Pir Mehr Ali Shah

ARID AGRICULTURE UNIVERSITY

RAWALPINDI

DEPARTMENT OF AGRONOMY

Self Assessment Report
Ph.D Agronomy
2014

Program Team

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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 program:

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 condimention of students have to be stretched out by research stationed 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:
Departments 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 accorded 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 clousing 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>
<thead>
<tr>
<th>Table 1:</th>
<th>Objective Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>sr. #</strong></td>
<td><strong>Objectives</strong></td>
</tr>
<tr>
<td>1</td>
<td>Multi-dimensional courses of Agronomy.</td>
</tr>
<tr>
<td>2</td>
<td>Cultural and useful information to the Ph.D students</td>
</tr>
</tbody>
</table>
### Progress in Agronomy Department for Master’s education

After knowing about new one technology in agronomy  
As a essential need new technology shoul be practiced  
Progressive and suitable style is required  
. Comprehensive and research methods are induced.

<table>
<thead>
<tr>
<th>Sr. #</th>
<th>Innovation of new techniques in researchable area</th>
<th>By making up to date advancement in agronomy</th>
<th>It is a stable process.</th>
<th>Fresh and innovation based programs are intented to include in course</th>
<th>Faculty has entangle the approval of innovative and advance programes</th>
</tr>
</thead>
</table>

#### Standard 1.2:  
**Objectives vs. Outcomes**

**Table 2: Objectives vs. Outcomes**

<table>
<thead>
<tr>
<th>Sr. #</th>
<th>Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>1</td>
<td>**</td>
</tr>
<tr>
<td>2</td>
<td>**</td>
</tr>
<tr>
<td>3</td>
<td>**</td>
</tr>
<tr>
<td>4</td>
<td>***</td>
</tr>
</tbody>
</table>

*** 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:

![Bar chart showing teacher evaluation scores]

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. Zammurad Iqbal Ahmed was calculated 100%.

   Teacher evaluation parameters showed that the of the 100% 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 lecture
- The course was completed in time
- More practicals must be regulate in labs.
ii. Course Evaluation

<table>
<thead>
<tr>
<th>AGR-707</th>
<th>Field crop experimentation</th>
<th>4(3-2)</th>
<th>Dr. Zammurad Iqbal Ahmed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Semester- Fall -2013</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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.
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 Ahmed (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.
- Teaching schedule was strictly followed by the teacher.
- While delivering his lecture, the teacher’s concepts were clear.
ii. Course Evaluation

<table>
<thead>
<tr>
<th>AGR-717</th>
<th>Integrated Agriculture</th>
<th>4(3-2)</th>
<th>Dr. Fayyaz ul Hassan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Semester-Fall -2013</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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.
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 Ahmed (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

<table>
<thead>
<tr>
<th>AGR-720</th>
<th>SEMINAR-2</th>
<th>1(1-0)</th>
<th>Dr. Muhammad Azim Malik</th>
</tr>
</thead>
<tbody>
<tr>
<td>Semester-Spring-2013</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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 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, 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.
ii. **Course Evaluation**

<table>
<thead>
<tr>
<th>AGR-715</th>
<th>Seed Production and Management</th>
<th>3(2-2)</th>
<th>Dr. Ghulam Qadir</th>
</tr>
</thead>
</table>

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.
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.

<table>
<thead>
<tr>
<th>Course code</th>
<th>Title</th>
<th>Credit Value</th>
<th>Assessment Methods/Exams</th>
<th>No. of Stu</th>
<th>comments on curriculum</th>
<th>Any changes for future</th>
<th>Semeste r</th>
<th>%Grade</th>
<th>Course Instructor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course Code</td>
<td>Course Name</td>
<td>Credits</td>
<td>Exam Type</td>
<td>Mode of Presentation</td>
<td>Grading Scheme</td>
<td>Instructor</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>AGR-701</td>
<td>Advanced field crop production</td>
<td>4(3-2)</td>
<td>Mid term And Final</td>
<td>Good and interesting</td>
<td>Should be improved</td>
<td>Fall 35 31 34 - -</td>
<td>Dr. Zammurad Iqbal Ahmed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AGR-702</td>
<td>Advanced Agronomy</td>
<td>4(3-2)</td>
<td>Mid term And Final</td>
<td>Good but lengthy</td>
<td>Should be divided</td>
<td>Spring 24 38 38 - -</td>
<td>Prof. Dr. Fayyaz ul Hassan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AGR-703</td>
<td>Dryland Agro-management</td>
<td>3(3-0)</td>
<td>Mid term And Final</td>
<td>Good but lengthy</td>
<td>Should be divided</td>
<td>Fall 13 55 12 1 5</td>
<td>Dr. Muhammad Azim Malik</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AGR-704</td>
<td>Crop environment</td>
<td>3(2-2)</td>
<td>Mid term And Final</td>
<td>Excellent but lengthy</td>
<td>Should be divided</td>
<td>Spring 60 10 21 6 2 1</td>
<td>Mr. Irfan Aziz</td>
<td></td>
<td></td>
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<tr>
<td>AGR-706</td>
<td>Weed management</td>
<td>4(3-2)</td>
<td>Mid term And Final</td>
<td>Very good</td>
<td>No</td>
<td>Fall 13 57 11 1 4 0 5</td>
<td>Dr. Muhammad Ansar</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AGR-707</td>
<td>Field crop experimentation</td>
<td>4(3-2)</td>
<td>Mid term And Final</td>
<td>Good prepared</td>
<td>No</td>
<td>Fall 52 32 10 4 1 1</td>
<td>Dr. Zammurad Iqbal Ahmed</td>
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<tr>
<td>AGR-708</td>
<td>Advanced seed technology</td>
<td>4(3-2)</td>
<td>Mid term And Final</td>
<td>Well prepared</td>
<td>No</td>
<td>Spring 40 38 11 9 0 2</td>
<td>Dr. Ghulam Qadir</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AGR-710</td>
<td>Crop Nutrition</td>
<td>3(2-2)</td>
<td>Mid term And Final</td>
<td>Well prepared</td>
<td>No</td>
<td>Fall 52 26 13 8 1 0</td>
<td>Dr. Muhammad Ashraf</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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.

1. The work has more pressure and heavy in programe

- V.D: 1%
- D: 10%
- V.S: 20%
- UC: 19%
- S: 50%

2. The program is effective in enhancing team-working abilities

- F: 7%
- E: 22%
- G: 42%
- V.G: 25%
- P: 5%

3. The program administration is effective in supporting learning.

- F: 5%
- P: 8%
- E: 22%
- G: 35%
- V.G: 30%

4. The program is effective in developing analytical and problem solving skills

- F: 5%
- P: 8%
- V.G: 32%
- G: 53%
- E: 2%
5. The program is adequate in developing antagonistic 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 expectations:

- V.G: 39%
- G: 39%
- F: 11%
- P: 8%

10. Faculty was able to meet the program objectives:

- V.G: 32%
- G: 38%
- F: 19%
- P: 5%

11. Environment was promotive for learning:

- G: 41%
- V.G: 28%
- F: 10%
- E: 19%

12. Whether the groundwork of the department was good:

- V.G: 22%
- G: 47%
- F: 12%
- E: 15%

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

- G: 37%
- F: 20%
- V.G: 26%
- E: 2%

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

- F: 37%
- V.G: 16%
- G: 33%
- E: 2%
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 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 prerequisite to qualify as candidate for Ph.D. degree and is taken at the end of the course work. A research paper is must to publish 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 repute, working in difficult conditions and independent philosophy, learnt excellent administration of resource and time, learnt excellent power of judgment.
1. Math, Science, Humanities and professional discipline

2. Problem formulation and solving skills

3. Collecting and analyzing appropriate data

4. Ability to link theory to practice

5. Ability to design a system component or process

6. IT knowledge
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

- E: 46%
- V.G: 17%
- G: 18%
- F: 12%
- P: 7%

Judgment

- E: 53%
- V.G: 18%
- G: 9%
- F: 13%
- P: 7%

Discipline

- E: 52%
- V.G: 27%
- F: 16%
- P: 2%

Infrastructure

- E: 37%
- V.G: 14%
- G: 17%
- F: 16%
- P: 16%
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 solving, knowledge of the subject, and personal qualities.
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

- F: 10%
- G: 21%
- V.G: 18%
- E: 43%
- P: 8%

2. Report writing

- F: 6%
- G: 31%
- V.G: 24%
- E: 21%

3. Presentation skills

- F: 24%
- G: 11%
- V.G: 36%
- P: 7%
- E: 22%
1. Ability to work in teams.

2. Leadership

3. Independent thinking

4. Motivation

5. Reliability

6. Appreciation of ethical values
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 out comes:

Table 3: Quantitative Assessment of the Department

<table>
<thead>
<tr>
<th>Sr. #</th>
<th>Particular</th>
<th>No</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Ph.D Degree awarded</td>
<td>08</td>
<td>Most of the Ph.D degree awarded were already in job and the others got</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>jobs in different relevant fields.</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Degree</th>
<th>Pre-requisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ph.D</td>
<td>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.</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Degree</th>
<th>Pre-requisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ph.D</td>
<td>M.Sc. (Hons.) Agriculture in Agronomy with minimum CGPA 3 GAT Subject and entry test is compulsory for admission in the Ph.D degree.</td>
</tr>
</tbody>
</table>

Degree Requirements:

Degrees are accorded 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

<table>
<thead>
<tr>
<th>Degree</th>
<th>Pre-requisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ph.D</td>
<td>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.</td>
</tr>
</tbody>
</table>

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:

<table>
<thead>
<tr>
<th>Component</th>
<th>Weightage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mid Examination</td>
<td>30%</td>
</tr>
<tr>
<td>Assignments</td>
<td>10%</td>
</tr>
<tr>
<td>Final Examination</td>
<td>60%</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Courses</th>
<th>Program objective</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>AGR-701, AGR-702, AGR-703, AGR-704, AGR-716</td>
<td>+++</td>
</tr>
<tr>
<td>AGR-705, AGR-706, AGR-708, AGR-709, AGR-717</td>
<td>++</td>
</tr>
<tr>
<td>AGR-710, AGR-711, AGR-712, AGR-713, AGR-715</td>
<td>+++</td>
</tr>
<tr>
<td>AGR-714, and AGR-718</td>
<td>+++</td>
</tr>
</tbody>
</table>

+ = Relative, ++ = Relative and satisfactory, +++ = Very relevant & very satisfactory, ++++ = Highly relevant & highly satisfactory.
Standard 2.2:
Elements vs courses:
Table 9: Elements vs courses

<table>
<thead>
<tr>
<th>Elements</th>
<th>Agronomy Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem analysis/ Solution Design</td>
<td>AGR-707 (Field Crop Experimentation)</td>
</tr>
</tbody>
</table>

Standard 2.3:
Credit hours distribution

Table 10: Credit hours distribution

<table>
<thead>
<tr>
<th>Elements</th>
<th>Credit hours/ semester</th>
<th>Total credit hours</th>
<th>Course Work</th>
<th>Research and thesis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ph.D Agriculture</td>
<td>Minimum 12</td>
<td>17</td>
<td>7</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Maximum 32</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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:

<table>
<thead>
<tr>
<th>S/No.</th>
<th>Name of Equipment</th>
<th>Quantity/No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Heating Drying Cabinet</td>
<td>Three</td>
</tr>
<tr>
<td>2.</td>
<td>Water Distillery apparatus</td>
<td>One</td>
</tr>
<tr>
<td>3.</td>
<td>Over Head Projector</td>
<td>Two</td>
</tr>
<tr>
<td>4.</td>
<td>Computer with Laser Printer</td>
<td>Two</td>
</tr>
<tr>
<td>5.</td>
<td>Freezer</td>
<td>One</td>
</tr>
<tr>
<td>6.</td>
<td>pH Meter</td>
<td>Two</td>
</tr>
<tr>
<td>No.</td>
<td>Equipment</td>
<td>Quantity</td>
</tr>
<tr>
<td>-----</td>
<td>-----------------------------------------</td>
<td>----------</td>
</tr>
<tr>
<td>7.</td>
<td>EC Meter</td>
<td>One</td>
</tr>
<tr>
<td>8.</td>
<td>Centrifuge 14000 Rpm</td>
<td>One</td>
</tr>
<tr>
<td>9.</td>
<td>Top Loading Balance</td>
<td>Two</td>
</tr>
<tr>
<td>10.</td>
<td>Vacuum Pump</td>
<td>One</td>
</tr>
<tr>
<td>11.</td>
<td>Water Potential Apparatus</td>
<td>One</td>
</tr>
<tr>
<td>12.</td>
<td>Water Bath</td>
<td>One</td>
</tr>
<tr>
<td>13.</td>
<td>Spectrophotometer</td>
<td>One</td>
</tr>
<tr>
<td>14.</td>
<td>Leaf Area Meter</td>
<td>Two</td>
</tr>
<tr>
<td>15.</td>
<td>Growth Chamber</td>
<td>Two</td>
</tr>
<tr>
<td>16.</td>
<td>Flame Photometer</td>
<td>One</td>
</tr>
<tr>
<td>17.</td>
<td>Analytical Balance</td>
<td>Two</td>
</tr>
<tr>
<td>18.</td>
<td>Osmometer</td>
<td>One</td>
</tr>
<tr>
<td>19.</td>
<td>Chiller</td>
<td>One</td>
</tr>
<tr>
<td>20.</td>
<td>Digestion Block</td>
<td>One</td>
</tr>
<tr>
<td>21.</td>
<td>Mechanical shaker</td>
<td>One</td>
</tr>
<tr>
<td>22.</td>
<td>Electric fan heater</td>
<td>One</td>
</tr>
<tr>
<td>23.</td>
<td>Gas heater</td>
<td>One</td>
</tr>
<tr>
<td>24.</td>
<td>Book Shelves</td>
<td>One</td>
</tr>
<tr>
<td>25.</td>
<td>Spring balance</td>
<td>Two</td>
</tr>
<tr>
<td>26.</td>
<td>Tripple beem balance</td>
<td>One</td>
</tr>
<tr>
<td>27.</td>
<td>Aquarium pump</td>
<td>Two</td>
</tr>
<tr>
<td>28.</td>
<td>Balance electronic</td>
<td>One</td>
</tr>
<tr>
<td>29.</td>
<td>Adjustable pipette</td>
<td>Four</td>
</tr>
<tr>
<td>30.</td>
<td>Vernier caliper</td>
<td>Six</td>
</tr>
<tr>
<td>31.</td>
<td>Seed counter</td>
<td>One</td>
</tr>
<tr>
<td>32.</td>
<td>Seed moisture tester</td>
<td>One</td>
</tr>
<tr>
<td>33.</td>
<td>Lux meter</td>
<td>One</td>
</tr>
<tr>
<td>34.</td>
<td>Balance open pan</td>
<td>One</td>
</tr>
<tr>
<td>35.</td>
<td>Drying oven</td>
<td>One</td>
</tr>
<tr>
<td>36.</td>
<td>Hot plate</td>
<td>One</td>
</tr>
<tr>
<td>37.</td>
<td>Micro kieldah distillation appratus</td>
<td>One</td>
</tr>
<tr>
<td>38.</td>
<td>Power sprayer</td>
<td>One</td>
</tr>
<tr>
<td>39.</td>
<td>Refrigerator</td>
<td>One</td>
</tr>
<tr>
<td>40.</td>
<td>Seed cleaner</td>
<td>One</td>
</tr>
<tr>
<td>41.</td>
<td>Seed dispensor machine</td>
<td>One</td>
</tr>
<tr>
<td>42.</td>
<td>Bio microscope</td>
<td>One</td>
</tr>
<tr>
<td>43.</td>
<td>Laminar flow</td>
<td>One</td>
</tr>
<tr>
<td>44.</td>
<td>Growth rack</td>
<td>Two</td>
</tr>
<tr>
<td>45.</td>
<td>Incubator</td>
<td>One</td>
</tr>
<tr>
<td>46.</td>
<td>Grinding machine</td>
<td>One</td>
</tr>
<tr>
<td>47.</td>
<td>Plant cutter</td>
<td>One</td>
</tr>
</tbody>
</table>
Shortcoming in Laboratory facilities:

- For faculty member and Master's students equipments for growth analysis/physiological framework 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 Personals for 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

<table>
<thead>
<tr>
<th>Degree</th>
<th>Pre-requisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ph.D</td>
<td>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</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Name of faculty member</th>
<th>Designation</th>
<th>Qualification</th>
<th>Name of Country Awarding Highest Degree</th>
<th>Date of Birth</th>
<th>Email address</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Dr. Fayyaz-ul-Hassan Sahi</td>
<td>Professor</td>
<td>Ph.D.</td>
<td>Uk</td>
<td>15-05-1963</td>
<td><a href="mailto:fayyaz.sahi@uaar.edu.pk">fayyaz.sahi@uaar.edu.pk</a></td>
</tr>
<tr>
<td>2.</td>
<td>Dr. Muhammad Azim Malik</td>
<td>Professor</td>
<td>Ph.D.</td>
<td>Usa</td>
<td>20-06-</td>
<td><a href="mailto:drazim61@gmail.com">drazim61@gmail.com</a></td>
</tr>
<tr>
<td>S. No.</td>
<td>Name</td>
<td>Position</td>
<td>Specialization</td>
<td>Country</td>
<td>Date</td>
<td>Email</td>
</tr>
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</tr>
<tr>
<td>3.</td>
<td>Dr. Zammurad</td>
<td>Professor</td>
<td>Ph.D.</td>
<td>PK</td>
<td>01-05-1960</td>
<td><a href="mailto:azammurad@htomail.com">azammurad@htomail.com</a></td>
</tr>
<tr>
<td></td>
<td>Iqbal Ahmed</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Dr. Abdul Razzaq</td>
<td>Professor</td>
<td>Ph.D.</td>
<td>China</td>
<td>01-08-1957</td>
<td><a href="mailto:abdul.razzaq@uaar.edu.pk">abdul.razzaq@uaar.edu.pk</a></td>
</tr>
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</tr>
<tr>
<td>5.</td>
<td>Mr. Irfan Aziz</td>
<td>Assistant Professor</td>
<td>Ph.D.</td>
<td>PK</td>
<td></td>
<td><a href="mailto:dIrfan.aziz@uaar.edu.pk">dIrfan.aziz@uaar.edu.pk</a></td>
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</tr>
<tr>
<td>6.</td>
<td>Dr. Muhammad Ansar</td>
<td>Associate Professor</td>
<td>Ph.D.</td>
<td>UK</td>
<td>14-10-1964</td>
<td><a href="mailto:Muhammad.ansar@uaar.edu.pk">Muhammad.ansar@uaar.edu.pk</a></td>
</tr>
<tr>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td><a href="mailto:drmatarar@gmail.com">drmatarar@gmail.com</a></td>
</tr>
<tr>
<td>7.</td>
<td>Dr. Muhammad Rasheed</td>
<td>Assistant Professor</td>
<td>Ph.D.</td>
<td>PK</td>
<td>09-10-1962</td>
<td><a href="mailto:drrasheed786@gmail.com">drrasheed786@gmail.com</a></td>
</tr>
<tr>
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</tr>
<tr>
<td>8.</td>
<td>Dr. Ghulam Qadir</td>
<td>Associate Professor</td>
<td>Ph.D.</td>
<td>PK</td>
<td>01-12-1968</td>
<td><a href="mailto:qadir@uaar.edu.pk">qadir@uaar.edu.pk</a></td>
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<tr>
<td>9.</td>
<td>Dr. Mukhtar Ahmed</td>
<td>Assistant Professor</td>
<td>Ph.D.</td>
<td>PK</td>
<td>01-10-1979</td>
<td><a href="mailto:mukhtarahmad@uaar.edu.pk">mukhtarahmad@uaar.edu.pk</a></td>
</tr>
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<tr>
<td>10.</td>
<td>Dr. Abdul Manaf</td>
<td>Assistant Professor</td>
<td>Ph.D.</td>
<td>PK</td>
<td>20-02-1970</td>
<td><a href="mailto:munafawan@yahoo.com">munafawan@yahoo.com</a></td>
</tr>
<tr>
<td></td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>11.</td>
<td>Mr. Safdar Ali</td>
<td>Lecturer</td>
<td>M. Sc. (Hons.)</td>
<td>PK</td>
<td>01-10-1974</td>
<td><a href="mailto:safdaraliarid@yahoo.com">safdaraliarid@yahoo.com</a></td>
</tr>
<tr>
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</table>

Table 13. Faculty Distribution by Program Areas in Agronomy
<table>
<thead>
<tr>
<th>No.</th>
<th>Topic</th>
<th>Professor/Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Integrated Weed Management, Zero-tillage, Allelopathy</td>
<td>Prof. Dr. Muhammad Azim Malik, Mr. Safdar Ali</td>
</tr>
<tr>
<td>2.</td>
<td>Oilseed Crops, Crop Water Management</td>
<td>Prof. Dr. Fayyaz-ul-Hassan, Dr. Ghulam Qadir, Dr. Abdul Manaf</td>
</tr>
<tr>
<td>3.</td>
<td>Integrated Plant Nutrient Management, Drought Stress physiology</td>
<td>Prof. Dr. Zammurad Iqbal Ahmed, Dr. Muhammad Rasheed</td>
</tr>
<tr>
<td>4.</td>
<td>Stress Physiology, Genetic Transformation of Crops</td>
<td>Dr. Abdul Razzaq</td>
</tr>
<tr>
<td>5.</td>
<td>Fodder &amp; Forage Production</td>
<td>Dr. Muhammad Ansar</td>
</tr>
<tr>
<td>6.</td>
<td>Plant Physiology, Crop Growth Modeling and climate change, NRM &amp; GIS</td>
<td>Mr. Naveed Tahir, Mr. Mukhtar Ahmed, Mr. Irfan Aziz</td>
</tr>
</tbody>
</table>

**List of publications**

1. **Prof. Dr. Muhammad Azim Malik**


2. **Prof. Dr. Fayyaz-ul-Hassan**


3. Dr. Zammurad Iqbal Ahmed


1. Dr. Abdul Razzaq


2. Dr. Ghulam Qadir


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Standard 6.2:
Effective Programs for Faculty Development.

- Professional training and faliibility 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 acorded.
- Sufficient secretarial support, technical staff and office equipment.
- The upgradation of existing teaching cadre also provided and added advantage in detaining 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 laboratry. 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 unbiyosness attitude in examination, grading and approach to scientific research by the faculty memebers. 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 concerned 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 renown universities. About 45 publications has 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**

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

**Name:** Dr. Zammurad Iqbal Ahmed  

<table>
<thead>
<tr>
<th>Personal</th>
</tr>
</thead>
</table>
| 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.  

<table>
<thead>
<tr>
<th>EXPERIENCE</th>
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</thead>
</table>
| 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.  

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### Proforma 9

<table>
<thead>
<tr>
<th>Name</th>
<th><strong>Prof. Dr. Fayyaz Ul Hassan</strong></th>
</tr>
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<tbody>
<tr>
<td><strong>Personal</strong></td>
<td></td>
</tr>
<tr>
<td>Professor of Agronomy</td>
<td>Phone Office: +92-51-9062217,</td>
</tr>
<tr>
<td>Department of Agronomy</td>
<td>Cell: 0300-9514597</td>
</tr>
<tr>
<td>University of Arid Agriculture, Rawalpindi</td>
<td>Fax Office: +92-51-9290160</td>
</tr>
<tr>
<td></td>
<td>e-mail:<a href="mailto:fayyaz.sahi@uaar.edu.pk">fayyaz.sahi@uaar.edu.pk</a></td>
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<td><a href="mailto:drsahi63@gmail.com">drsahi63@gmail.com</a></td>
</tr>
<tr>
<td></td>
<td>Phone Residence: +92-51-4848187</td>
</tr>
<tr>
<td>Name</td>
<td>Fayyaz-ul-Hassan</td>
</tr>
<tr>
<td>Date of Birth</td>
<td>15-05-1963</td>
</tr>
<tr>
<td>Father’s Name</td>
<td>Abdul Latif</td>
</tr>
<tr>
<td>Permanent Address</td>
<td>Village &amp; Post Office TOOR, Teh. &amp; Distt. JHELUM</td>
</tr>
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</table>

### EDUCATION

<table>
<thead>
<tr>
<th>University/Board</th>
<th>Degree</th>
<th>Year</th>
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<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 &amp; Secondary Education, Mirpur</td>
<td>F.Sc(Pre-medical)</td>
<td>1981</td>
</tr>
<tr>
<td>Board of Intermediate &amp; Secondary Education, Rawalpindi</td>
<td>Matric(Science)</td>
<td>1979</td>
</tr>
</tbody>
</table>

### Experience

#### 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.


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.


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.
<table>
<thead>
<tr>
<th>MANAGEMENT EXPERIENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assistant Warden, From July, 1993 to September, 1995, Cwrt Mawr student’s Hall of Residence, University of Wales Aberystwyth (UK).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Honor and Awards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ministry of Education Scholarship for PhD 1992.</td>
</tr>
<tr>
<td>Overseas Research Students Award 1994-95 (Awarded by CVCP UK).</td>
</tr>
<tr>
<td>Endeavour Pakistan Research Award by Govt. of Australia, 2007</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Graduate Students, Postdocs, Undergraduate Students, Honour Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of students who were supervised and completed their degrees</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Service Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaching and Research.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Research Grants and Contracts</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Title</strong>: Promotion of Safflower through participatory approach in Pothwar.</td>
</tr>
<tr>
<td><strong>Value</strong>: Rs. 3.017 Million</td>
</tr>
<tr>
<td><strong>Duration</strong>: 2012-2015.</td>
</tr>
</tbody>
</table>
**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**

<table>
<thead>
<tr>
<th>Name</th>
<th>Muhammad Azim Malik</th>
</tr>
</thead>
</table>

**Personal**

- Date & Place of Birth: June 20, 1955, Mainwali,
- Present Position: Chairman and Professor of Agronomy

**Qualifications**

<table>
<thead>
<tr>
<th>S/No.</th>
<th>Name of Institution</th>
<th>Degree/Diploma</th>
<th>Year</th>
<th>Division</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>University of Wyoming, Laramie, USA</td>
<td>Ph. D. Agronomy</td>
<td>1990</td>
<td>CGPA (3.54)</td>
</tr>
<tr>
<td>2</td>
<td>University of Agriculture, Faisalabad</td>
<td>M. Sc. (Hons.) Agronomy</td>
<td>1979</td>
<td>1st</td>
</tr>
<tr>
<td>3</td>
<td>University of Agriculture, Faisalabad</td>
<td>B. Sc. (Hons.)</td>
<td>1976</td>
<td>1st</td>
</tr>
<tr>
<td>4</td>
<td>University of Agriculture, Faisalabad</td>
<td>F. Sc.</td>
<td>1973</td>
<td>2nd</td>
</tr>
<tr>
<td>5</td>
<td>Govt. High School PiplanDistt. Mainwali</td>
<td>Matriculation</td>
<td>1971</td>
<td>1st</td>
</tr>
</tbody>
</table>

**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.

<table>
<thead>
<tr>
<th>Memberships</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pakistan Botanical Society</td>
</tr>
<tr>
<td>Pakistan Agricultural Scientist Forum</td>
</tr>
<tr>
<td>Pakistan Agronomy Society</td>
</tr>
<tr>
<td>Pakistan Weed Science Society</td>
</tr>
<tr>
<td>American Association for cereal chemist.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Graduate Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Postdocs</td>
</tr>
<tr>
<td>Undergraduate</td>
</tr>
<tr>
<td>Students</td>
</tr>
<tr>
<td>Honour Students</td>
</tr>
<tr>
<td>Number of students who were supervised and completed their M.Sc (Hons) degree-10</td>
</tr>
<tr>
<td>Ph.D – one</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Service Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaching and Research.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Publications</th>
</tr>
</thead>
<tbody>
<tr>
<td>i. Impact factor-01</td>
</tr>
<tr>
<td>ii. HEC recognized-03</td>
</tr>
<tr>
<td>iii. Non HEC recognized-01</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Research Grants and Contracts.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research projects: Nil</td>
</tr>
<tr>
<td>Project submitted: one</td>
</tr>
<tr>
<td>Name</td>
</tr>
<tr>
<td>--------------</td>
</tr>
<tr>
<td>Personal</td>
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<tr>
<td>Experience</td>
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<tr>
<td>Publication</td>
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<tr>
<td>Supervised Students</td>
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<tr>
<td>Service Activity</td>
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<tr>
<td>International Presentations</td>
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</tbody>
</table>