Confidential

National Agriculture Education Accreditation Council

12

Report of the
Accreditation Inspection Committee
(AIC)

Prof. Dr. Safdar Ali
Mr. Muhammad Tahir Saleem

Department of Soil & Environmental Sciences,
KPK Agricultural University, Peshawar

1. General.

1.1 Introduction.

The accreditation committee was briefed by the Chairperson of the Department of Soil and Environmental Sciences about the history of KPK agricultural university. It was the College of Agriculture established in 1957 as a constituent college of the University of Peshawar. In 1974, the college became a faculty of Agriculture under the University of Peshawar. It attained its autonomous status as NWFP Agricultural University, Peshawar in 1981.The department was established in 1966. At the time of its inception, this department started with nominal laboratory facilities and few (hardly three) faculty members. The department initially began B.Sc (Hons) and M.Sc (Hons) programs and later in 1997 began Ph.D. program. The department is imparting B.Sc., M.Sc., and Ph.D. education on a wide range of soil and environmental sciences including soil fertility, microbiology, chemistry, physics, salinity, genesis, classification, morphology, conservation of soil and water, waste management and environmental sciences. Because of growing concern of environmental problems caused mainly by poor soil and water managements, the department was re-named as Soil and Environmental Sciences in 2000 to address the environmental issues as well, and hence introduced courses at all levels related to environmental sciences.

1.2 Accreditation of Agriculture Education Institutions in Pakistan.

As per clause 10 subsections (d) and (l) of the bylaws of NAEAC, an accreditation Inspection Committee (AIC) is to be constituted for assessment and accreditation of the degree awarding academic programs of the agricultural education institutions in Pakistan.

The following Accreditation Inspection Committee, constituted by chairman NAEAC visited the department of soil and environment on June 21-23, 2010.

Prof. Dr. Safdar Ali — Convener
Chairman
Dept. of Soil Science and Soil & Water Conservation
PMAS Arid Agriculture University
Rawalpindi.

Mr. Muhammad Tahir Saleem Member
Ex-Project Director/Chief, NFDC
House No. 39, St.# 39, I-8/2 Islamabad.

The Accreditation Inspection Committee shall have the following TORs:

- To validate the Self-Assessment Report prepared by the SES Department.
- To carryout external evaluation of the Degree Programs in a transparent and holistic manner for assessment and accreditation.
- To submit synthesized and concise analytical report on the basis of interaction with Dean, Chairman, Faculty Members, students and support staff as well as detailed visits of infrastructure and other learning resources.
- To submit accreditation and rating recommendations to Chairman-NAEAC.

The team composition and itinerary schedule is given at Annex-1 (need to be attached)

1.3 The Department of Soil and Environmental Sciences.

The committee was apprised that the Department of Soil Science expanded its scope to include the problems related to natural ecosystems and to processes affecting the chemical pollution of the environment and named it as Department of Soil and Environmental Sciences in 2000. After about forty years of its growth, this department has now well-qualified and experienced 12 faculty members (10 are holding and 2 are pursuing Ph.D degrees). The department at the age of 44 years has awarded 9 Ph.D., 309 MSc.(Hons) and 315 BSc.(Hons) degrees. Currently 59 BSc. 42 MSc. and 16 Ph.D. students are enrolled in the department.

It is operating with an annual recurring budget of Rs.11.80 million, mainly utilized for the salaries. The support staff consists of 15, with teacher- support staff ratio of 1:1 as compared to the recommended ratio of 2:1. Moreover, it has 4 teaching laboratories.

The department has the following objectives:

 Development of trained human resource base in the disciplines of soil and environmental sciences.

 To inculcate the graduates with a sense of dedication, motivation and hard work so that they are able to maintain and uplift the standard of soil & environmental sciences in the country.

 Basic and applied research in Soil and Environmental Sciences.

 Advisory services to farmers, NGOs and the relevant agro-based industry.

1.4 Academic Programs of department of Soil and Environmental Sciences.

As reported by the chairperson, the Department of Soil and Environmental Sciences is running its academic program through semester system of examination. The department offers BSc. (Hons), M.Sc. (Hons) and Ph.D. degree programs. B. Sc. (Hons.) is a four years degree program. During the first two years of the degree program, students are exposed to different areas of agriculture. In the third year, students actively join the department. The Courses offered at the B.Sc. (Hons) level are approved by National Curriculum Revision Committee, HEC, Islamabad, which is inline with the international standards. Courses provide theoretical and practical foundation in Soil and Environmental Sciences to the students of this department.

2. Criteria-wise analysis.

2.1 Strength and quality of faculty

Faculty members of the Department of Soil and Environmental Sciences are active in their discipline and have the necessary technical depth and breathe to support the program. There are enough faculty members providing continuity and stability, to cover the curriculum adequately and effectively. The Department of Soil and Environmental Sciences is currently having the services of 12 faculty members. Ten of these faculty members hold Ph.D. Degree in Soil and Environmental Sciences and are well trained and foreign qualified. Two are currently undertaking

Ph.D. one abroad and one inland **(Faculty - Annexure-2).** Following table shows the distribution of faculty in various specializations:

Area of Specialization	Title of Courses	No. of Faculty	No. of Faculty with Ph.D Degree
Soil Fertility	Soil fertility and fertilizers Fertilizers and their use in Pakistan	4	3
Soil Microbiology	Soil microbiology	3	3
Soil Chemsitry, Environmental Pollution	Soil and Plant Analysis Environmental pollution and Management Waste Management Pollution in Soil Envrinment Soil Plant Water Relationship	3	2
Soil and Water Conservation, Soil Physics, Survey	Soil and Water Conservation Soil Survey and Land Evaluation	1	1
Soil Genesis, Morphology and Salinity,	Soil Genesis and Morphology Salt affected Soils and Water Quality	1	1

N. B. Most of the faculty of this department are having diverse specialization and can teach and conduct research in more than one area of specialization.

General Comments of the Faculty:

1. Provision of environment for collaborative research. Strengthening research program set up (e.g. provision of devoted research officers, Lab Assistants etc).
2. Labs need strengthening with more advance equipments. Technical trained staff will further improve the efficiency of labs and equipments.
3. Provision of seminar room, committee room, class rooms and separate place for Ph.D students in SES.
4. Establishment of NWFP Soil Science group who frequently meet and present each scientist his/her research program.

5. Regular training programs for researchers, extension worker and farmers.
6. Provision of relevant and latest books, literature etc in library.
7. Provision of smooth promotion, chance for post doc and funds for research. Improve salary and compensation packages.
8. Promotion of a culture with mutual respect and confidence among the various disciplines of universities and to understand the ground realities of norms and values of the area to which we belong.
9. Mutual understanding and trust, devotion and dedication and to share facilities and experiences for the uplift of the university.

I would request Mr. M. Tahir Saleem, our honorable committee member to put in the information he got from the faculty interview.

The evaluation committee met all professors and assistant professor of the department to discuss their academic background, areas of interest, their perceptions about the academic programs, students, opportunities for professional growth besides research opportunities, facilities available, teacher-student relationship, teaching load and strengths and weaknesses of the program. The objective was to suggest improvements rather than a criticism of their programs. Following is the outcome of the discussions with the faculty:

 All the faculty members except one were happy and satisfied with the facilities, support and the teaching environment. They seemed enthusiastic and committed to their profession which is a happy sign.
 All agreed that student population has increased while the number of teachers and the student-space was the same. Obviously there has been no expansion in the teaching space resulting in congested atmosphere which is not as conducive to learning as a more normal and comfortable space for individual students. This may impact the quality adversely.
 A few students expressed that some teachers did not encourage the students to seek clarifications from them, whether in the classroom or out of classroom. These individual complains are every where.

 A number of research projects have been successfully completed and some are ongoing in the department. This is a great help in providing funds and facilities to those who run these projects. But those without the projects lack necessary university funds and facilities for adequate performance of their research students.

Faculty development:

 It was noted by the team members that the department has no regular and organized faculty development program in place.

 Out of 11 PhDs, 8 possess PhD from foreign universities and three of them are local PhDs.

 The faculty lacks professional and institutional level interaction with the international organizations.

Faculty-teaching load:

It was observed that present teaching load with 59 BSc (Hons), 32 MSc (Hons) and 15 PhD students is normal. The student-teacher ratio is 10:1

2.2Curriculum design and development.

The curriculum is a reflection, how far it is supportive in achieving learning objectives and student learning outcomes. The chairperson informed the team members that degree level curriculum has been developed with the collaboration of HEC through its Curriculum Review Committees (CRCs). The members of the curriculum review committee (CRC) were senior professors from this department. The maximum weightage is given to final exams (60 per cent), followed by mid term (30 per cent) and assignments/quizzes, etc. (10 per cent). To keep abreast of the latest knowledge in the concerned discipline, it is imperative to have a regular review and update of the curriculum. The Quality Enhancement Cell (QEC) of the KPK Agricultural University is trying to make 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 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, the students informed that some Professors do not take the mid term tests. So, they don't follow the rules of semester system in letter and spirit.

2.3 Infrastructure and learning resources

Classrooms: There were two classrooms for post graduate classes. There is serious shortage of classrooms and faculty offices. Increasing number of students results in the congestion of classrooms which affects adversely the quality of teaching.

Laboratories: Four teaching and research laboratory facilities are present in the Department of Soil and Environmental Sciences. Two of these laboratories (Lab-101 and Lab-121) are located in the Plant Science Building of the University while the other two (Lab-126 and a post-graduate lab) are located in the Old Building of the University. Lab # 126 is mostly used for practical demonstration to under-graduate students. The objectives of these laboratories are to provide technical training and research facilities to students and faculty of the department and other relevant institutes of the University. All of these laboratories are fairly equipped with basic equipments required for soil, plant and water analysis. The entire safety regulations imperative for the proper usage of chemicals and equipments are properly followed

Library: There is a university library which is centrally air-condition and contains a large amount of books, journals, etc. A number of international agricultural databases have been acquired. Reference and bibliographical assistance is also provided. The library is linked with digital library developed by he Higher Education Commission of Pakistan, where, over 15000 full text journals and 25000 abstracted journals are available free of cost. There is also a book bank which provides textbooks on loan to the students on nominal rent. The department do not have their own library.

Experimental farms: The KPK Agricultural University is provided with a large experimental area. On-farm research and demonstrations are carried out for research projects and thesis

research. All the farm equipment and machinery is university - owned and is available as and when required.

2.4 Students support and progression

The curricula were properly presented in the form of handbooks for Bachelor, M.Sc and Ph.D programs. Courses were mainly those designed and approved. The semester was off and the undergraduate students had gone to their homes during our visit, however, some students were asked to come to the department for AIC visit purpose. The undergraduate students were very happy with the regularity of classes and especially the laboratory facilities for practical work. During the discussion, the M.Sc. and Ph.D. students were questioned to judge the degree and extent of the knowledge they had learnt and assimilated. Since all students are not identical, some of them had a very clear concept about the core subjects and other aspects of their research while some were not very clear. Most of the students expressed satisfaction over the cooperation and assistance provided to them by the teachers other than their major supervisor. Students were of the view that there should be a mix of use of white board, chalk and multimedia thus ensuring involvement of the student in the process of learning.

2.5 Research and consultancy activities

There seems to be adequate research and consultancy activity in the department as reflected by the completed research projects, the ongoing one's and those submitted for funding.

Research paper published (500) both in foreign and local journals by the faculty speaks out the research effort and commitment of researchers for achieving high standards. A number of excellence research award have been earned by the faculty. The team was briefed that it was mandatory for the teaching faculty to devote 80 per cent time to teaching and 20 per cent to research. At present Rs.11.2 million recurring budget of the department is mainly for salaries and 0.16 million is for research purpose.

2.6 Governance and leadership

The highest administrative governance authority is the Vice Chancellor, followed by the Registrar, Treasurer and Controller of Examinations. The organizational setup of the department of Soil and Environmental Sciences consists of a chairperson who is responsible to the Dean of the Faculty. The University provides funds to the department besides HEC and other organizations providing funding for different projects of the department. Important bodies of the university include the Syndicate, the Senate, Academic Councils, Advanced Study & Research Board, finance & planning committees, selection board, boards of studies & of faculty, directorate of students' affairs and hall warden. All bodies of the university function within the framework of well defined rules and procedures.

2.7 Adoption of Best Practices.

The department has initiated an exercise for the assessment of students as well as teachers. However, it is not yet fully functional. There exists a mechanism of feedback from both the students and the teachers on the assessment of program/courses. This innovative practice is for quality enhancement of teaching as per HEC requirements.

3. Overall analysis

3.1 Major strengths.

- Availability of well equipped laboratories, both for research and teaching of under-graduate and post-graduate students.
- A sound and qualified teaching and research faculty; majority of them have Ph.D. degrees.

3.2 Major weaknesses

- A limited number of trained supporting staff i.e. laboratory technicians/assistants.

- Limited and relatively small space for lecture rooms.
- Lack of trained faculty in GIS.
- Lack of international professional teachers' training programs.
- Limited use of advance teaching methods by the faculty.

3.3 Major opportunities

- Potential for training of Human Resource Development at post-graduate level.
- Increasing the number of grants from the national and international donors.
- Opportunity of training to staff of research and extension departments.

3.4 Major challenges

- Improvement of out-reach programs.
- Strengthening of linkages between faculty and stakeholders.
- Generating financial resources.
- Increase in the laboratories space in view of increasing number of students in soil science.

4. Recommendations

4.1 General recommendations

Faculty development program - Although the department has highly foreign qualified faculty. Faculty development program may be planned for long-term and short-term trainings for the capacity enhancement of teaching and non-teaching staff. Participation of faculty members in conferences, seminars and workshops may be encouraged to improve exposure and interaction with experts.

Infrastructure – Increasing number of students results in the overcrowding of classrooms which affects adversely the quality of teaching. It was felt that there is shortage of classrooms Therefore, the university may consider increasing the classroom space.

Computer facilities*:* At present a few computers are available for students. Keeping in view the large number of post-graduate students, more computers with printers and internet facilities are required to be provided.

Linkage with local industry - During the discussion with the chairperson it was felt that the department had weak linkages with the national and international organizations, especially with the industry. Linkages of the students and teachers may be promoted with local industry through Memorandum of Understandings (MoUs) to benefit from the resources of the private sector. This may help the graduates to get better job placements.

Library – There is no departmental library facility for the faculty and students, therefore, face and funds may be allocated for this facility at the top priority.

Budget - The operational budget provided to the department by the university is insufficient to meet the genuine needs of teaching and research. University may consider increasing the annual grant and allocating appropriate amount for repair and maintenance and operational activities of the department.

Dissemination of research information. The findings of these research studies/projects may be edited and printed in the form of technical bulletins, extension leaflets and brochures for use by the community and extension workers. Also the community training programs, such as focus group meetings or farmers' field days, etc may be organized in order to disseminate research information.

Annual seminar roster - The department may develop an annual seminar roster; organize fortnightly faculty and senior student seminars. Postgraduate students may also be encouraged to participate in such academic forums.

Placement bureau - The institute may establish its own placement bureau and alumni association in the larger interest of students and alumni of the institute.

4.2 Final recommendation

The department has a historical background and made significant contributions in the field of soil science. However, there is ample room for improvements to match the international standards and to meet the market challenges. In view of these considerations, the committee recommended that degree programs of the institute be graded as X category (i.e. the classification of degree program with minor shortfalls expected to meet the criteria as set by the Council for Accreditation).

Department of Soil and Environmental Sciences
KPK Agricultural University, Peshawar
List of Faculty Members
Annexure I

S.No.	Name	Designation	Highest Qualification	Teaching Experience
1	Dr. Riaz A.Khattak	Meritorious Professor	PhD USA	34

2	Dr. Sajida Perveen	Professor	PhD PAK	29
3	Dr. Muhammad Afzal	Professor	PhD UK	29
4	Dr. Zahir Shah	Professor	PhD UK	26
5	Dr. M. Jamal Khan Khattak	Professor	PhD USA	25
6	Dr. Farmanullah Khan	Professor	PhD JAPAN	23
7	Dr. Muzammil Shah	Professor	PhD AUSTRALIA	25
8	Dr. Muhammad Sharif	Professor	PhD PAK.	20
9	Dr. Muhammad Tariq	Professor	PhD UK	20
10	Dr. Dost Muhammad	JRS	PhD PAK.	05
11	Mr. Wajahat Nazeef	Lecturer	M.Sc (Hon,s) PAK	05

Department of Soil and Environmental Sciences
KPK Agricultural University, Peshawar
List of Supporting Staff
Annexure II

S.No.	Name	Designation	Highest Qualification	In Line Experience
1	MS. Shaheen Akhtar	Lab. Superintendent	SSC	30
2	Mr. Sadaqat Ali	Lab. Superintendent	SSC	26
3	Mr. Saeed Akram	Lab. Superintendent	BA	22
4	Mr. Gohar Zada	Lab. Superintendent	SSC	22
5	Mr. Muhammad Ali	Senior Lab. Assistant	SSC	15
6	Mr. Hussain Muhammad	Lab. Assistant	FA	05
7	Mr. Muhammad Anwar	Field Attendant	NIL	28
8	Mr. Zahir Shah	Lab. Attendant	NIL	26
9	Mr. Zarbad Shah	Lab. Attendant	NIL	21
10	Mr. Muhammad Yousaf	Lab. Attendant	NIL	22
11	Mr. Muhammad Israr	Niab Qasid	NIL	15
12	Mr. Zakirullah	Field Attendant	SSC	06
13	Mr. Muhammad Arif	Junior Clerk	SSC	02
14	Mr. Aurangzeb	Lab. Attendant	FA	01
15	Mr. Jehanzeb	Driver	NIL	23

Department of Soil and Environmental Sciences
KPK Agricultural University, Peshawar
List of Projects 2006-2010
Annexure III

S.No.	Name of project	Principal Investigator	Funding Source	Completed/ On-going
1	Biological treatment of industrial waste waters using algae	Prof. Dr. Zahir Shah	HEC, Islamabad	On-going
2	Solubility enhancement of phosphorus from rock phosphate	Prof. Dr. Muhammad Sharif	ALP-PARC	on-going
3	Micronutrients studies for sustainable plum productivity in Peshawar valley	Prof. Dr. Muhammad Tariq	HEC-AUP	On-going
4	Modelling spatial variability and mapping of soil test results of some district of NWFP.	Prof. Dr. Amanullah Bhati	HEC	Completed
5	Restoring crop productivity of eroded lands through integrated plant nutrient management for sustained production.	Prof. Dr. Amanullah Bhati	PSF	Completed
6	Heavy metals status in soil, plant and water	Prof. Dr. Sajida Perveen	PSF	Completed
7	Recycling of Organic wastes for sustainable crop productivity Umbrella Project (NWFP) AUPP Component-II)	Prof. Dr. Zahir Shah	ALP/PARC	Completed

8	Beneficial reuse of wastewater as a resource for crop production.	Prof. Dr. M. Jamal Khan	HEC	Completed
9	Field Evaluation of VAM Fungi and their significance in wheat maize cropping system under different soil series of NWFP.	Prof. Dr. Muhammad Sharif	ALP/PARC,	Completed
10	Micronutrients management in apple and citrus orchards in Swat	Prof. Dr. Zahir Shah	PARC, Islamabad	Completed
11	Beneficial reuse of wastewater as a resource for Agriculture.	Prof. Dr. M. Jamal Khan	HEC	Completed
12	Utilization of environmental friendly bio-natural resources for increase crop production	Prof. Dr. M. S. Sarir	HEC/AUP	Completed
13	Increasing crop production through humic acid in rainfed and salt affected soil in Kohat Division	Prof. Dr. Riaz A. Khattak	PARC	Completed
14	Development of sustainable Rice-Wheat cropping system through management of Legumes.	Prof. Dr. Zahir Shah	PSF	Completed
15	Management of salt-affected soils and brackish waters in Pakistan.	Prof. Dr. Izharul Haq	PARC/ALP	Completed
16	Sugar cane reinforcement with Humic Acid.	Prof. Dr. M.S. Sarir	HEC-AUP	Completed
17	Utilization of sugarcane wastes with Humic Acid	Prof. Dr. M.S. Sarir	PTCL/AUP	Completed
18	Organic Farming	Prof. Dr. M.S. Sarir	AKRSP	Completed

Annexure IV

Department of Soil and Environmental Sciences, KPK Agricultural University, Peshawar
List of Laboratory Equipments

S.No.	Name of Item	Model	Qty	Remarks
Laboratory No. 101				
1	Auto Clave	STA-400, Taiwan	1	Working properly
2	Balance (Top load)	Acculab,Lserier USA	1	Working properly
3	Balance Field	ACS, China	1	Working properly
4	Balance Field	Germany	1	Working properly
5	Balance Field	China	1	Working properly
6	Conductivity Meter	Jenway- UK	1	Working properly
7	Distillation Plant	England	1	Working properly
8	EC meter	WTW Germany	1	Working properly
9	Flame Photometer	Jenway P # P-7 - USF	2	Working properly
10	Fumigator/Vacuum	GAST USA	1	Working properly
11	HPLC	Perkin Elmer, USA	1	Working properly
12	Incubator	Nil	1	Not working
13	Micro Scope (Bi- nocular)	China Made	1	Working properly
14	Microscope, comp.	Reichent, USA	1	Working properly
15	Muffle Furnace	VULCAN (3-550), USA	1	Working properly
16	N-Distillation	Local made	1	Working properly
17	Oven	OSK, USA	1	Working properly
18	Oven	ECOCEL, Germany	1	Working properly
19	pH meter	WTW Inolab. pH720. Germany	1	Working properly
20	pH meter	WTW Inalob. Germany	1	Working properly
21	Precision Balance	Citizen Scale, Poland	2	Working properly
22	Shaker	To and Fro, Local made	1	Working properly
23	Spectrophotometer	Lamda 35, Perkin Elmer, USA	1	Working properly
24	Water Still , Deionizer,	B114, UK	1	Working properly
Laboratory No. 121				
1	AA Spectrophotometer	Shimadzu, ,AA 6300, Japan	1	Working properly
2	Analytical Balance	BL 2200 H, Japan	1	Working properly
3	Balance (Top load)	Shimadzu, Japan	1	Working properly
4	Balance Top loader	OGAWA SEIKI, Japan	1	Working properly

5	Block digester	Selecta, Spain	1	Working properly
6	Centrifuge	Intt EQ. Co. USA	1	Working properly
7	Colony Counter	CC560, Taiwan	1	Working properly
8	Conductivity Meter	SERICO China	1	Working properly
9	Conductivity Meter	Jenway- UK	3	Working properly
10	Digestion Plate	Electro thermal	1	Working properly
11	Dispensers	Eppendorf varispenser, Germ.	2	Working properly
12	Incubator	Shell Lab. USA	1	Working properly
13	Laminar Flow Cabinet	ESCO, Singapore	1	Working properly
14	Magnetic Stirrer	VELP, Scientifica, China	1	Working properly
15	Magnetic Stirrer	SERICO, China	1	Working properly
16	Micropipettes		10	Working properly
17	Microwave	Dawalance, Pak.	1	Working properly
18	N-Distillation	Labconco, Rapid still –II USA	1	Not working
19	Oven	Shel Lab., USA	1	Working properly
20	Oven	Memmet Germany	1	Working properly
21	pH meter	WTW Inolab. pH lev. Germany	1	Working properly
22	Precision Balance	Citizen Scale, Poland	1	Working properly
23	Shaker	To and Fro, Australia	1	Working properly
24	Spectrophotometer	Shimadzu, UV-1700, Japan	1	Working properly
25	Water Bath	Shel Lab., USA	1	Working properly
Laboratory No. 126 (old building)				
1	Leaf grinder	Thomas Wiley, USA	1	Working properly
2	Vacuum Extractor	USA made	1	Working properly
3	Vacuum Pump	DOA-P104-BN, China	1	Working properly
Post graduate Lab. (Old lab)				
1	AA spectrophotometer	Perken Elmer 2380, USA	1	Working properly
2	Balance Top loader	OGAWA SEIKI, Japan	1	Working properly
3	Centrifuge	Hangari	1	Working properly
4	Centrifuge	Janetzki S-70, USA	1	Working properly
5	Conductivity Meter	Jenway- UK	3	Working properly
6	Lab. Mixer	Drink mixer, Holland	5	Working properly
7	Leaf Grinder	Thomas Scientific Co. USA	1	Working properly
8	Mixer/Dispersion	ELE, USA.	3	Working properly
9	Mixer/Dispersion	Hamitton Bech, USA	1	Working properly
10	Oven	Precision Scientific Co. USA	1	Working properly
11	Precision Balance	Citizen Scale, Poland	1	Working properly

12	Pressure Plate Extractor	Soil moisture equip. Co. USA.	1	Working properly
13	Shaker reciprocal	Eber-bach. USA	1	Working properly
14	Water Distillation	Made in China	1	Working properly
15	Wrist Action shaker	Burrel, USA	1	Working properly

Department of Soil and Environmental Sciences,
KPK Agricultural University, Peshawar
Number of Titles for Books and Journals in AUP Library
Annexure V

Number of Title (Books)	**Number of Title (Journals Subscribed)**
328	22

Department of Soil and Environmental Sciences,
KPK Agricultural University, Peshawar
Number of Class Rooms and Faculty Offices
Annexure VI

Class Rooms	**Covered Area (Sq. ft)**
05	1225
82	1150
Faculty Offices	
166	242
166 A	121
167	121
168	121
184	176
185	176
186	176
187	176
188	176
189	176

Department of Soil and Environmental Sciences,
KPK Agricultural University, Peshawar
Current Enrollment of Students
Annexure VII

Degree	**Current Enrollment**	
Under-graduate	**Spring Semester 2010**	**Fall Semester 2010**
B.Sc. (H) P-III	24	24
B.Sc. (H) P-IV	35	35
Post-graduate		
M. Sc. (H) Previous	22	22
M.Sc. (H) Final	10	10
PhD	15	15