



## Decision of the Standing Commission of AQAS

on the Master programmes

“**Environmental Systems and Climate Change**” (Master of Science)

“**Food Processing and Value Addition**” (Master in Agriculture and Sustainable Environment)

and on the Ph.D. degree programmes

“**Environmental Systems and Climate Change**” (Ph.D.)

“**Food Processing and Value Addition**” (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 Master programmes “**Environmental Systems and Climate Change**” (Master of Science) and “**Food Processing and Value Addition**” (Master in Agriculture and Sustainable Environment) and the PhD programmes “**Environmental Systems and Climate Change**” (PhD) and “**Food Processing and Value Addition**” (PhD 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 conditional.

The study programmes essentially comply 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.

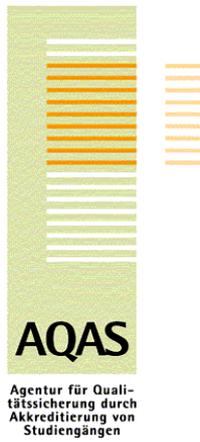
2. The condition has to be fulfilled. The fulfilment of the condition has to be documented and reported to AQAS no later than **30 November 2020**.
3. The accreditation is given for the period of **six years** and is valid until **30 September 2026**.

### **Condition for all programmes:**

1. CEADESE has to develop a concept to ensure that in each study programme specific up-to-date technical equipment is available to students. This can be either shown by handing in an agreement with other higher education institutions nearby or by a verification of purchased resources for each of the specific disciplines.

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

The conditions were fulfilled on time.  
The Standing Commission confirms this with its decision of 24.08.2020.



## **Experts' Report**

On the Master programmes

**“Environmental Systems and Climate Change”** (Master of Science)

**“Food Processing and Value Addition”** (Master in Agriculture and Sustainable Development)

and on the Ph.D. degree programmes

**“Environmental Systems and Climate Change”** (Ph.D.)

**“Food Processing and Value Addition”** (Ph.D. AgSE)

**offered by the Federal University of Agriculture,  
Abeokuta (Nigeria)**

Visit to the University: November, 19-22 2018

### **Panel of Experts:**

<b>Prof. Dr. Mamadou Diakité</b>	Fulda University of Applied Sciences, Department of Food Technology, Germany
<b>Prof. Dr. Jörg Szarzynski</b>	United Nations University, Institute for Environment and Human Security (UNU-EHS), Germany
<b>Prof. Dr. Mark Odhiambo</b>	Moi University, Department of Agricultural Economics and Resource, Kenya
<b>Dr. Bob Manteaw</b>	Africa Resilience Collaborative, Ghana (labour market representative)
<b>Anna Käferböck</b>	Student at School of Applied Science Wels, Austria (student representative)

### **Coordinators:**

Doris Herrmann	AQAS, Cologne, Germany
Patrick Heinzer	

**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:**

For the Master programmes “**Environmental Systems and Climate Change**” (M.AgSE) and “**Food Processing and Value Addition**” (M.AgSE) and for the PhD programmes “**Environmental Systems and Climate Change**” (PhD AgSE) and “**Food Processing and Value Addition**” (PhD AgSE):

**Conditions given after the site visit in 2019:**

1. Specific PhD courses have to be introduced in order to make a clear differentiation between the Master programmes and the PhD programmes.
2. In the **descriptions of the learning outcomes** a clear distinction has to be made between courses addressing the Master level on one hand and addressing the PhD level on the other hand. The level of the programmes has to be described referring the national or European Qualification Framework.
3. CEADESE must define the **responsibilities for quality assurance and its core processes** transparently. Furthermore, a concept has to be developed on how **results of evaluations are shared with stakeholders**.
4. Processes to collect regular **feedback from the labour market** as well as from the alumni must be implemented. Data on student progression and competition rates should be followed.
5. The **overall learning outcomes of all programmes** (Master and PhD) must be defined transparently and must be related to the descriptors of the national or European Qualifications Framework (EQF).
6. **Specific PhD courses** have to be introduced in order to make a clear differentiation between the Master programmes and the PhD programmes.
7. In the **descriptions of the learning outcomes** a clear distinction has to be made between courses addressing the Master level on one hand and addressing the PhD level on the other hand. The level of the programmes has to be described referring the national or European Qualification Framework.
8. The **composition of courses** for all programmes needs to be revised based on the detailed feedback to each individual programme provided in this report. Moreover, the following general aspects should be considered:
  - a. The learning outcomes have to be aligned with the course descriptions.
  - b. The internship for Master and PhD programmes should be extended.
  - c. More practical experiences should be implemented.
  - d. More entrepreneurial content should be included.
9. The **examination methods** have to be transparently described in the course handbook.
10. For international exchange CEADESE has to develop a kind of transfer system which allows **aligning the local credit system with the European Credit System** (ECTS) which is based on student workload.
11. CEADESE has to develop a **concept** to ensure that for each study programme specific up-to-date **technical equipment** is available to students.

## **Recommendations:**

1. A document which students receive on graduation which gives detailed information on the target of the study programme as well as on all competencies the student got during his/her studies (e.g. Diploma Supplement) should be introduced.
2. The degree and awarding title of the programmes should be reconsidered because they are not in line with comparable programmes on the international level and to facilitate entering the labour market of its graduates.
3. More options for the development of the teaching staff, e.g. trainings to enhance the didactic competencies, as well as for participation in international conferences should be offered.
4. CEADSE should revise the structure of its QA evaluation and include aspects like the learning environment, support services and the student workload.
5. The centre should consider implementing re-sit options for students within the same semester to avoid an unnecessary prolongation of time of study.
6. The labour market orientation of some of the programmes should be strengthened by a stronger interlinkage with the entrepreneurial centre and by including more industrial expertise in the teaching staff portfolio.
7. The course contents of the study programmes should be outlined more transparently on the webpage.
8. The literature used in the courses should be updated and should be in line with the course description in the student handbook.

## 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 programmes “Environmental Systems and Climate Change” (Master of Science) and “Food Processing and Value Addition” (Master AgSE) “Environmental Systems and Climate Change” (PhD AgSE) and “Food Processing and Value Addition” (PhD AgSE) offered by the Federal University of Agriculture, Abeokuta, Ogun State/Nigeria (FUNAAB).

The two Master programmes and the two PhD programmes have been postponed by the decision of the AQAS Standing Commission from the 25<sup>th</sup>/26<sup>th</sup> of February 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 and it includes the new overall assessment of the Master and PhD programmes. 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. Where necessary, the chapters distinguish between the different programmes. The chapters that did not need to be changed are indicated.

### I. 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 PhD-programmes are assessed against the AQAS **criteria for the accreditation of structured doctoral programmes**. 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 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.

## **II. 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 dropouts).
- 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 20-21 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]**

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.

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

#### **Condition 3:**

"CEADESE must define the **responsibilities for quality assurance** and its core processes transparently. Furthermore, a concept has to be developed on how results of evaluations are shared with stakeholders."

#### **Condition 4:**

“Processes to collect regular **feedback from the labour market** as well as from the alumni must be implemented. Data on student progression and competition rates should be followed.”

## Description

As outlined in the Self-Evaluation Report, 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 SWOT analysis. The indicators outlined of the analyses comprise financial and human resources, internationalization, 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. 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). 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 intends to lead to concrete measures which consist of several development steps.

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 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. 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 systematized template and is carried out at the end of the first semester. A report will be generated afterwards. The second academic audit cycle focusses quality enhancement from an external point of view by professors outside the college. This will be done at the end of the second semester, and a report will be 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 by the university, the university also involves external and internal stakeholders. 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. In contrast, 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 accordingly 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.

The SER describes that 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 and information. It is aimed that the graduates assume a university ambassador role for the centre. Graduates who require help in publishing will be 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**

Based on the findings of the expert panel, the CEADESE Centre states that the Monitoring and Evaluation Committee has undergone a comprehensive training concerning the enhancement of the efficiency of quality assurance mechanisms at FUNAAB. It is said that the Centre uses the World Bank platform, which includes an in-built mechanism to interact with stakeholders appropriately. This can be used as a point of interaction between staff, students, industry partners and other relevant stakeholders. Based on the documentation, it is stated that the quality assurance unit has been reorganized in a way that the collection and analysis of student's, staff's and stakeholder's feedback follow a more transparent structure. 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. 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.

### **Expert's evaluation**

During the site visit, the expert panel testified a lack of consistency regarding the quality assurance mechanisms by not having a clear-cut quality assurance system. It became clear that there was a mismatch between the aim for quality assurance processes and the real situation. Responsibilities and expectations were not clearly communicated in the Centre and, thus, in the individual programmes. By reshaping the university-wide quality assurance structure and by clarifying the functions and responsibilities within the quality assurance framework, the panel of experts sees now a dynamic movement towards quality assurance mechanisms that are purposeful. The data collection mechanisms can now be designed in a way that concrete measures can be taken for each study programme. The experts believe that internal processes triggered by the previous concerns have led to synergies within the university structures. The documents provided by the Centre leads to the conclusion that the quality assurance model is now better working. This model is based on data collection (covering data on teaching staff, equipment and laboratory, student enrolment or curriculum relevance). The unit can deduce data on the performance such as student success-ratio, stakeholder satisfaction or societal need of graduates in the respective labour market.

### **Conclusion**

This criterion is fulfilled.

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

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
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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.

## II.1 Master programmes

### Condition 2:

“The **overall learning outcomes of all programmes** (Master and PhD) must be defined transparently and must be related to the descriptors of the national or European Qualifications Framework (EQF).”

### Condition 1:

“Specific PhD courses have to be introduced in order to make a clear differentiation between the Master programmes and the PhD programmes.”

### Condition 7:

“In the **descriptions of the learning outcomes** a clear distinction has to be made between courses addressing the Master level on one hand and **addressing the PhD level** on the other hand. The level of the programmes has to be described referring the national or European Qualification Framework.”

### Condition 8:

“The **composition of courses** for all programmes needs to be revised based on the detailed feedback to each individual programme provided in this report. Moreover, the following general aspects should be considered:

- a. The learning outcomes have to be aligned with the course descriptions.
- b. The internship for Master and PhD programmes should be extended.
- c. More practical experiences should be implemented.
- d. More entrepreneurial content should be included.”

### Condition 9:

“The **examination methods** have to be transparently described in the course handbook.”

### Condition 10:

“For international exchange CEADESE has to develop a kind of transfer system which allows **aligning the local credit system with the European Credit System** (ECTS) which is based on student workload.”

## Description

### Environmental Systems and Climate Change (Master programme)

The programme aims to foster multidisciplinary research on the issue of environmental sustainability to improve agricultural development under climate change scenarios. As stated by the university, the programme is designed to provoke a multidisciplinary approach in tackling complex

environmental issues. Graduates shall be able to mitigate the risks posed by climate change to the environment. The study programme involves theoretical, practical, computational and internship components that will be needed to address emerging environmental challenges. It is aimed that graduates will have knowledge in different applications of the environmental systems, will have managing skills related to environmental safety or will be capable of developing environmental early warning systems and prediction for sustainable agriculture and national development.

Additionally, a typical plan of study could be shown as follows:

First semester:

Two centre courses (4 CP), “Mathematical Methods and numerical applications” (3 CP), “Fluid Mechanics” (2 CP), “Hydrological Measurements and Analysis” (3 CP), “Environmental Simulation Modelling” (3 CP), “Climate Change Processes, History and Contemporary Issues” (2 CP), “Remote Sensing, GIS and Land Management” (3 CP) and “Waste Water Management and Pollution Control” (3 CP),

Second semester:

Two Centre Courses (6 CP), “Environmental Economics” (1 CP), “Environmental Safety and Protection” (2CP), “Soil Processes assessment and Management” (2 CP), “Climate Change Impacts, Ecosystem Management and Sustainability” (2 CP) and “Environmental Impact Assessment and Safeguard Policies” (2 CP).

#### Food Processing and Value Addition (Master programme)

The programme aims to focus on the current changes in the food industry (shift from supply-oriented to demand-oriented processes leading to substantial value addition). The programme takes into account the global demand for safe food due to the rapid demographic changes worldwide. Graduates of the programme shall be competent food processors and value addition experts with a high entrepreneur orientation and the adequate knowledge and skills in livestock food processing and value addition to products derived from meat, chicken, milk and fish. According to the university, students have to choose one elective course during their first two semesters. The options for the first semester are “Food Laws, Legislation and Policy”, “Special Topics in Sensory Analytics” or “Industrial Drying of Foods”, whereas the option for the second semester is “Topics in Raw Material Sourcing”. Each elective course equals 2 CP.

Additionally, a typical plan of study could be shown as follows:

First semester:

Two Centre Courses (4 CP), “Food Processing Technology” (3 CP), “Special Topics in Food Chemistry and Biochemistry” (2 CP), “Special Topics in Food Microbiology and Safety” (2 CP), “Food Business Management and Entrepreneurship” (2 CP) plus one elective course (2 CP).

Second semester:

Two Centre Courses (6 CP), “Recent Development in Food Processing, Value Addition and Value Chain Development” (1 CP), “Planning and Analysis of Experiments” (2 CP), “Livestock Products Processing Practical” (2 CP), “Food Product Development” (2 CP), “Physical and Engineering Properties of Foods and Biomaterials” (2 CP), “Process and Plant Design for the Food Industry” (2 CP), “Advanced Quality Management” (2 CP) plus one elective (2 CP).

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

#### General

For both Master study programmes and both PhD programmes, comprehensive course handbooks have been drafted and handed in by the Centre. The course descriptions cover the module code,

the course name, intended learning outcomes on course level, student workload, class size. Furthermore, detailed information on teaching and assessment methods and recommended reading materials are given. The intended learning outcomes follow the same structure highlighting the different level of understanding and knowledge for each module.

The Centre has handed in a note for conversion from the university's grading system the European Credit Transfer System (ECTS). It differentiates between theoretical, practical and seminar units.

#### Environmental Systems and Climate Change (Master programme)

The Centre has further established the overall intended learning outcomes on programme level. The Centre leadership has amplified the philosophy of the programme towards the application of environmental systems by meeting the agro-industrial needs. Based on the feedback given by the panel of experts, the study programme leadership has redesigned the structure of the programme as a whole. The documentation indicates that now the curriculum consists of a total of 51 credit points, differentiating between 22 general courses, 22 core courses and six elective courses. Core courses being the baseline of the curriculum cover topics such as "Environmental Simulation Modelling", "Climate Change Processes, History and Contemporary Issues" or "Environmental Statistics", whereas elective courses such as "Remote Sensing, GIS and Land Management" or "Waste Water Management and Pollution Control" lead to one of the specialization options for students ("Hydrology and Climate Change", "Environmental Geophysics", "Remote Sensing and Climate Change" or "Environment Safety". In comparison to the old curriculum, it has to be highlighted that the Centre has created a total of seven new courses. These courses cover analytical instruments and mathematics (e.g. "Environmental Statistics", "Research Methodology for Environmental Sciences" or "Environmental Simulation Modelling"), but also society-related topics (e.g. "Global Issues Negotiation Process I" or "Public Health and Environmental Systems").

#### Food Processing and Value Addition (Master programme)

The documents handed in by CEADESE for the continuation process, clarify that the Master programme is designed to produce competent food processors and value addition experts. The objective of the study programme is that food processing techniques are combined with entrepreneurial skills in livestock processing. Graduates shall be able to add value to products derived from meat, chicken, milk, egg and fish. The curricular structure of the programme has been under revision as a result of the expert feedback. The study programme leadership has decided to add a number of new courses to the curriculum. Topics cover analytical methods (e.g. "Research Methodology and Biostatistics"), management topics (e.g. "Management of by-products and waste") and discipline-related content (e.g. "Traditional valued-added products"). Furthermore, the study programme structure includes now more practical courses "Livestock Processing Practical I" and "Livestock Processing Practical II". These courses are based on a new partnership with WAMCO Friesland and Obasanjo farms).

### **Expert's evaluation**

#### General

By drafting the course handbooks for the two Master programmes, it became evident that the Centre has looked into the specific discipline intended learning outcomes on Master and PhD level in an adequate manner. The course handbooks are written in an informative way so that students can use them as a source of information. In addition, the panel of experts believes that these alignments have been beneficial for all four programmes to detect certain curricular omissions, which are now filled. Students can distinguish easily between more practical and more theoretical courses. The descriptions of the courses can additionally help students to decide better regarding the elective courses and in consequence of possible specializations.

The draft of the ECTS conversion note indicates that the Centre tries to connect to comparable European programmes. The expert panel believes that the conversion note gives a good structural basis to establish possible collaboration with international higher education institutions and, thus, possible exchange with international students.

#### Environmental Systems and Climate Change (Master programme)

During the site visit, the expert panel testified a certain lack of consistency regarding the quality assurance mechanisms by not having a clear-cut quality assurance system. It became clear that there was a mismatch between the aim for quality assurance processes and the real situation. Responsibilities and expectations were not clearly spelt out in the Centre and, thus, in the individual programmes. By reshaping the university-wide quality assurance structure and by clarifying the functions and responsibilities within the quality assurance framework, the panel of experts sees a dynamic movement towards quality assurance mechanisms that are purposeful. The data collection mechanisms can now be designed in a way that concrete measures can be taken for each study programme. The panel of experts appreciates the new structure of the Master programme. The revision of the study programme can be seen as effective. The existing curricular omissions have been addressed appropriately. By shifting some courses from the elective courses to the mandatory courses, the study programme leadership made room for innovative society-related topics. The role of global climate change negotiation processes is being addressed by implementing a course on “Global Issues Negotiation Process I”.

#### Food Processing and Value Addition (Master programme)

Based on the new documentation, the intended learning outcomes on programme level are much more adequate for the aim of the study programme. The differentiation between elective courses and mandatory courses can be described as successful and meaningful for the study programme. The structure of the programme covers now an adequate balance between practical and theoretical input. The Centre decided to opt for raising the percentage of practical input by implementing two specific courses (“Livestock Processing Practical I” + “Livestock Processing Practical II”). The panel of experts commends this choice due to the fact that this approach fits right to the intended learning outcomes of the study programme. Research methods are fostered with an extra course, which is beneficial for those students that opt for the PhD programme but also to carry out the Master thesis properly. On a content-related level, the topics addressed within the curriculum are on a reasonable level and cover the whole process chain of food processing and the addition of value within this process. The intended learning outcomes on programme and course level are adequate.

## **II.2 PhD programmes offered by CEADSE**

### **Description**

The PhD programmes are research-based and have a duration of six semesters. The Centre provides prospective students with the postgraduate handbook, which includes a timeline for students in order to complete the respective 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 the 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 presented 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.

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

#### **Environmental Systems and Climate Change (PhD programme)**

Based on the need to implement course-specific PhD courses, the Centre leadership has defined a PhD curriculum that consists of four subject-specific courses. On the one hand, the Centre offers now courses focussing on the methodology aspect of carrying out research (e.g. “Advance Research Methodology for Environmental Sciences” or “Advanced Environmental Statistics”). On the other hand, the Centre tries to tackle the subject by offering courses on policy-making and current trend topics (e.g. “Environmental Policy and Governance” and “Global Issues Negotiation Process II”). A clear differentiation between Master and PhD courses has been established by using 800-course codes for Master courses and 900-course codes for PhD courses (see expert’s evaluation of the Master programmes).

#### **Food Processing and Value Addition (PhD programme)**

The new self-evaluation report indicates that the Centre has established a total of eight subject-specific core courses and four elective courses. These courses are all PhD specific and cover methodological, theoretical and practical aspects. It is outlined by the Centre that now a total of 28 credit points of discipline-specific courses have to be taken. In addition to this, the general courses must be taken by students who have not graduated in the Centre’s Master programme. The programme follows the same codification of courses as the programme “Environmental Systems and Climate Change”.

### **Expert’s evaluation**

#### **Environmental Systems and Climate Change (PhD programme)**

The panel of experts believes that by adding the subject-specific courses, the PhD programme has been redirected in the right direction. The curriculum has been contentwise modified in an adequate manner. The changes and additions to the curriculum are beneficial for the students and create a common theme between the Master study programme and the PhD programme. Consequently, the Centre has established a clear structure between Master courses and more advanced PhD courses. A course on advanced research methodology helps students to define their research topic and support the statistical data sampling. Furthermore, global trend topics can be addressed within the new course on global issues. The newly developed curriculum structure helps the Centre to contextualize the discipline with upcoming challenges concerning climate changes. Students will be able to understand and create environmental policies, which is essential for the programme and the graduates’ profile. The intended learning outcomes cover subject-specific topics and are comparable to the respective level of the European Qualifications Framework.

#### **Food Processing and Value Addition (PhD programme)**

Having in mind the genesis of the PhD programme and the structure during the site visit, the experts are satisfied with the new contents of the programme. The new structure includes important topics which are relevant for the discipline and differentiates between elective and mandatory courses. The intended learning outcomes on programme level are transparently described and fit for purpose. The relation between these aims and the content of the programme congruent. A clear transition between the Master programme and the PhD programme is possible through the implementation of advanced courses. Furthermore, the inclusion of topics concerning sustainability has to be seen as beneficial for the programme because of the value for Africa and the region. In conclusion, the panel of experts testifies that the measures taken by the Centre have been for the benefit of the programme.

## **Conclusion**

The criterion is fulfilled.

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

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. Additionally for PhD programmes:  
*The form of supervision and/or course structure is adequate and corresponds with the intended learning outcomes.*

*No changes needed and stated by the Centre.*

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

Consistently applied, pre-defined, and published regulations are in place which cover student admission, progression, recognition, and certification. Additionally for PhD programmes:  
*The institution is entitled to award a doctorate.*

*No changes needed and stated by the Centre.*

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

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 staff.

*No changes needed and stated by the Centre.*

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

Appropriate facilities and resources are available for learning and teaching/research (for PhD) activities. Guidance and support are available for students which include advice on achieving a successful completion of their studies.

**Condition 11:**

“CEADESE has to develop a **concept** to ensure that for each study programme specific up-to-date **technical equipment** is available to students.”

## **Description**

### Facilities and resources

According to the SER, the CEADESE centre caters for the academic, personal and professional needs of students with an emphasis on the successful transition and academic progression. The university receives a sponsorship from the World Bank facilitated by the Association of African Universities (AAU) and the National Universities Commission (NUC).

The Centre is located at the International Scholars Resources Centre and offers lecturer rooms, equipped with teaching and learning facilities. The Centre additionally offers seminar rooms, laboratories, workshops and computer rooms. The university has a central library, which has the most extensive collection of Agricultural resources in Nigeria. The Centre itself has a specialised library, which is equipped with e-resources with up to date journals and e-books. It is outlined that both electronic and printed resources are provided in order to give students the essential background reading for courses taught in the Centre. The facilities include 24-hour reading rooms, research commons for the exclusive use of graduate students and faculty members, photocopy services and networked environments with computers. As stated in the SER, the university provides internet connectivity.

### Information, consultation and guidance

According to the self-evaluation report, course components and descriptions are available on the CEADESE website for students and other stakeholders. Admitted students will receive useful information prior to their enrolment in the specific programme about living conditions and the working environment. Accommodation will be provided to students on campus, and there is a paid shuttle system in place at the university for on-campus transportation of students. The university has established a personal tutoring policy, which supports students in terms of guidance. The CEADESE management, programme leaders and the faculty are available between one and two hours every day for consultations. International students will be assisted by the Centre to obtain necessary immigration documents through the FUNAAB International Office. Additionally, students will get access to medical services at the university's Health Centre. Students are also registered under National Health Insurance Schemes.

## **Improvements based on the findings**

The Centre documents that further collaboration and exchange with nearby universities with relevant expertise have been contacted in order to create synergies between the institutions. A positive benefit is expected for teaching staff, research activities and resources. Practical relevance will be given by using new established cooperation with higher education institutions and companies.

The Centre gave evidence regarding their efforts to make the programmes for visible for the labour market. Based on the findings, the Centre gave the respective study programme leaders a choice to decide whether the title “Master in Agriculture and Sustainable Environment” (MAgSE) and the “PhD in Agriculture and Sustainable Environment” (PhDAgSE) should stay or a more conventional title should be used. The documentation indicates that the study programme leadership has decided to keep the denomination for “Food Processing and Value Addition” but has decided to change the title of “Environmental Systems and Climate Change” to a Master of Science.

## **Experts' Evaluation**

During the site visit, it became evident that the financial resources were used to establish laboratories, new building, classrooms, farms and student workplace. The rooms are sufficient dimensioning the current student cohorts. In addition to the main library, the Centre also has its own library in

which subject-specific literature can be used. Students have access to databases and journals via workstations. Nonetheless, the new documentation does not include a specific concept on how subject-specific research with appropriate instruments for both programmes can be assured. This can be either shown by using the potential of other higher education institutions nearby or by a verification of purchased resources for each of the specific disciplines (**Finding 1**).

The panel of experts appreciates the efforts made by the Centre. It clearly underlines that the Centre intensively debates about the uniqueness of its programmes, how to make them more attractive for students, and how to be more visible in the market. The decision made by the Centre can be judged as the right choice. In the future, it would be beneficial to evaluate the visibility of the study programmes that decided to hold onto the denomination "AgSE".

### **Conclusion**

This criterion is partially fulfilled.

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

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.
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*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 study programme “**Environmental Systems and Climate Change**” (Master of Science) offered by **Federal University of Agriculture, Abeokuta (Nigeria) with conditions.**

The panel of experts recommends to **accredit** the study programme “**Food Processing and Value Addition**” (Master in Agriculture and Sustainable Environment) offered by **Federal University of Agriculture, Abeokuta (Nigeria) with conditions.**

The panel of experts recommends to **accredit** the PhD programme “**Environmental Systems and Climate Change**” (PhD) offered by **Federal University of Agriculture, Abeokuta (Nigeria) with conditions.**

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

#### **Finding:**

CEADESE has to develop a **concept** to ensure that for each study programme specific up-to-date **technical equipment** is available to students. This can be either shown by using the potential of other higher education institutions nearby or by a verification of purchased resources for each of the specific disciplines.