

**The Chairman
NAEAC Secretariat
Room # 2, Old Comsats Building
HEC Sector H-8/1, Islamabad**

Tel: 051-90802681

E-mail: info@naeac.com

**Subject: Accreditation Inspection Committee's (AIC) Report
(Department of Soil Science, College of Agriculture, D. G. Khan)**

Dear Sir:

This is in response to your office letter **No. 696/NAEAC/HEC-2011 dated 21-02-2012**, the Accreditation Inspection Committee (AIC) visited the Department of Soil Science, College of Agriculture, Dera Ghazi Khan and conducted the accreditation processes through review meetings, interviews, individual meetings, group consultations and visits, etc. as per schedule given.

The Undersigned and Dr. Muazam Jamil, Principal/Chairman, University College of Agriculture and Environmental Sciences/Department of Soil Science, Islamia University Bahawalpur, along with your office team spent two days (21-22, 2012) there for accreditation and evaluation of the degree programs offered by the Department of Soil Science as per necessary guidelines and the toolkit. The draft report prepared unanimously is annexed herewith for your kind information and further perusal please. Please do not hesitate to contact the undersigned for any information if required.

Prof. Dr. Muhammad Abid
Convener of the AIC
0300-7343316

TABLE OF CONTENTS

S. No.	Particulars	Page #
	<i>Covering letter</i>	1
	<i>Table of Contents</i>	2
1	INTRODUCTION	3
	Letter of TOR	3
2	DEPT. OF SOIL SCIENCE, COLLEGE OF AGRICULTURE, D. G. KHAN	3
	Dept. History and Main Features	3
	Degree Programs Offered	3
3	CRITERION ANALYSIS	4
	Criterion I Strength and Quality of Faculty	4
	Criterion II Curriculum Design and Development	4
	Criteria III Infrastructure and Learning Resources	5
	Criterion IV Students Support and Progression	5
	Criteria V Research and Consultancy Activities	6
	Criteria VI Governance and Leadership	6
	Criteria VII Recent Innovations and Best Practices	6
4	SWOT ANALYSIS OF THE DEPT. DEGREE PROGRAMS	7
5	ACTIONABLE RECOMMENDATIONS	8
6	LIST OF ANNEXURES	8
	Annexure # 1	8

1. INTRODUCTION

The Composition of the Accreditation Inspection Committee (AIC) and the TOR were given as below:

- | | | |
|----|--|----------|
| i | Prof. Dr. Muhammad Abid
Chairman, Department of Soil Science
Faculty of Agricultural Sciences & Technology, B.Z.
Univ., Multan | Convener |
| ii | Dr. Muazam Jamil
Principal, University College of Agriculture and
Environmental Sciences, Islamia University
Bahawalpur. | Member |

2. The Accreditation Inspection Committee shall have the following **TORs**:

- To validate the self-assessment report (SAR) of the degree programs (B.Sc. (Hons.), and M.Sc. (Hons.) prepared by the Department of Soil Science
 - To carryout external evaluation of the degree programs in a transparent, neutral, holistic and participatory manner for accreditation and rating **based on seven (7) evaluation criteria given in the Evaluation Manual.**
 - To submit a synthesized and concise analytical report (7-8 pages only) consisting of SWOT analysis and actionable recommendations based on the interactions with the Principal, Faculty Members, Students, Supporting Staff as well as detail visit of physical infrastructure, facilities and other teaching-learning resources available for the degree programs.
 - To submit clear, specific and justified degree programs accreditation and rating recommendations to the Chairman-NAEAC.
3. The AIC shall carry out the accreditation process **from January 21-22, 2013**. The draft report may be submitted to Secretary NAEAC within a period of two weeks of the on-site visit. The Experts/Program Evaluators shall be offered an honorarium of Rs.5, 000/- per day during the on-site accreditation visit of the degree programs besides TA/DA as per HEC rules.

2. DEPARTMENT OF SOIL SCIENCE, COLLEGE OF AGRICULTURE, D. G. KHAN

• DEPARTMENT HISTORY & MAIN FEATURES

The Department of Soil Science was established in 1999. At that time, the Department offered B.Sc. (Hons.) program. Now the Department is also offering M.Sc. (Hons.) Agriculture in Soil Science since 2012. Although, the Department is offering both B.Sc. (Hons.) and M.Sc. (Hons.) Agriculture in Soil Science, but the outlines of courses for M.Sc. (Hons.) Agriculture in Soil Science is not provided in the self assessment report. However, it was informed during the presentation by the Department.

• DEGREE PROGRAMS OFFERED

- B.Sc. (Hons.) Soil Science Since 1999
- M.Sc. (Hons.) Soil Science Since 2012

3. CRITERION ANALYSIS

Criteria I: Strength and Quality of Faculty

The total faculty of the Department of Soil Science is composed of 5 persons only, which do not meet the standards/criteria for degree awarding teaching departments as mentioned in Evaluation Manual (Toolkit) at page 18. One out of them is working as Professor, two as Assistant Professor and two as a Lecturer. The student teacher ratio is 1:10. The AIC met individually with faculty members of Soil Science to discuss their academic background, areas of interest, and their perceptions about the academic programs, students and peers opportunities for professional growth besides research opportunities, facilities available, teacher-student relationship, teaching load and strengths and weaknesses of the program. It was accomplished by calling the faculty staff of various levels and holding frank and free discussions assuring them that the objective of this visit was only to improvements rather than a criticism of their programs. This helped us to know the real situation and feeling of the faculty members about the work place. Following points were made during discussion:

1. Most of the faculty members were not much impressive with the available facilities, the support and the teaching facilities and environment provided by the college/department. However, they were very enthusiastic and passionate to their profession, which seemed to help them to work in a place that is not very easy due to limited resources and facilities.
2. The space in the laboratory was enough, which is considered as a good sign for a good quality education.
3. The research projects submitted to various funding agencies were in the state of evaluation or re-evaluation. The faculty showed high motivation to write more projects for funding in future.
4. The committee enquired some teachers either their research findings were written as general information/extension bulletins? Or not. The answer was yes. Time constraints is conceded on the part of faculty members due to their heavy teaching load, nevertheless, writing the results for general information is the need of the hour.

Criteria II: Curriculum Design and Development

The most important document for academia is curriculum, which reflects the worth of an institution. That is how far it is supportive in achieving learning objectives and student learning outcomes. The AIC team members were informed that degree level curriculum 2010 developed by HEC through its Curriculum Review Committees (CRCs) and the curriculum adopted by the University of Agriculture, Faisalabad has been adopted. The members of the curriculum review committee (CRC) of the department are senior professors of BOS. A uniform curriculum approved by HEC has been adopted by all the Agricultural Universities/Colleges. Generally, maximum weightage is given to final exams (60 %), followed by mid term

(30 %) and assignments/quizzes, etc. (10 %). The students were appreciating this system and are performing well in acquiring knowledge. To keep abreast of the latest knowledge in the concerned discipline, it is imperative to have a regular review and update of the curriculum. In the recent years, feedback mechanism is considered extremely useful for participatory and objective decision making. The Quality Enhancement Cell (QEC) has made positive efforts to develop this mechanism on regular basis for continuous improvement of teaching learning quality. This mechanism has to be further streamlined to improve the quality of education on the basis of the feedback from all the stakeholders such as employers, alumni, students, peer academicians and parents. This criterion was assessed in the light of evidence whether the department is functioning under a set of well-defined and known objectives yielding expected learning outcomes, which support program objectives. Also programs are redesigned and reviewed from the feedback. The AIC committee is of the view that the department has developed a set of worthwhile curriculum design according to the needs of the students using interdisciplinary and multidisciplinary approaches. However, it was noted that curriculum revision exercise by the Board of Studies is carried out regularly.

Criteria III: Infrastructure and Learning Resources

Classrooms: There were two (02) classrooms for classes. Thus, there is a slight shortage of classrooms. Increasing number of students may result in the congestion of classrooms, which may affect the quality of teaching and learning.

Laboratories: There are 01 teaching laboratory and 01 research laboratory. The laboratory equipment in these laboratories meets the basic necessities of teaching and research for the students. Moreover, the department is slowly improving the strength of instruments through various resources provided by the affiliated university or the research project.

Library: There is no specialized separate laboratory in the department; however the department shares a common library in the College of Agriculture with other departments. It contains sufficient relevant books. The availability of research journals and periodicals was limited, that must be built up to update current advances in research. Keeping in view the large number of students, the number of computers with printers and internet facilities are required to be increased at the departmental level. It is worth to mention here that at present there is no any internet facility to the Library and teachers.

Experimental farms: The area provided to College is totally barren with brackish under-ground water. The College is trying to put degraded land under normal plough. At present, the Department is provided with 05 acres of experimental area. Thus, at this small research farm very few research and demonstrations could be carried out. Moreover, the availability of farm equipments and resources was also limited.

Criteria IV: Students Support and Progression

The AIC evaluation committee was apprised that students are provided handouts in the class and/or a folder containing topics wise data and lecture material for the given class and semester, which are placed in the library. The teachers provide handouts of lectures along with presentation on multimedia. Students were of the opinion that the number of assignments should be increased and more quizzes should be conducted to keep the students fully involved in the semester system as well system. In addition to the regular mid term and final examination in a given semester, the Soil Science has a unique system of arranging a comprehensive paper covering major core subjects for the B.Sc. (Hons.) final year students. It is a useful and very effective method of revision of the important topics, which will help the students in practical life. Because of very high enrollment in the general courses offered during first four semesters, the students felt congested in the practical classes and the teachers are overloaded. This may affect the quality of teaching. Internship, which is a pre-requisite for the award of Bachelor degree, is regularly conducted in a systematic manner. A few internship reports were checked and found of good quality. Internship and practical training might be a regular feature with a view to develop a strong and effective program.

Criteria V: Research and Consultancy Activities

There seems to be adequate research and consultancy activity in the department. The AIC that it was mandatory for the teaching faculty to devote 70 % time to teaching and 30 % to research. It was observed that the location of College is far away from the main city and facilities of transport are limited. Hence, the consultancy activities were not up to the mark.

Criteria VI: Governance and Leadership

The highest administrative governance authority is the Chancellor, Vice Chancellor, followed by the Pro-Vice Chancellor, and Principal. The part of the organizational setup of the department is controlled by the Head of the Department (HOD), who is responsible to report to the Principal. The Vice Chancellor is the overall controlling authority. Important bodies of the University of Agriculture, Faisalabad control the matters of sub-campus; these include the Syndicate, the Senate, Academic Councils, Advanced Study & Research Board, Finance & Planning Committees and Selection Board. All bodies of the University function within the framework of well defined rules and procedures.

Criteria VII: Recent Innovations and Best Practices

It was noted that the Department is trying best to survive in hard conditions. It could be suggested that at current the faculty is trying to maintain minimum standard due to limited resources and infrastructure.

Further, it was noted that the faculty was motivated to put forth their efforts for improving the quality of education and research.

4. SWOT ANALYSIS OF THE DEPT DEGREE PROGRAMS

Overall analysis

Major strengths

1. Striving hard to maintain the regularity of classes and research activities.
2. Making best use of research and experimentation facilities likes experimental field.
3. A sound and qualified teaching and research faculty; majority of them have Ph.D. degrees.

Major weaknesses

1. Lack of faculty positions like Associate Professor and Lecturers in the department.
2. A limited number of trained supporting staff, i.e. laboratory technician/assistants.
3. Lack of equipment repair engineer.
4. Limited and relatively small space for lecture rooms.
5. Lack of international professional teachers' training programs.
6. Limited area for conducting research trails.

Major opportunities

1. Increasing the number of grants from the national and international donors.
2. Provision of training to staff of research and extension departments.
3. Increasing the experimental farm and farm equipment/machinery

Major Threats

1. Rising of budget for the department.
2. Strengthening of linkages between faculty and stakeholders.
3. Generating financial resources and getting independence.
4. Adding to the laboratories space in view of increasing number of students in soil science.

Recommendation

The department is a need of the southern Punjab where the soils need a lot of management practices. However, there is always a room for improvements to match the national as well as international standards and to meet the market challenges. The AIC recommend completing the faculty composition by appointing full time Associate Professor, Assistant Professors and Lecturers. Thus, Soil Science major

needs to focus on some grey areas and weaknesses discussed in this report. Obviously, it requires more funding for providing the requisite facilities.

5. ACTIONABLE RECOMENDATIONS

Some of the immediate actionable points emerged from the discussion are as under:

- More classrooms and stores.
- Periodicals and journals for faculty and students.
- More computer/internet facilities for all.
- Ample budget for increasing Dept. facilities
- More HEC opportunities, scholarships and financial aids
- Provision of more High-Tech equipment.

6. LIST OF ANNEXURES

1. Evaluation Criteria and Program Ratings
2. TOR of the Committee

AIC Draft Report Visit on January, 21-22, 2013

7. Evaluation Criteria for Agricultural Degree Programs

Sr. No	Criteria	Points Assigned	Points Awarded
Major Criteria			
1	Strength and Quality of Faculty	250	135
2	Curriculum Design and Development	150	126
3	Infrastructure and Learning Resources	200	106
4	Students Support and Progression	100	70
Sub-Total (a):		700	437
Minor Criteria			
5	Research and Consultancy Activities	150	74
6	Governance and Leadership	100	28
7	Recent Innovations and Best Practices	50	24
Sub-Total (b):		300	126

Grand Total (a+b):	1000	563
--------------------	------	-----

1. Prof. Dr. Muhammad Abid
Chairman, Department of Soil Science
Faculty of Agricultural Sciences & Technology
B.Z. University, Multan. Convener

2. Dr. Muazam Jamil
Principal, University College of Agriculture
and Environmental Sciences,
Islamia University Bahawalpur. Member