

Pir Mehr Ali Shah
ARID AGRICULTURE UNIVERSITY
RAWALPINDI



DEPARTMENT OF AGRONOMY

**Self Assessment Report
Ph.D Agronomy
2014**

Program Team

Prof. Dr. Fayyaz-ul -Hassan	(Coordinator)
Dr. Ghulam Qadir	(Member)
Dr. Muhammad Rasheed	(Member)
Dr. Irfan Aziz	(Member)
Dr. M. Naveed Tahir	(Member)

Table of Contents

INTRODUCTION	6
CRITERION 1	6
PROGRAM MISSION, OBJECTIVES AND OUTCOMES	6
Mission Statements of the Department of Agronomy:	7
STANDARDS.....	7
Standards 1.1:.....	7
Objectives:	7
Outcomes:	7
Main elements of strategic plan to achieve mission and objectives	8
Table 1: Objective Assessment.....	8
Standard 1.2:	9
Objectives vs. Outcomes.....	9
Table 2: Objectives vs. Outcomes.....	9
Skills and Capabilities Reflected in Performance as Agronomist	37
Proforma 7:Alumni Survey	41
Proforma 8:Employer Survey	46
Standard 1.3:Strength of the Department.....	51
Strength of the department.....	51
Weakness Identified in the Program:	52
Major Feature of Improvement Plans	52
Program out comes:	52
Table 3: Quantitative Assessment of the Department.....	52
Skills and capabilities Reflected in performance as Agronomist:	52
Table 4: Present Performance Measures for Research Activities.....	53
Faculty Satisfaction Regarding the Administrative Services.....	54
Table 5 : Degree Requirements	54
Major future improvement plans	54
CRITERION 2:	55
CURRICULUM DESIGN AND ORGANIZATION	55
SECTION: 2.....	55
Criterion 2: Curriculum Design and organization:	55
Definition of Credit Hour.....	55

Degree Plan	55
Ph.D in Agronomy	55
Pre-requisites.....	56
Academic Requirements:	56
Table 6 : Admission requirements for different academic Programme	56
Degree Requirements:.....	56
Table 7: Degree Requirements	56
Examination Weightage.....	56
Table 8: Courses vs objectives.....	57
Standard 2.1:	57
Assessment of the Curriculum of Agronomy Department	57
Standard 2.2:	57
Elements vs courses:	58
Table 9: Elements vs courses.....	58
Standard 2.3:	58
Credit hours distribution	58
Table 10: Credit hours distribution	58
Standard 2.4:	58
Credit hours and HEC requirement.....	58
Standard 2.5:	58
Attendance requirement	58
Standard 2.6:	58
Standard 2.7:	59
Enhancement of communication skills	59
CRITERION 3	59
LABORATORIES AND COMPUTER FACILITIES	59
Laboratory Facilities:	59
Location and Area:.....	59
Objectives:	59
List of instruments:	59
Shortcoming in Laboratory facilities:	61
Safety arrangements:.....	61
Standard 3.1:	61
Laboratory Manuals	61

Standard 3.2:	61
Laboratory Personalsfor Maintenance of Laboratory	61
Standard 3.3: Computing Infrastructure and Facilities	61
SECTION 4.....	61
CRITERION 4	61
STUDENT SUPPORT AND ADVISING.....	61
Standard 4.1:	62
Frequency of courses	62
Standard 4.2:	62
Structure of the courses.....	62
Standard 4.3:	62
Guidance to the Students	62
CRITERION 5	63
PROCESS CONTROL	63
Standard 5.1:	63
Program admission criteria	63
Table 11: Admission requirements	63
Standard 5.2:	63
Process of registration.....	63
Standards 5.3:.....	64
Recruiting Process for Faculty.....	64
Standard 5.4:	64
Teaching and Delivery of Course Material.....	64
Standard 5.5:	65
Completion of Program Requirements	65
Examination Weightage.....	65
CRITERION 6	65
FACULTY	65
Standard 6.1:	65
Full Time Faculty.....	65
Table 12: Faculty qualification	65
Table 13. Faculty Distribution by Program Areas in Agronomy.....	66
List of publications	67
Standard 6.2:	72

Effective Programs for Faculty Development.	72
Standard 6.3:	72
Faculty member motivation	72
CRITERION 7	72
INSTITUTIONAL FACILITIES	72
Standard 7.1:	72
Infrastructure	73
Lack of Institutional Facilities	73
Standard 7.2:	73
Library Facilities	73
Standard 7.3:	73
Class Room and Faculty Offices	73
CRITERION 8	73
INSTITUTIONAL SUPPORT	73
Standard 8.1:	74
Support and financial resources	74
Standard 8.2:	74
High quality Research scholars	74
Standard 8.3:	74
Financial resources	74
List of Enrolment for last few years	74
SUMMARY	74
Annexure-1	76
List of Courses offered by the Department of Agronomy for M.Sc. (Hons.) Agronomy	76
Annexure-2	78
Proforma 9 FACULTY RESUME	79

INTRODUCTION

Agronomy Department was founded in 1984 in the Barani Agriculture College, Rawalpindi. Ph.D degree program was started in 1997. The department offers research based Ph.D degree Agriculture, in Agronomy. Students who are eligible admitted in Ph.D Agronomy degrees programs. Agronomy department facilitates the student's in different subdisciplines viz. Crop Nutrition, Crop Production Technology, Seed Production and management, Plant Water Relation, Dry Land Agro Management, Integrated Agriculture

The students of Ph.D are encouraged to participate in national as well as international workshop seminars, and other training activities to achieve advancement in Agronomy in addition to leading the students in research publications.

The Department consists of experienced and highly qualified faculty mostly having post doctorate research experience from universities of International fame. The faculty members are specialized in the fields of Crop Modeling, Crop Physiology, Crop & Seed Production Technology, Plant Nutrition, Forage and Fodder Production, Organic Farming, Conservation Agronomy, Allelopathy/ Weed Management etc. The faculty has produced 45 publications during the reporting period in journals of national and international repute.

Components of Self Assessment Process:

There are eight criteria upon which the Self Assessment has been based

CRITERION 1

PROGRAM MISSION, OBJECTIVES AND OUTCOMES

Agronomy is a wide profession which includes all actions and practices of crop production and soil management.. The main goal of the program is to expand the growth yield, quality and profit by utilizing the crop potentials and physiology. Which makes the Ph.D students professionally to meet with changing world.

Mission Statements of the programe:

Since the establishment of university, agronomy department is heavily involved in providing multidirectional planning , teaching and research dealing with areas such as dryland cropping systems, stress physiology, genetic transformation of crops, biological nitrogen fixation, water use efficiency, integrated weed management, seed production and technology, plant nutrition, intercropping and simulation modeling with the given objectives by

1. Producing adequate trained manpower with great accentuate on dryland agriculture.
2. Undertaking felicitous applied research and the creation of site-specific improved technology to bind gap between ren-fed and barani area
3. Establishing effective connection between education, research and extension for transfer of improved technology to the farming community.

Mission of program STANDARDS

Standards 1.1:

Documented measurable objectives

Objectives:

Presently, the department is focusing on the following leading objectives:

- By building up department for education and research at Ph.D level..
- The therotical and practical condimenation of students have to be stretched out by research stationned teaching in agriculture
- By using the admirable rational techniques to teach the prudent and by using the scientific skills of Agronomy
- By planning for ongoing and opposing researchable affliction by using of ingenious teaching methods

Outcomes:

.. Deparments will be able to figure out the ongoing agriculture issues by target on need based education and research for Ph.D students.

- The progressive techniques have to be induce in agricultural community by Ph.D students research work.
- Multi-purpose knowledge was introduce through multi faceted courses for Ph.D students and the current developments in applied in research projects /thesis research.
- By approaching the consigning meeting researchable agri. issues has been achieved by continuous and boldly planning about the hazards and issues.

Main elements of strategic plan to achieve mission and objectives to

- Ph.D degrees is acorded to the students by a crash training system, collecting information's through conference from convention and workshops world reviews .
- Brain storming was started to update the curricula of major & minor courses.
- By clausing upto date facilities & equipments for departmental labs.
- By preffering the scientific journals of world morality, books and other literature for publishing the research findings
- Programme Objectives Assessment

Table 1: Objective Assessment

sr. #	Objectives	How measured	When measured	Improvement identified	Improvement made
1	Multi-dimensional courses of Agronomy.	By examine students and making embodiment Effects in semester and comprehensive	During semester exams and in comprehensive exams after research.	M.Sc. (Hons.) course work should be carried out with multidimensional courses.	Agronomy the inclusion of the novel courses should be carried out for discretry coverage of areas
2.	Cultural and useful information to the Ph.D students	During the semester examinations, seminars and research presentation and examinations.	During their mid and final exams, seminars & research presentations.	Some novel courses and research facilities are needed for Master's curricula	Master's degree curricula has been revised to meet or fullfil the HEC criteria as per policy.

3	Progress in Agronomy Department for Master's education	After knowing about new one technology in agronomy	As a essential need new technology should be practiced	Progressive and suitable style is required	. Comprehensive and research methods are induced.
4	Innovation of new techniques in researchable area	By making up to date advancement in agronomy	It is a stable process.	Fresh and innovation based programs are intended to include in course	Faculty has entangle the approval of innovative and advance programmes

Standard 1.2: Objectives vs. Outcomes

Table 2: Objectives vs. Outcomes

	Objectives				
	Sr.#	1	2	3	4
	1	**	***	**	**
	2	**	**	***	***
	3	**	**	***	**
	4	***	***	**	***

*** Highly relatedt and assuaging

** Relevant and valid

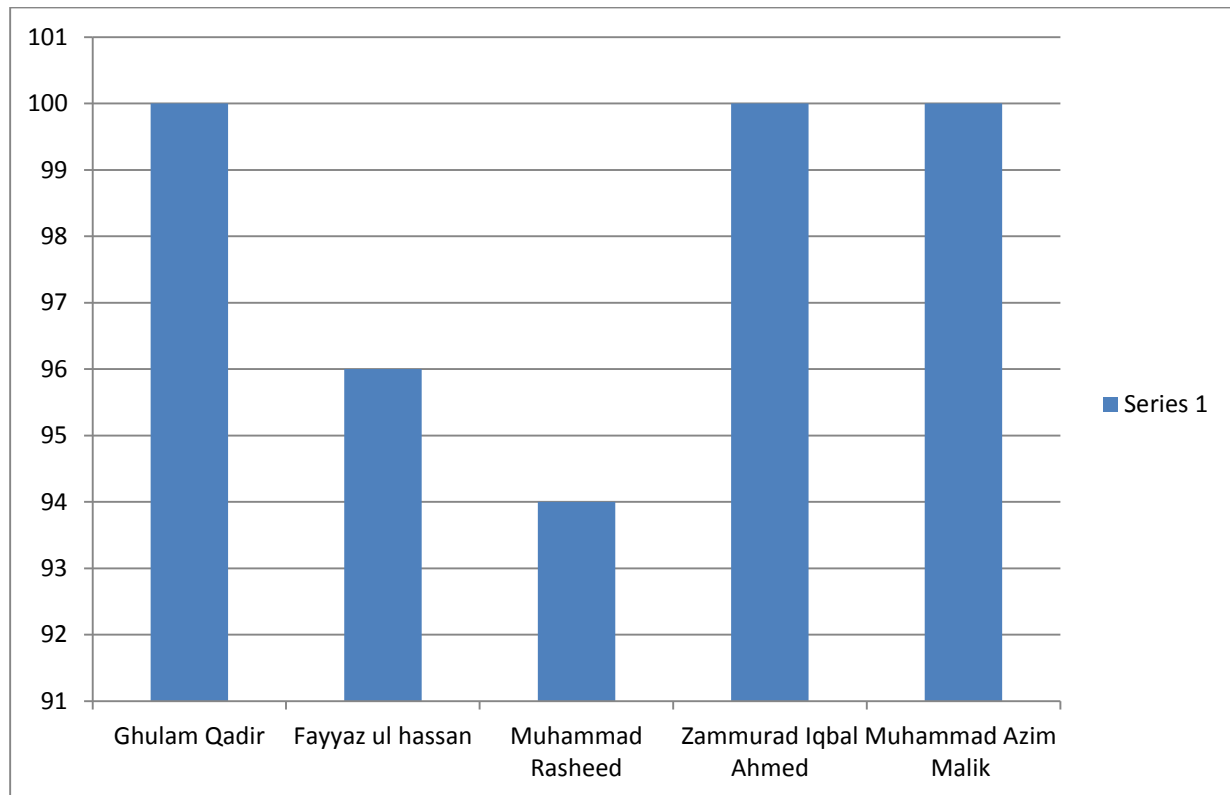
* sufficing

Preformat 1 & 10

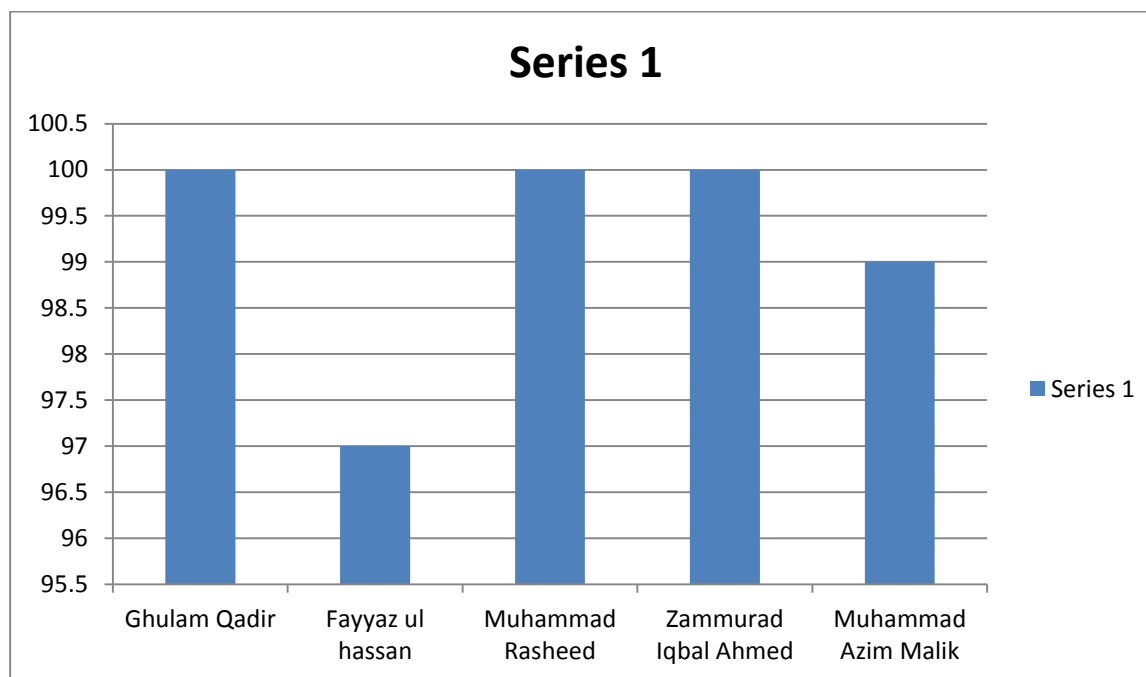
Course and Teacher Evaluation

Comparative graph of courses evaluation:The values were taken from the proformulas filled by the students, and then the jounce was calculated according to the formula given by QE

Comparative graph of course evaluation



Comparative graph of teachers' evaluation:



1. Dr. Zammurad Iqbal Ahmed

i. Teacher Evaluation

Data were collected from 6 Ph.D students. Among the teachers, Dr. Ghulam Qadir achieved an excellent performance of 100 % , that was followed by Prof. Dr. Muhammad Azeem (99%) Dr. fayyaz ul Hassan (97.0%) and Muhammad Rasheed 100%. Whereas, the performance level/impact value for Dr.Zamurrad Iqbal Ahamd was calculated 100%.

Teacher evaluation parameters showed that the of the100% students strongly agreed that the instructor was prepared for each class. The data of rest of the parameters indicated that main percentage of the students were agreed that the teacher is fair in examination, the instructor came with good preparation the instructor demonstrated knowledge of the subject the instructor provided additional material apart from the textbook, instructor had completed the whole course,

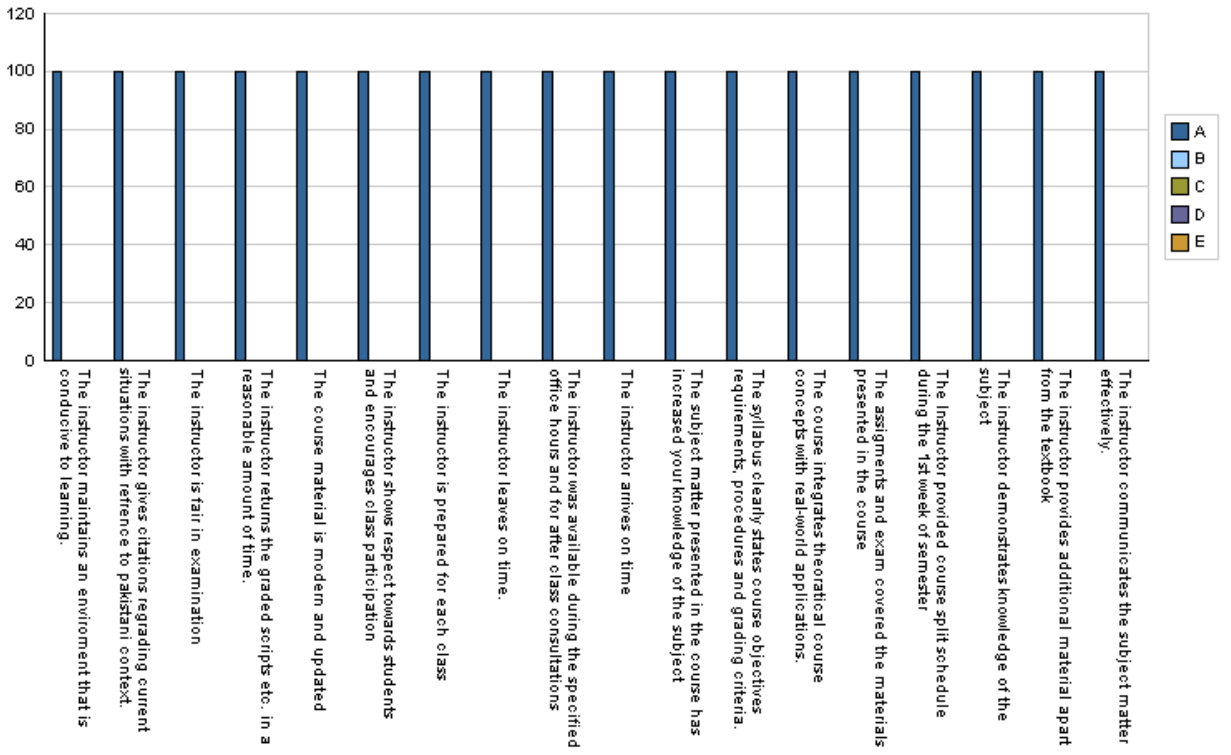
, the instructor gave citations regarding current in context with Pakistan, the instructor communicated the subject matter, the instructor showed respect towards students and encourages class participation effectively, the instructor maintained an environment that was conducive to learning, the instructor arrived on time, the instructor returned the graded scripts etc. in a reasonable amount of time, the instructor was available during the specified office hours after class for consultations, the subject matter presented in the course had increased their knowledge of the subject, the syllabus clearly stated course objectives needs, procedures and range criteria. the course material is current and updated. the course harmonizes theoretical course concepts with real-world applications, and the assignments and exams covered the materials presented in the course

Comments / Suggestions

- Teacher behavior should be good and accessible any time
- visionary way of communication should be available in each lectures
- The course was completed in time
- More practicals must be regulate in labs.

..

Teacher Evaluation Graph



ii. Course Evaluation

AGR-707 Semester- Fall -2013	Field crop experimentation	4(3-2)	Dr. Zammurad Iqbal Ahmed
--	-------------------------------	--------	-----------------------------

Data were collected from 6 Ph.D Students. The purpose of Comparative graph of course evaluation showed that the course (AGR-707) taught by Dr. Zammurad Iqbal Ahmed had a performance value of 100%.

Course evaluation parameters showed that 100% of the students strongly agreed that the course objectives were clear. Data regarding other parameters showed that most of the students agreed about the effectiveness and objectivity of the course the course was well structured to achieve the learning outcomes, the course workload was manageable, well organized, the learning and teaching methods encouraged participation, the overall environment in the class was conducive to learning, and classrooms were satisfactory, learning materials were relevant, recommended reading books etc. were relevant and appropriate, provision of learning resources in the library was adequate and the course stimulated their interest and thought on the subject area, the pace of the course was appropriate concepts and ideas were presented clearly, the method of assessment were reasonable, the material was well organized and presented, the instructor was responsive to student needs and problems, instructor was regular throughout the course and the material in the tutorials was useful.

Comments / Suggestions

- By rising the fury of practicals and ingenious techniques the course can be improved by adding.
- The course was impressive and useful.
- Lab facilities are needed to be advanced and improved.
- Class rooms should be well furnished
- The course was interesting and visionary.

Dr. Fayyaz ul Hassan

i. Teacher Evaluation

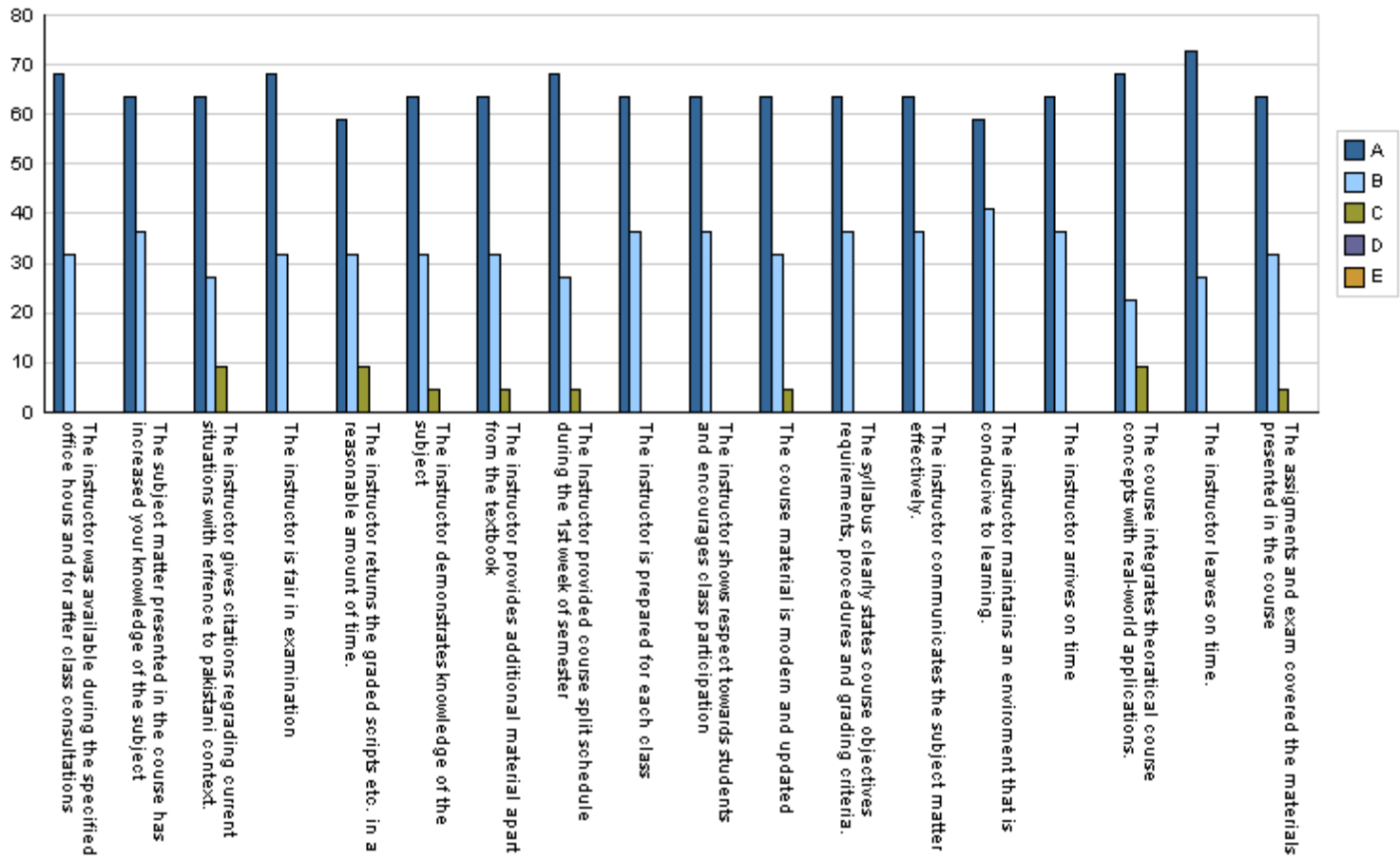
Data were collected from 6 Ph.D students. Dr. Ghulam Qadir achieved an excellent performance of 100 % , that was followed by Prof. Dr. Muhammad Azeem (99%) Dr. Zammurad Iqbal Ahmedl (100%) and Muhammad Rasheed 100%. Whereas, the performance level/impact value for Prof. Dr. F.H. Sahi was calculated as 97 %

The evaluation criteria parameters showed that the 64% of the students strongly agreed and 32% agreed that the instructor was prepared for each class. The data of other parameters inferred that major proportion of the students are agreed that the teacher is fair in examination, instructor demonstrates knowledge of the subject , the instructor came with good preparation,, instructor had completed the whole course, the Instructor provided additional material apart from the textbook, the Instructor gave citations regarding current situations with reference to Pakistani context, the Instructor communicates the subject matter, the Instructor maintained an environment that was conducive to learning, the Instructor shows respect towards students and encourages class participation effectively, , the Instructor returned the graded scripts etc. in a reasonable amount of time,the Instructor was available during the specified office hours after class for consultations,the subject matter presented in the course has increased their knowledge of the subject. the Instructor arrived on time.

Comments / Suggestions

- The teacher thoroughly prepares himself before each lecture.
- Taching schedule was strictly followed by the teacher .
- While delivering his lecture, the teacher's concepts were clear

Teacher Evaluation Graph



ii. Course Evaluation

AGR-717 Semester-Fall -2013	Integrated Agriculture	4(3-2)	Dr. Fayyaz ul Hassan
--------------------------------	------------------------	--------	----------------------

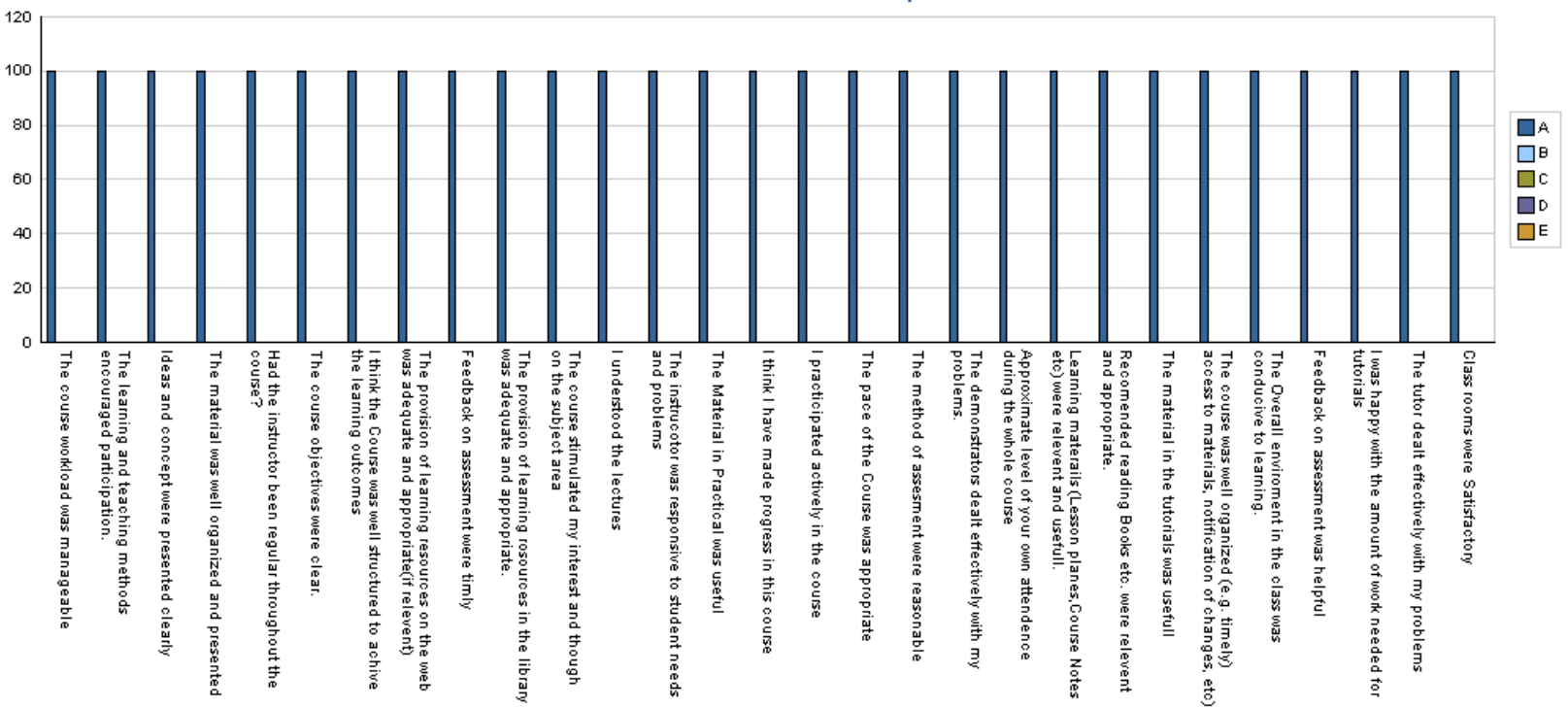
Data were collected from 6 Ph.D students. Comparative graph of course evaluation showed, that the course (AGR-717) taught by Dr. Fayyaz ul Hassan had an impact value of 96%.

The individual parameter showed that 63.8% students strongly agreed, 38% agreed and 2.83 % students uncertain that the course objectives were clear. Data regarding other parameters showed that major proportion of the students agreed about the effectiveness and objectivity of the course, the course objectives were clear, the course workload was manageable, well organized, agreed that the approximate level of student's attendance during the whole course was higher; students participated actively in the course and have made progress in this course, the course was well structured to achieve the learning outcomes (there was a good balance of lectures, tutorials, practical etc.). Similarly, they agreed that the learning and teaching methods encouraged participation, the overall environment in the class was conducive to learning, and classrooms were satisfactory, learning materials (Lesson Plans, Course Notes etc.) were relevant and useful, recommended reading books etc. were relevant and appropriate. They described that the provision of learning resources in the library was adequate and the course stimulated their interest and thought on the subject area. According to most of the students, the pace of the Course was appropriate, ideas and concepts were presented clearly, the method of assessment were reasonable.

Comments / Suggestions

- There is need for the augmentation of practical work and field visits
- Lack of ideal environment of the class which is needed to be improved.
- Class environment was not conducive for high profiled learning.
- The course was very broad spectrum and shows the explain the principles of Agronomic
- There was lack of a well designed course .

Course Evaluation Graph



Dr. Muhammad Azim Malik

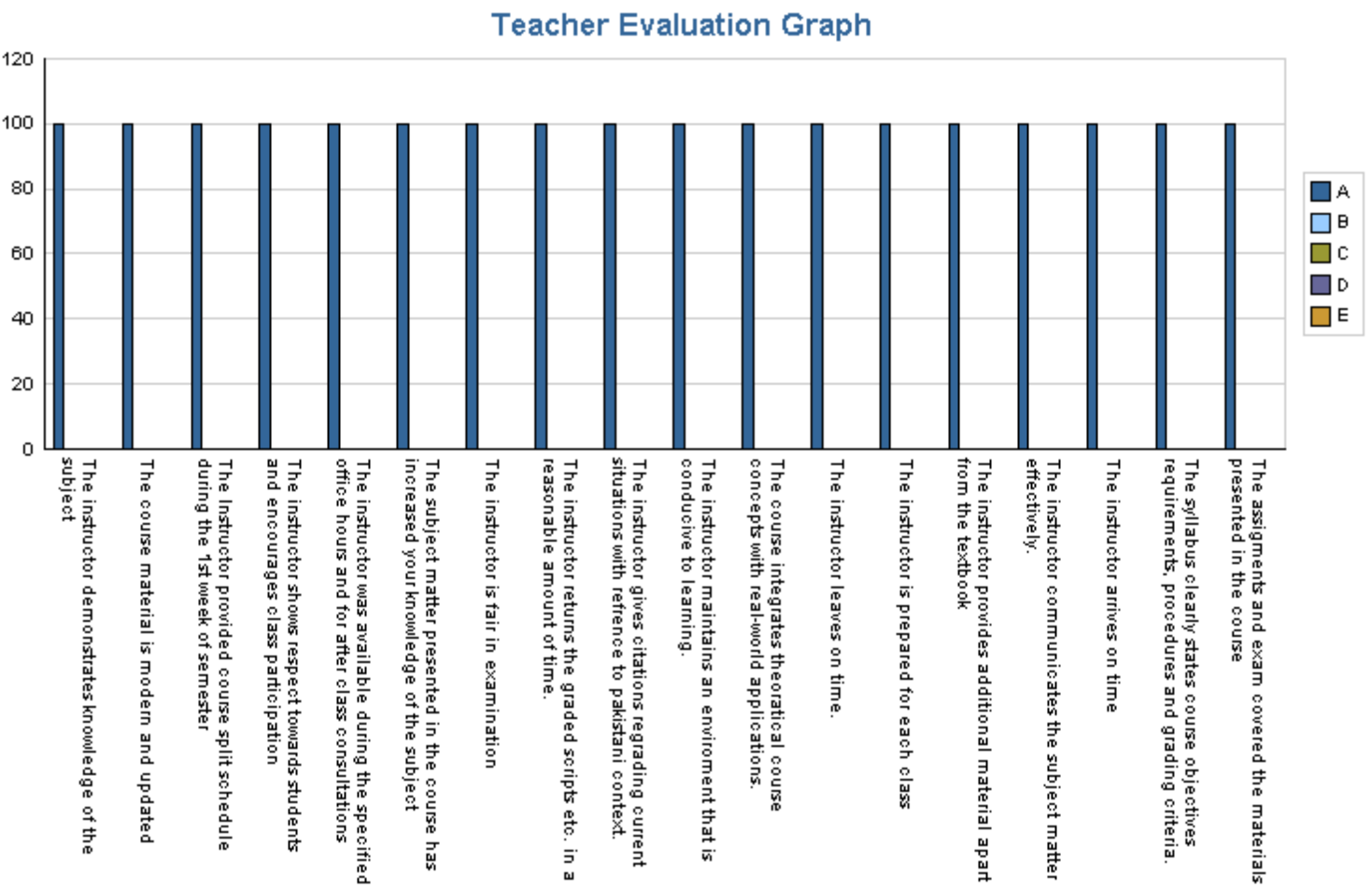
i. Teacher Evaluation

Data were collected from 6 Ph.D students. Dr. Ghulam Qadir achieved an excellent performance of 100 % , that was followed by Dr. fayyaz ul Hassan (97.0%) and Muhammad Rasheed 100% Zammurad Iqbal Ahmedl (100%). Whereas, the performance level/impact value for Prof. Dr. Muhammad Azeem was calculated as 100%

The teacher evaluation criteria showed that the 100% of the students strongly agreed that the instructor was prepared for each class. The data of other parameters inferred that major proportion of the students are agreed that the teacher was fair in examination , came with good preparation, the instructor demonstrates knowledge of the subject, instructor had completed the whole course, the Instructor provided additional material apart from the textbook, the Instructor gave citations regarding current situations with reference to Pakistani context, the Instructor communicates the subject matter, the Instructor shows respect towards students and encourages class participation effectively, the Instructor maintained an environment that was conducive to learning, the instructor arrived on time, the Instructor returned the graded scripts etc. in a reasonable amount of time, the Instructor was available during the specified office hours after class for consultations.

Comments/Suggestions

1. During lectures always cites from his practical experiences to make the understanding of the subject effective.
2. Course was very motivating and was completed well in time.
3. Competent, humane and good teacher with amiable and parental behavior with the students.



Course Evaluation

AGR-720 Semester- Spring-2013	SEMINAR-2	1(1-0)	Dr. Muhammad Azim Malik
---	-----------	--------	-------------------------

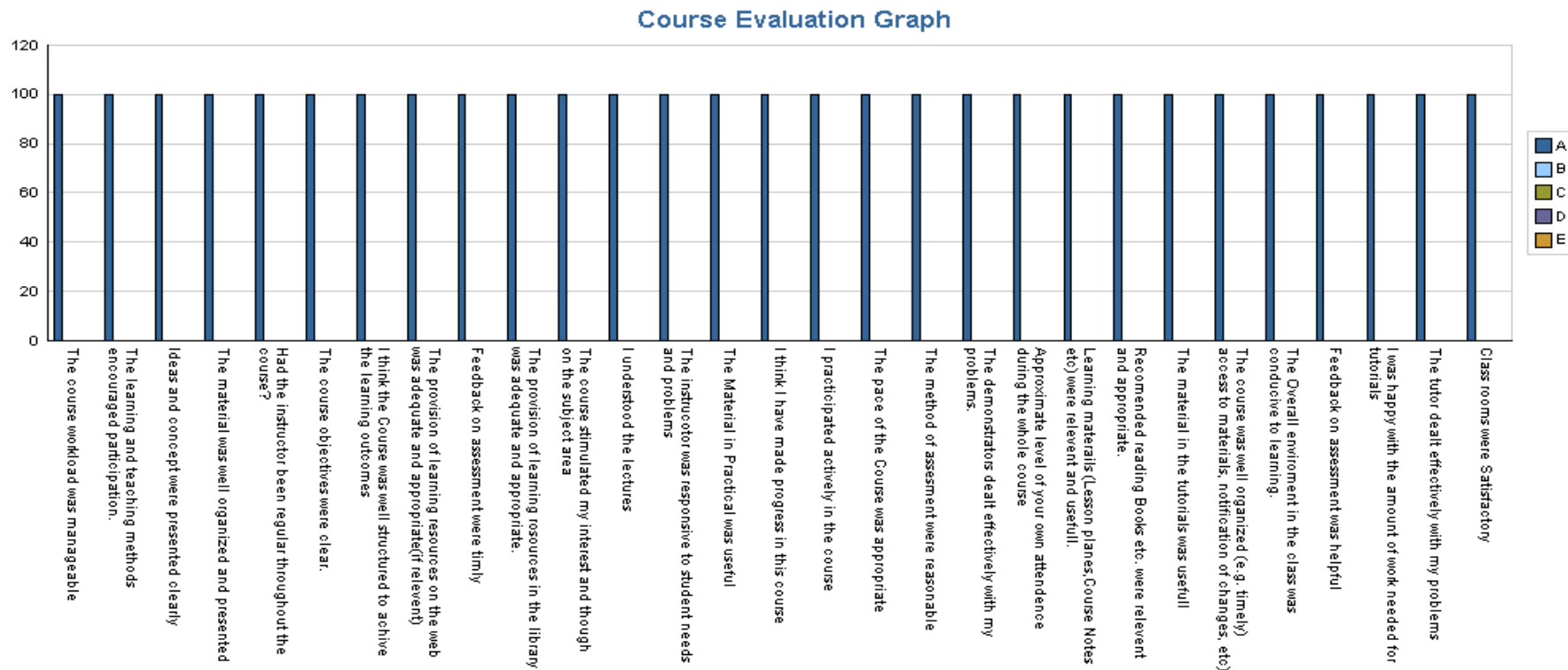
Data were collected from 6 Ph.D students. Comparative graph of course evaluation showed, that the course (AGR-720) taught by Dr. Muhammad Azim Malik had an impact value of 100%.

The sole framework showed that 100% of the students strongly agreed that the course objectives were clear. Data related other framework showed that major proportion of the students agreed about the operativity and objectivity of the course, the course objectives were clear, the course workload was manageable, well organized, the approximate level of student's attendance during the whole course was higher; students participated actively in the course and have made progress in this course. Most of the students agreed that the course was well structured to achieve the learning outcomes, the learning and teaching methods encouraged participation, the overall environment in the class was conducive to learning, and classrooms were satisfactory, learning materials (Lesson Plans, Course Notes etc.) were relevant and useful, recommended reading books etc. were relevant and suitable, the provision of learning resources in the library was adequate and the course stimulated their interest and thought on the subject area. According to most of the students, the pace of the Course was appropriate, ideas and concepts were presented clearly, the method of assessment were reasonable.

Comments / Suggestions

- Use of latest audio –visual learning resources needed to be provided in the classroom.
- University library needed to be amend for the availability of course
- Course was effectual for future.

- Course was quite related and provides bountiful informations.



Dr. Ghulam Qadir

i. Teacher Evaluation

Data were collected from 6 Ph.d students. Among the teachers, , Dr. Ghulam Qadir achieved an excellent performance of 100 % , that was followed by Dr. fayyaz ul Hassan (97.0%) and Muhammad Rasheed 100% Zammurad Iqbal Ahmedl (100%)

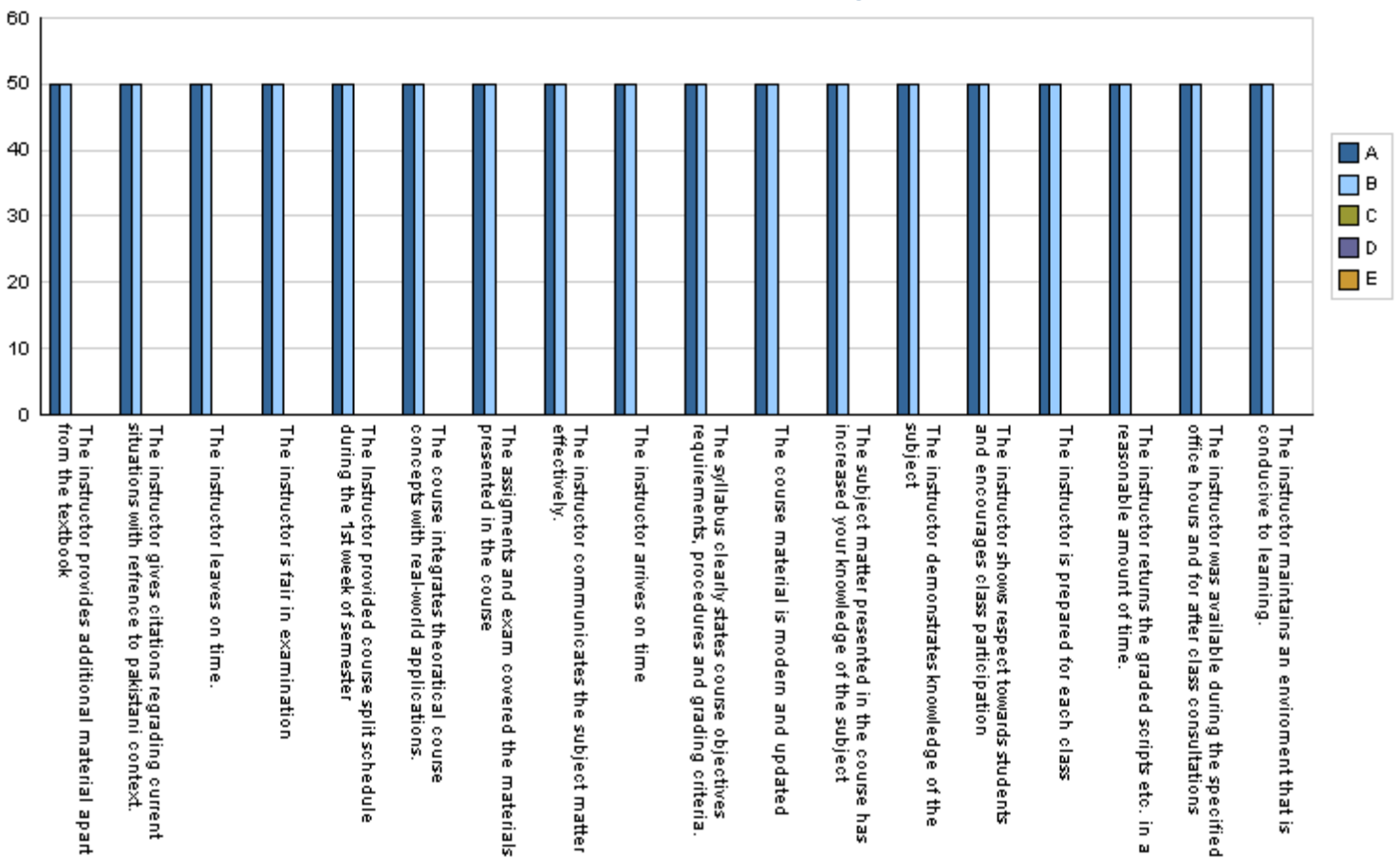
The evaluation criteria parameters showed that the 50% of the students strongly agreed, 50%agreed that the instructor was prepared for each class. The data of other parameters inferred that major proportion of the students are agreed that theinstructor

demonstrates knowledge of the subject, instructor had completed the whole course, the Instructor provided additional material apart from the textbook, the Instructor gave citations regarding current situations with reference to Pakistani context, the Instructor communicates the subject matter, the Instructor shows respect towards students and encourages class participation effectively, the Instructor maintained an environment that was conducive to learning, the Instructor arrived on time, the Instructor returned the graded scripts etc. in a reasonable amount of time, the Instructor was available during the specified office hours after class for consultations, the Subject matter presented in the course has increased their knowledge of the subject, the syllabus clearly states course objectives requirements, procedures and grading criteria, the course integrates theoretical course concepts with real-world applications, and the assignments and exams covered the materials presented in the course, the course material is modern and updated.

Comments/Suggestions

1. Moderate and jolly teacher.
2. Teacher taught the course with special association to the surrounding environment of the country.
3. Punctuality can improve the learning process.

Teacher Evaluation Graph



ii. Course Evaluation

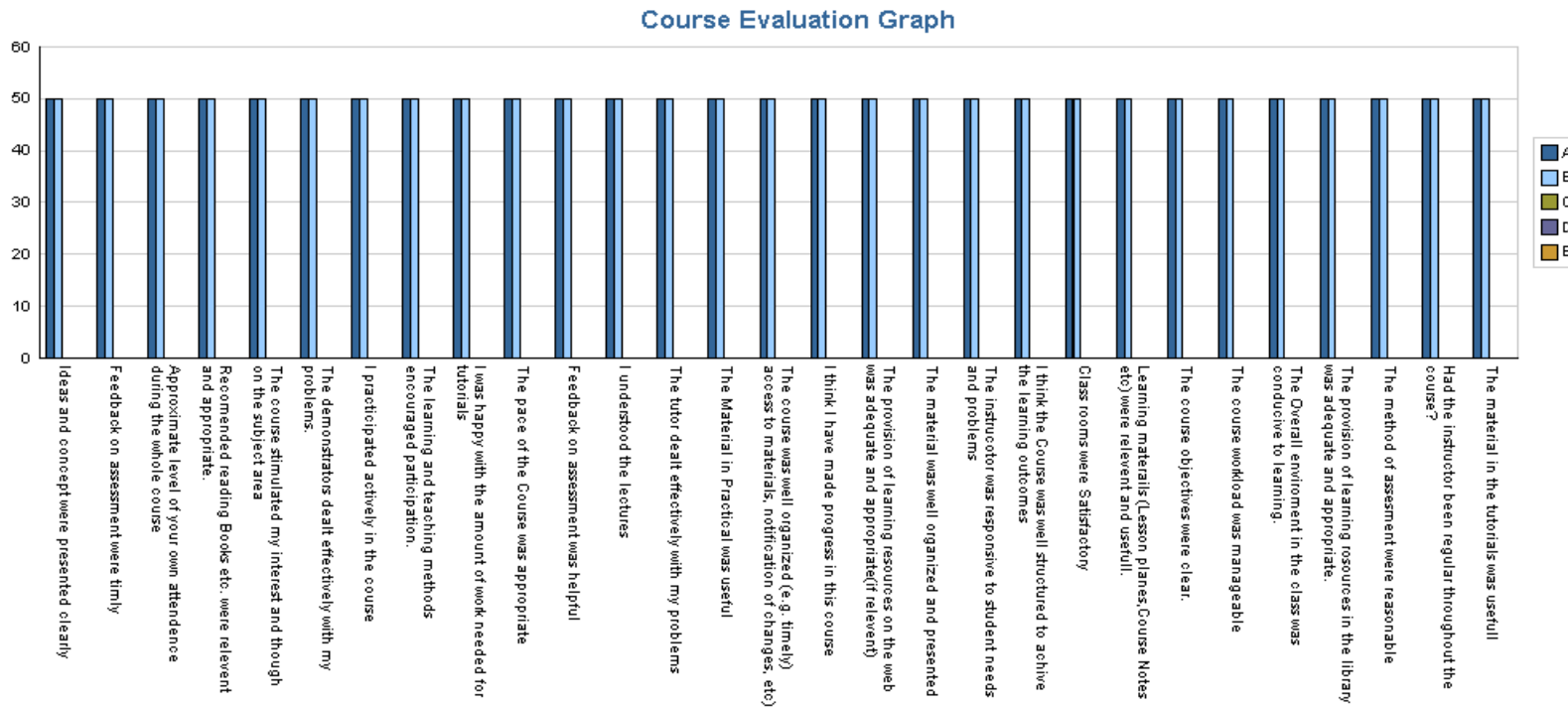
AGR-715	Seed Production and Management	3(2-2)	Dr. Ghulam Qadir
---------	--------------------------------	--------	------------------

Data were collected from Ph.d students. Comparative graph of course evaluation showed, that the course (AGR-715) taught by Dr. Ghulam Qadir had an impact value of 100%

The individual parameter showed that 50% of the students strongly agreed, 50 % agreed, that the course objectives were clear. Data regarding other parameters showed that major proportion of the students agreed that the course objectives were clear, the course workload was manageable, well organized, the approximate level of student's attendance during the whole course was higher; students participated actively in the course and have made progress in this course, the learning and teaching methods encouraged participation, the overall environment in the class was conducive to learning, and classrooms were satisfactory, learning materials (Lesson Plans, Course Notes etc.) were relevant and useful, recommended reading books etc. were relevant and appropriate, the provision of learning resources in the library was adequate and the course stimulated their interest and thought on the subject area.

Comments / Suggestions

- Course could have been improved if the teacher were regular to his classes
- Learning environment was not good.
- Practicals and field visits can improve the course effectiveness.
- Proper class room should be provided for providing the calmful learning environment



Dr.Muhamad Rasheed: Teacher Evaluation

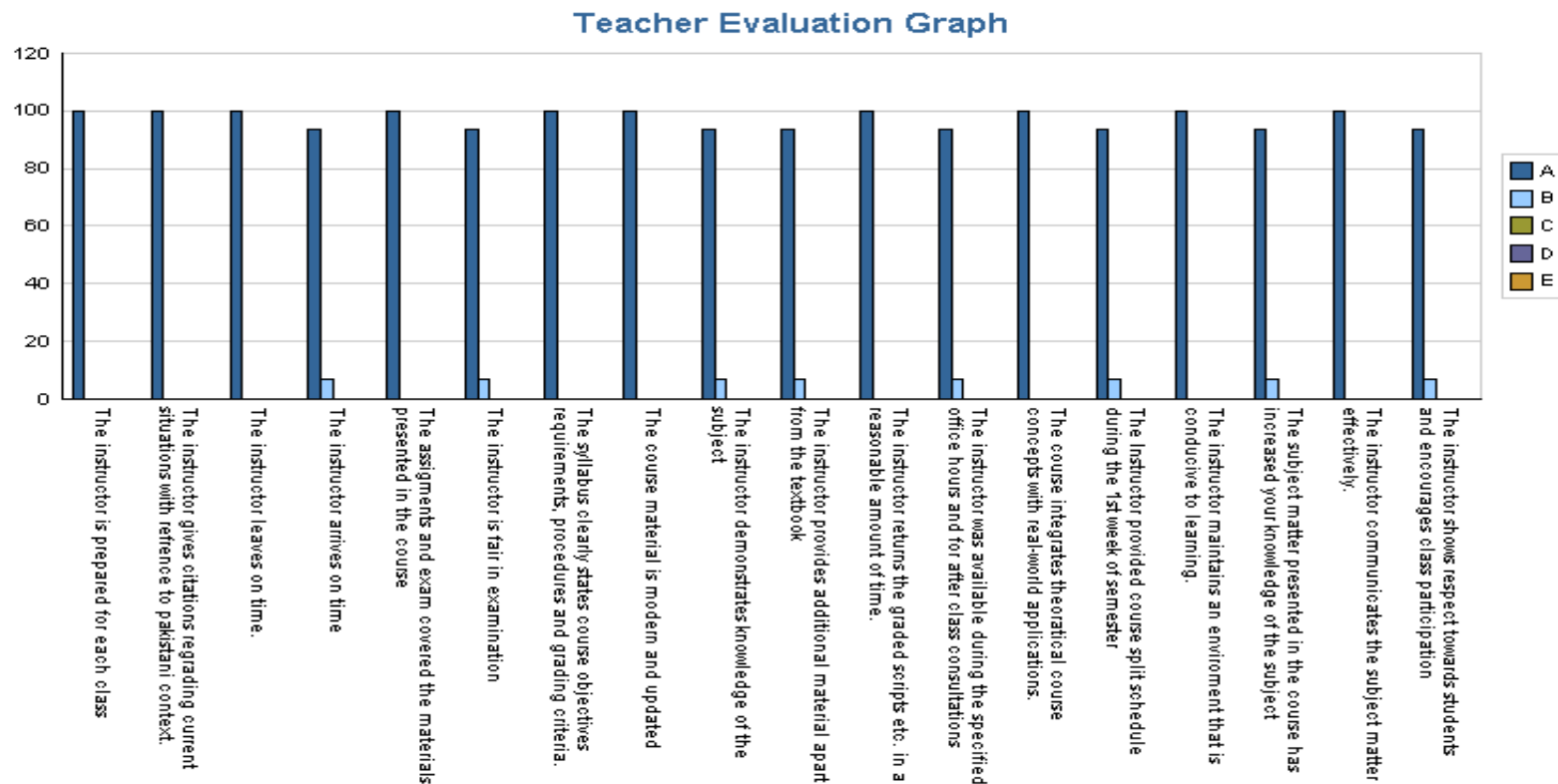
Data were collected from 6 Ph.d students. Among the teachers, , Dr. Ghulam Qadir achieved an excellent performance of 100 % , that was followed by Dr. fayyaz ul Hassan (97.0%) and Muhammad Rasheed 100% Zammurad Iqbal Ahmedl (100%) and Muhammad Rasheed have performance of 100%

The evaluation criteria parameters showed that the 82% of the students strongly agreed and 18% agreed that the instructor was prepared for each class. The data of other parameters inferred that major proportion of the students are agreed that the teacher is fair in examination, the instructor came with good preparation. ,instructor demonstrates knowledge of the subject, instructor had completed the whole course, the Instructor provided additional material apart from the textbook, the Instructor gave citations regarding current situations with reference to Pakistani context, the Instructor communicates the subject matter, the Instructor shows respect towards students and encourages class participation effectively, the Instructor maintained an environment

that was conducive to learning, the Instructor arrived on time, the Instructor returned the graded scripts etc. in a reasonable amount of time, the Instructor was available during the specified office hours after class for consultations, the Subject matter presented in the course has increased their knowledge of the subject, the syllabus clearly states course objectives requirements, procedures and grading criteria, the course integrates theoretical course concepts with real-world applications, and the assignments and exams covered the materials presented in the course, the course material is modern and updated.

Comments/Suggestions:

- The teacher always relates the course topics with his practical experiences under the local environmental conditions for proper understanding of the students.
- The teacher's attitude was amiable during and after his lectures with the students.
- The pace of course covering was commendable and understanding of the theme of the course was also appreciable.



i. Course Evaluation

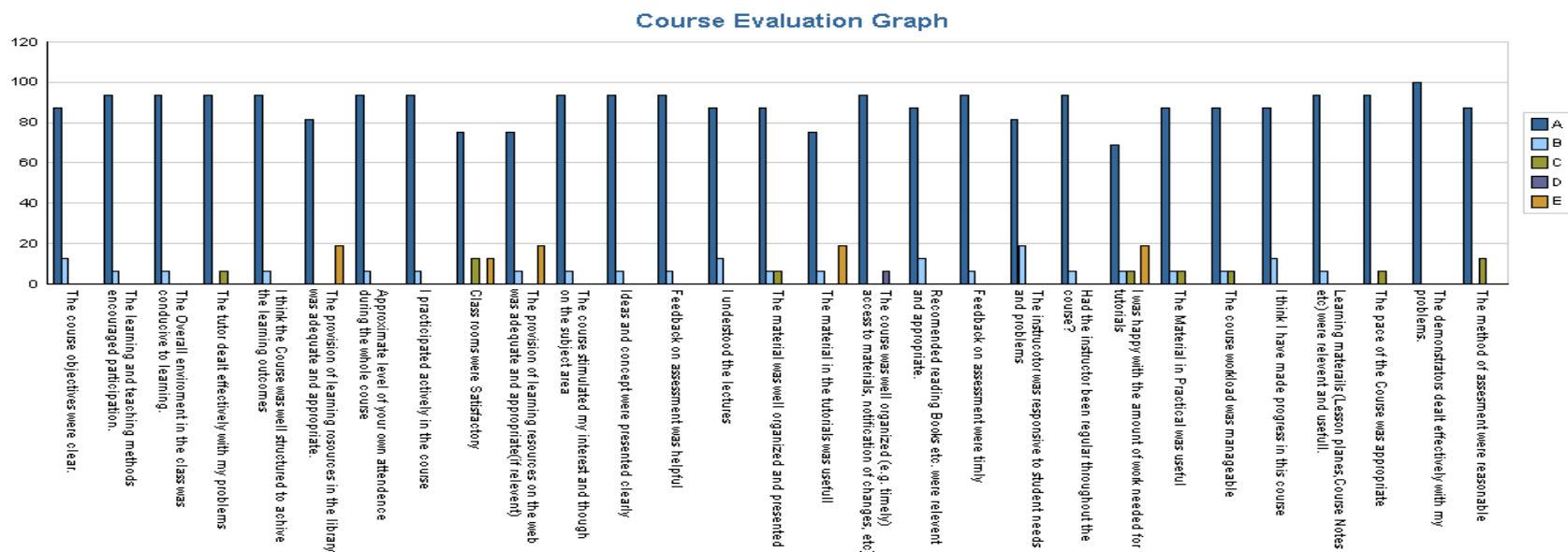
AGR-710	Crop Nutrition	3(2-2)	Dr. Muhammad Rasheed
---------	----------------	--------	----------------------

Data were collected from 6 Ph.D students. Comparative graph of course evaluation showed, that the course (AGR-710) taught by Dr. Muhammad Rasheed had an impact value of 94%. Data regarding other parameters showed that major proportion of the students agreed that the course workload was manageable, well organized ,the approximate level of student's attendance during the

whole course was higher; students participated actively in the course and have made progress in this course, the course was well structured to achieve the learning outcomes ,the learning and teaching methods encouraged participation, the overall environment in the class was conducive to learning, and classrooms were satisfactory, learning materials (Lesson Plans, Course Notes etc.) were relevant and useful, recommended reading books etc. were relevant and appropriate. They described that the provision of learning resources in the library was adequate and the course stimulated their interest and thought on the subject area. According to most of the students, the pace of the Course was appropriate, ideas and concepts were presented clearly, the method of assessment were reasonable.

Comments / Suggestions

- More practicals will make the course better.
- Lab equipments were not ample.
- Projector and multimedia should be used to deliver lectures.
- There was lack of practical demonstrations in the practical part of the course.
- No doubt the course was enlightening and interesting.



Proforma 2: Faculty Course Review Report

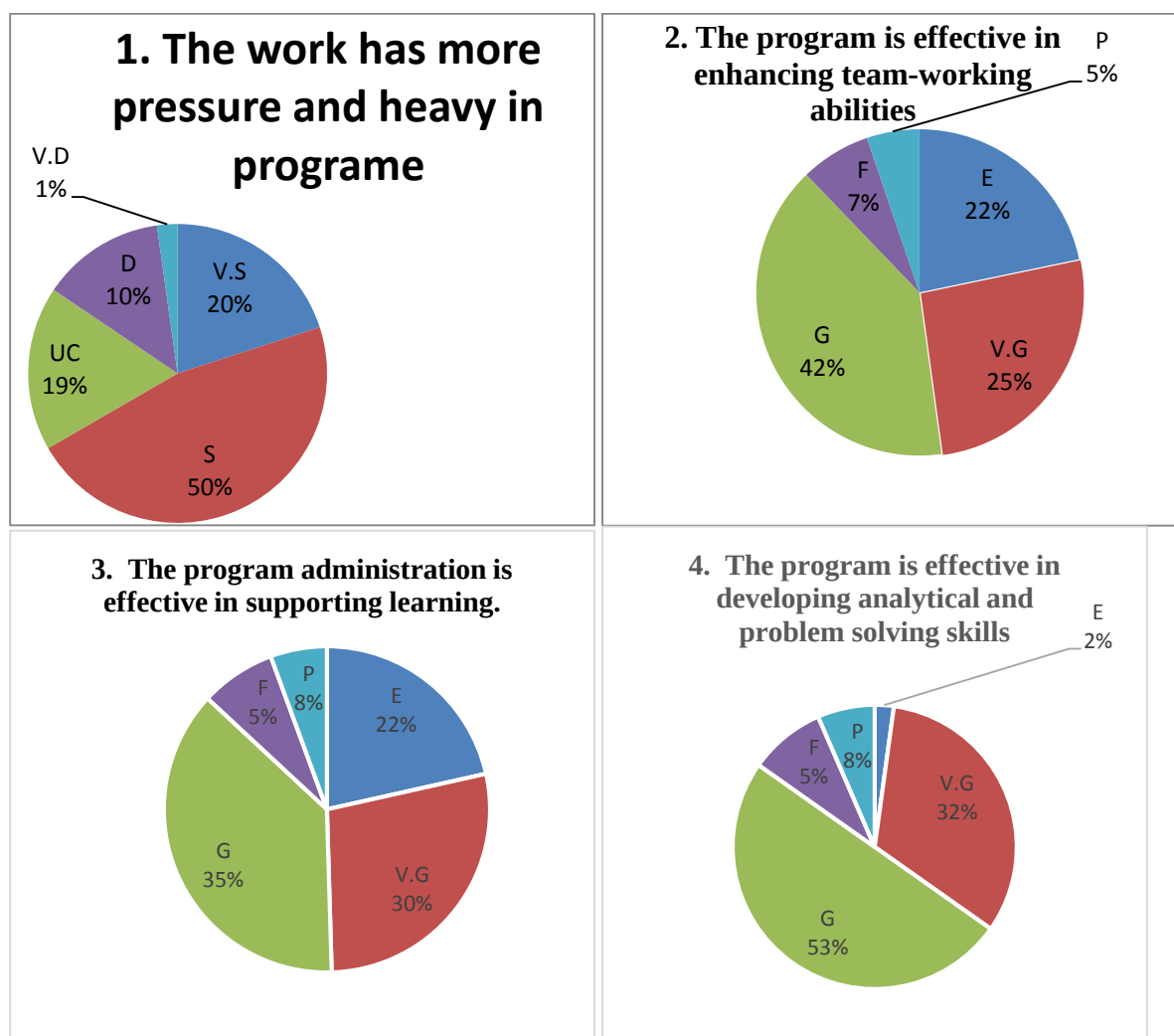
The evaluation revealed that the faculty is satisfied with curricula. Proformas for evaluation has been filled and analyzed. The internal evaluation was done through semestoral examinations for all courses offered by department. Some of the teachers suggested splitting up of certain courses as they were lengthy.

Course code	Title	Credit Value	Assessment Methods/ Exams	No. of Stu	comments on curriculum	Any changes for future	Semester	%Grade	Course Instructor
-------------	-------	--------------	---------------------------	------------	------------------------	------------------------	----------	--------	-------------------

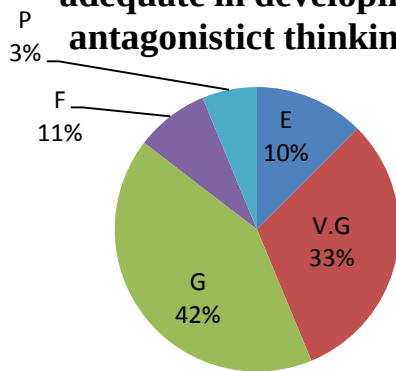
				dent s		in course		A	B	C	D	E	F	
AGR-701	Advanced field crop production	4(3-2)	Mid term And Final	24	Good and interesting	Should be improved	Fall	35	31	34	-		-	Dr. Zammurad Iqbal Ahmed
AGR-702	Advanced Agronomy	4(3-2)	Mid term And Final	24	Good but lengthy	Should be divided	Spring	24	38	38	-	-	-	Prof..Dr. Fayyaz ul Hassan
AGR-703	Dryland Agro-management	3(3-0)	Mid term And Final	24	Good but lengthy	Should be divided	Fall	13	55	12	15			Dr. Muhammad Azim Malik
AGR-704	Crop environment	3(2-2)	Mid term And Final	24	Excellent but lengthy	Should be divided	Spring	60	10	21	6	2	1	Mr. Irfan Aziz
AGR-706	Weed management	4(3-2)	Mid term And Final	24	Very good	No	Fall	13	57	11	14	0	5	Dr. Muhammad Ansar
AGR-707	Field crop experimentation	4(3-2)	Mid term And Final	24	Good prepared	No	Fall	52	32	10	4	1	1	Dr. Zammurad Iqbal Ahmed
AGR-708	Advanced seed technology	4(3-2)	Mid term And Final	24	Well prepared	No	Spring	40	38	11	9	0	2	Dr. Ghulam Qadir
AGR-710	Crop Nutrition	3(2-2)	Mid term And Final	24	Well prepared	No	Fall	52	26	13	8	1	0	Dr. Muhammad Ashraf

Proforma 3: Survey of Graduating Students

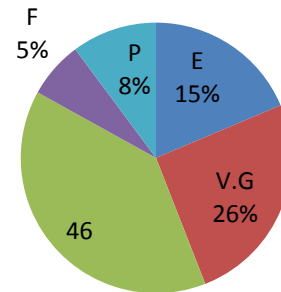
A total of 30 students were included in the survey. The data showed that 20% of the students were very quenched (V.S), 50% satisfied, 19% vague, 10% discontent and 1% very perturbed for the work in the parameter is too heavy and activate a lot of pressure. Moreover, most of the students were very satisfied with program authority, development of cogent and problem solving skills, the program is effective in developing independent thinking, written communication skills and planning abilities, the contents of curriculum are advanced and meet program objectives, faculty was able to meet the program objectives and the environment was conducive for learning.



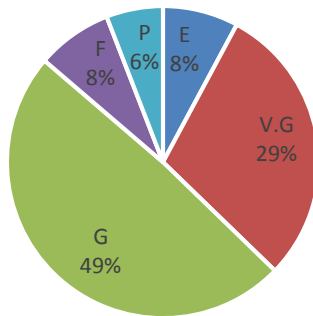
5. The program is adequate in developing antagonistict thinking



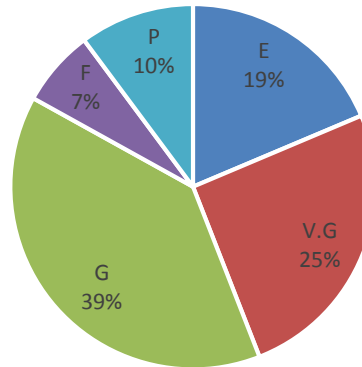
7. The program is effective in developing planning abilities



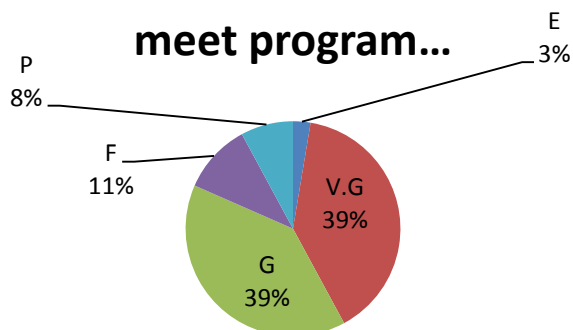
6. The program is effective in developing written communication skills



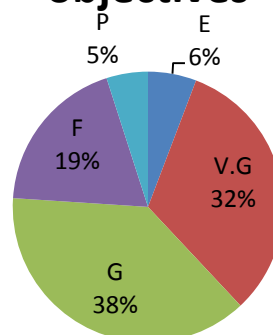
7. The program is effective in developing planning abilities



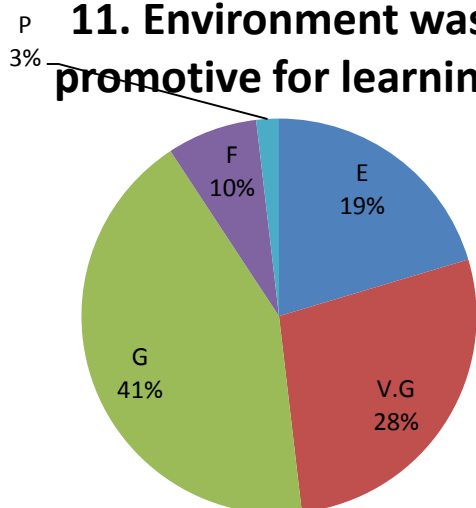
9. Whether the contents of curriculum are advanced and meet program...



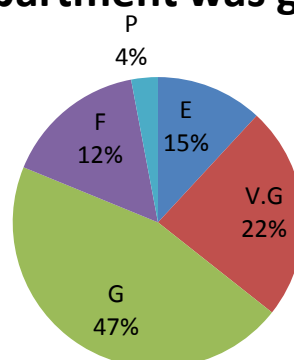
10. Faculty was able to meet the program objectives



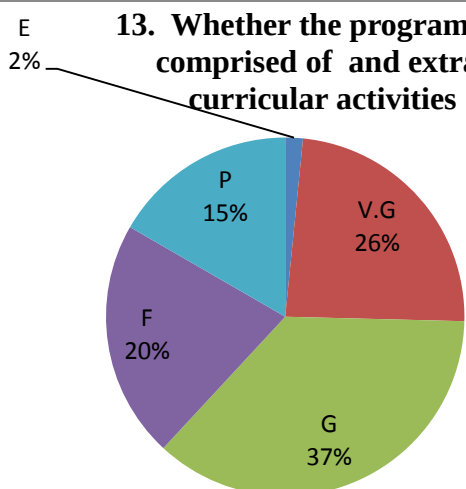
11. Environment was promotive for learning



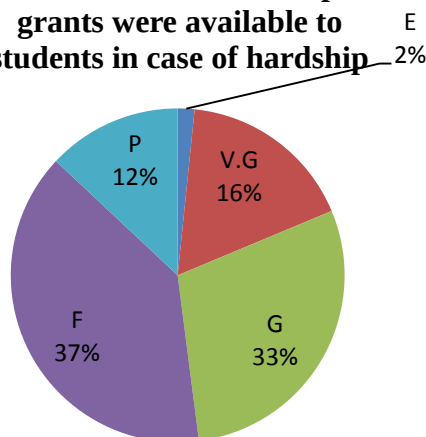
12. Whether the groundwork of the department was good



13. Whether the program was comprised of and extra-curricular activities



14. Whether scholarships/ grants were available to students in case of hardship



Proforma 4 :Research Student Progress Review Form

A total of 16 students of Ph.D were surveyed. Most of the students pointed out the problems regarding to the availability of space, computers and internet which is very poor and Masters are interested in laboratory work and eager to operate modern equipments.

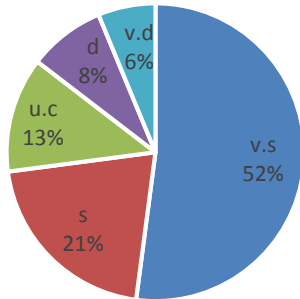
Skills and capabilities reflected in performance as agronomist

- To develop skill of adequate writing, oral presentations and demonstration.
- Students will be able to work in the field of Agronomy boldly
- To use new techniques/ tools in research studies

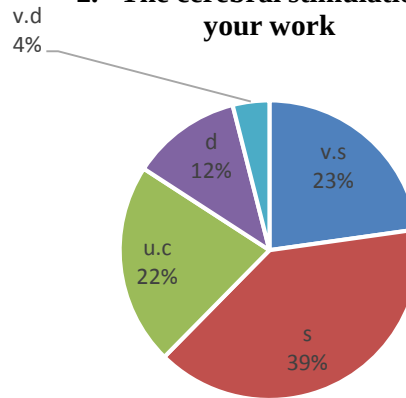
Performa 5: Results of Faculty Survey

The data generated as a result of faculty survey, showed that 19% of faculty members were very satisfied , 29% satisfied, 23% uncertain, 12% dissatisfied and 17% very dissatisfied with their job clarity about promotion process. However, most of the faculty themselves reported as very satisfied mentoring and administrative support, job security, support from the department, their progress through ranks. The least time availability to faculty to interact with their family is due to extra load on present teachers as some times of the faculty members proceed on training, workshops etc so the poor strength of remaining faculty in the campus has to bear out the load of course work and other assignments.

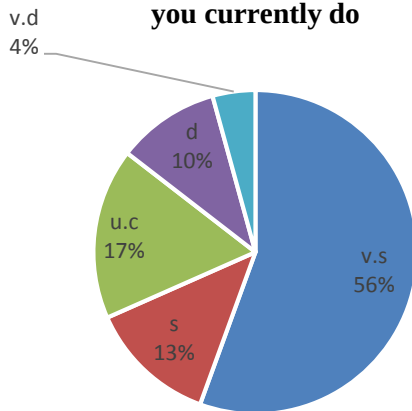
1. Your mix of research, teaching and community service



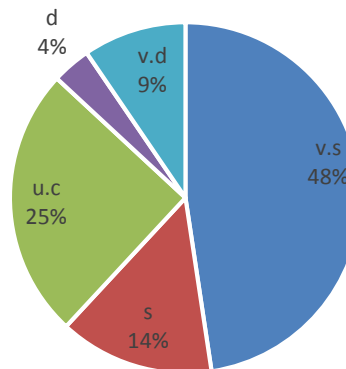
2. The cerebral stimulation of your work



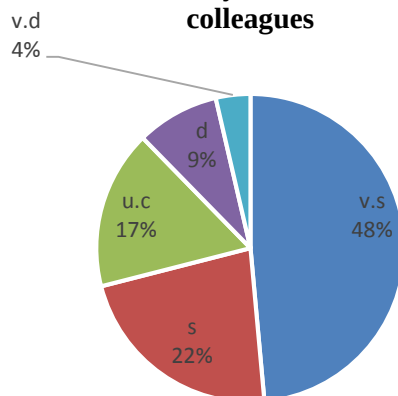
3. Type of teaching / research you currently do



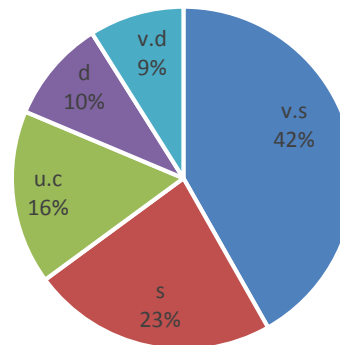
4. Your interaction with students



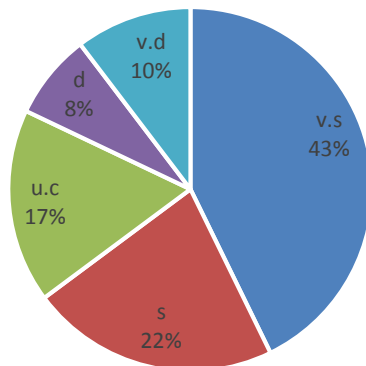
5. coaction you receive from colleagues



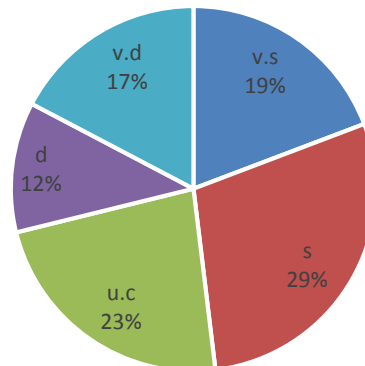
6. The counsel available to you



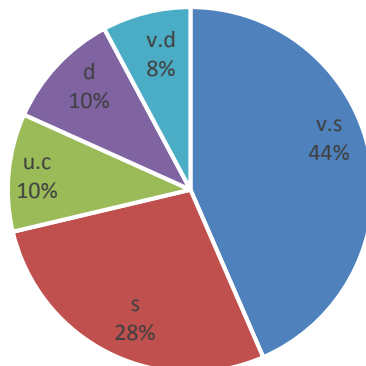
7. Administrative support from the department



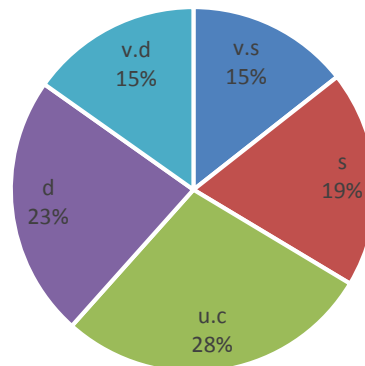
8. Providing exactness about the faculty promotion process



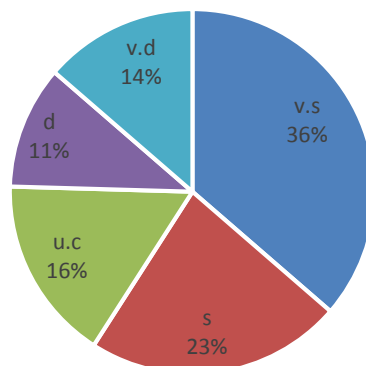
9. Your prospects for advancement and progress through ranks



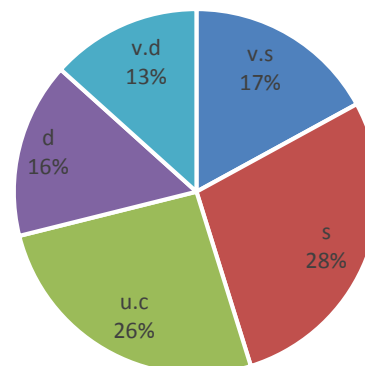
10. Salary and compensation package

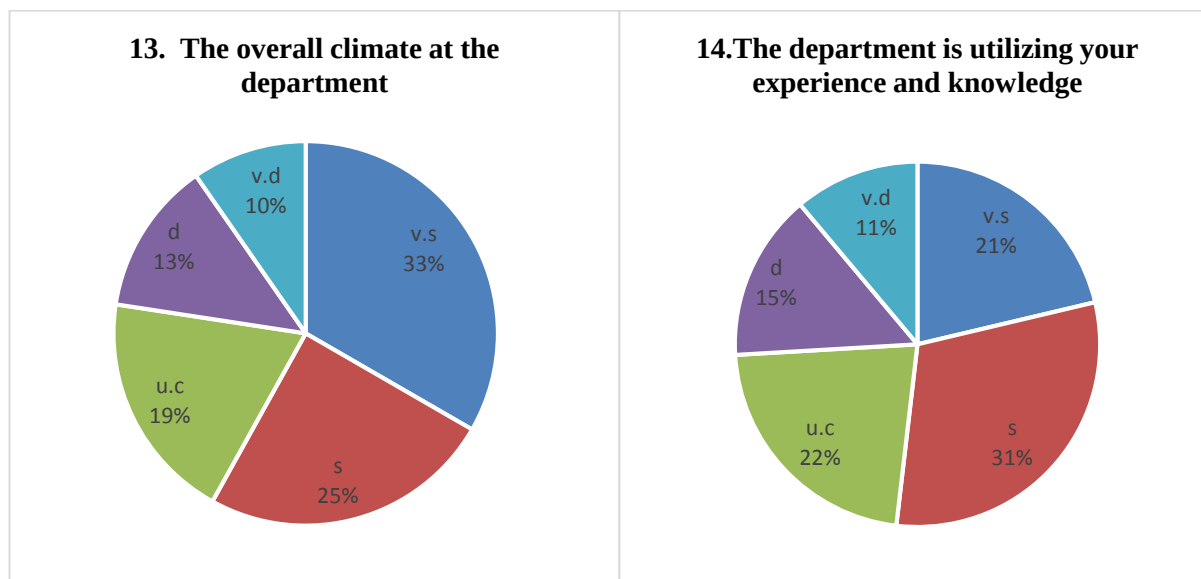


11. Job security and stability at the department



12. Amount of time you have for yourself and family



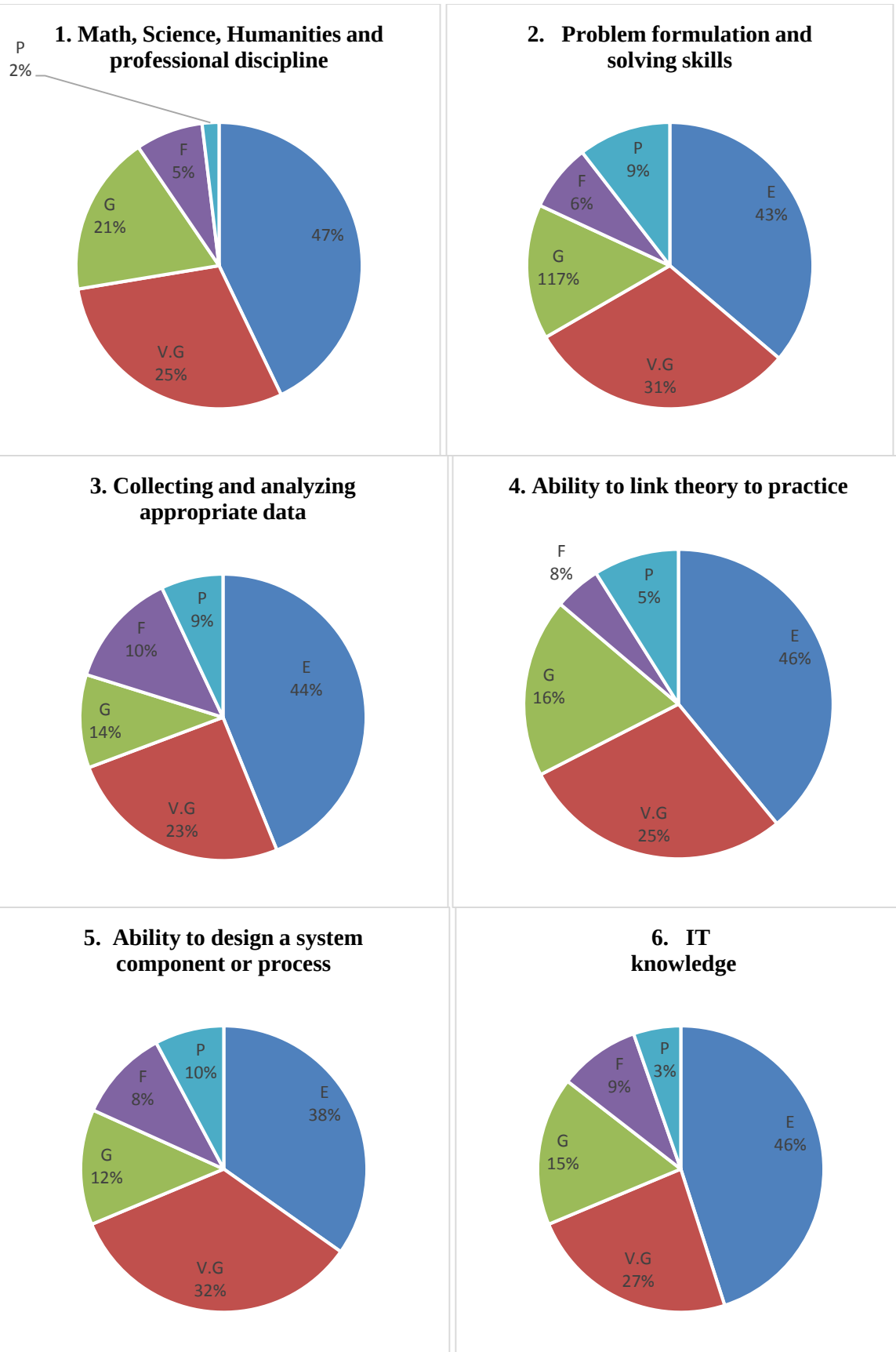


Performa 6: Survey of department offering Ph.D. programs

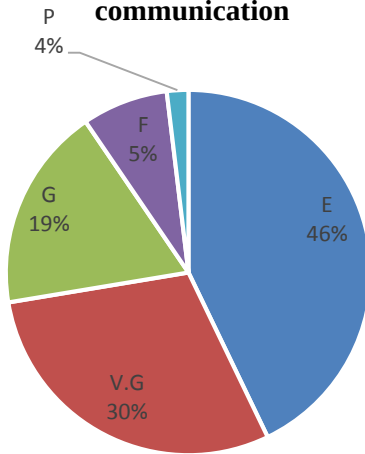
Department of Agronomy started its Ph.D. program during 1997 and 04 students have completed Ph.D from the department while 06 students are currently enrolled in department. Admission in Ph.D. program requires M.Sc. (Hons.) degree in Agronomy with a minimum CGPA of 3.0. Ph.D. degree student has to complete minimum 18 credit hour in addition to research thesis with minimum time duration of 3 years. Comprehensive examination is a prerequisite to qualify as a candidate for Ph.D. degree and is taken at the end of the course work. A research paper must be published from Ph.D. thesis in HEC recognized journal. All the faculty members (12) possess Doctorate degrees. Out of 12 faculty members 9 are HEC approved supervisors. Faculty members are running 04 research projects in the department funded by different organizations.

Proforma 7:Alumni Survey

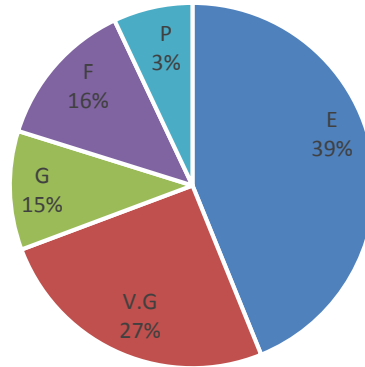
The purpose of this survey was to obtain alumni input on the quality of education and research they received and the level of preparation they had at University. A total of 36 alumni were surveyed. The data showed that the alumni reported 47% excellent, 25% very good, 21% good, 5% fair and 2% poor knowledge of Math, Science, Humanities and professional discipline. Also most of the Alumni reported excellent concerning department trained them excellently about the interpersonal skills such as team work,, training of oral communication, IT knowledge, report writing and management skills, department has excellent infrastructure and reputation, working in difficult conditions and independent philosophy, learnt excellent administration of resource and time, learnt excellent power of judgment.



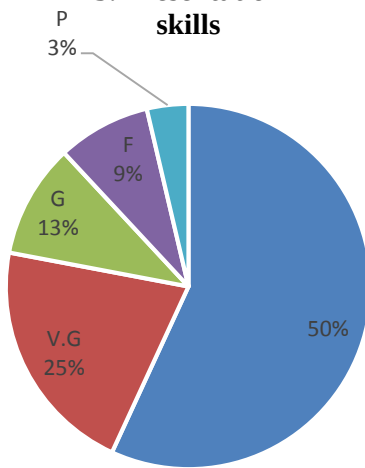
1. Oral communication



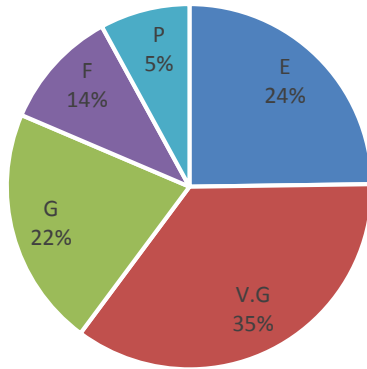
2. Report writing



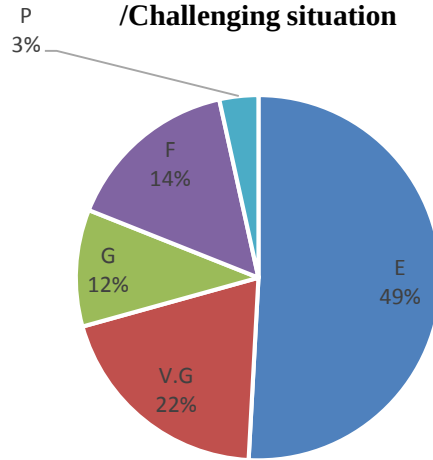
3. Presentation skills



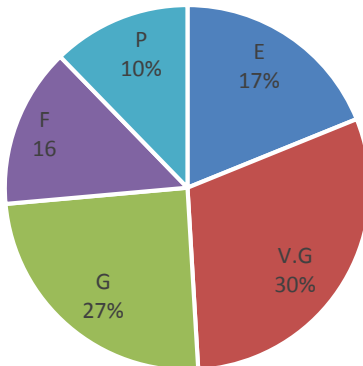
1. Ability to work in teams.



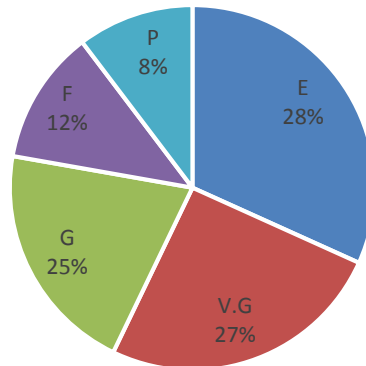
2. Ability to work in arduous /Challenging situation



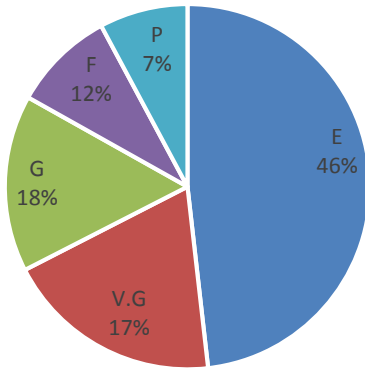
3. Independent thinking



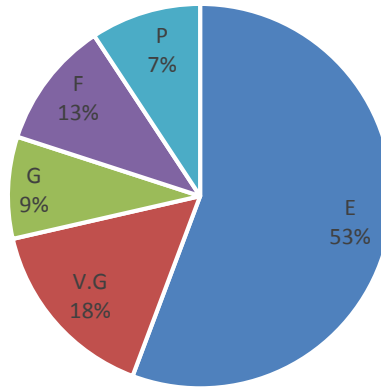
4. Appreciation of ethical Values



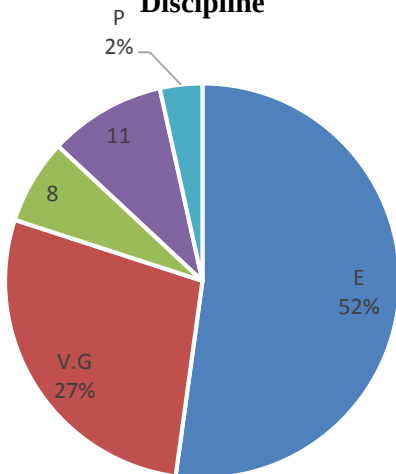
Resource and Time management skills



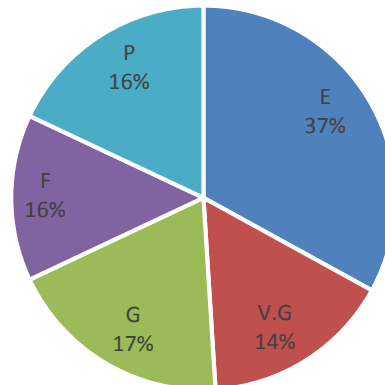
Judgment

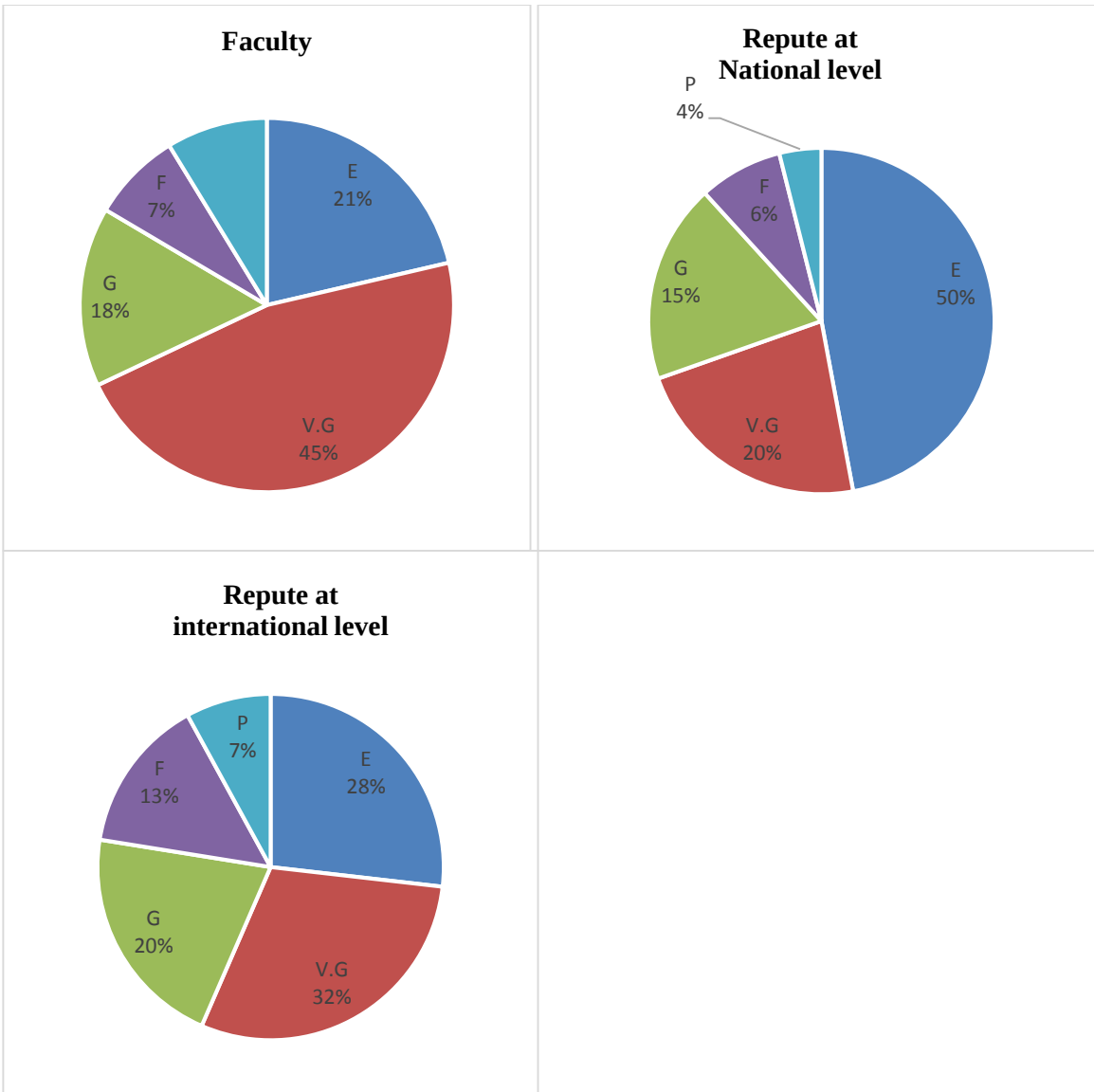


Discipline



Infrastructure

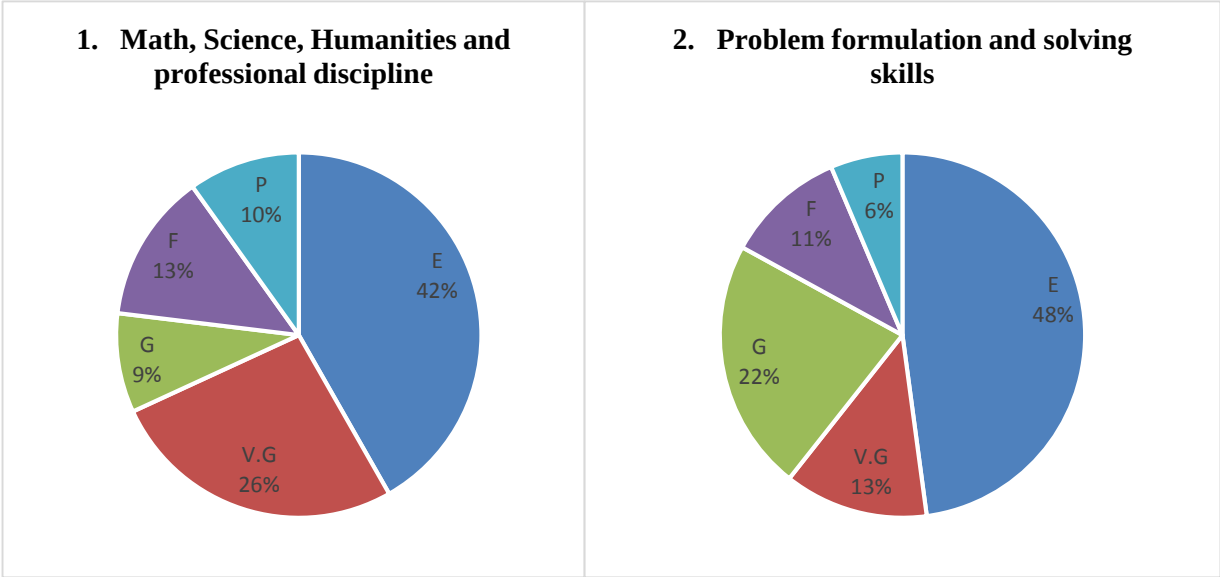




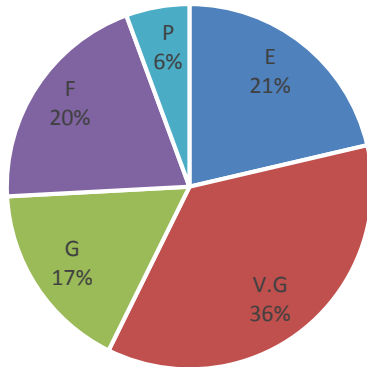
Proforma 8:Employer Survey

The rationale of this survey is to obtain employers input on the quality of education, the department is providing and to assess the quality of the academic program. The survey included University graduates employed in different organizations. A total of 8 employers provided the data. The generated data showed the report of the employers about the Math, Science, Humanities and professional discipline was as 42% excellent, 26% very good, 9% good, 13% fair and 10% poor. All the employers significantly favoured the excellent performance of the candidates as regards different aspects of the professional life like power of problem

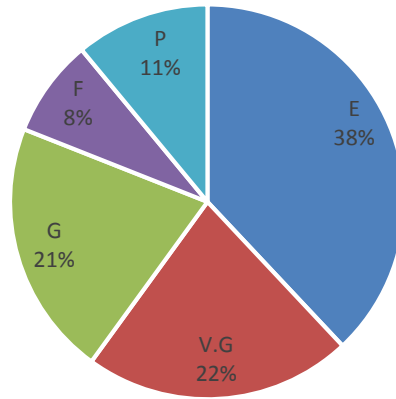
formulation and solving skills, and have great ability of oral communication and are reliable and morally sound. Employers showed a little apprehension about computer skills of the students.



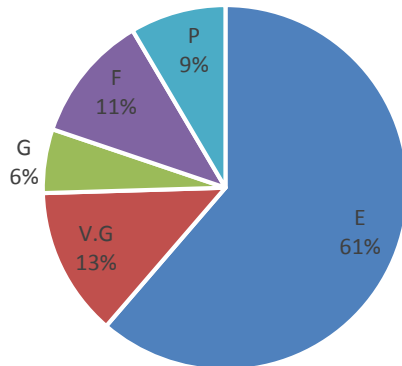
3. Collecting and analyzing appropriate data



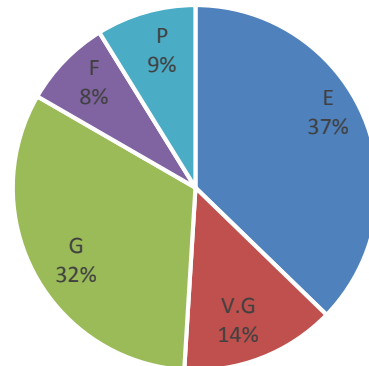
4. Ability to link theory to practice



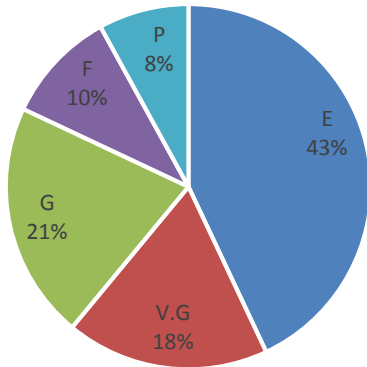
5. Ability to design a system component or process



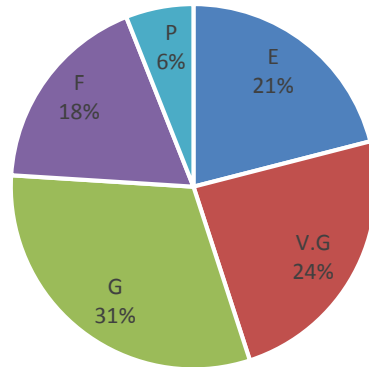
6. Computer knowledge



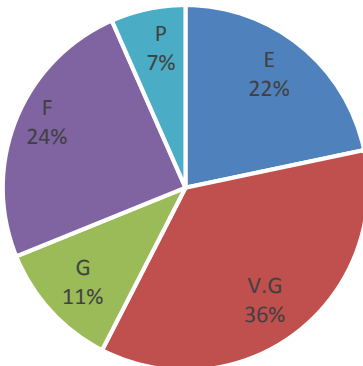
1. Oral communication

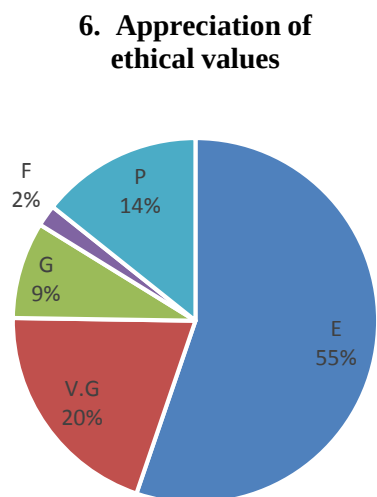
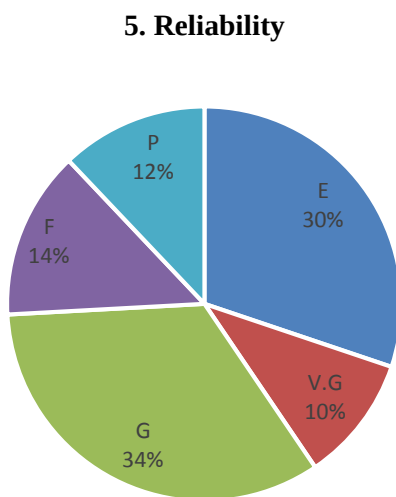
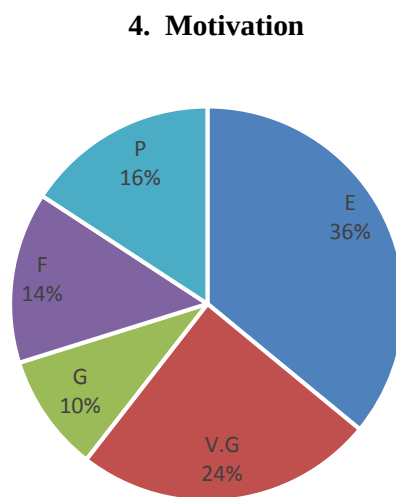
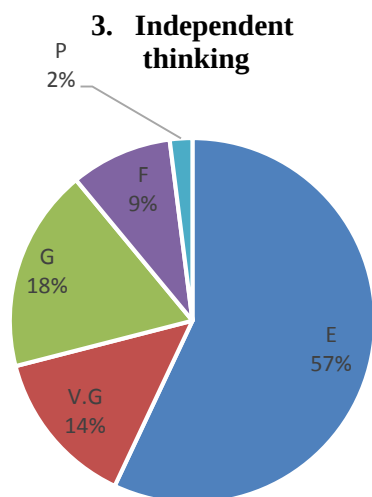
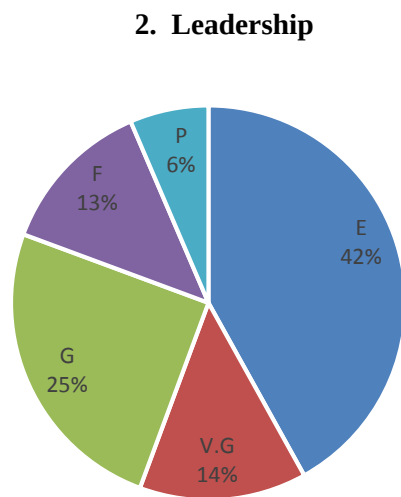
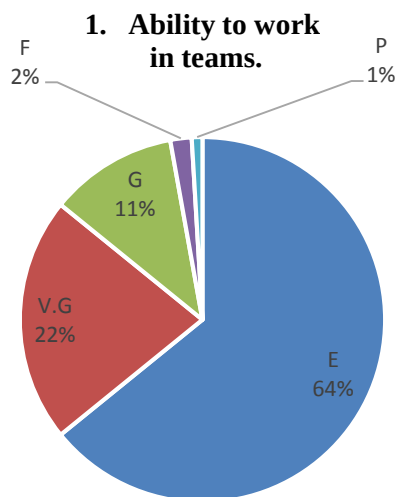


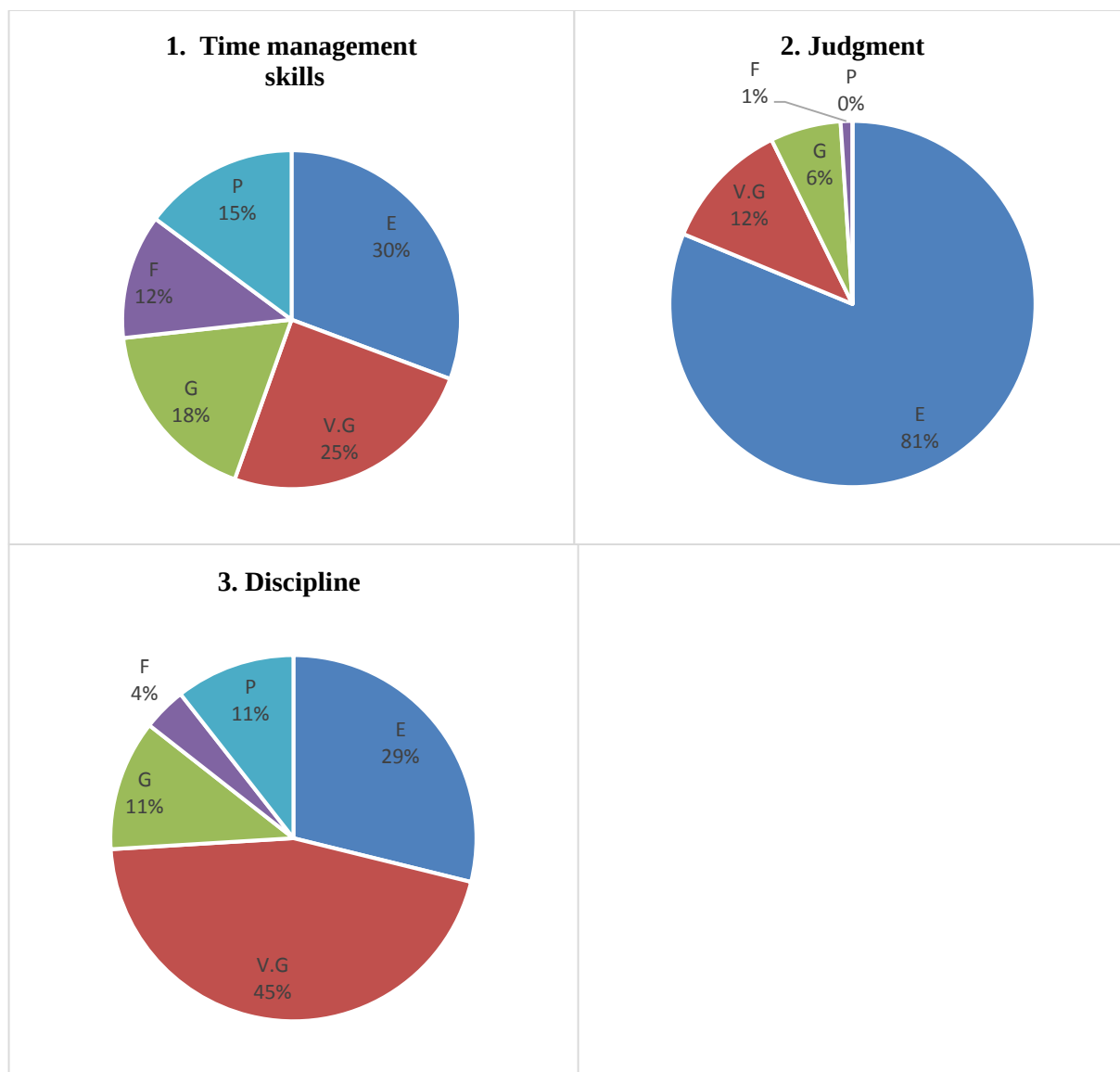
2. Report writing



3. Presentation skills







Standard 1.3:Strength of the Department

The results are being communicated to the respective departmental head through the Dean for corrective measures where needed.

Strength of the department

The main strength of the department is the availability of highly qualified teachers and their full acquaintance with respective subjects. Majority of the faculty members are foreign qualified and are well versatile in their area of interest.

Weakness Identified in the Program:

There is a lower frequency deputing the young faculty for foreign trainings .
Lack of infrastructure to transfer the recommendations and technology to the farmers. Partial access to latest literature and updated review .

Major Feature of Improvement Plans

Quality education in the department is met partially through audio visual aids and use of modern equipments along with provision of latest literature, journals, books, reviews and access to internet.

The augmentation of knowledge and skills of faculty members to keep them up in pace with the latest global advancements in the discipline through is being practiced through faculty exchange programs(FEP), short training and collaborative research project(CRP) within and outside Pakistan.

Program outcomes:**Table 3: Quantitative Assessment of the Department**

Sr. #	Particular	No	Remarks
1.	Ph.D Degree awarded	08	Most of the Ph.D degree awarded were already in job and the others got jobs in different relevant fields. .

The evaluation process indicated high efficiency of system and satisfactory impact of outcomes. Almost all the graduates students got jobs in various organizations viz provincial agricultural department, universities, research organizations, banks and private firms.

Skills and capabilities reflected in performance as Agronomist:

Students build up potential to apply information of Agronomy and to work as professionals to build self-confidence and communicate successfully in writing and oral skills. Students are able to make obvious use of modern research tools, techniques and skills for building their proficient career. To make them be aware of how to formulate and design the experiments and to work efficiently in a research groups.

Table 4: Present Performance Measures for Research Activities

Sr. Nos.	Name of faculty member	Research Papers	Projects Completed
1.	Dr. Fayyaz-ul-Hassan	21	1 (ALP)
3.	Dr. Muhammad Azim Malik	06	Nil
4.	Dr. Zammurad Iqbal Ahmad	4	-Nil
5.	Dr. Abdul Razzaq	10	1(HEC)
6.	Mr. Irfan Aziz	2	Nil
7.	Dr. Muhammad Ansar	5	Nil
8.	Dr. Muhammad Rasheed	6	Nil
9.	Mr. Ghulam Qadir	05	Nil
11.	Mr. Mukhtar Ahmad	2	Nil
12.	Dr. Abdul Manuaf	2	Nil
13.	Mr. Safdar Ali	1	Nil
14	D. M. Naveed tahirr		Nil
15	Dr. Ghulam Abbas shah		Nil
16	Fauzia Kanawal		Nil
Total		45 international as well as national	02

Faculty Satisfaction Regarding the Administrative Services

- The department upholds a percentage 4:1 for the academic (technical) and administrative non-technical staff which fulfils the standard set by HEC.
- Administrative meeting (departmental, university, academic council and syndicates) are attended as and when required.
- Regular disposal of office works is practised without reminder from higher authorities .
- Proper records of the following is maintained;
 - Enrolment
 - Research Reports
 - Tour reports
 - Attendance report
 - Assignments
 - Evaluation report
 - Entry test

Table No: 5 : Degree Requirements

Degree	Pre-requisites
Ph.D	Academic minimum score of 3 CGPA,17 credit hours comprising 7 credits of course work and 10 credits of research thesis, comprehensive examination and thesis writing.

Major future improvement plans

- Foundation of Crop Seed Production ,Research and Training Centre
- Crucifixion of research projects funded by different donor agencies.
- Further Strengthening of Linkages with National/ International organizations. Participatory research activities.

- Foundation of demonstration plots on farmers fields.
- Assembling faculty trainings in advanced countries to equip them with latest developments and research skills.

CRITERION 2: CURRICULUM DESIGN AND ORGANIZATION

SECTION: 2

Criterion 2: Curriculum Design and organization:

Curriculum design and modernized by the faculty members of the Department after the approval of Board of Studies which comprises of senior faculty members and subject specialist who is taken from other faculties or from other Universities or research Institutions. It is headed by the Chairman of the Department. The approved curriculum is then sent to Board of Faculty, aimed by the Dean Faculty of Crop and Food Sciences. This Board consists of senior faculty members from all the Departments of the faculty and subject specialists. Finally the curriculum is presented before the Academic Council which is comprised of the Professors, Associate Professors, Faculty Representatives and nominated experts.

Definition of Credit Hour

A student must complete a definite number of credit hours. One credit hour is one theory lecture or two hours practical work per week. One credit hour carries 20 marks. The semester is of 18 weeks.

Degree Plan

Ph.D in Agronomy

The Ph.D degree program consists of 3 academic years /six semesters. As a whole a student has to study 18 credit hours with 10 credit hours (research work and thesis writing). The student also has to defend their topic and also have to clear comprehensive Degrees are awarded after completing course work, one year research work, thesis writing and comprehensive examination are mandatory for the Ph.D degree. For Each course 10% marks are reserved for

the assignments, 30% marks are for mid-term examination while 60% marks for final examination as per university rules

Pre-requisites

Academic Requirements:

The process of admission well founded and followed as per rules and criteria set by HEC. For this purpose an advertisement is given in the National Newspapers by the Registrar office.

Table 6 : Admission requirements for different academic Programme

Degree	Pre-requisites
Ph.D	M.Sc. (Hons.) Agriculture in Agronomy with minimum CGPA 3 GAT Subject and entry test is compulsory for admission in the Ph.D degree.

Degree Requirements:

Degrees are awarded after completing the required number of credit hours (courses). Minimum Grade Point Average for obtaining the degree is 3. To remain on the roll of the university, a student shall be required to maintain the following minimum GPA/CGPA in each semester.

Table 7: Degree Requirements

Degree	Pre-requisites
Ph.D	Academic minimum score of 3 CGPA, 17 credit hours comprising 7 credits of course work and 10 credits of research thesis, comprehensive examination and thesis writing.

Examination Weightage

In course work, student's evaluation is done by mid-term examination, assignments/presentations/quizzes and final examination. A student, who misses the mid-term

examination, is not allowed a make-up examination and is accorded zero marks in that examination. In case a student does not appear in the final examination of a course, he shall be deemed to have failed in that course. In theory, weightage to each component of examination is as prescribed here under:

Mid Examination	30%
Assignments	10%
Final Examination	60%

For practical examination (if applicable) 100% Weightage is given to practical as scored in the final examination. A student is eligible to sit for the examination provided that he/she has attended not less than 75% of the classes in theory and practical, separately. The minimum pass marks for each course are 40 % for B.Sc.

Standard 2.1:

Assessment of the Curriculum of Agronomy Department

The Curriculum fits very well and satisfies the interior requirements for the program, as specified by the respective accreditation body. The Curriculum satisfied the general arts and professional and other discipline required for the program according to demands and requirements set by the Higher Education Commission (HEC).

Standard 2.1: Curriculum must be consistent & support the program's documented objectives

Table 8: Courses vs Program objectives

Courses	Program objective		
	1	2	3
AGR-701, AGR- 702, AGR-703, AGR-704, AGR-716	+++	, ++	++++
AGR-705, AGR- 706, AGR-708, AGR-709, AGR-717	++	+++	++
AGR-710, AGR- 711, AGR-712, AGR-713, AGR-715	+++	+++	++++
AGR-714, and AGR- 718	+++	++++	++

+ = Relative, ++ = Relative and satisfactory , +++ = Very relevant & very satisfactory, ++++ = Highly relevant & highly satisfactory.

Standard 2.2:**Elements vs courses:****Table 9: Elements vs courses**

Elements	Agronomy Courses
Theoretical background	AGR-701, AGR-702, AGR-703, AGR-704, AGR-705, AGR-706, AGR-708, AGR-709, AGR-710, AGR-711, AGR-712, AGR-713, AGR-714, AGR-715, AGR-716, AGR-717 and AGR-718
Problem analysis/ Solution Design	AGR-707 (Field Crop Experimentation)

Standard 2.3:**Credit hours distribution****Table 10: Credit hours distribution**

Elements	Credit hours/ semester	Total credit hours	Course Work	Research and thesis
Ph.D Agriculture	Minimum 12 Maximum 32	17	7	10

Standard 2.4:**Credit hours and HEC requirement**

The courses offered by the department felicitous to the minimum criteria as laid down by Higher Education Commission.

Standard 2.5:**Attendance requirement**

Attendance required in each course is 75%, below which the student is not allowed to sit in the examination.

Standard 2.6:**Need for IT courses:**

Information technology component of the curriculum must be mixed throughout the program. There is deficiency of information technology related courses but some activities and courses in program are useful to give basic training of IT especially of computer programs.

Standard 2.7:**Enhancement of communication skills**

Two seminars included in the course work topic defence comprehensive viva in addition to the Ph.D research activities enhances oral and written communication skills of the students .

CRITERION 3**LABORATORIES AND COMPUTER FACILITIES****Laboratory Facilities:**

Laboratory titles:

1. Allelopathic Research lab
2. Stress physiology lab
3. General research lab
4. Nutrient efficacy lab

Location and Area:

Faculty of crop and food sciences, Ground floor, Agronomy Department

Objectives:

- Laboratories are used for:
- Practical exercise and testimony to students in their major courses
- Research work for the Master and Ph.d students
- Used for implementing the funded projects by the University, HEC, PSF, PARC and other agencies.
- Laboratories are well spacious and wide and efforts are being made to update these more advanced and sophisticated research in future.

List of instruments:

S/No.	Name of Equipment	Quantity/No.
1.	Heating Drying Cabinet	Three
2.	Water Distillery apparatus	One
3.	Over Head Projector	Two
4.	Computer with Laser Printer	Two
5.	Freezer	One
6.	pH Meter	Two

7.	EC Meter	One
8.	Centrifuge 14000 Rpm	One
9.	Top Loading Balance	Two
10.	Vacuum Pump	One
11.	Water Potential Appratus	One
12.	Water Bath	One
13.	Spectrophotometer	One
14.	Leaf Area Meter	Two
15.	Growth Chamber	Two
16.	Flame Photometer	One
17.	Analytical Balance	Two
18.	Osmometer	One
19.	Chiller	One
20.	Digestion Block	One
21.	Mechanical shaker	One
22.	Electric fan heater	One
23.	Gas heater	One
24.	Book Shelves	One
25.	Spring balance	Two
26.	Tripple beam balance	One
27.	Aquarium pump	Two
28.	Balance electronic	One
29.	Adjustable pipette	Four
30.	Vernier caliper	Six
31.	Seed counter	One
32.	Seed moisture tester	One
33.	Lux meter	One
34.	Balance open pan	One
35.	Drying oven	One
36.	Hot plate	One
37.	Micro kieldah distillation appratus	One
38.	Power sprayer	One
39.	Refrigerator	One
40.	Seed cleaner	One
41.	Seed dispensor machine	One
42.	Bio microscope	One
43.	Laminar flow	One
44.	Growth rack	Two
45.	Incubator	One
46.	Grinding machine	One
47.	Plant cutter	One

Shortcoming in Laboratory facilities:

- For faculty member and Master,s students equipments for growth analysis/physiological pframework are lacking viz. IRGA, chlorophyll meter, moisture monitoring, Neutron probe, tensiometers, water potential measurement devices. etc
- The department lacks lecture rooms so the research labs are being used for classes.
- A green/glass house is direly needed for controlled experiments.

Safety arrangements:

- There is no proper safety arrangement and no security plans are in the case of emergency.
- There is no emergency exit for the lab and classroom.
- No fire extinguishers have been installed in any laboratory.
- No first aid kits/ facilities provided in the laboratory/department.

Standard 3.1:**Laboratory Manuals**

Laboratory manuals of each subject are not available. The department has no library at all. However, individual teachers have their books.

Standard 3.2:**Laboratory Personalsfor Maintenance of Laboratory**

Laboratories are maintained by Lab Assistant (01), and Laboratory Attendants(02).

Standard 3.3: Computing Infrastructure and Facilities

Computer facilities are not available to all faculty members and the master,ss students.

SECTION 4**CRITERION 4****STUDENT SUPPORT AND ADVISING**

University organizes support programs and provides information regarding admission, scholarship schemes, etc. Department in its own capacity arranges orientation and guides

various cultural activities and solve the student's problems, however currently there is no parent teacher association.

Standard 4.1:

Frequency of courses

- Courses are taught as per policy of HEC.
- At master,s level course subjects are offered as per scheme of study provided by HEC and approved.
- Courses are provided according to scheme of study.
- Elective courses are offered as per strategy of HEC and the university.
- For Ph.D a variety of courses are offered according to demand of the profession.

Standard 4.2:

Structure of the courses

- To ensure effective interaction between students and faculty during course formulation both theoretical and practical aspects are focused.
- Theoretical problems are explained and assignment is also given to the students whereas practical are carried out both in the laboratory as well as in the field
- Courses are decided in the board of study meetings.
- Emphasis is always given for an effective interaction between each section.

Standard 4.3:

Guidance to the Students

- Several steps have been taken to provide guidance to the students such as:
- Students are informed about the program requirement through the office of the head of the department.
- Through the personal communication of the teachers with the students.
- Students can also consult their relevant teachers whenever they face any professional problems.
- In case of some problems, Director, Student Affairs is available who is ready to help the students.
- Student can interact with the teachers in university, whenever they need.

- Realizing the need for exploring job opportunities for the university graduates, Directorate of placement bureau has been established at PMAS-AAUR.

CRITERION 5

PROCESS CONTROL

It includes student admission, registration, faculty recruitment activities which are dealt by various statutory bodies and the university administration.

Standard 5.1:

Program admission criteria

The process of admission is well established and followed as per rules and criteria set by HEC. For this purpose an advertisement is given in the National Newspapers by the Registrar office.

Table 11: Admission requirements

Degree	Pre-requisites
Ph.D	M.Sc. (Hons.) Agriculture in Agronomy with minimum CGPA 3 and Gat Subject and entry test is compulsory for admission in the Ph.D degree

Standard 5.2:

Process of registration

- The student name, after completion of the admission process, are forwarded to the registrar office for proper registration in the specific program and registration numbers are issued to the students
- Registration is done for one time for each degree but estimation is done through the result of each semester, if the students fulfill criteria of the university, they are promoted to the next semester.
- In general, the students are registered on merit basis keeping in view the academic and research standards.

Standards 5.3:**Recruiting Process for Faculty**

- Pursuit policy followed the university is recommended by HEC for induction of new faculty is done as per rules:
- Vacant and newly created positions are tout in the National Newspapers, applications are received by the registrar office and call letters are issued to the short listed candidates on the basis of their experiences, qualifications, publications and other qualities / activities as fixed by the university.
- The candidates are interviewed by the university selection Board. Principal and alternate candidate are selected.
- Selection of candidates is approved by the cabinet for issuing orders to join within a specified period.
- Induction of new candidates depends upon the number of sanctioned posts.
- Standard set by HEC are followed.
- At present, no procedure exists for retaining highly qualified faculty members, however, the revised pay scales of structures is quite attractive.
- HEC also supports appointment of highly qualified members as foreign faculty professors, National Professors and place them in several departments of the university.

Standard 5.4:**Teaching and Delivery of Course Material**

- To help providing high quality teaching, Department periodically revises the curriculum depending upon needs, ingenious and new technology
- With the emergence of new fields, new courses are set and included in the curriculum
- Lecture notes are also prepared by the teachers and given the students.
- Most of the lectures are also supplemented by overheads, slides, pictures.
- All-out efforts are made that the courses and knowledge imparted should meet the objectives and outcomes. The progress is regularly reviewed in the staff meetings.

Standard 5-5:**Completion of Program Requirements**

The controller of examinations announces the date of commencement of examination. After ~20-30 days of the examinations, the controller office notifies the results of the students. The evaluation procedure consists of mid and final examinations, practical formulas, assignments and reports, oral and technical presentations. Candidates who secure 80% or more marks are awarded grade A. Gold medals are awarded to the students who secure highest marks. Degrees are awarded to the students on the annual convocation that is held every year.

Examination Weightage**Grading Policy**

A grade = 80 % and above

B grade = 65-79 %

C grade = 50-64 %

D grade = 40-49 %

F grade = below 40 %

CRITERION 6**FACULTY****Standard 6.1:****Full Time Faculty****Table 12: Faculty qualification**

S. No.	Name of faculty member	Designation	Qualification	Name of Country Awarding Highest Degree	Date of Birth	Email address
1.	Dr. Fayyaz-ul-Hassan Sahi	Professor	Ph.D.	Uk	15-05-1963	fayyaz.sahi@uaar.edu.pk
2.	Dr. Muhammad Azim Malik	Professor	Ph.D.	Usa	20-06-	drazim61@gmail.com

					1955	
3.	Dr. Zammurad Iqbal Ahmed	Professor	Ph.D.	PK	01-05-1960	azammurad@htomail.com
4.	Dr. Abdul Razzaq	Professor	Ph.D.	China	01-08-1957	abdul.razzaq@uaar.edu.pk
5.	Mr. Irfan Aziz	Assistant Professor	Ph.D.	PK		dIrfan.aziz@uaar.edu.pk
6.	Dr. Muhammad Ansar	Associate Professor	Ph.D.	UK	14-10-1964	Muhammad.ansar@uaar.edu.pk drmatarar@gmail.com
7.	Dr. Muhammad Rasheed	Assistant Professor	Ph.D.	PK	09-10-1962	drasheed786@gmail.com
8.	Dr. Ghulam Qadir	Associate Professor	Ph.D.	PK	01-12-1968	qadir@uaar.edu.pk
9.	Dr. Mukhtar Ahmed	Assistant Professor	Ph.D.	PK	01-10-1979	mukhtarahmad@uaar.edu.pk
10.	Dr. Abdul Manaf	Assistant Professor	Ph.D.	PK	20-02-1970	munafawan@yahoo.com
11.	Mr. Safdar Ali	Lecturer	M. Sc. (Hons.)	PK	01-10-1974	safdaraliarid@yahoo.com

Table 13. Faculty Distribution by Program Areas in Agronomy

S. No.	Area of Specialization	Faculty members
--------	------------------------	-----------------

1.	Integrated Weed Management, Zero-tillage, Allelopathy	Prof.Dr. Muhammad Azim Malik, Mr. Safdar Ali
2.	Oilseed Crops, Crop Water Management	Prof.Dr. Fayyaz-ul-Hassan, Dr. Ghulam Qadir Dr. Abdul Manaf
3.	Integrated Plant Nutrient Management, Drought Stress physiology,	Prof.Dr. Zammurad Iqbal Ahmed, Dr. Muhammad Rasheed
4.	Stress Physiology, Genetic Transformation of Crops.	Dr. Abdul Razzaq
5.	Fodder & Forage Production	Dr. Muhammad Ansar
6.	Plant Physiology, Crop Growth Modeling and climate change, NRM & GIS	Mr. Naveed Tahir Mr. Mukhtar Ahmed Mr Irfan Aziz

List of publications

1. Prof. Dr. Muhammad Azim Malik

1. Sher, A., M. Ansar, F.U. Hassan, G. Shabbir and M.A . Malik, 2012. Hydrocyanic acid contents variation amongst sorghum cultivars grown with varying seed rates and nitrogen levels. Int. J. Agric. Biol. , 14: 720-726
2. ParvezKhaliq, Azim Malik, Nasir Mahmood Cheema and Muhammad Umair.2012 Economics of wheat based cropping systems in rainfed areas of PakistanPakistan J. Agric. Res. Vol. 25 No. 3, 2012
3. Zahid, A.; A. Khanum; M. Ansar and M.A. Malik. 2012. Effect of cutting and post-cutting intervals on hydrogen cyanide in sorghum forage grown under rainfed conditions. Pak. J. Bot. 44(3):955-960
4. Sher, A., M. Ansar, G. Shabbir, M. A. Malik, A. Wasaya and R. H. Qureshi. 2012. Variability of hydrocyanic acids in fresh leaves of forage sorghum (*Sorghum Bicolor* (L.) Moench) grown under different soil moisture regimes. Submitted in Archive De Science Journal. Invoice Number ETuBwUW.
5. **Malik, M.A.**, F. Zahoor, M. R. Anser, M. Rasheed and S. H. Raza. 2012. Weed biomass and economic yield of wheat (*Triticum aestivum*) as influenced by chemical weed control under rainfed conditions. African J. Biotech. 11(7): 1567-1573. DOI: 10.5897/AJB11.154.

6. Ahmad Sher, Lorenzo Barbanti, M. Ansar and **M A Malik**, 2013. Growth response and plant water status in forage sorghum (*sorghum bicolor* (L.) Moench cultivars subjected

2. Prof.Dr. Fayyaz-ul-Hassan

- i. **Fayyaz-ul-Hassan** & Shauib Kaleem, 2014. Influence of seasonal disparity on NPK uptake in Sunflower. *J. Anim. & Plant Sci.* 24:190-196. Publisher: *Pakistan Agriculture Scientists Forum, Lahore*, (Impact Factor: 0.539).
- ii. Hussain S, **Fayyaz- Ul- Hassan**, M. Rasheed, S. Ali and M. Ahmed. (2014). Effects of allelopathic crop water extracts and their combinations on weeds and yield of rainfed wheat. *J. of Food, Agric. & Environment* 12 : 161 - 167 . **(IF:0.579)**. Publisher: *WFL Publisher, Helsinki, Finland*
- iii. Malik, M.A., K.S. Khan, **Fayyaz-Ul-Hassan** and A. Umair, 2014. Dynamics of phosphorus pools in subtropical alkaline soils. *Int. J. Agric. Biol.*, 16: 293–299. Publisher: *Friends Science Publisher, Faisalabad*. (Impact Factor: 0.935).
- iv. Rehman H. U., M. Q. Nawaz, S. M. A. Basra, I. Afzal, A. Yasmeen and **Fayyaz ul-Hassan**. 2014. Seed priming influence on early crop growth, phenological development and yield performance of Linola (*Linum usitatissimum* L.). *Journal of Integrative Agriculture*, 13(5):990-996. Publisher: *Elsevier*, (Impact Factor. 0.435).
- v. Mukhtar Ahmed, M. Aqeel Aslam, **Fayyaz-Ul-Hassan**, M. Asif and Riffat Hayat, 2014. Use of APSIM to model nitrogen use efficiency of rain-fed Wheat. *Int. J. Agric. & Biol.* 16:461-470. Publisher: *Friends Science Publisher, Faisalabad*. (Impact Factor: 0.935).
- vi. M. Ahmad, L. K. Teong, S. Sultana, I. U. Khan, A. A. Zuhairi, M. Zafar & **Fayyaz-ul-Hassan**, 2014. Optimization of Biodiesel Production from *Carthamus tinctorius* L. Cv. Thori 78: A Novel Cultivar of Safflower Crop. *International Journal of Green Energy*. DOI:10.1080/15435075.2013.841165. Publisher: *Taylor & Francis*, (Impact Factor. 2.761).
- vii. Zafar Abbas, M. Akmal, K. S. Khan and **Fayyaz-ul-Hassan**. 2014. Effect of Buctril Super (Bromoxynil) Herbicide on Soil Microbial Biomass and Bacterial Population. *Braz. Arch. Biol. Technol.* 57:9-14. Publisher: *Technology Institute of Paraná – Tecpar, Brazil* (Impact Factor: 0.436)
- viii. S. Sultana, A. Khalid, M. Ahmad, A. A. Zuhairi, L. K. Teong, M. Zafar & **Fayyaz ul-Hassan** (2013): Production, optimization and characterization of biodiesel from a novel source: *Sinapis alba* L. *International Journal of Green Energy*, 11:280-29. Publisher: *Taylor & Francis*, (Impact Factor. 2.761).
- ix. Ahmad M., **Fayyaz-ul-Hassan** & M. Asif. 2014. Amelioration of Drought in Sorghum (*Sorghum bicolor* L.) by Silicon. *Comm. Soil Sci. & Pt. An.* 45(4):470-486. Publisher: *Taylor & Francis*, (Impact Factor: 0.432)

- x. Ahmad M. M. Asif & **Fayyaz-ul-Hassan**. 2014. Augmenting drought tolerance in sorghum by silicon nutrition. *Acta Physiol Plant.*36:473-483(**IF 2.36**). Publisher: *Springer*, (Impact Factor: 1.524) .
- xi. Qudsia Bano, Noshin Ilyas, Asghari Bano, Nadia Zafar, Abida Ikram &**Fayyaz-ul-Hassan**. 2013. Effect of *AZOSPIRILLUM* inoculation on Maize (*Zea mays* L) under drought stress. *Pak. J. Bot.* 45:13-20. Publisher: *Pakistan Botanical Society*, (Impact Factor: 1.207).
- xii. Malik, M.A., K.S. Khan, P. Marschner and **Fayyaz-ul-Hassan**, 2013. Microbial biomass, nutrient availability and nutrient uptake by wheat in two soils with organic amendments. *Jour. of Soil Science and Plant Nutr.*, 13 (4), 955-966. Publisher: *Chilean Society of Soil Science* (Impact Factor: 0.779).
- xiii. A. Wasaya, R. Ahmad, **Fayyaz-Ul-Hassan**, M. Ansar, A. Manaf and A. Sher. 2013. Enhancing crop productivity through wheat (*Triticum aestivum* L)-Fenugreek intercropping system. *J. Anim. & Plant Sci.* 23:210-215. Publisher: *Pakistan Agriculture Scientists Forum, Lahore* (Impact Factor: 0.539).
- xiv. Shamim Akhtar, Armghan Shahzad, Muhammad Arashad &**Fayyaz-ul-Hassan**. 2013. Morpho-physiological evaluation of Groundnut (*Arachis hypogaea* L) genotypes for iron deficiency tolerance. *Pak. Jour. Bot.*, 45(3): 893-899. Publisher: *Pakistan Botanical Society*, (Impact Factor: 0.94).
- xv. **Fayyaz-ul-Hassan** and Muhammad Arif. 2012. Response of white Mustard (*SINAPIS ALBA* L) to spacing under rainfed conditions *J. Anim. & Plant Sci.* 22:137-141. Publisher: *Pakistan Agriculture Scientists Forum, Lahore* (Impact Factor: 0.638).
- xvi. Ahmad Sher, Muhammad Ansar, **Fayyaz-ul-Hassan**, Ghulam Shabbir and Muhammad Azim Malik. 2012. Hydrocyanic Acid Content Variation amongst Sorghum Cultivars Grown with Varying Seed Rates and Nitrogen Levels. *Int. J. Agric. & Biol.* 14:720-726. Publisher: *Friends Science Publisher, Faisalabad*. (Impact Factor: 0.808).
- xvii. Mukhtar Ahmed, **Fayyaz-Ul-Hassan**, M. Aslam and M.A. Aslam. 2012. Physiological Attributes Based Resilience of Wheat to Climate Change. *Int. J. Agric. & Biol.* 14:407-412. Publisher: *Friends Science Publisher, Faisalabad*. (Impact Factor: 0.808).
- xviii. Muhammad Akmal, M.S. Altaf, R. Hayat, **Fayyaz-ul-Hassan**, M. Islam. 2012. Temporal changes in soil urease, alkaline phosphatase and Dehydrogenase activity in rainfed wheat field of Pakistan. *J. Anim. & Plant Sci.* 22:457-462. Publisher: *Pakistan Agriculture Scientists Forum, Lahore* (Impact Factor: 0.638) .
- xix. Mukhtar Ahmed, **Fayyaz-ul Hassan** and M. Asif. 2012. Physiological response of bread wheat (*Triticum aestivum* L.) to high temperature and moisture stresses. *Aust. J Crop Sci.* 6:749-755. Publisher: *Southern Cross Publishing Group, Australia* (Impact Factor: 1.623).
- xx. **Fayyaz-ul-Hassan** and Mukhtar Ahmed 2012. Oil and fatty acid composition of peanut cultivars grown in Pakistan. *Pak. Jour. of Botany*, 44(2):627-630. Publisher: *Pakistan Botanical Society*, (Impact Factor: 0.94).

xxi. Muhammad Islam, S. Ali, S. Mohsin, R. Khalid, **Fayyaz-ul-Hassan**, A. Mehmood and S. Afzal. 2012. Relative efficiency of two sulfur sources regarding nitrogen fixation and yield of Chickpea. *Communications in Soil Science and Plant Analysis*, 43:811–820, Publisher: *Taylor & Francis*, (Impact Factor: 0.432).

3. Dr. Zammurad Iqbal Ahmed

- i. Khan, F. S., Z. I. Ahmed, M. Ansar and H. Shah. 2008. Response of mungbean genotype to Rhizobium inoculum and varying levels of nitrogen fertilizers. *Pak. J. Agric. Res.* 21 (1-4): 33-44.
- ii. Ahmed, Z. I., M. Ansar, M. Tariq and M. S. Anjum. 2008. Effect of different Rhizobium inoculation methods on performance of lentil in Pothowar region. *Int. J. Agri. Biol.* 10 (1): 81-84.
- iii. Zhang, F., Z. L. Jin, M. S. Naeem, Z. I. Ahmed, H. J. Gong, L. Lu, Q. F. Ye and W. J. Zhou. 2009. Spatial and temporal changes in acetolactate synthase activity as affected by new herbicide ZJ0273 in rapeseed, barley and water chickweed. *Pestic. Biochem. Physiol.* 95: 63-71.
- iv. Ahmed, Z. I., M. Ansar, M. Iqbal and N. M. Minhas. 2009. Effect of different planting geometry and wheat straw mulch on performance of wheat under rainfed conditions of Pothowar. *Pak. J. Agric. Res.* 22 (3-4): 112-115.
- v. Ansar, M., Z. I. Ahmed, M. A. Malik, M. Nadeem, A. Majeed and B. A. Rischkowsky. 2010. Forage yield and quality potential of winter cereal-vetch mixtures under rainfed conditions. *Emir. J. Food Agric.* 22 (1): 25-36.
- vi. Jin, Z.L. F. Zhang, Z.I. Ahmed, M. Rasheed, M.S. Naeem, Q.F. Ye, W.J. Zhou. 2010. Differential morphological and physiological responses of two oilseed Brassica species to a new herbicide ZJ0273 used in rapeseed fields *Pestic. Biochem. Physiol.* In Press, Corrected Proof, Available online 18 April
- vii. Ullah, N., L. Xu, Z. I. Ahmed, M. Rasheed, G. Jilani, M. S. Naeem, W. Shen and W. Zhou. 2011. Ultraviolet-C mediated physiological and ultrastructural alteration in *Juncus effuses* L. shoots. *Acta Physiologiae Plantarum*: 33(2) 481-488.
- viii. Saleem, R., Z. I. Ahmed, M. Ashraf, M. Arif, M. A. Malik, M. Munir and M. A. Khan. 2011. Response of maize-legume intercropping system to different fertility sources under rainfed conditions. 27(4). In Press.

- ix. Anwar, A., M. Ansar, Z. I. Ahmed, M. Nadeem, G. Ahmed, S. Khan and A. Hussain. 2009. Performance of non-traditional winter legumes with oat for forage yield and soil health under rainfed conditions. J. Agri. Res. (Submitted).

1. Dr. Abdul Razzaq

1. **Razzaq, A.**, Q. Ali, A. Qayyum, I. Mahmood, M. Ahmad and M. Rasheed. 2013. Physiological responses and drought resistance index of nine wheat (*Triticum aestivum* L.) cultivars under different moisture conditions. Pak. J. Bot., 45(SI): 151-155 (IF 0.937).
2. Khalid M., M. Arshad, G. M. Ali and **A. Razzaq**. 2013. Tissue culture responses of some wheat (*Triticum aestivum* L.) cultivars grown in Pakistan. Pak. J. Bot., 45(SI): 545-549 (IF 0.937).
3. Chaudhry, A. N., M. A. Naeem, G. Jilani, **A. Razzaq**, D. Zhang. M. Azeem and M. Ahmad. 2013. Influence of composting and poultry litter storage methods on mineralization and nutrient dynamics. J. Ani.Plant Sci. 23(2): 500-506 (IF 0.250)
4. Rao, S.R., A. Qayyum, **A. Razzaq**, M. Ahmad, A. Sher. 2012. Role of foliar application of salicylic acid and L-tryptophan in drought tolerance of maize. J. Ani.Plant Sci., 22 (3): 768-772 (IF 0.937).
5. Mahmood, I., A. Razzaq, Z. Khan, I.A. Hafiz, and S. Kaleem. 2012. Evaluation of tissue culture responses of promising wheat (*Triticum aestivum* L.) cultivars and development of efficient regeneration system. Pak. J. Bot. (Special Issue) 44: 277-284 (IF 0.937)

2. Dr. Ghulam Qadir

- i. Riaz, A., Jane Nicklin, Irfan-ul-Huq, Abdur Rauf, G. Qadir and F. Naz. 2013. Toxicity Induced by Solanapyrone in Chickpea shoots and its Metabolism through Glutathione/Glutathione-S-Transferase System. Pak. J. Botany. Vol.45 (1): 135-139. (Impact Factor)
- ii. Qadir, G., M. Ikram, F. Hassan and R. Hayat. 2014. Interactive effect of Humic Acid and plant growth promoting Rhizobacteria (PGPR) on growth and yield of maize under rainfed conditions. Ref. No Pass/UCA/305. (Accepted- Hec. Recognized).
- iii. Ali, Amjid, Rabia Khalid, G. Qadir, S. Ali, Z. Akram and R. Hayat. 2014. Plant growth promoting characterization of Rhizosphere bacteria and re-inoculation response of Chickpea (*Cicer arietinum* L.). Ref. No Pass/UCA/287. (Accepted-Hec. Recognized)
- iv. Baloch, Nadir, M. Yousaf, W. P. Akhtar, Shah, F. B. Ullaha, G. Qadir and Z. I. Ahmad. 2014. Integrated Effect Of phosphate solubilizing bacteria and Humic acid on physiomorphic attributes of maize. Int J. of current microbiology and applied sciences, Internat. J. Agro Biol.)

- v. Tareen.H.Ullaha,Ch.A.Rauf,G.Qadir and A.R.Bhutta.2014. Biological studies on seed bormn mycoflora of exotic tomato seeds. P.J. Phytophatology.26(02): 271-279.
3(6) (549-554) 2014.

Standard 6.2:

Effective Programs for Faculty Development.

- Professional training and falibility of adequate research and academic facilities are provided to the faculty members according to the available resources.
- Currently one faculty member is abroad for post-Doc as sponsored by the HEC.
- Incentives in the form of allowances to theses supervisors have been implemented lately to promote high standard research.□
- Existing facilities include mainly internet access, which is available through networking system in addition to library facility with latest books also available.
- Effective programs for faculty development have been introduced.

Standard 6.3:

Faculty member motivation

- Time to time provision of enthusiasm to the young faculty by the senior faculty members.

CRITERION 7

INSTITUTIONAL FACILITIES

Standard 7.1:

Infrastructure

- The department must have the base to support new trends in learning and research.
- Department has established new laboratory for research related to crop physiology and working on developing new more laboratories.
- Equipments are not adequatet to meet the current requirement of research.

Lack of Institutional Facilities

- Insufficient facilities related to the infrastructure to support new trends in learning or prevalent.
- Department library must be developed to provide support to graduate and post graduate students.
- Computer facilities should be provided to the staff and postgraduate students.
- Offices must be adequate to enable faculty to carry out their responsibility.

Standard 7.2:

Library Facilities

The university Central Library has very limited number of books, journals and periodicals. It's a small library in term of space and facilities with no catalogue systems. It does not meet the standards of a university library. Department itself does not have a library.

Standard 7.3:

Class Room and Faculty Offices

No class room available. Research laboratories are being used for teaching purpose also, which affect the working of research students. Two to three teachers are sharing rooms. Unavailability of most modern and related books and internet affects the quality of teaching. Common room for students is also missing.

CRITERION 8

INSTITUTIONAL SUPPORT

- Institutional support is highly accorded.
- Sufficient secretarial support, technical staff and office equipment.
- The upgradation of existing teaching cadre also provided and added advantage in retaining the present faculty.

Lack of Institutional support

- Financial support should be increased and allocate funds for postgraduate research students.
- Due to unavailability of class rooms, classes are taken in the laboratories.

Standard 8.1:

Support and financial resources

The department has limited funds and Individual research grants for students and faculty are mainly supporting the departmental research activities. There is a need for increasing the financial resources allocated to the department to establish a library, laboratories and computer facilities.

Standard 8.2:

High quality Research scholars

The intake is once in a year. A strict merit policy applies and University test/GAT is preferred.

Standard 8.3:

Financial resources

To fulfill the Total budget of the department of agronomy for the financial years 2008-09 and 2009-10 was Rs. 24000 and 202000 respectively which does not fulfil departmental needs particularly for the purchase of equipment, chemicals etc

List of Enrolment for last few years

Around 5-7 students get admission in Ph.D Agriculture in Agronomy every year.

SUMMARY

Agronomy is an important discipline that surrounded all aspects of crop production and soil management. The Mission of Agronomy department is to equip and impart training to Ph.D students for high-quality research & education for their professional skills and expertise in the field of agriculture. The Ph.D degree program was started in the department during 1996. The Department has supposed the well structured academic and research programme for Ph.D studies. The courses aim to develop and strengthen students capability to grasp principles and practices for Agronomic studies based on scientific methods in field as well as in laboratory. The strong academics enables them to specialize in one or more areas reflecting the student's particular interest. Specialization in Agronomy have input considerate of the current concepts of crop and edaphic practices. In addition they have sufficient specialist knowledge in selected

areas to allow them to pursue a research degree in crop science. Ph.D students acquire scientific background as well as having gained experience in problem solving and have developed the communication, numerical and computer skills required for a wide range of careers.

Different methods of evaluation have been used to assess that whether department is fulfilling its objectives or not. Course evaluation, teacher evaluation, alumni survey, research/graduating students surveys and faculty survey etc. have been conducted by the departmental members. Specified prescribed performa have been used to collect the above mentioned survey data. The collected data have been analyzed and presented in the form of graphs and tables. After analysis of data it has been concluded that students are contented with the approaching to subject and methods of teaching by the faculty teachers. They were more happy to see the unbiased attitude in examination, grading and approach to scientific research by the faculty members. However, department is facing many problems but the limited availability of well established lecture rooms and insufficient equipments available in laboratories were reported as major issue for research. Senior student researcher have serious concern about the accessibility of internet and to various scientific journals is not enough to study latest research papers, which should be extended. In the same way, the department has limited availability of budget for research purposes which is not sufficient to maintain laboratories and research activities. According to employer survey, students are doing their job best but they are lacking the knowledge of information technology and computer skills. Faculty members are pleased with their salaries which should be increased with the inflation rate of market and they are satisfied with their workload as most of them are agreed.

Some courses were rated as excellent but lengthy. Overall, the program of study was rated very good.

Most faculty members of the department are qualified and experienced having post doctorate research experience from world renowned universities. About 45 publications have been made in National and International reputed journals by the faculty members during last five years. Furthermore, five research projects were completed during the aforesaid period; lack of infrastructure to transfer the recommended practices and technology to farmers. Admittance to latest literature and availability of updated review is not up to the mark. There is a need for short foreign trainings of young faculty members.

The performance of the department may be further improved considering;

- Scattered class rooms are needed to facilitate the post-graduate students to continue laboratory works without breaks.
- Departmental Laboratories need to be well equipped with new equipments.
- There is also need that the post graduate research should be focused on the current regional issues.
- The professional trainings are very important for the modern research techniques of the staff. Such trainings will improve their abilities for attractive the quality of research and teaching. The budget allocated to the department hardly meets the requirements of the research, that should be increased.
- At present there is no departmental library. Allocation of sufficient funds for this purpose will be helpful in subscribing reputed journals and purchase of books that will ultimately boost quality of learning, teaching and research.

Annexure-1

List of Courses offered by the Department of Agronomy for Ph.D Agronomy

S. No	Course No.	Title	Credit Hours
2.	AGR-702	Advanced Agronomy	4(3-2)
3.	AGR-703	Dryland Agro Management	3(3-0)
5.	AGR-705	Sustainable Agriculture	3(3-0)
7.	AGR-707	Field Crop Experimentation	4(3-2)
8.	AGR-708	Advanced Seed Techonology	4(3-2)
9.	AGR-709	Heribicides and Crop Production	4(3-2)
10.	AGR-710	Crop Nutrition	3(2-2)
12.	AGR-712	Plant Water Relations	3(2-2)
13.	AGR-713	Seed Physiology	3(3-0)
15.	AGR-715	Seed Production and Management	3(2-2)
16.	AGR-716	Principles of Remote Sensing	3(2-2)
17.	AGR-717	Integrated Agriculture	3(3-0)
20.	AGR-720	Seminar-I	1(1-0)
		Seminar-II	1(1-0)

Annexure-2

Proforma 9

FACULTY RESUME



Name	Dr. Zammurad Iqbal Ahmed
Personal	Father's Name : Ghulam Ahmed Date of Birth : 1st May 1960 Phone : 051-9062256, Cell 0333-5101247 E-mail : azammurad@hotmail.com Address : House # 11, University Colony # 2, Opposite Divisional Public School, Shamsabad, Rawalpindi, Pakistan Academic Qualification: I did my B.Sc. (Hons) and M.Sc. (Hons) degrees in Agronomy from University of Agriculture, Faisalabad in 1984 and 1984 respectively. Whereas, Ph.D in Agronomy with dissertation title as "Morpho. Genetic expression of sunflower under varied Temperature and Moisture regimes" in 1996 from University of Agriculture, Faisalabad. and MBA- Human Resource Management in 2004 from PMAS-AAUR. I did my Post doctorate from Zhejiang University, China in 2008.
EXPERIENCE	I served as Lecturer in Agronomy (BPS 17) at NARC, Islamabad w.e.f. 28.4.1998 to 14-10-2006 and Assistant professor (BPS 18) from 14-10-2006 to May, 2010 and as Associate professor w.e.f. 19-05 2010 to Aug, 2014 and promoted Professor Agronomy in Aug, 2014. at PMAS -AAUR . I am member of Academic Council and Faculty Board of Studies. I have also the charge of Head of the Department of Library for ten years. I had been Hall Warden for about two years and member of Central Purchase Committee of the University. Member of National Curriculum Revision Committee of Higher Education Commission. .
Publications	Impact factor- HEC recognized- Non HEC recognized-
Supervised Students	Number of students who were supervised and completed their M.Sc (Hons) degree-08 Ph.D -
Service Activity	Teaching and Research.
Research Grants and Contracts	Title: Promotion of Safflower through participatory approach in Pothwar. Value: Rs. 3.017 Million Agency: Agricultural Linkage Program, Pak. Agric. Res. Council, Islamabad. Duration: 2012-2015.

Proforma 9

Name	Prof. Dr. Fayyaz Ul Hassan																					
Personal	Professor of Agronomy Phone Office: +92-51-9062217, Cell: 0300-9514597 Department of Agronomy Fax Office: +92-51-9290160 University of Arid Agriculture, e-mail: fayyaz.sahi@uaar.edu.pk Rawalpindi drsahi63@gmail.com Phone Residence: +92-51-4848187																					
	Name Fayyaz-ul-Hassan Date of Birth 15-05-1963 Father's Name Abdul Latif Permanent Address Village & Post Office TOOR, Teh. & Distt. JHELMUM																					
	EDUCATION <table border="0"> <thead> <tr> <th>University/Board</th><th>Degree</th><th>Year</th></tr> </thead> <tbody> <tr> <td>Curtin University of Technology, Perth, Australia</td><td>Post Doc</td><td>2007</td></tr> <tr> <td>University of Wales Aberystwyth (UK)</td><td>PhD</td><td>1995</td></tr> <tr> <td>University of Agriculture, Faisalabad (Pakistan)</td><td>M.Sc(Hons)</td><td>1988</td></tr> <tr> <td>University of Agriculture, Faisalabad (Pakistan)</td><td>B.Sc(Hons)</td><td>1986</td></tr> <tr> <td>Board of Intermediate & Secondary Education, Mirpur</td><td>F.Sc(Pre-medical)</td><td>1981</td></tr> <tr> <td>Board of Intermediate & Secondary Education, Rawalpindi</td><td>Matric(Science)</td><td>1979</td></tr> </tbody> </table>	University/Board	Degree	Year	Curtin University of Technology, Perth, Australia	Post Doc	2007	University of Wales Aberystwyth (UK)	PhD	1995	University of Agriculture, Faisalabad (Pakistan)	M.Sc(Hons)	1988	University of Agriculture, Faisalabad (Pakistan)	B.Sc(Hons)	1986	Board of Intermediate & Secondary Education, Mirpur	F.Sc(Pre-medical)	1981	Board of Intermediate & Secondary Education, Rawalpindi	Matric(Science)	1979
	University/Board	Degree	Year																			
Curtin University of Technology, Perth, Australia	Post Doc	2007																				
University of Wales Aberystwyth (UK)	PhD	1995																				
University of Agriculture, Faisalabad (Pakistan)	M.Sc(Hons)	1988																				
University of Agriculture, Faisalabad (Pakistan)	B.Sc(Hons)	1986																				
Board of Intermediate & Secondary Education, Mirpur	F.Sc(Pre-medical)	1981																				
Board of Intermediate & Secondary Education, Rawalpindi	Matric(Science)	1979																				
As Professor 23-06-07 to date Main Duties: • Teaching postgraduate and undergraduate courses. • Supervision of PhD and M.Sc student's research. • Planning & Management of University Research Farm. • Planning & Execution of cropping pattern/ scheme at Research Farm. • Writing, planning and execution of research projects. • Financial and operational management of research projects & Farm. As Associate Professor 29-05-04 to date 22-06-2007 Main Duties: • Teaching postgraduate and undergraduate courses. • Supervision of PhD and M.Sc student's research. • Writing, planning and execution of research projects. • Data recording, writing and compilation of annual reports of research projects.																						

- Financial and operational management of projects.
- Advisory service when and where needed.

As Assistant Professor: From 22-1-1998 to 29-05-04

Main Duties:

- Teaching postgraduate and undergraduate courses.
- Supervision of student's research.
- Planning, execution, data collection of research projects.
- Management and maintenance of department laboratories.
- Coordination amongst departments for timetable/date sheet etc.
- Checking/review of student's thesis at University level.
-

As Assistant Agronomist (Water Management): From 15-1-1992 to 22-1-1998.

Main Duties:

- Supervision and guidance of field staff related to agronomic development activities.
- Preparation of PC-1 of development schemes related to soil and water conservation.
- Training of field staff and farmers for farm designing, layout and management.
- Community mobilization and organization for water management activities.
- Demonstration and layout of sprinkler and drip irrigation systems.
- Preparation and presentation of monthly and annual reports.
- Farm advisory service when and where needed.

As Agricultural Officer (Water Management): From 16-11-1989 to 15-1-1992.

Main Duties:

- Supervision and guidance of field staff related to field activities.
- Preparation of monthly, semi annual and annual reports.
- Training of field staff and farmers for farm designing, layout and management.
- Farmers mobilization and organization to benefit from development projects.
- Office supervision and management.

Assistant Research Officer: From 1-1-1989 to 15-11-1989.

Main Duties:

- Planning, layout and execution of research experiments.
- Data recording/collection, analysis and writing results/reports.
- Farm management including resource mobilization and utilization.
- Farm inventory preparation/compilation.

	MANAGEMENT EXPERIENCE Assistant Warden, From July, 1993 to September, 1995, Cwrt Mawr student's Hall of Residence, University of Wales Aberystwyth (UK).
Honor and Awards	Ministry of Education Scholarship for PhD 1992. Overseas Research Students Award 1994-95 (Awarded by CVCP UK). Endeavour Pakistan Research Award by Govt. of Australia, 2007
Graduate Students Postdocs Undergraduate Students Honour Students	Number of students who were supervised and completed their degrees
Service Activity	Teaching and Research.
Research Grants and Contracts	Title: Promotion of Safflower through participatory approach in Pothwar. Value: Rs. 3.017 Million Agency: Agricultural Linkage Program, Pak. Agric. Res. Council, Islamabad. Duration: 2012-2015.

Brief Statement of Research Interest	• Crop production and Management. • Oilseed crop production and enhancement. • Water management and conservation.
Publications	Impact factor- 21 HEC recognized- 0 Non HEC recognized- 0
Supervised Students	Number of students who were supervised and completed their M.Sc (Hons) degree- Ph.D -
Service Activity	Teaching and research
Research Grants and Contracts	Nil

Proforma 9

Name	Muhammad Azim Malik				
Personal	Date & Place of Birth:	June 20, 1955, Mainwali,			
	Present Position	Chairman and Professor of Agronomy			
	Qualifications				
	S/No.	Name of Institution	Degree/Diploma	Year	Division
	1	University of Wyoming, Laramie, USA	Ph. D. Agronomy	1990	CGPA (3.54)
	2	University of Agriculture, Faisalabad	M. Sc. (Hons.) Agronomy	1979	1 st
	3	University of Agriculture, Faisalabad	B. Sc. (Hons.)	1976	1 st
	4	University of Agriculture, Faisalabad	F. Sc.	1973	2 nd
	5	Govt. High School PiplanDistt. Mainwali	Matriculation	1971	1 st
	Experience	I served as Assistant Agronomist, w.e.f. 05-05-1979 to 11-30-1981 at PARI, Faisalabad and Farm Manager from 24-02-1982 to 05-07-1985, Assistant Professor, 06-07-1985 to 04-04-1994, w.e.f 05-04-1994 to 15-08-2003 as Associate Professor and Professor of Agronomy, 16-08-2003 to to-date at PMAS-AAUR.			
Honor and Awards		• Served for 3 years as member on National Curriculum Review Committee of Crop Physiology, University of Agriculture, Faisalabad			

	- Served for 3 years as member on Finance & Planning Committee, University of Arid Agriculture, Rawalpindi - Serving since 1996 as member of academic council, University of Arid Agriculture, Rawalpindi - Serving since 1994 as member on several postgraduate supervisory committees of different disciplines in University of Arid Agriculture, Rawalpindi - Serving as Senior Tutor since April 1st, 2003 in University of Arid Agriculture, Rawalpindi
Publications	Impact factor- 01 HEC recognized- 01 Non HEC recognized- 04
Supervised Students	Number of students who were supervised and completed their M.Sc (Hons) degree-06 Ph.D -03
Service Activity	Teaching and research
Research Grants and Contracts	Nil

Proforma 9

Name Dr. Ghulam Qadir	
Personal	Father name: Malik Umar Hayat Date of birth: December 1, 1968 Ph: 92-51-4251667,0333 5101301 Email: qadir@uaar.edu.pk Place of birth: Jhang (Pakistan) Nationality: Pakistani Mailing address: H#20 colony #1, PMAS, Arid Agriculture, University, Murree Road Rawalpindi. Contact: 03335101301, 0514426318 Academic Qualification: I did my B.Sc. (Hons) and M.Sc. (Hons) degrees in Agronomy from University of Agriculture, Faisalabad in 1990 and 1993 respectively. Whereas, Ph.D in Agronomy with dissertation title as "Morpho. Genetic expression of sunflower under varied Temperature and Moisture regimes" in 2006 from PMAS – AAUR and Post doctorate from Imperial college London UK and post doc from Saskatchewan university Canada.
Experience	I served as Science Officer (BPS 17) at NARC, Islamabad w.e.f. 07.9.1993 to 28.4.1998. 2. Served as Lecturer in Agronomy (BPS 17) w.e.f. 28.4.1998 to 14-10-2006 and Assistant professor (BPS 18) from 14-10-2006 to May, 2010 and as Associate professor w.e.f. 28-05 2010 to onward at PMAS -AAUR
Honor and Awards	Won the indigenous PhD Scholarship sponsored by Ministry of Science & Technology under the supervision of HEC in the first batch in open competition in 2001. Won common

	wealth award for post doctorate for 2011-2012.Awarded post doc fellowship by HEC.
Memberships	Pakistan Botanical Society Pakistan Agricultural Scientist Forum Pakistan Agronomy Society Pakistan Weed Science Society American Association for cereal chemist.
Graduate Students Postdocs Undergraduate Students Honour Students	Number of students who were supervised and completed their M.Sc (Hons) degree-10 Ph.D – one
Service Activity	Teaching and Research.
Publications	i. Impact factor-01 ii. HEC recognized-03 iii. Non HEC recognized-01
Research Grants and Contracts.	Research projects:. Nil Project submitted: one

Name Irfan Aziz	
Personal	Residence: House No.SA870/D Street No 2 Sadiqabad, Rawalpindi, Pakistan. Phone: +92-51-4845917 Mobil 03005336016 Academic Qualification: I did my B.Sc. (Hons) and M.Sc. (Hons) degrees in Agronomy from University of Agriculture , Faisalabad in 1988 and 1991 respectively. Professional Master in ITC, Netherlands in 2000. Whereas, Ph.D in Agronomy was awarded in 2006 by PMAS – AAUR. I have good knowledge and experience of following computer packages. ILIWIS 2.2 (GIS Database, Analysis, Visualization/Presentation). Windisp (Handling of NOAA Data/NDVI). Eeccrop. (Crops Ecological Requirements). Cropwat. (Crop water Requirement). PS123. (Simulation Crop growth Modelling). Manitab. (Data Analysis). SPSS (Data Analysis). Arc view (GIS operations). Windows NT (Report writing, presentations). MS.Excel (Data entering /Database/Analysis). Internet surfing (Extracting Informations).
Experience	1.I served as Lecturer in Agronomy (BPS 17) w.e.f. 15-8-1997 to 06-01-2005 and Assistant professor (BPS 18) from 07-01-2005 to onward in the Agronomy Department at PMAS-AAUR.
Publication	Impact factor- HEC recognized-
Supervised Students	Number of students who completed M.Sc (Hons) degree- Ph.D -
Service Activity	Teaching and Research.
International Presentations	i. OS Digital products, applications using OS DATA AND OS data on the Internet. ii. Information about the Digital National Framework. iii. Data collection in the field using P at Geography RISM, Department. University of Southampton, Southampton, United Kingdom.