



AIC Report

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Feb, 2013

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Executive Summary

Discipline of Agricultural Entomology was established in 2001 to offer B. Sc. (Hons.) Agriculture, with specialization in the field of Entomology. Since the start of the programme 156 students have graduated till 2012. The department has also started M. Sc (Hons.) programme. There are five faculty members in the discipline with specialization in Insect Toxicology and Biochemistry, Insect Taxonomy, IPM, Insect Neurobiology and Insect Pollinators Biodiversity and Conservation. The committee held discussions with faculty members in friendly and open atmosphere. The outcome of the discussion was that most of the faculty members were satisfied with the working environment, space in the laboratories was sufficient to some extent. However, more space and equipment will improve the quality and standard of the degree. Although 30 research papers have been published in peer reviewed journals by the faculty but research findings have not been published in the form of extension/recommendation brochures to reach the stakeholders. Curriculum developed by HEC through its Curriculum Review Committee (CRCs) has been adopted by the discipline. Board of Studies and Board of Faculty review the curriculum periodically. The Quality Enhancement Cell (QEC) of the University has very good mechanism for decision to improve standards. Sufficient space is available for teaching classes. Department has one undergraduate laboratory, available equipments are of good quality, fully operational and properly utilized. Laboratory staff is available but lack professional qualifications. There is need for recommended books, facility of digital library and facility of computers. Multimedia facility is available in the department. Students have adequate opportunities for scholarships, medical facilities and hostel but sports and transport facilities need to be enhanced. Administrative authority and governance is clearly defined and rules and procedures are well documented. Financial resources are stable and operational budget is also meeting the requirements but it is needed to be enhanced. Increasing the area of the farm and adding more farm machinery for demonstration and research is required. In review meetings the committee recommended that research journals and latest text and reference books in the library should be enhanced; establishment of at least one more computer laboratory with internet facility; provision of computers and internet facility to all faculty members; provision of training to laboratory support staff and encouraging them to improve their educational qualifications; encouraging Ph. D. faculty to seek opportunities for Post Doc and external funding through research projects; allocation of hardship allowance for the faculty, separate budget for research and funds for post graduate students to present papers in national conferences.

Introduction

Discipline of Agricultural Entomology was established in 2001 to offer B. Sc. (Hons.) Agriculture, with specialization in the field of entomology. Since the start of the programme

156 students have graduated till 2012. The department also started M. Sc (Hons.) programme. At the start of the discipline there were three teachers with specialization in IPM, Stored Grain Pest Management and Insect Resistance and its Management. At present there are five faculty members in the discipline with the specializations in Insect Toxicology and Biochemistry, Insect Taxonomy, Integrated Pest Management, Insect Neurobiology and Insect Pollinators Biodiversity and Conservation. Currently 44 students are enrolled in B. Sc (Hons) and six students are enrolled in M. Sc (Hons).

CRITERION ANALYSIS

Criteria I: Strength and Quality of Faculty

There are five faculty members in the discipline. One of them is Assistant Professor and the rest are Lecturers. The experience of the faculty members ranged from 1 to 11 years. Faculty members have published two papers in international journals and 28 in national journals. Followings are the outcomes of discussions

1. Among the faculty members two have Ph. D degree and rest are M. Sc (Hons.). Faculty with M. Sc (Hons.) were enthusiastic to pursue higher degrees and training for the capacity building of the programme.
2. Most of the faculty members were satisfied with the working environment with available support and facilities.

Criteria II: Curriculum Design and Development

Curriculum developed by HEC through its Curriculum Review Committee (CRCs) has been adopted by the discipline. Curriculum is current, compatible globally and market oriented to greater extent. Curriculum is revised in Board of Studies and all the teachers are the members. No mechanism exists regarding feedback of stakeholders.

Criteria III: Infrastructures and Learning Resources

Laboratories class rooms and their capacity

Sufficient space is available for teaching classes. There are four post-graduate laboratories and one computer laboratory, shared by the discipline of Entomology with other departments. Department has one undergraduate laboratory. Available equipments are of good quality, fully operational and properly utilized. However, it is inadequate to meet the need of every student. Laboratory staff with moderate experience is available but lack professional qualification. No safety equipment for laboratory is available.

Library

Some of the recommended in HEC curriculum books are available in the library along with sufficient supporting books meet present requirements but there is also need for more recommended books, recent books and facility of digital library.

Experimental Farm

A farm of three acre area is being well maintained and utilized for post-graduate research. However, it needs more agricultural equipments and security measures are needed to be improved.

Criteria IV: Students Support and Progression

Faculty members and students told that the course instructors provide schedule for lectures of theory and practical classes in the beginning of the each semester.

Instructors provide handouts, references of the books and websites to the students. Multimedia facility is also available in the department. Students were of the opinion that they have adequate opportunities for scholarships, medical facilities and hostel but sports and transport facilities need to be enhanced. Internship is compulsory for every student as degree requirement and internship reports were examined and found good. Student teacher interaction and academic counseling were encouraging. Students demanded more computers in the laboratory, regular field visits and more library books.

Criteria V: Research and Consultancy Activities

Research papers published by most of the faculty members are as per criteria of HEC ; however more effort is needed to compete with other institutes and to maintain quality. Faculty members are actively involved in consultancy services.

Criteria VI: Governance and Leadership

Administrative authority and governance is clearly defined and organizational set up is well laid out. Rules and procedures are well documented and administrative powers are clearly delineated and decentralized. Relevant rules are available even in the prospectus. Financial resources are stable and operational budget is also meeting the requirements but it is needed to be enhanced particularly for research. Alumni profile is not available in the discipline.

SWOT Analysis

Major Strengths

- Easy accessibility and opportunities for higher education in Dera Gahzi Khan and surrounding areas.
- Good on-line attendance availability for students.
- Scholarships for students, as 35% are benefited

- Diverse fields of specializations of the faculty.

Major Weaknesses

- Shortage of the senior faculty
- Non-availability of computers and internet facility for faculty.
- Non-availability of research journals in the library and no access to digital library for faculty and students.
- Limited field visits of the students for demonstration
- Availability of limited research facilities
- Availability of limited numbers of the books in library.

Major Opportunities

- Opportunities for increasing student intake by attracting potential candidates.
- Having laboratory safety equipment and manuals.
- Making efforts to secure external funding for research.
- Provision of training to newly appointed faculty members.
- Making arrangements for getting the laboratory support staff trained.
- Start of Ph.D programme in near future
- Creating awareness in the farmers and local community for all areas of pest management.

Major Threats

- Decrease in enrolment of students due to limited facilities.
- Decline in quality and standards of research and students.
- Loss of confidence of stake holders, i. e. employers of the graduating students

- Decrease in attraction of Ph. D. and experienced faculty in diverse specializations of Entomology due to harsh and remote area.

Recommendations

Considering the importance of agriculture and cropping pattern of the area the discipline of Entomology cannot be ignored/ neglected in the college. The discipline needs to be strengthened for technological development for the regional pest management strategy and research on diversity of insect fauna in the area. The discipline is fulfilling the mission to certain extent but there is a room for improvement in the existing situation. The faculty needs to focus on entomological problems of the area for the benefit of the farming community. To focus on these problems and efficient delivery of services obviously more resources and facilities are required. The weaker areas identified in different sections/ criteria needs to be addressed and more financial resources have to be allocated for quality education and efficient training of the students to increase the productivity of the faculty. Based on the score (---) the committee recommends that the discipline on Entomology may be granted accreditation with a possibility of upgradation after appropriate improvements suggested throughout the report are made.

Actionable Recommendations

- Field research facilities are inadequate and in appropriate, there is need to increase the area of the farm and adding more farm machinery for demonstration and research purposes.
- Provision of research journals and latest text and reference books in the library.

- Establishing at least one more computer laboratory with internet facility.
- Provision of computers and internet facility to all the faculty members.
- Provision of training to laboratory support staff and encouraging them to improve their educational qualifications.
- Encouraging Ph. D. faculty to seek opportunities for Post doc and external funding through research projects.
- Hardship allowance for the faculty
- Allocation of separate budget for research.
- Allocating funds for post graduate students to present papers in national conferences.

List of Annexure

I. TOR of the Committee

II. Faculty and support staff profile

III. Inventory of apparatus/equipments

IV. Text and reference books in the library

AIC Draft report Visit on January 21-22, 2013

Evaluation Criteria for Agricultural Degree Programs

Sr. No.	Criteria	Points Assigned	Points Awarded
Major Criteria			
1	Strength and Quality of Faculty	250	118
2	Curriculum Design and development	150	120
3	Infrastructure and Learning Resources	200	106
4	Student support and Progression	100	50
Sub-Total (a)		700	394
Minor Criteria			
5	Research and Consultancy Activities	150	50
6	Governance and Leadership	100	70
7	Recent Innovations and Best Practceics	50	30
Sub-total (b)		300	150
Grand total (a + b)		1000	544

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