EDUCATIONAL ASSESSMENT
LIMITED PROCEDURE

Nutrition and Rural Development

Master of Science in Nutrition and Rural Development at Ghent University

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Educational Assessment – Limited procedure
Master of Science in Nutrition and Rural Development – Ghent University

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PART 1
General Section
1 Introduction

In 2014 an assessment panel reviewed the master Nutrition and Rural Development of Ghent University. The panel’s conclusions were published on May 18, 2016, in the report “Toegepaste Biologische Wetenschappen”.

Based on this report the study programme applied for an (temporary) accreditation from the Dutch-Flemish Accreditation Organisation (NVAO). In accordance with the Decree on the Structure of the Higher Education in Flanders, Ghent University submitted this request, accompanied with an improvement plan. The master programme received an accreditation with limited validity, until the end of the academic year 2018-2019 (i.e. October 1, 2019).

2 Limited procedure

Before the expiration of the accreditation date, the study programmes must reapply for accreditation. This limited accreditation procedure entails a self-evaluation report by the study programme, a site visit carried out by an independent panel of expert peers and the publication of the panel’s findings in an assessment report. Based on this assessment report, the study programme can apply for accreditation by NVAO.

The reassessment of the Master of Science in Nutrition and Rural Development is limited to the standard that was evaluated as unsatisfactory in the first assessment:
- Standard 1, targeted outcome level
3 Composition of the panel

The assessment panel of Nutrition and Rural Development consisted of 4 members. The composition of the assessment panel was ratified on July 2, September 24 and November 26, 2018 by the VLUHR Quality Assurance Board. The VLUHR Quality Assurance Board installed the assessment panel by its decision of February 25, 2019. The NVAO sanctioned the panel composition on March 4, 2019.

The assessment panel was composed as follows:

- **Chairman**
  - Prof. Paul Janssen, professor in Mathematics and Statistics, UHasselt and chair VLIR-UOS

- **Panel members:**
  - Prof. Yvan Larondelle, dean Faculty of Bioscience Engineering AGRO UC Louvain & Louvain Institute of Biomolecular Science and Technology
  - Prof. Arie Kuyvenhoven, professor emeritus of Development Economics, Wageningen University
  - Ms. Justine van Burgsteden, master Nutrition and Health (Nutritional Physiology and Health Status), Wageningen University

Mr. Andreas Smets, policy advisor Quality Assurance of the Quality Assurance Unit of the VLUHR, was the project manager and secretary of the panel.

The curricula vitae of the panel members are attached (see Appendix 1).

4 Task of the assessment panel

For this reassessment, the programme prepared a self-evaluation report. The VLUHR Quality Assurance Unit received the report on January 17, 2019 and distributed it to the panel members. Hence, the assessment panel had the opportunity to study the information stated in the self-evaluation report and to prepare the visit accurately.

The panel visited the programme on March 1, 2019. During the visit, the panel had meetings with the programme management, students, teaching staff, alumni and employers. The panel had also the opportunity to consult a representative set of study materials, theses and exams. The discussions were held in a very constructive way. The visit schedule is attached (see Appendix 2).

Finally, the panel presented its findings and conclusions regarding the assessed standards in a draft report (this report). This was done in accordance with the “VLUHR Manual for the external quality assurance in Flemish higher education, 2015”. The draft was sent to the programme management under embargo for a response. The panel incorporated the reaction of the programme in its final report insofar it agreed with the remarks.
PART 2
Assessment report
1 Introduction

At the time of the previous assessment, the programme organised three study tracks:
- Rural Development
- Tropical Agriculture
- Human Nutrition

Since the Ghent University organises an International MSc in Rural Development, the track Rural Development became redundant. Moreover the track of Tropical Agriculture had a very low intake of students. In line with the repair plan of 2016, these two tracks have been closed.

In 2016-2017 53 students were enrolled in the programme. In the academic year 2017-2018 and 2018-2019, respectively 35 students and 23 students enrolled the programme. The incoming students are from a wide range of countries and educational backgrounds.

Until the academic year 2017-2018, the programme received scholarships from the Flemish Interuniversity Council (VLIR-UOS) for students from low-and middle-income countries. Non-VLIR scholarship students obtained funding from other scholarships or were self-supporting. Without the scholarships, the share of non-EU students has decreased the last two years, which explains the decreasing student intake.

The programme consists of 120 credits equally divided over two academic years. As students can enroll from various backgrounds, the first semester fosters a common academic basis and provides general mandatory courses. The courses in the second semester of the first year build on the courses lectured in the first semester. The second year consists of a limited list of elective courses and the master’s theses. Internships are considered as elective courses which can be taken in the first or second year. The present programme has two majors: “Public health nutrition” focussing on nutrition outcomes and “Nutrition security and management” focussing on the developmental origins of nutrition problems.
2 Impressions on the Generic Quality Standard 2 and the Generic Quality Standard 3

As mentioned before, the scope of the reassessment is Generic Quality Standard 1 – targeted outcome level. Although not in the scope of the reassessment, the panel wants to share some of its impressions on the Generic Quality Standard 2 – learning process and Generic Quality Standard 3 – outcome level achieved.

- The panel finds that the programme managers made great efforts in order to reshape the profile and the content of the programme. This results in attractive and challenging course contents.
- The learning processes illustrate well how the targeted learning outcomes can be achieved, with an emphasis on multidisciplinarity. The staff clearly understand the specific aims of the programme and several staff members made multidisciplinary bridges between the disciplines. The panel recommends additional effort to further implement this bridging. Internal workshops might help to reach the highest level of interaction between and involvement of teachers and assistants. The panel suggests organising a seminar (on a yearly basis) on multidisciplinary themes with contribution of all relevant disciplines.
- The panel doubts the usefulness of specifying two “majors”. Instead, electives could be recommended based on the current optional courses offered.
- The students consider the heterogeneity of the student population as an opportunity to learn from each other and the possibility to compare between countries. The panel encourages the programme to utilise the peer learning as much as possible.
- The students like the design-planning-implementation approach of the programme. Although, the students consider some courses as too scientific and missing the link with nutrition and development. The total workload is under control, according to the students.
- In the first-year course on Human Nutrition, food availability plays a central role. To present a more complete picture of possible food and nutrition deficiencies, equal attention has to be paid to other aspects such as access to food (affordability), utilisation (determining nutritional value), information (about nutritional characteristics), and individual, gender or household preferences (for food versus other consumer goods).
- The panel is convinced that a greater enhancement of ex-post-evaluation techniques is needed. The Rural Project Management course would be the most obvious place to introduce ex-post-evaluation techniques to understand outcomes better.
- Aspects on the concept of value chains (mapping the production chain from farmers via processing and trade to consumers) and the integration of nutrition issues in circular economy dynamics should be addressed more explicitly in the curriculum.
- The master’s theses appear to be of high quality, but the panel recommends that each thesis should have a section that embeds the research work in a global and nutritional perspective, and briefly elaborating on its multidisciplinary characteristics.
- The internship is an elective course and seems very useful for the students. Although the internship is not extensive in time, the students consider the duration of the internships as correct.
- The quality of the internship reports varied among students, which calls for more emphasis on the quality demands and structure of these reports. This is a suitable project for critical reflection.
- The internship seems more student-driven than network-driven. Financial support for the internship is not unified.
- The panel encourages the programme managers to take measures to increase the student intake. A new ICP-application (International Course Programme) in 2021 is meaningful.
- The evaluation rubrics and the ‘toetsmatrijs’ are clear tools for grading.
– The profile of graduates is appreciated by employers. Some alumni stress a strong skill the ability of the students to work in a multidisciplinary environment with co-workers with a very different background.

3 Reassessment

GENERIC QUALITY STANDARD 1: TARGETED OUTCOME LEVEL

The assessment panel evaluates the targeted outcome level for the Master in Nutrition and Rural Development as satisfactory.

Assessment 2016

The panel had the impression that tracks have been created whose content is mutually independent. Further the panel believed that the programme specific learning outcomes are insufficiently attuned to the profile of the programme. The panel took the view that due to the lack of inter- and multidisciplinarity in the programme specific learning outcomes and the lack of proper benchmarking, there are insufficient guarantees that the programme specific learning outcomes are consistent with the current requirements of the professional field and the discipline with regard to the content of the programme from an international perspective. The panel therefore considers it necessary for the programme management to hold thorough discussions on the profile of the programme and associated clear learning outcomes. The integrational character of the programme needs to be firmly based in both the profile and the programme-specific learning outcomes.

Reassessment 2019

The self-evaluation report of the programme is very informative. It reflects a serious and well-considered attempt to address the earlier critical remarks on the structure of the master programme Nutrition and Rural Development. The efforts made by the organisers of the programme are clearly reported. The large number and the high quality of the actions that have been undertaken to improve the organisation of the master to match with the recommendations of the 2016 panel, impressed the panel. During the improvement process, the programme management involved students, staff and advisory board (alumni and employers).

The profile of the programme is now on nutrition in an international public health perspective, which makes the programme clear and focused. All stakeholders (management, staff, students, alumni and employees) clearly understand the major aim of the programme and point out the same key elements of the programme: the link between nutrition and development in a multidisciplinary and international perspective.

The multidisciplinary approach of the programme is clear. The philosophy of the current programme supports that solutions to nutritional problems “are often found in non-nutritional domains”, and that a comparative and international perspective on nutrition is pursued, resulting in a multi-angle approach to nutrition and rural development. As mentioned before, the multidisciplinary approach is recognised as a key characteristic by all involved stakeholders.

The name of the programme and the mission statement underpin that improvement of the nutritional status at population level is considered “within a context of rural development”. Using the adjective rural indeed limits the concept of development to its rural aspects. For the panel, this limitation can in many cases be questionable (e.g. in view of the needs of urban development). During the site visit, the programme managers, clarified that this limitation is outdated and no longer in line with the learning outcomes and course contents. A modification of the programmes name is on the agenda for 2019, after the reassessment. The panel encourages the programme to continue the discussion on a prospective broader than ‘rural’.
The profile of the programme is translated in **clear learning outcomes**. The learning outcomes provide the students with a set of competencies required to address some of the major international questions related to balanced nutrition and food security of the general population. As recommended by the previous panel, much attention has been paid to increase the awareness of the learning outcomes. As a suggestion for further improvement, the panel recommends to strengthen the learning outcomes with aspects of sustainability, in order to meet the Sustainable Development Goals (SDG’s) and to link the learning outcomes with the SDG’s. Staff members stress that these aspects are present in the course contents, the panel recommends to show this more explicit in the learning outcomes. Overall, the panel think that the learning objectives meet the requirements of the Flemish Qualifications Framework and the Domain Specific Learning outcomes (DLR).

The learning outcomes are formulated in the ECTS-files, so the objectives of the courses are transparent for students. The panel recommends that an additional effort is needed by some staff members to correctly fill in the ECTS-files.

Although most of the courses can be followed by students from other programmes, the collection of courses provides the multi-angle view towards needed to tackle nutritional questions and problems. This aspect gives the programme an specific profile in a **benchmark** with nutrition related programmes.

To enhance the profile of the programme, an **Advisory Board** is established. The Advisory Board is instrumental in the formulation of the vision as well as the learning outcomes of the programme. The members of the Advisory Board represent international agencies and academic institutions in the high-, middle- and low-income countries, which are in fact possible employers. The panel admits that the Advisory Board covers a broad field of nutrition related disciplines, but believes at the same time that a consumer party and some specific research institute such as the International Food Policy Research Institute (IFPRI) should be part of the Advisory Board.

The panel **concludes** the mission statement in combination with the learning outcomes clearly show the profile of the programme. The panel appreciates that input from different stakeholders (in fact the Advisory Board) is used to formulate the mission statement and the learning outcomes. The programme meets the international standard. The panel concludes that a sufficient international level of quality has been achieved, and gives the score 'satisfactory' for Standard 1 – Targeted outcome level.
The panel evaluates the Generic Quality Standard 1 satisfactory (2019) and, given the positive judgement of the assessment of 2016 Generic Quality Standards 2 an 3 (2016), the overall judgement on the Master in Nutrition and Rural Development is “satisfactory”.

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APPENDICES
Paul Janssen
Paul Janssen, statistics professor at Hasselt University, holds a master degree in mathematics (1974), a PhD degree in statistics (1978) and an Habilitation Degree (Hoger Aggregaat, 1988) from the catholic University of Leuven (KU Leuven). He has research expertise in and published methodological articles on asymptotic statistics, nonparametric estimation (smoothing techniques, kernel estimation), modelling of univariate and multivariate survival data (frailty models and copula models) and resampling techniques (bootstrapping). Over the years he taught a variety of statistics courses at bachelor and master level in several faculties including the faculties of Business Economics, Medicine and Life Sciences, and Sciences, not only at Hasselt University but also, as visitor, at e.g. Jimma University (Ethiopia) and Anton de Kom University (Suriname). He held research visiting positions at the Johns Hopkins University (Baltimore, USA) and the University of Washington (Seattle, USA). He served as vice-rector research at Hasselt University in the period 2004-2012 and has been a member of the Flemish Advisory Board for Science and Innovation (VRWI, now VARIO). He is also a member, since 2007, of the Bureau UOS (University Development Cooperation – VLIR-UOS) and is the chair of the Bureau UOS since 2012.

Arie Kuyvenhoven
Arie Kuyvenhoven is Emeritus Professor of Development Economics at Wageningen University in the Netherlands. Since 1979 he has been affiliated with the Netherlands Economic Institute in Rotterdam where he was statutory Director International Affairs from 1988 to 1998. In the 1990s he served at Wageningen University as Dean of Social Sciences and Chairman of the Department of Economics and Management, and during 2003-2009 as Director Mansholt (Wageningen) Graduate School of Social Sciences. Arie Kuyvenhoven is (co-)author of 150 scholarly articles, has written or edited 15 books and (co-)supervised 34 dissertations on issues related to development and trade, input-output analysis and project appraisal, sustainable agriculture, food security and environmental issues. Having overall responsibility for the Development Economics group at Wageningen University for 20 years, he has been involved in bio-economic modelling, agricultural and rural development, and natural resource management, and has directed various research co-operation programmes in West Africa, Costa Rica, Pakistan, Indonesia and China. He has served on several supervisory boards, including the International Food Policy Research Institute (IFPRI), the Centre for World Food Studies and the Asian Centre for Upland Crops in Bogor. He is an honorary professor of economics at Nanjing
Agricultural University in China where he also serves as visiting professor since 2014. Over his career, he has worked in 20 developing countries in Africa, Asia and Latin America.

**Yvan Larondelle**

Yvan Larondelle got a Bioengineer degree (1983) and PhD in agronomical sciences (1989) (UCL). He made a postdoctoral training at the Institute of Genetics (1989-1990) (University of Köln, Germany). He went then back to UCL where he worked as research coordinator in the laboratory of clinical molecular biology (1990-1992). He is Professor at UCL and member of a research unit in nutritional biochemistry since 1992. At the University of Louvain, he is one of the co-founder of the interdisciplinary initiative “Louvain4Nutrition”. He works in close collaboration with several universities in Europe and in developing countries (Bolivia, Brazil, Cameroon, Peru, Vietnam). Since 2009, he owns a title of “Doctor honoris causa” from the Federal University of Para, in Brazil. In 2016, he has received an official recognition by the Vietnamese government for his commendable contribution to the agricultural and rural development of the country. In Belgium, he is Vice-president of the Walloon competitiveness cluster “Wagraim” since 2006 (Belgium) and member of the Royal Academy of Belgium. He has also been Dean of the Faculty of Bioscience Engineering of UCL (2013-2016). The research team headed by prof. Yvan Larondelle focuses its efforts on the development of foods with higher nutritional quality and/or increased chemical safety, the final goal being to improve consumer’s health. He is the co-author of more than 160 articles and reviews in international journals.

**Justine van Burgsteden**

Justine van Burgsteden is a master (MSc) student Nutrition and Health at the Wageningen University (The Netherlands), with the specialisation Nutritional Physiology and Health Status. Her MSc thesis at the chairgroup Nutrition and Pharmacology focuses on the association between vitamin D supplement regimes and blood levels of medication used to prevent renal graft rejection in kidney transplant recipients. She holds a BSc degree in Nutrition and Health, and took Pharmacy courses during her minor. She has been a member of the Programme Committee of the BSc/MSc programme from 2014 until 2017, where she has been in search committees for chairgroup holders and a study advisor. In addition, she has been a student assistant of physiology, pharmacology and presentation skills courses, has been chair of the study association ‘Di-Et-Tri’ and biyearly presents her study at the BSc Open Day.
## APPENDIX 2
Time schedule of the site visit

### February 28, 2019
- 16:30–19:00 preparatory meeting
- 19:00 dinner

### March 1, 2019
- 9:00–10:00 programme management
- 10:00–10:30 deliberation
- 10:30–11:15 students
- 11:15–11:30 deliberation
- 11:30–12:15 teaching staff
- 12:15–13:15 lunch
- 13:15–14:00 alumni and employers
- 14:00–15:00 deliberation
- 15:00–15:30 programme management
- 15:30–16:00 draft of the final conclusions
- 16:00–16:15 presentation of the final conclusions