



National Agriculture Education Accreditation Council

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**Report of the
Accreditation Inspection Committee
(AIC)**

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ACCREDITATION INSPECTION COMMITTEE
for
The Degree Programmes of
The Department of Wildlife Management
PMAS Arid Agriculture University,
RAWALPINDI

The Department of Wildlife Management was established and approved by the University Syndicate in its 43rd meeting held on 3rd February 2007 (Notification No. UAAR/Synd-43/417 dated 12-2-2007) in 2007 at Pir Mahar Ali Shah Arid Agriculture University, Rawalpindi. This Department was established to carryout teaching and research on various aspects of Wildlife and suggests scientific measures for the conservation and management of different wildlife species specially focusing on threatened species, their habits, management of different types of protected areas and wetlands, management of human-wildlife conflict, etc. The Department is offering Post-Graduate degrees of M.Sc., M.Phil. and Ph.D. The main mission of this Department is to provide education and research for conservation and management of wildlife resources and their ecosystems. The overall goal is to develop and communicate the knowledge necessary for enhancing conservation and management of wildlife and their habitats for the greatest aesthetic, ecological, economic, and recreational values. This mission and goal is achieved through working on some of the objectives which include 1) to provide qualified and skilled personnel for meeting the needs of wildlife conservation, research and education in the public and private sectors; 2) to ensure students: a) appreciate the importance of all aspects of wildlife conservation/management and ecology, including human dimensions and policy, population and habitat ecology, and organism biology, b) possess sufficient quantitative and qualitative analytical and critical thinking skills for effective problem solvers, c) possess effective skills necessary to communicate scientific concepts, principles and management approaches in public, professional, and academic environments.

The Department supports the government to fulfill its obligations committed under different international conventions by generating knowledge on different aspects of biodiversity. The Wildlife Management Department has conducted a Self Assessment Exercise to review its performance and progress on different criteria of Higher Education Commission. A Self Assessment Report was prepared under the guidelines of HEC and was appreciated by external reviewers.

This external assessment of the degree programmed of the Department of Wildlife Management PMAS UAAR was conducted by a team of external reviewer through a consultative process. This review was conducted from 4th to 8th April, 2011. During this review process discussions were held with the Dean Faculty of Forestry, Range and Wildlife, Chairman of the Department, all faculty members, students of MSc, MPhil and PhD programs. In addition, detailed visit was also made to the faculty offices, classroom and laboratories. During this exercise, Evaluation Manual for Agriculture Degree Programs was used. This manual has been prepared by National Agriculture Education Accreditations Council of the HEC.

Based on the assessment, for the degree programmes there is a strong faculty, majority of which are highly qualified and have good teaching and field experience. Currently three out of a total five faculty members hold a PhD degree from reputable universities. The other two members are seeking their PhD degrees. Faculty is a good combination of some wide experienced (more than 25 years) and some young members which provides a good learning opportunity to students. The HEC recommends at least eight faculty members for each department but the University Management has opted to have minimum of five faculty members in new departments, so though the department is not meeting the HEC criteria but they are satisfied with the current number of staff for their current degree programmes. It was suggested to have some visiting faculty members till the positions are fulfilled. The student-teacher ratio was also good since there was not much load on each teacher.

The curriculum of all degrees covers many important courses which are offered by the faculty. These courses generally cover all major aspect of Wildlife Management. Currently 31 courses are being offered at various levels by the faculty but students are also supposed to select some courses from other departments.

Visits were made to the class room and laboratory and it was felt that the classroom is currently meeting the need of the degree programme, however, in near future they will need some more classrooms. Currently there is only one class room in the Department. There are two laboratories as well but the equipment available is not satisfactory. The equipment was not sufficient and there was not enough equipment to take care of some new aspects related to the Wildlife Management and its Ecology and Habitat.

Both students and faculty were satisfied by the current support to them for the degree programmes. Students were satisfied on the skills that are developed during their studies. During the session with student it was felt that students are very confident and they responded very well to various questions which were asked to them. The Team was informed that since Wildlife Management Degree is not being recognized by the Public Service Commissions for any job in the Provincial Wildlife Departments, therefore, students are not much willing to get admission in this field. They only join the degree programme if they do not have any other choice. The Team suggested writing to the HEC and Public Service Commission and the relevant departments to review their recruitment policy and add this degree on Wildlife Management as first option for applicants.

It was felt that very little support for students in the form of any scholarship was available. HEC provide scholarships through indigenous program and currently there are two students who are availing this opportunities.

One of the strength of the programme was the involvement of the faculty in many research projects. Every faculty member was implementing at least one project per year. Most of these projects were relevant to the field of wildlife management. In some projects students were also contributing either as a part of their research thesis or as part of the team which provided opportunities for them to get some hands on experience during their studies.

It was felt that the leadership was very supportive of different initiatives taken by the faculty. The Chairman was supportive and it was observed that a participatory approach was applied in various decisions taken by the Chairman. This helped in broader ownership by the faculty and also supported building a supportive team of the department.

Though there are not many facilities available for the degree programme but still faculty was innovative in using different tools during their teaching and research tasks. Students are given challenging assignments and with the support of faculty they are able to complete them successfully.

SWOT Analysis:

1. Strength of Degree Programs

- i. A qualified faculty. There are three PhDs in the relevant discipline, among a faculty of five, with a good track of publications and academic/professional experience.
- ii. Facilities. Basic facilities necessary to conduct the degree programs including basic research equipment, relevant books, and a rich collection of scientific articles was available.
- iii. There were active collaborations with various institutes and professional organizations, which provide students access to additional research facilities and resources for their degree research.
- iv. Merit based admission policy ensures induction of quality students. It also ensures equal opportunity to talented students from across the country.
- v. Degree Programme is conducted according to a defined schedule and degrees are awarded on time.
- vi. Curriculum for the degree programme is developed, following HEC standards, and according to the needs of stakeholders
- vii. Faculty members are regularly securing externally funded research projects, which enhances research opportunities for students.

2. Weaknesses of Degree Programs

- i. There is not enough space for offices, labs and classrooms
- ii. For the PhD degree students, there is no working space available
- iii. Research and field work related facilities need enhancement/ improvement. Currently there is a lack of advanced lab and field equipment, and proper transport arrangements for the fieldwork
- iv. Operational budget is insufficient
- v. Though a good collection of scientific articles and text books are maintained, the library facilities need to be enhanced to meet the requirements of a PhD program
- vi. Field exposure of the students is limited due to lack of resources
- vii. Support to enhance capacity of the faculty is not available

- viii. Financial support is not available to engage experts on short-term basis as visiting faculty.

3. Opportunities of Degree Programs

- i. The geographic location of the University has inherent advantages. Being located in vicinity of various research institutes/organization in Islamabad/Rawalpindi, the students of the degree programme students and faculty members have access to the external labs and other research facilities which is available readily for their degree research.
- ii. The department is located in vicinity of many representative ecosystems, including wetlands (eg; Rawal Lake), forests and mountains, hence students can conduct various wildlife related studies in cost-effective way.
- iii. The students of degree programmes and faculty can provide support to various provincial wildlife and forest departments in the form of management oriented research, which could help saving endangered species and managing protected areas.

4. Threats to Degree Program

- i. Degree program is not officially recognized by the Public Service Commission for considering jobs in provincial wildlife departments, which limits job opportunities for the graduates.
- ii. The Higher Education Commission (HEC) is a major source of funding for this new department. The possible dissolution of HEC under the 18th Amendment is a potential threat.
- iii. Regular research funds are not available.
- iv. No research funds available to support cost of publishing in international journals.

Actionable Recommendations

- Faculty strength needs to be enhanced, as currently it is below the HEC standards (i.e. minimum 8 per department). Moreover, PhD qualified faculty is three in the department, against the HEC requirement of five. In view of increasing PhD students in the department (currently 11 are enrolled) more PhD qualified faculty need to be hired, preferably specialized in advanced fields of ecology like geo-informatics, conservation genetics, ecological modeling, etc.
- Limited space is an obvious challenge in an effective conduct of the degree programs. More space is required for labs, classrooms, and offices as well as for providing working space to PhD students.
- Lab and field equipments need to be enhanced. Progressing from classical methods to advanced approaches in wildlife sciences requires access to state of the art equipment

including satellite telemetry, geo-informatics and molecular genetics. The degree programme should target to build such facilities in future.

- A museum need to be established at the department where all field collection of specimen are preserved and catalogued.
- Majority of the research projects currently run by the faculty are of short-term nature. Long-term ecological studies help better understand the complexity of ecosystems over time and answer major ecological questions. The faculty should consider initiating long-term studies to have an obvious impact in ecological research.
- Role of analytical skills in wildlife research cannot be overemphasized. Students of the three degree programs (MSc, MPhil, PhD) at the department are taking courses in Statistics according to their curriculum. However, during their interaction with the AIC, they unanimously admitted that current courses do not enable them to analyze their data. It was complained that neither content nor conduct of these courses is tailored according to the needs of the studies of wildlife. The faculty should discuss with the Department of the Statistics to customize these courses by including contents and examples/problems relevant for wildlife students.
- In addition to the full degree programmes currently being conducted, the faculty should consider initiating short-term courses in wildlife management. This will allow staff of the Provincial Wildlife and Forest Departments to enhance their capacities.

Rating Recommendations for Accreditation

In view of the above narrated findings, it is recommended that the Degree Programme offered by the Department of Wildlife Management be graded as “X” category (i.e. degree programs with minor shortfalls expected to meet the criteria as set by the Council for Accreditation) with scope for up gradation to category “W” after appropriate improvement in due course of time.