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# **AIC Report**

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January 5-6, 2012

## **Department of Agronomy**

University College of Agriculture & Environmental Sciences, Islamia University, Bahawalpur

#### **ACKNOELEDGEMENT**

The evaluation committee acknowledges the support of Principal of the University College of Agriculture and Environmental Sciences and Chairman/faculty staff members of the Department of Agronomy, Islamia University, Bahawalpur. The immense help and support of Mr. Naseer Alam khan (Secretary) and Malik Kashif Anwar, IT Coordinator of NAEAC Secretariat is also acknowledge.

**Accreditation Inspection Committee (AIC)** 

## **Prologue**

The AIC constituted by the National Agriculture Education Accreditation Council (NAEAC) for the external evaluation of the Degree programs of B.Sc(hons) and M.Sc(hons) offered by the Department of Agronomy, University College of Agriculture and Environmental Sciences, Islamic University Bahawalpur, Bahawalpur, visited the Department on 05-01-2012. The NAEAC Secretary and AIC members met in the office of the Principal, University College and Environmental Sciences. The Principal Dr. Moazzam Jameel briefed about the academic activities of the Department. Later on Dr. Rana Muhammad Iqbal Khan, Chairman, Department of Agronomy, also gave a presentation on the academic activities of the Agronomy Department. The tentative schedule provided by NAEAC was followed by AIC and detailed interviews and discussions were held with the Principal of the college, Chairman of the Department of Agronomy, Faculty members and senior/junior students of the College. Laboratories, on-going Research Programs, class rooms and staff offices were also visited to review the infrastructure and other facilities available for the degree programs.

a) In pursuance of the mandate given by the HEC under clause10 sub sections(d) and(1) of the bylaws of NAEAC, an AIC was constituted comprising the following scientists to review the degree programs of Agronomy, University College of Agriculture and Environmental Sciences of assessment and accreditation.

Dr. Rashid Ahmad Shad Convener
Dr. Muhammad Bismillah khan Member

- b) Terms of Reference of the Committee
  - To validate the Self-Assessment Report of the Agronomy Department
  - To carry out the external evaluation of the academic programs for the rating and accreditation
  - To synthesize and submit report on the interactions with the Principal, Chairman,
     Faculty members, Students as well as visit of infrastructure, facilities and
     activities
  - To submit recommendations to NAEAC Chairman

Agronomy Department is not yet a full-fledged department as in other universities. It is one of the 4 academic programs offered by the University College of Agriculture and Environmental Sciences.

#### **B.Sc (Hons)**

B.Sc(Hons) degree program was started in 2005, where-as Agronomy specialization in the degree program was initiated in 2009, The B.Sc(Hons) Agriculture comprises of 137 credit hours as per directions of the HEC with major/ minor/supporting courses. The course consists of 20% sessional evolution, 30% mid-term evaluation and 50% final examination.

Besides basic courses offered/required for all students in first 4 semesters (68 credit hours), for specialization in Agronomy, courses consisting of 69 credit hours including Internship are offered.

#### M. Sc (Hons)

M.Sc(Hons) degree programs has recently been started in 2011 in the evening classes. It consists of 94 credit hours including Field Experiments (4), Special Problem(1), Seminar(1) and Thesis(10).

## Criteria wise Analysis

#### **Criteria 1: Strength and Quality of Faculty.**

The total number of faculty in the college is 25consisting of one professor, 3 associate professors, 10 Assistant professors and 8 lecturers (10 Ph.D+8 M.Sc), specialized in different disciplines. Five faculty members are specialized in Agronomy.(Four PhD and one M.Sc (hons)) including 3 Assistant Professors and one lecturer composition of 1:0:3:1 compared to the desired ration of 1:1:2:2. The average teaching load for professor, Associate Professor, Assistant Professor and lecture is 8, 8, 12 and 12 hours/week respectively. The work load on the Agronomy specialized faculty members is satisfactory. The average number of MSc students supervised by each faculty member is 2. The salaries and fringe benefits are reasonable.

The faculty members, besides teaching, also participate in other professional and administrative matters such Quality Enhancement, Courses revision/improvement. One of the faculty member in Agronomy is also serving as Chairman of the Department as well Director of Bahawalnagar campus.

The working environment and Faculty Stability Computed Index is good. The faculty members adequately participate in seminars and conferences. The faculty members fully use variety of appropriate instructional techniques; promote analytical and critical thinking and other effective measures as Teaching-Leaning methods.

The faculty members are satisfied with the performance about degree programs and are moderately satisfied with their jobs. It was noted by AIC that regular promotion system, as in other government departments does not exit in the Agronomy department, as such no promotion chances for the faculty members are there.

#### **Criteria 2: Curriculum Design and Development.**

The B.Sc(Hons) comprises of 137 credit hours as per directions of HEC. With major/minor/supporting courses. The evaluation of courses consists of 20% sessional evaluation, 30% mid-term exam and 505 final exams. The M.Sc (Hons) consists of 94 credit hours including field experimentation (4), Special problem(1) and thesis(10). Besides basic courses offered/required for all students, for specialization in Agronomy, courses consisting of 69 credit hours are required/offered including internship.

The college follows HEC recommended curriculum as per decision of National Curriculum Revision Committee and duly approved by statuary bodies such as Board of Studies, Board of Faculty and Academic Council. The curricula are revised occasionally.

The curriculum objectives of degree programs are well defined and relevant and are supportive to degree programs. The curriculum was found well structured and rich in contents and the Information Technology has been well integrated in the curriculum. The

curriculum is able to achieve students learning outcomes for the students at the Masters level only. The Course registration and withdrawal policy exists. However Board of Study is at college level and not at Department level.

Students are satisfied with the course contents/period/requirement and consider quality, innovation, knowledge and Technology and much happy with the teachers performance and behavior/attitude.

## **Criteria 3: Infrastructure and Learning Resources.**

The building of the college is still under construction. However, presently the college temporarily is situated at two sites. The Agronomy department is located at first floor of the left block of Islamic Learning Building of the University and there is sufficient space for the faculty members, staff and Laboratory. The Laboratory is adequately equipped; the capacity of the Research lab and teaching lab is good. For field experimentation and research, sufficient land is available. However the adequacy and quality of Lab equipment is unsatisfactory and it is only partially operated. There is only one qualified Lab Assistant. No budget is specified of Laboratory.

There is no departmental Library. However, sufficient numbers of books are available in the College Library. Library is spacious and equipment such as computers, photocopier, Typewriters, canner etc are available in the College library and has also good sitting facilities in very peaceful environment.

Although students don't have any approach to computers, the students are very much satisfied with the quality of services provided in the Library.

#### Criteria 4: Students Support and Progression

The number of students in B.Sc(hons) Agronomy and M.Sc(hons) Agronomy are 20 and 8, respectively. With the initiation of M.Sc Programs, some students from other universities are shifting to this college because of their homes in the same area. However,

annual intake is according to requirement. Yearly percentage of graduating students is about 100 % and there is no dropout.

At present none of the student is residing in the hostel. Facilities such as auditorium, play grounds are available and guidance from teachers beyond teaching hours is also available and Internship system also exists. Students' interaction with the teachers and attitude towards teachers is very encouraging and students are encouraged to participate in seminars/conferences. Merit scholarship system also exists and at present 3 students has availed merit scholarships.

The students were found satisfied with the teaching standards. However they were not very much hope full to get jobs after completing their degree programs They also complained about the shortage of text books in the library and about the high tuition fees in the evening classes.

#### **Criteria 5: Research and Consulting Activities.**

At present B.Sc (hons) agronomy program is the main program and it does not require any research work for degree. M.Sc program, which require thesis, has very recently been started. As such there are not much research activities in the department at present. However sufficient experimental area and equipment is available and faculty members are also well qualified which indicates high research opportunities/prospects in future.

## Criteria 6: Governance and Leadership.

At present almost all administrative matters are under the control of University and neither the Principal nor Chairman of the Department is authorized to make any change for improvement. The department does not have even its own budget and all budget is under the control of Principal. As such the organizational set up and academic infrastructure is very weak. Placement Bureau and Alumni profile is also at the University level. Annual calendar of activities is available.

#### Criteria 7: Recent Innovations Best Practices.

Quality Enhancement Cell (QEC) has been 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 classes are being taught regularly and course contents are completed within the stipulated period of time. The student- teacher assessment is well adopted and operated according to the questionnaire by QEC and HEC directives. The departmental faculty members showed an enthusiastic look towards teaching.

### **SWOT Analysis**

#### A) Major Strengths

- Qualified and experienced Faculty with more than 80% possessing Ph.D degrees
- College building under construction at suitable and assessable place.
- Large experimental precision leveled field area and adequate laboratory facilities available.
- Low cost tunnel facilities for on farm research.
- Appropriate work environment for students and faculty.

#### B) Weaknesses

- Number of faculty members is less as required for B.Sc/M.Sc degree programs
- Limited Laboratory/class rooms/faculty office facilities at present
- Lack of administrative financial power, with the Chairman of Agronomy department
- Obsolete models of computers and unavailable to students in the library
- Insufficient text books/journals on Agronomy in the library
- Shortage of recurring budget for maintenance and improvement research facilities
- Number of qualified lab/field assistants is less
- No Green house facilities.

#### C) Major Opportunities

- Good opportunities of employment for graduating students of the department in public and private sectors
- The students of Bahawalpur and surrounding areas interested in Agriculture/Agronomy graduation will be able to receive degrees in their own areas at less expenses instead of studying in far off areas
- With the start of M.Sc and prospects of further leading to Ph.D, the department faculty may avail an opportunity for Ph.D and post doctorate programs
- Research opportunities will also be enhanced with initiation of M Sc and Ph D
  and hence more research papers in journals leading to improvement in
  professional careers
- More rural and urban development at regional/national level

#### **D)** Major Threats

- Restricted progress in construction of college building.
- Insufficient modern office gadgets such as photocopiers, printers, fax machines etc and Lap top computers for faculty members.
- Discouraging attitude of University authorities in the allotment of University residences to UCA & ES faculty and staff.
- Complicated process/policies of purchasing of essential items

#### **Actionable Recommendations**

- Number of faculty and qualified supporting staff be enhanced as HEC criteria
- Professional linkages/coordination with other institution may be established
- Facilities such as residences, Laptop computers, transport etc. may be provided to faculty staff.
- Labs/Greenhouse may fully equipped and field experimental machinery/tools maybe arranged to facilitate wide range of research work for students and faculty.

- A wide range of latest edition of text books, computers with internet and journals should be within the range of students.
- The building of the UCA&ES of the IUB (under construction) be completed at the
  earliest to provide sufficient infrastructure to accommodate faculty, supporting
  staff and labs.
- Agronomy section should be raised to the level of full-fledged teaching department with sufficient autonomy in finances, administration and academic matters.
- M.Sc (Agronomy) classes should held in the morning session and tuition fees should be reduced to normal level to attract the students.
- Ph.D (Agronomy) should be initiated before the present M.Sc students complete their program.
- Students/faculty should be encouraged to participate in seminars/conferences.

#### **Final Recommendation**

Agronomy program has highly qualified faculty but lacks required lecture rooms/ offices, well equipped labs, library to cater the needs of students in B.Sc and M.Sc (Hons). Multi-disciplinary more courses must be included in B.Sc (Hons) program. With the start of M.Sc classes more faculty is required. Wide range of research work on agronomic problem should also be initiated.

On the basis of the inspection/evaluation, the team recommends accreditation/rating of the degree programs of Department of Agronomy, University College of Agriculture and Environmental Sciences, Islamia University, Bahawalpur, Pakistan in the Upper band (64%) of "Y" category of National Agriculture Education Accreditation Council/HEC.