



## Decision of the Standing Commission of AQAS

on the Master programme

**“Agricultural Mechanization and Sustainable Environment”** (Master in Agriculture and Sustainable Environment)

and on the Ph.D. degree programmes

**“Livestock Science and Sustainable Environment”** (Ph.D. in Agriculture and Sustainable Environment)

**“Crop Pasture Production and Sustainable Environment”** (Ph.D. in Agriculture and Sustainable Environment)

**“Agricultural Mechanization and Sustainable Environment”** (Ph.D. in Agriculture and Sustainable Environment)

**offered by the Federal University of Agriculture,**

Abeokuta (Nigeria)

**Based on the report of the expert panel and the discussions of the Standing Commission in its 4<sup>th</sup> meeting on 17<sup>th</sup> February 2020, the Standing Commission decides:**

1. The study programme **“Agricultural Mechanization and Sustainable Environment” (Master in Agriculture and Sustainable Environment)** and the PhD programmes **“Livestock Science and Sustainable Environment” (Ph.D. in Agriculture and Sustainable Environment)** and **“Crop Pasture Production and Sustainable Environment” (Ph.D. in Agriculture and Sustainable Environment)** offered by **Federal University of Agriculture, Nigeria** are accredited according to the AQAS criteria for Programme Accreditation.

The accreditations are unconditional.

2. The PhD programme **“Agricultural Mechanization and Sustainable Environment” (Ph.D. in Agriculture and Sustainable Environment)** offered by **Federal University of Agriculture, Nigeria** is accredited according to the AQAS criteria for Programme Accreditation.

The accreditation is conditional.

The study programme essentially complies with the requirements defined by the criteria and thus the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG) and the European Qualifications Framework (EQF) in their current version. The required adjustments can be implemented within a time period of nine months.

The condition has to be fulfilled. The fulfilment of the condition has to be documented and reported to AQAS no later than **30 November 2020**.

3. The accreditation of the programmes is given for the period of **six years** and is valid until **30 September 2026**.

**Condition for “Agricultural Mechanization and Sustainable Environment” (PhD):**

1. A course on scientific writing and research techniques has to be included in the PhD programme.

With regard to the reasons for this decision the Standing Commission refers to the attached assessment report.

**Summary of Conditions and Recommendations (based on the decision by the AQAS Standing Commission on the 25<sup>th</sup>/26<sup>th</sup> of February 2019 and 27th/28th May 2019:**

**Conditions:**

1. CEADSE has to establish a systematic course evaluation for each course/module.
2. To increase transparency a diploma supplement – or equivalent – including a transcript of records has to be handed out with the final diploma.
3. The learning outcomes of the courses also have to reflect the elements of sustainability as described in the title of the programmes. They have to be described as outcome-oriented competencies.
4. The selection criteria for applicants have to be drafted and published.
5. Qualitative and quantitative data on the admission procedures of past cohorts have to be collected systematically.
6. It has to be made transparent how the credit system is linked to student workload.
7. Course/module descriptions including the modes of examination have to be published and also be available to students (e.g. student handbook).
8. Specific courses on Ph.D. level have to be introduced in the field of sustainability and theoretical and applied techniques (esp. research). This cannot be replaced with courses on Master level.

**Additional condition for the Ph.D. programme “Livestock Science and Sustainable Environment”:**

9. The crosslinks between the animal-based disciplines and crops have to become visible in the curriculum.

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## Preamble

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AQAS – Agency for Quality Assurance through Accreditation of Study Programmes – is an independent non-profit organisation, supported by more than 90 member institutions, both higher education institutions (HEIs) and academic associations. Since 2002, the agency has been accredited by the German Accreditation Council (GAC). It is therefore a notified body for accreditation of higher education institutions and programmes in Germany.

AQAS is a full member of ENQA and also listed in the European Quality Assurance Register for Higher Education (EQAR) which confirms that our procedures comply with the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG), on which all Bologna countries agreed as a basis for internal and external quality assurance.

AQAS is an institution founded by and working for higher education institutions and academic associations. The agency is devoted to quality assurance and quality development of both academic studies and teaching in Higher Education Institutions. The activities of AQAS in accreditation are neither restrained to specific academic disciplines or degrees nor to a certain type of Higher Education Institution

## I. Accreditation procedure

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This report results from the external review of the study programme “Agricultural Mechanization and Sustainable Environment” (Master in Agriculture and Sustainable Environment) and the PhD programmes “Agricultural Mechanization and Sustainable Environment” (PhD in Agriculture and Sustainable Environment), “Crop Pasture Production and Sustainable Environment” (PhD in Agriculture and Sustainable Environment) and “Livestock Science and Sustainable Environment” (PhD in Agriculture and Sustainable Environment).

The two programmes ““Agricultural Mechanization and Sustainable Environment” (Master in Agriculture and Sustainable Environment) and the PhD programme “Agricultural Mechanization and Sustainable Environment” (PhD in Agriculture and Sustainable Environment) have been postponed by the decision of the AQAS Standing Commission from the 25<sup>th</sup>/26<sup>th</sup> of February 2019. Furthermore, the AQAS Standing Commission postponed the decision on the PhD programmes “Livestock Science and Sustainable Environment” (PhD Agriculture and Sustainable Environment) and “Crop Pasture Production and Sustainable Environment” (PhD Agriculture and Sustainable Environment) due to clarifications needed from the panel of experts. These two programmes have been postponed by the AQAS Standing Commission on its meeting on the 27<sup>th</sup>/28<sup>th</sup> May 2019.

The Federal University of Agriculture, Abeokuta (FUNAAB) handed in the revised documentation within the period given by the AQAS Standing Commission in November 2019. Based on the new documentation, the experts assessed the four programmes again. This second review was carried out in written procedure because the last site visit of the faculties took place in 2018. This report is the result of this written procedure.

The structure of this report includes for each chapter a descriptive part, changes made by the Centre and based on the original report and a final evaluation by the experts. The chapters that did not need to be changed are indicated.

## 1. Criteria

The Master programmes are assessed against a set of **criteria for programme accreditation** developed by AQAS. The criteria are based on the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG) 2015. To facilitate the review each criterion features a set of indicators that can be used to demonstrate the fulfilment of the criteria. However, if single indicators are not fulfilled this does not automatically mean that a criterion is not met. The indicators need to be discussed in the context of the programme since not all indicators necessarily can be applied to a programme.

The Ph.D.-programmes are assessed against the AQAS **criteria for the accreditation of structured doctoral programmes**. The accreditation by AQAS is based on the following key concepts:

- The doctoral thesis is an independent, original academic piece of research. It can take the form of a monograph or a cumulative dissertation. The assessment of the originality is based on a set of criteria:
  - selection of the research topic,
  - formulation and development of questions around the research topic,
  - decision regarding the use of suitable methodological tools and methods,
  - the scientific research, and
  - the discussion and publication of research results.
- Doctoral programmes should foster subject-specific knowledge and, if possible, facilitate cross-disciplinary perspectives and inter-disciplinary exchanges.
- Doctoral programmes are carried out and completed within a specific timeframe.

The panel of experts was asked to assess the programmes on the basis of the relevant criteria and discuss the programmes separately, when needed.

## 2. Approach and methodology

### *The initialisation*

The university mandated AQAS to perform the accreditation procedure in July 2017.

The university produced a Self Evaluation Report (SER). In June 2018, the institution handed in a draft of the SER together with the relevant documentation of the study programme and an appendix.

The appendix included e.g.:

- Overview over statistical data of the student body (e.g. number of applications, beginners, students, graduates, student drop outs)
- CVs of the teaching staff
- Information on student services
- Core information on the main library
- Graduate academic regulations

AQAS checked the SER regarding completeness, comprehensibility and transparency. The final version of the SER was handed in August 2018.

The accreditation procedure was officially initialised by a decision of the AQAS Accreditation Commission on 20<sup>th</sup>/21<sup>st</sup> August, 2018.

#### *The nomination of the panel of expert*

The composition of the panel of experts follows the stakeholder principle. Consequently, representatives from the respective discipline/s, the labour market and students are involved. Furthermore, AQAS follows principles for the selection of experts of the European Consortium for Accreditation (ECA).

The Accreditation Commission nominated in August 2018 the before mentioned expert panel. AQAS informed the university about the members of the expert panel and the university did not raise any concerns against the composition of the panel.

#### *The preparation of the site visit*

Prior to the site visit, the experts reviewed the SER and submitted a short preliminary statement including open questions and potential needs for additional information. AQAS forwarded these preliminary statements to the University and the panel members in order to increase transparency in the process and the upcoming discussions during the site visit.

#### *The site visit*

After a review of the Self Evaluation Report, a site visit to the university took place from 19-22 November 2018. On site, the experts interviewed different stakeholders, e.g. the management of the HEI, the programme management, teaching and other staff, as well as students and graduates, in separate discussions and consulted additional documentation as well as student work. The visit concluded with the presentation of the preliminary findings by the group of experts to the university's representatives.

#### *The report writing*

Following the site visit, the expert group drafted the following report, assessing the fulfilment of the AQAS criteria for programme accreditation. The report included a recommendation to the Accreditation Commission. The report was sent to the university for comments.

#### *The decision*

The report, together with the comments of the department, forms the basis for the AQAS Accreditation Commission to make a decision regarding the accreditation of the programme. Based on these two documents, on 17 February 2020, the AQAS Standing Commission took its decision on the accreditation. AQAS forwarded the decision to the university. The university had the right to appeal against the decision or any of the imposed conditions.

In May 2020, AQAS published the report and the result of the accreditation as well as the names of the panel of experts.

## **II. Assessment of the programmes**

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### **1. Policy and procedures for quality assurance [ESG 1.1, 1.7 & 1.9]**

Standard MA programme:

*The programme is subject to the Higher Education Institution's policy and associated procedures for quality assurance, including procedures for the design, approval, monitoring, and revision of the programmes.*

*A quality-oriented culture, focusing on continuous quality enhancement, is in place. This includes regular feedback mechanisms involving both internal and external stakeholders.*

*The strategy, policies, and procedures have a formal status and are made available in published form to all those concerned. They also include roles for students and other stakeholders. [ESG 1.1]*

Standards PhD programme:

*The results of the internal quality assurance management are taken into account for the further development of the doctoral programme.*

**Condition 1:**

“CEADESE has to establish a systematic course evaluation for each course/module.”

**Condition 2:**

“Qualitative and quantitative data on the admission procedures of past cohorts have to be collected systematically.”

**Description**

As outlined in the SER, FUNAAB has developed several levels of quality assurance mechanisms. The university has implemented a strategic plan 2014-2019 which reiterates the commitment to quality assurance. The strategic plan includes an analysis of the actual situation and a SWOT analysis. The indicators outlined of the analyses comprise financial and human resources, internationalisation, quality assurance, academic programmes, entrepreneurship or security. On university level, FUNAAB has designed a University's Quality Assurance (QA) policy, which aims to ensure the quality level in all academic areas, such as curriculum planning, delivery of course content, evaluation of courses as well as administrative unit processes. With this, the university tries to target all processes that affect the quality of education which includes the systematisation of knowledge, the concentration of necessary information and the derivation of concrete measures to improve both quality of education and students' performances. As outlined in the QA policy, FUNAAB tries to implement a QA system based on input QA indicators (such as quality of teaching and lecturing staff, quality of equipment and laboratories or quality of student enrolment procedure), process QA indicators defining management responsibilities and output QA indicators (such as student success-ratio or stakeholder's satisfaction). The internal FUNAAB QA system also comprises an institutional auditing which analyses both student enrolment and curriculum relevance. As outlined in the SER, the university evaluates the quality of students annually and reviews the admission processes, if needed. Secondly, the university analyses the relevance of each programme in written reports. These reports cover topics such as study programme's profile and structure, methods of teaching and assessment, practical implementation, student evaluations or available resources. The analysis of these reports is intended to lead to concrete measures which consist of several development steps (Area of improvement, required improvements, timeframe and deadlines for improvements or the definition of success criteria.

Quality enhancement at the Federal University of Agriculture is furthered by the collection and analysis on student, staff and stakeholder's feedback. In addition to the feedback collected, unexpected inspection assessments are carried out in order to collect primary data by the quality assurance unit. The university states that each department has QA personnel who report periodically to the QA unit. These reports include the progress and challenges of the department. These reports also complement the information received from feedback and inspections, and to ensure effectiveness in attending to issues promptly.

Furthermore, the university states that each programme has to undergo an internal review process which consists of two phases (Academic Audit Cycle 1 and 2). The first academic audit cycle can be seen as a peer review by professors within the college. As stated, the evaluation is based on a systematised template and is carried out at the end of the first semester. A report is generated afterwards. The second academic audit cycle focusses on quality enhancement from an external point of view by professors outside the college, which means that for example a professor from FUNAAB's COLANIM (College of Animal Science and Livestock Production) college can review a study programme at FUNAAB's COLNAS (College of Natural Sciences) college. This is carried out at the end of the second semester, and a report is generated as well. Newly developed programmes are subjected to internal and external review before approval by the postgraduate school and the University Senate. As stated, the design, approval and revision of the programmes are carried out in a transparent manner which aims to guarantee that all stakeholders are included in the process. The course and study programme approval processes within the university's structure ensure that the content, credit weighting and modes of instruction meet the standards of international universities.

The university states that both external and internal stakeholder involvement is also carried out. The listed external stakeholders include the National Universities Commission (NUC), Federal Ministry of Education, Federal Ministry of Agriculture, Federal Ministry of Environment and industry representatives, whereas internal stakeholders consist of Federal University of Agriculture members, teaching staff and students. The data and information are collected by doing review recommendations, feedback workshops, survey reports, student supervisory reports, student's quarterly progress reports, in-country supervisor reports and student course evaluation reports. Course evaluation is usually carried out after the completion of each course module (mostly at the end of the semester). The data of the evaluation includes the workload, contact hours, graduate's data, rates of student's progression and performance. The results of the quality assurance procedures are analysed and documented. Curricula modifications can be done based on the QA analysis results.

Being mandatory by Nigerian law, national accreditations procedures for all CEADESE programmes have been carried out successfully in April 2017, and all national regulations are applied appropriately as stated in the documentation. In addition, quality assurance teams from the NUC, the Association of African Universities (AAU), and the World Bank carry out biannual supervisory visits to CEADESE as part of ensuring quality of the programmes.

Graduates have established an Alumni platform to share ideas and which serves as an instrument for further collaboration. It is outlined that all graduates are regularly contacted for progress in their work. It is aimed that the graduates assume a university ambassador role for the Centre. Graduates who require help in publishing their work are supported and information on conferences is circulated to all graduates. CEADESE continues to support graduates through regular engagements and events. As outlined, the Centre tries to bring alumni back to the Centre as tutors, but a typical trend in the fields is that Alumni will work in the industry.

### **Improvements based on the findings**

It has been outlined that the CEADESE Centre has assured that the Monitoring and Evaluation Committee a comprehensive training concerning the enhancement of the efficiency of quality assurance mechanisms at FUNAAB. Each department has a quality assurance officer that has to report periodically to the quality assurance unit of FUNAAB. The documentation states that several responsibilities of the quality assurance unit have been defined to clarify the mission of the said unit. One of the key responsibilities is the external and internal collection of feedback. The collection of feedback includes stakeholders, such as students or industry partners. Based on the Centre documentation, this feedback is used to detect mismatches concerning the courses, its content. The department quality assurance units can take measurements.



These responsibilities cover topics such as modification processes based on the feedback collected from stakeholders, internal and external data collection, assessment of academic staff, students' performance or the coordination of surveys for specific focus groups. Furthermore, the quality assurance committee now engages the units at the postgraduate school, the academic planning and the curriculum review unit.

Furthermore, the Centre points out that data of cohorts are collected and presented at the Centre homepage.

### **Experts' Evaluation**

The changes made by the Centre are adequate and appropriate for the Centre. By outlining the data of cohorts and the study background of the students, potential candidates can inform themselves adequately. The improvements regarding the collection of feedback on course level from students can be described as adequate.

### **Conclusion**

This criterion is fulfilled.

## **2. Quality of the Curriculum / Aims and structure of the doctoral programme [ESG 1.2]**

### Standards MA programme:

*The intended learning outcomes of the programme are defined and available in published form. They reflect both academic and labour-market requirements and are up-to-date with relation to the relevant field. The design of the programme supports achievement of the intended learning outcomes.*

*The academic level of graduates corresponds to the requirements of the appropriate level of the European Qualifications Framework.*

*The curriculum's design is readily available and transparently formulated. [ESG1.2]*

### Standards PhD programme:

*The institution defines the aims of the doctoral programme.*

*The doctoral programme is aligned with the aims of the defined qualification.*

*The doctoral theses provide evidence that the appropriate level on the European Qualifications Framework (EQF) or the respective level on the national qualifications framework for the award of Higher Education degrees have been achieved.*

*Doctoral programmes are structured in such a way - with regards to the research content and the required time - that students are enabled to progress efficiently through all stages of their research and achieve their doctorate within an appropriate timescale.*

### **I.1 Master programme**

#### **Condition 3:**

"The academic reflection of the Master programme "Agricultural Mechanization and Sustainable Environment" clearly has to be visible within the curriculum. The Centre has to create courses on sustainable environment regarding the topic of agricultural mechanization."

#### **Condition 4:**

“The learning outcomes of the courses also have to reflect the elements of sustainability as described in the title of the programmes. They have to be described as outcome-oriented competencies.”

**Condition 5:**

“Course/module descriptions including the modes of examination have to be published and also be available to students (e.g. student handbook).”

**Description**

General

According to the SER all M.AgSE programmes are designed to be completed within two years. The programmes have a modular structure and are differentiated in Centre courses, specific programmes courses, an internship and the thesis courses. As outlined in the postgraduate prospectus the Centre courses can be divided into compulsory courses (worth eight Credit Points) and elective language courses (worth 2 CP). The compulsory centre courses are “Climate Change and Agriculture” (2 CP), “Information Systems and Agricultural Knowledge Management” (3 CP) and “International Trade and Commercial Policy” (3 CP). As elective centre courses students can either choose “Short English language course” (2 CP) and “Short French language course” (2 CP). This means that each M.AgSe programme has centre course to the extent of ten CP.

Additionally, each Master programme consists of up to two internships, two seminars (one pre-data and one post-data seminar) and the Master thesis. As stated by the university, the total structure of each Master programme comprises a maximum 48 CP and can be divided into General Centre Courses (10 CP), Programme specific courses (23-28 CP; differ for each programme), Internships with a length of 3-6 months (2-4 CP), Seminar (2-3 CP) and Master Thesis (6 CP).

According to the postgraduate handbook, the general structure for Master programmes can be plotted as followed:

1. Centre Courses (10 CP) including:
  - Climate Change and Agriculture (2 CP; First Semester)
  - Information Systems and Agricultural Knowledge Management (3 CP; Second Semester)
  - International Trade and Commercial Policy (3 CP; Second Semester)
  - Short English or French Language Course (2 CP; First Semester)
2. Programme Specific Course (23-28 CP)
3. Internship(s) (2-4 CP; First and Second Semester)
4. Seminar Courses (2-3 CP) including:
  - Pre-Data Seminar (First Semester)
  - Post-Data Seminar (Second Semester)
5. Thesis (6 CP)

The courses for M.AgSe students shall be completed within the first year, and the second year will cover research activities for the Master Theses. The internships will be done at the end of the second semester. The courses are delivered in the form of lectures, workshops and field visits.

## **Improvements based on the findings**

The Centre provided an updated course handbook including all courses of all study programmes and PhD programmes that are subject to this procedure. The handbooks include a clear differentiation between Master and PhD courses by indicating the module code for each programme. 800-courses classify courses for Master students, whereas PhD courses are outlined as 900-courses.

## **Experts' Evaluation**

The handbook clarifies the content of each programme. Students can now inform themselves about each individual course offered in the respective programme. The clarifications help them to expect the workload of each course. The respective teaching method and assessment method is outlined appropriately.

### Master programme Agricultural Mechanization and Sustainable Environment

The study programme strives to impart knowledge to preserve a sustainable environment with the practice of agricultural mechanization. The study programme objectifies to train graduates that are practically and theoretically sound in issues related to engineering applications in agriculture. Additionally, it aims to impart knowledge to solve challenges of small and medium-scale farmers and basic knowledge farming operations, taking into consideration the relationship between soil, water and crop. According to the university, students have to choose one elective course during their first semester. The options are "Agro-Food Process Waste Handling and Management", "Soil and Water Engineering for Sustainable Environment" and "Farm Power and Machinery for Sustainable. Each elective course equals 2 CP.

Additionally to the above-mentioned structure, a typical plan of study could be shown as followed:

First semester:

Two Centre Courses (4 CP), "Engineering Technology and Climate Change" (3 CP), "Engineering Technology for Precision Farming and Conservation Agriculture" (3 CP), "Entrepreneurship in mechanized Agri-Business" (3 CP) plus one elective course (2 CP),

Second semester:

Two Centre Courses (6 CP), "Farm Implement & Operations and Tractor Operation" (2 CP), "Bio-Fuel and Environment" (2 CP), "Livestock Products Processing Practical" (2 CP), "Food Product Development" (2 CP).

## **Improvements based on the findings**

The Centre handed in a course handbook that indicates a curricular structure of 42 credit points out of which 40 CP are compulsory courses, and two CP are elective courses. Additionally, the curriculum outlines ten CP of Centre core courses. On subject-specific level, the course handbook indicates that nine new core courses have been established covering topics such as "Agricultural Waste Water Management for Sustainable Environment", "Tractor and farm equipment maintenance and operation", "Contemporary issues in agricultural mechanization and sustainable environment" or "Advanced Design of environmental control structures for sustainable environment". Additionally, four elective courses have been introduced to the curriculum focussing on agro-food processes, waste management or soil and water engineering. The course handbook includes a summary of the philosophy for the Master programme. The Master programme has been modified based on the feedback from the industry. The industry partners had detected a particular omission concerning the interaction between academia and labour market needs. In conclusion, the Centre has decided to modify the programme in order to create a better link to the labour market. Current issues shall be addressed within the curriculum in order to provide knowledge in sustainable

agricultural mechanization. This academic perspective shall be used by graduates of the programme to create synergies between the industry and the Centre.

### **Experts' Evaluation**

The documentation provided by the Centre can be seen as an indicator that the Centre and the programme leadership is in the right way. The interaction with the labour market has been used to detect omissions within the curriculum. The great effort of establishing a good number of new subject-specific courses is highly appreciated by the panel of experts. The new curriculum indicates that the Centre has discussed intensively on how sustainability components of the discipline can be addressed appropriately. The result of the discussion is that the Centre now offers a reliable programme covering a comprehensive curriculum. The implementation of components under the light of sustainability in the combination of agricultural mechanization was successful. The interaction with the labour market representatives and the conclusion drawn out of these discussions are beneficial for the study programme. The panel of experts testifies that the programme now has a much clearer structure. The intended learning outcomes on programme level are purposeful for the region and beyond. As part of the African Centre of Excellence, the Centre attracts national and international students from the region.

## **II.2 All Ph.D. AgSE programmes**

### **Condition 5:**

Course/module descriptions including the modes of examination have to be published and also be available to students (e.g. student handbook).

### **Condition 6:**

Specific courses on Ph.D. level have to be introduced in the field of sustainability and theoretical and applied techniques (esp. research). This cannot be replaced with courses on Master level.

### **Condition 7:**

PhD programme "Livestock Science and Sustainable Environment":

The crosslinks between the animal-based disciplines and crops have to become visible in the curriculum.

## **Description**

### General

The PhD programmes are research-based for six semesters. The university provides prospective students with the postgraduate handbook, which includes a timeline for students to complete the PhD programme in sufficient time. This timeline starts with the submission of a research concept note, which should be done within six weeks (maximum within the first semester) after the admission into the PhD programme. The presentation of the first non-thesis seminar, the research proposal seminar and the second non-thesis seminar should be done within the first three semesters after the admission into one PhD programme. The presentation of the post-data seminar can be done either at the end of the third semester or during the fourth semester.

Nonetheless, the post-data seminar can only be presented six months after having taken the pre-data seminar. The PhD programmes end with the presentation of the final public defence of the dissertation. Students should start working on the final presentation before the end of their fourth

or during their fifth semester to finish their PhD in due time. The above listed general centre courses will be taken by PhD students as well.

### **Improvements based on the findings**

The Centre provided an updated course handbook including all courses of all study programmes and PhD programmes that are subject to this procedure. The handbooks include a clear differentiation between Master and PhD courses by indicating the module code for each programme. 800-courses classify courses for Masters students, whereas PhD courses are outlined as 900-courses.

### **Experts' Evaluation**

See evaluation on the module handbook on page 12.

## **i. PhD Livestock Science and Sustainable Environment**

### **Improvements based on the findings**

The Centre has handed in a course handbook that differentiates between Centre Core Courses, Subject-specific mandatory courses and elective courses. Centre Core Courses are compulsory for students who have not studied their Master programme at the Centre. It is outlined that the PhD programme leadership has implemented five new PhD courses that are subject-specific. These advanced courses are labelled as so-called 900-courses which indicates for students a clear difference between Master and PhD courses. On a content level, the new courses cover methodical and subject-related courses. Academic writing will be tackled by a course on "Advances in Research Methodology" in the first semester and a course on "Research and Academic Integrity" in the second semester. Subject-relevant content will be taught in the courses "Advances in Carbohydrates and Lipids Metabolism", "Metabolism of Protein and Nucleic Acid in Livestock Science" and "Livestock Science and Sustainability". The structure of the PhD programme now includes two credit points of electives for each semester. The new established elective courses cover subject-specific courses and give students the chance to specialize. The courses are "Advances in Biotechnology Techniques", "Vitamin and Minerals Nutrition and Metabolism in Livestock", "Issues in Food Safety and Quality Control" (all courses offered in the first semester), and "Molecular Nutrition", "Topical Research Problems" and "Stock improvement" (second semester).

### **Experts' Evaluation**

The new documentation for the PhD programme "Livestock Science and Sustainable Environment" testifies a strong commitment to enhancing the quality of the PhD programme. The changes made by the Centre have to be declared as meaningful. The adjustments of the programme show a definite upgrade on the quality of the programme. By adding research-related courses and courses that aim towards sustainability aspects of livestock, the programme leaders have made adequate changes. PhD students get now the chance to carry out research that can have an impact on the region and beyond. Especially the course "Livestock Science and Sustainability" aims to provide students essential insights into subject-specific sustainability issues. The Centre has chosen to focus on environmental, social and economic aspects of sustainability. The panel of experts believes that the PhD programme now fulfils the intended learning outcomes on the programme level. The addition to the curriculum helps the Centre to provide a more robust and purposeful PhD programme.

## **ii. PhD Crop Pasture Production and Sustainable Environment**

### **Improvements based on the findings**

The Centre outlined that the programme leadership has implemented a total of 22 subject-specific courses. These courses cover seven potential specialization fields: Crop Production, Plant Breeding, Seed Technology, Pasture Agronomy and Production, Crop Physiology, Crop Entomology and Crop Pathology. For each of these specializations, two or three courses are offered out of which it is mandatory that students take two courses.

#### **Experts' evaluation**

The experts are content with the development of the PhD programme. The aim of the Centre to establish a structured PhD programme has been transformed into a reliable programme that enables PhD students to specialize in a respective topic. The Centre decided to add one course on applied statistics for agricultural research. The content indicated in the respective course handbook indicates that PhD students will get to know needful knowledge on experimental designs or sampling techniques. The experts testify that the PhD programme now is adequate in structure and content. The intended learning outcomes on the programme level are reflected on the course level. The new subject-specific courses cover sustainability elements which are related to the national and regional context.

### **iii. PhD Agricultural Mechanization and Sustainable Environment**

#### **Improvements based on the findings**

Analogously to the other two PhD programmes, the Centre has provided a new structure for the PhD programme. The PhD programme now consists of a total of six mandatory courses and ten elective courses. The mandatory courses build upon the Master programme and aim to amplify the knowledge of students. The topics that are covered include engineering technologies, subject-specific entrepreneurship or a course on current issues. The Centre indicates that courses that are used within other PhD programmes, can be chosen by PhD students of the Agricultural Mechanization and Sustainable Environment programme as electives.

#### **Experts evaluation**

The Centre has opted for a good mixture between mandatory and elective courses. The mandatory courses are purposeful for the intended learning outcomes on the programme level. They cover engineering technology-related subjects but also give room for contemporary issues.

The Centre includes sustainability specific courses that can be selected by students via electives. The panel of experts states that the necessary changes are done carefully. On a subject-related level, all topics are addressed appropriately.

Nonetheless, it has to be stated that courses on research techniques are not included within the PhD course structure. In comparison to the other PhD programmes, it has to be noted that these techniques are not addressed adequately within the "Agricultural Mechanization and Sustainable Environment". Thus, a specific course on research techniques still has to be included within the programme (**Finding 1**).

#### **Conclusion:**

Generally, it has to be stated that the Centre has taken the findings of the panel of experts very seriously. The development of all three PhD programmes is visible. Subject-specific topics for each PhD programme have been addressed appropriately. The criterion is partially fulfilled.

### **3. Learning, Teaching and Assessment of Students [ESG 1.3]**

Standards MA programme:

*The delivery of material encourages students to take an active role in the learning process.*

*Students are assessed using accessible criteria, regulations, and procedures, which are made readily available to all participants and which are applied consistently.*

*Assessment procedures are designed to measure the achievement of the intended learning outcomes. [ESG 1.3]*

*No changes needed and stated by the Centre.*

#### **4. Student Admission, Progression, Recognition, and Certification / Legal status, admission and certification [ESG 1.4]**

Standards MA programme:

*Consistently applied, pre-defined, published regulations are in place which cover student admission, progression, recognition, and certification.*

*[ESG 1.4]*

Standards PhD programme:

*The relevant formal criteria such as admission requirements and procedures, examination conditions and the award of the degree are described and have been published.*

#### **Condition 8:**

To increase transparency a diploma supplement – or equivalent – including a transcript of records has to be handed out with the final diploma.

#### **Condition 9:**

The selection criteria for applicants have to be drafted and published.

#### **Description**

##### Admittance to the study programme

According to the report, the student's admission follows the University Admission Policy. The admission procedure is outlined in the postgraduate regulations. The regulations differentiate between Postgraduate diploma, Professional Master, Academic Master and PhD degrees. Prospective students for M.AgSE programmes must have satisfied the basic Undergraduate Matriculation requirements. To be eligible for admission into Academic Master degree programmes, a candidate must be a graduate of FUNAAB or any other University recognised by the University Senate and shall have obtained a minimum of Second Class (Upper Division) degree in the relevant field. It is stated that in exceptional cases, candidates with Second Class (Lower Division) can be accepted as well. Holders of a Postgraduate Diploma or a professional Master degree from FUNAAB or another recognised university with a minimum weighted average score of 60% may be considered for admission into the Academic Master Degree as well. Prospective candidates may be additionally required to undertake an oral and/or written examination before admission. Students will usually be enrolled in September, which is the start of the new academic year.

To be eligible for admission to the PhD programme, a prospective candidate must have obtained an Academic Masters/M.Phil. with a research degree of two years duration with a minimum weighted average score of 60% from FUNAAB or an equivalent recognised university. Candidates from other universities with a Master degree of fewer than two years duration and Master degree holders from FUNAAB with less than 60% weighted average can only be admitted to Master degree

programmes. They shall be required to pass a PhD qualifying examination before proceeding to the full PhD programme. The university states that courses can be prescribed for such candidates and those candidates are not allowed to present a Pre-Data seminar until having passed all prescribed courses, each of which the candidate must take and pass at 50% or a higher grade. All applications are to be screened by the CEADESE Scientific Board to invite suitable candidates for an oral interview. The university states that the students are selected following an open, merit-based procedure, and special concessions are given to female, regional applicants. Following the selection process, a shortlist will be created and forwarded to the Postgraduate School for final scrutiny and approval by the postgraduate board. If necessary, course bridges can be advised to students with any deficit regarding the programme's content. Students who have acquired some prerequisite knowledge and skills before admission at CEADESE are given some degrees of percentage taught courses credit waivers. As outlined in the Graduate Students Handbook, this regulation is explicitly applicable to PhD students.

The university states that theoretically for all Master and PhD programmes, tuition fees have to be paid, but due to the World Bank funding, nearly all of the enrolled students have a scholarship.

#### Progression

According to the university, the programme's structure takes into account the level of readiness of the students, occupational requirements as well as age requirements of the students. As the programme is taught in English, the university offers English language courses for international students.

#### Creditation and recognition

As explained by FUNAAB, credits are assigned to courses based on the number of contact hours needed to complete the described course content. According to the SER, three hours of lectures per week is equivalent to three credits, two to three-hour practical is equal to one credit, and six hours of fieldwork is equal to one credit. FUNAAB uses local credits. The workload calculation is stated under the postgraduate regulation prospectus and indicates a minimum of one CP and a maximum of six CP for each course.

#### **Improvements based on the findings**

The Centre has handed in a draft of a diploma supplement that covers all necessary information for graduates. The diploma supplement includes courses taken by the respective graduate.

The selection criteria are published on the website of the Centre. It differentiates between Master and PhD students. The Centre can possibly give conditions to students. The Core Centre courses are specifically drafted for students who did not study beforehand at the Centre.

#### **Experts' Evaluation**

The experts believe that the Centre has carried out all necessary adaptations carefully and can be seen now as fit for purpose.

#### **Conclusion**

The criterion is fulfilled.

### **5. Teaching Staff/Academic level of supervisory staff [ESG 1.5]**

Standards MA programme:



*The composition (quantity, qualifications, professional and international experience, etc.) of the staff is appropriate for the achievement of the intended learning outcomes.*

*Staff involved with teaching is qualified and competent to do so.*

*Transparent procedures are in place for the recruitment and development of the staff. [ESG 1.5]*  
Standards PhD programme:

*The qualification of supervisory staff (m/f) is appropriate to ensure that doctoral students are supervised at the correct academic level.*

*The personnel are sufficient in number to safeguard supervision arrangements on the doctoral programme.*

*The remit of supervisors is clear and transparent.*

*No changes needed and stated by the Centre.*

## **6. Learning Resources and Student Support/Support and research environment [ESG 1.6]**

Standards MA programme:

*Appropriate facilities and resources are available for learning and teaching activities.*

*Guidance and support is available for students to advise on achieving successful completion of their studies.*

*[ESG 1.6]*

Standards PhD programme:

*There is a research environment in place which facilitates the relevant research and fosters the qualification which is necessary for a future research career inside academia or outside an academic context.*

*Doctoral students have access to access to an appropriate infrastructure.*

*Sufficient and suitable guidance and supervisory systems are in place.*

*No changes needed and stated by the Centre.*

## **7. Public Information [ESG 1.8]**

Standards MA programme:

*Data is collected from relevant sources and stakeholders, analysed, and used for the effective management and continuous enhancement of the programme. [ESG 1.7]*

*Impartial and objective, up-to-date information regarding the programme and its qualifications is published regularly. This published information is appropriate for and available to relevant stakeholders. [ESG 1.8]*

*No changes needed and stated by the Centre.*

### III. Recommendations of the panel of experts

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The panel of experts recommends to **accredit** the Master study programme “**Agricultural Mechanization and Sustainable Environment**” (Master in Agriculture and Sustainable Environment) offered by **Federal University of Agriculture, Abeokuta (Nigeria) without conditions.**

The panel of experts recommends to **accredit** the PhD programme “**Livestock Science and Sustainable Environment**” (PhD in Agriculture and Sustainable Environment) offered by **Federal University of Agriculture, Abeokuta (Nigeria) without conditions.**

The panel of experts recommends to **accredit** the PhD programme “**Crop Pasture Production and Sustainable Environment**” (PhD in Agriculture and Sustainable Environment) offered by **Federal University of Agriculture, Abeokuta (Nigeria) without conditions.**

The panel of experts recommends to **accredit** the PhD programme “**Agricultural Mechanization and Sustainable Environment**” (PhD in Agriculture and Sustainable Environment) offered by **Federal University of Agriculture, Abeokuta (Nigeria) with conditions.**

#### **Finding:**

A course on scientific writing and research techniques has to be included in the PhD programme “Agricultural Mechanization and Sustainable Environment”.