniform Semester & Implementation rules
- Curriculum designed and selected from HEC approved guidelines for the subject of Forestry. Also revision of curriculum as per approved HEC guidelines (NCRC).

(B) Faculty, Lab & Office staff

- The department has on its strength the services of three regular and two visiting faculty including three Ph.D faculty members. Among them one is Associate Professor, Two Assistant Professors and two Lecturers.
- The teaching staff is well versed and trained in their respective field of studies.

(C) Infrastructure

- The department has the facility of spacious classrooms equipped with multimedia projector and screens, fully equipped research laboratories, computer laboratories, faculty offices, a central library with 180 books in addition to departmental library containing required number of text and reference books (20).
- The Department its own building with 02 classrooms, one large space research laboratory, one wildlife museum, one computer laboratory for the students with 35 computers and 04 faculty offices.
- Each faculty member has official computer with printer. There is computer lab for students containing 35 computers linked with Wi-Fi internet.
- Because of internet facility in the Computer laboratory, the faculty and students can utilize HEC digital library for research and linkages development with other institutions.

(D) Library, Books & Research Journals:

There is a central library of the university where the students and faculty has access to a large number of books, journals and e. library facilities. The central library has a separate section of books for the department of forestry containing over 180 text and reference books related to all sections/sub disciplines of forestry including forest management, Range Management, Agro-forestry, Watershed Management, etc. The university has adequate budget to order any book on demand by the department through library book collection policy. The senior Faculty members have published books/monographs related to their specialization and also produced sufficient number of research publications in local as well as international journals having impact factors.

3.2 Major Weaknesses

- The department is well short of required number of regular faculty positions due to which only B.Sc. (Hons.) degree programme is currently being offered by the department. The department plans to start M.Sc. (Hons.) degree programme in Forestry but due to shortage of faculty the Master level degree programme has not yet been started.
- Lack of adequate practical exposure of students to various forest types and other field project sites which is needed for proper learning of the subjects related to natural resources management. The current touring exercises are not sufficient to meet the degree requirement.
- Although students are deputed to do practical work on forestry related issues at various allied departments as part of their internship during 8th semester, the scheme of studies and curriculum does not address practical exercises like preparation of forest management plans in collaboration and supervision of forest departments and forestry research institutions.

- The text and reference books needs to be updated with latest editions and topics on new trends in forestry like biodiversity and climate change, etc. be added in the current scheme of studies.

3.3 Major Opportunities

- The Department of Forestry, Range and Wildlife Management of BZU is located in the Indus Basin ecological zone where there is a great opportunity for afforestation and reforestation of multipurpose trees in conjunction with agriculture crops under agroforestry practices. The climate of tropical irrigated plains is suitable for introduction and multiplication of promising tree species like *Moringa oleifera*, *Leucaena leucocephala* and *Acacia nilotica*, etc. The department can make significant headways in developing a strong forestry research and extension programme in collaboration with line departments and NGOs.

The Department has a huge research area under its control to establish quality nursery and an impressive plantation demonstration area. The department already has established a demonstration site with drip irrigation which has the capacity of up scaling by inclusion of more promising species.

3.4 Major Challenges

- The department should put more focus on securing funding for research projects on testing innovative forestry techniques like raising quality seedlings under nursery and field conditions and promotion of agro-forestry technology among progressive farmers.
- Outreach exposure to the students is another challenge for the department which can be carried out in collaboration with Forest departments and Punjab Forestry Research Institute for demonstration and learning of latest practical knowledge in the field of forestry.

Section-4 Recommendations

4.1 General Recommendations

- The curriculum of B.Sc. (Hons.) degree programme should include separate course on forest management plan in consultation with other universities already having similar course and eventually following four years degree program as BS Forestry in line with other universities.
- Addition of new and latest edition of recommended text books in departmental as well as main library.
- Revision of some course contents by including latest issues and trends in the field of climate change issues like carbon stock estimation and REDD and REDD+.
- Field visits be arranged for the students for practical demonstration of latest and innovative nursery and field plantation techniques being employed by the extension wings of forestry departments and forestry research institutions.

- To improve the quality of education, faculty should be provided ample opportunities for short and long term training in developed countries.
- The faculty should be encouraged to get competitive research grants in order to inculcate research culture in their academic career.
- Hiring of qualified and experienced faculty and promotion/up-gradation of existing faculty would further improve the quality of education in the department and enable the department to start Masters level post graduate degree programme in near future.

4.2 Rating Recommendations for Accreditation

In view of the above narrated findings, AIC unanimously recommends that the Degree program of B.Sc (Hons.) offered by the Department of Forestry, Range and Wildlife Management, Bahauddin Zakariya University, Multan be graded as “X” category of National Agriculture Education Accreditation Council/Higher Education Commission i.e., the classification of 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.