



**Final evaluation of the IUC
with Mountains of the Moon
University, Uganda**

Acronyms

AI	Artificial Insemination
EAC	East African Community
KYOFNET	Kabarole Young Farmers Network
MAAIF	Ministry of Agriculture, Animal Industry and Fisheries
MMU	Mountains of the Moon University
MoU	Memorandum of understanding
NAFPRI	National Agriculture Food Policy and Research Institute
NCHE	National Council for Higher Education
ODEL	Open and Distance Education and Learning
OWG	Operation Wealth Creation
ToR	Terms of Reference
ToT	Training of Trainers
PSU	Project Support Unit

Executive Summary

Subject and objective of the evaluation

Subject of this end of term evaluation is the Institutional University Cooperation programme (IUC), phase II, implemented in partnership between the Mountains of the Moon University (MMU), Uganda, Rwenzori Region and the following educational institutions: Universiteit Gent (UGent, which had developed previous contacts and collaboration with MMU on aquaculture), KULeuven, Vrije Universiteit Brussel (VUB), HOWEST, Thomas MORE Hogeschool (University College).

This programme concerns two projects:

- Project 1: Agricultural action research and community engagement for development (with a budget of 572.700 euro/4 years)
- Project 2: The Transversal Institutional Strengthening project (with a budget of 392.780 euro/4 years)

Objective of this end evaluation was to contribute to learning and to effectiveness, impact and sustainability in particular.

Context

The programme is executed in a context that is characterized by the following elements:

- Uganda's long-term aspiration as articulated in its vision 2040 which aims for a transformed society from peasant to modern prosperous country thanks to (amongst others) sustainable (agro-)industrialisation.
- Figures related to low labour productivity, share of young people in the population and high unemployment call for not only expanding the scope of education but also its relevance to assure employment and subsequent increase in household incomes.
- Following the substantial government investments in universal primary and secondary education since the 1990s and the growing population, the demand for higher education has greatly increased. During the period of the IUC programme, there were 282 registered higher education institutions (public and private). Out of these, 12 are public universities in operation up from 8 in 2018, one of which is Mountains of the Moon University (MMU). Opening new universities is part of the strategy to secure equity of access to higher education in peripheral regions. The process started in 2018 and ended formally in 2023.
- Like many other sectors, the higher education sector suffered effects of COVID-19 pandemic registering a decline in most of the statistical higher education indicators including enrolment¹.

For the evaluation, it was important to understand that the university, from 2018 onwards and its leadership was heavily involved in a transition process to become a public university, a process that is not yet finalised (new batches of staff still need to be hired) and that has slowed down (together with COVID) the change process of operationalising the experiences of the IUC programme.

Methodological approach

This evaluation is part of a more comprehensive evaluation exercise of 8 VLIR-UOS IUC and Network programmes. It is based on a shared evaluation framework that looks at the 5 OECD-DAC criteria and a shared methodological approach which starts from the self-assessments by IUC stakeholders and entails attention for changes in institutional capacity, learning questions and analysis of a particular impact case.

The institutional capacity analysis was based on a tool that appreciated changes in 5 core capabilities. This tool was primarily used to highlight changes in capabilities that occurred between 2018 and today and to discuss the contribution of the IUC programme with the stakeholders. To analyse findings related to the learning questions and the impact case, the evaluators collected data in Excel sheets, assessed strength of evidence and analysed contribution based on a set of rubrics (that are attached in annex).

Execution of the evaluation

The evaluation was prepared by key-informant interviews, desk-study and design of the methodological approach for the impact case. The impact claim that was analysed was related to the contribution of MMU research to application of innovations in dairy farming and increase in production and income of one specific farming group. The field visit (8 days) started with the institutional capacity assessment and

¹ National Council for Higher Education (2022). The State of Higher Education and Training in Uganda 2019/20. Available at: <https://unche.or.ug/wp-content/uploads/2023/02/State-for-Higher-Education-Report-2019-2022.pdf>

was marked by a large participation of all different segments and levels of the university. The evaluators conducted more than 30 individual interviews and organized additional interviews and focus group discussions in the framework of the impact case. Two restitution meetings (with IUC and with VLIR) concluded the phase of data-collection and sense-making.

Main findings and conclusions

The programme performed good (to excellent) in relation to the DAC criteria.

Relevance - The IUC programme was highly relevant by design and from multiple perspectives: university strategy, context and government priorities and needs of the community. Attention for engagement with the community was part and parcel of the two projects and every PhD scholarship.

Coherence – Internal coherence was ensured by design. All research activities (Project 1) were related to an initial analysis of the dairy value chain and integrated in one way or the other the challenges that were identified by the (dairy) farmers. A decision was then made to focus on quality and volume of production (with view to contribute to higher income and improved livelihood of farmers/farmer communities) and gaps in knowledge were identified with the farmers (topic list). Transversal activities (Project 2) helped to create conditions for ensuring quality of research, education and outreach, with the radio functioning as a bridge between P2 and P1.

Actual realisation of internal coherence in the IUC (and the university) appeared to be less evident: attention for coherence was difficult to maintain under the stress of execution of each activity/PhD (complicated by COVID) thus not allowing a fully integrated approach. Relations with various external stakeholders was looked for: investment in relation building with potential donors and decision makers in Kampala and in Belgium was a key characteristic of the North-South coordination and increased visibility of MMU and access to funds but external coherence was complicated by rules and timelines of different donors to which the stakeholders have to adhere.

Efficiency - The programme was executed in an efficient way and this was strongly influenced by a growing performance of the PSU unit, joint planning and a high commitment from all partners and in particular the PhD students. Transparency on the budget and clear budget allocations contributed to the efficient execution and commitment of different stakeholders to execute their respective tasks. Monitoring of progress based on indicators was combined with smaller surveys on changes and discussion during (joint) coordination meetings which is good practice to understand progress beyond numbers (quantitative indicators). Issues with commitment at the level of the university and three PhDs (sourced outside of MMU), in the context of the instability caused by the transition to a public university, resulted in a decision of MMU to stop the IUC scholarship for these three and forced Flemish partners to seek funding elsewhere to secure finalisation. This did not lead to a breach in relations between the institutions involved in the IUC, which is due to the quality of the partnership and the capability of partners to engage in dialogue and conflict resolution.

The 12-year partnership has expanded the network of MMU: programme stakeholders from the North facilitated access to their academic network and beyond which made it possible to attract some additional (VLIR-UOS and other) funding that benefited additional staff and faculties in MMU and supported specific IUC interventions (radio, Kyembogo Dairy Innovation Centre).

Effectiveness - The programme stakeholders have realized most of the results that were planned which has strengthened the research and educational function of MMU. The IUC has led directly to the realization of 9 PhDs (of 12 planned) and indirectly (often through other VLIR-UOS funds and involving Northern partners from the IUC) to another 8 PhDs. Which is a critical mass in a university that started with 3 PhDs only. Scientific and peer reviewed articles, more than anticipated at the start, have been written by IUC PhD scholars but also by other academic staff that was inspired by the IUC dynamic and ambition (more in particular from Year 2, 2021 onwards). Academic staff is investing in writing new project proposals to attract funds or secure PhD scholarships. IUC PhD scholars have developed project management skills but also learned a lot from the feedback culture to support researchers and PhD students. Conditions (structures and budgets) have been put in place to support research and the integration of new teaching practices (e-learning and attention for research). A number of curricula have been reviewed and a new BSc in aquaculture can start next year. Quality of this has not been assessed by the evaluators but the process followed guidelines from the Higher Council for Education and was accredited. Action research and radio have diminished the distance between university and community which is a first requirement to ensure good interaction with communities and to improve understanding of the real challenges.

Impact - When it comes to the impact on the MMU as an institution, the cost-effectiveness (relatively modest budget compared to the impact on the institution) of this IUC cannot be underestimated. The IUC helped MMU to build and strengthen its core functions and to put it on the map and broaden its networks in Belgium and elsewhere. As an institution, all capabilities have been strengthened by the IUC programme which was sustained by ample examples of change provided during the evaluation mission. The IUC has been appreciated by MMU stakeholders as most impactful in the domains of research and positioning itself as a driver of change (capability to deliver upon results) and the domains of project management and putting the correct administrative procedures and mechanisms in place (capability to act and commit). Evidence of MMUs' responsiveness to other actors (both NGOs and decision makers) has been shared by various stakeholders during the evaluation mission and serve as an illustration. The progress of the university in terms of human capacity and presence/visibility in the region and at community level did not go unnoticed and eventually led to the decision of government to become a public university and the decision of government (MAAIF) to position a new research and policy centre on food within the Faculty of Agriculture.

The direct impact of the IUC on the development of the Rwenzori region and the community needs to be nuanced/is mixed. The main strategy of the IUC was to realise impact for communities through action-research. This research was executed by identifying specific households and farmers in the community and collecting their input on needs and the challenges they experience. During execution, the focus was on the realization of relevant PhD research. Not all interventions were equally strong in applying a systematic and continuous action research mode and a theoretical/operational model for action research was not defined in explicit terms either. Although the approach has contributed to relevant research, uptake by some farmers and diminishing distance between university and community, the evaluation and more in particular the impact case demonstrates that this is not enough to stimulate change at a larger scale (affecting communities beyond the people that were directly involved in providing data to the researchers and engaging with them on trials). Quite rightly, the IUC stakeholders acknowledge (in their own self-assessments) that the role of a university is limited (to knowledge transfer, development of innovations, translating research results into concrete policy recommendations) and that there is need for more strategic involvement of NGOs and government extension services to support the communities.

Sustainability - The sustainability of the IUC results is largely ensured at institutional, academic and financial level. Future institutional partnership with educational institutions in Belgium will help to further develop the research function at the university. MMU leadership (including the new Vice Chancellor) demonstrate ownership, IUC involved staff has been retained, current budget and action plans give proof of budget allocations to pursue IUC results and outputs in order to further develop them. Maintaining the focus on the community engagement will largely depend upon how the transition to a public university will be managed and new staff is impregnated by some key principles and will nurture that ambition of continuing to be a community owned university. The PhD study on change management provides valuable lessons about how to ensure that project results really contribute to change and reveal that attention for processes of change management was insufficiently taken into account in the IUC modality and only received more attention starting from 2021, but are genuinely addressed since then (although slowed down by the instability of the transition process).

Internal and external factors that influenced on the results of the IUC are related to the nature of the partnership, the effective and transparent coordination of the IUC, and the visionary leadership of MMU. It goes without saying that the decision of government to make MMU a public university was key in capitalizing on the foundations that were created through the IUC. The transition was necessary to maintain commitment of staff to MMU but also made it more difficult to ensure sufficient attention (time, HR, leadership) for the actual institutional change process. Also COVID was an ambiguous factor of success: it affected teaching and field research but also spurred the initial steps towards innovative pedagogy and led to increased use of e-learning and a structural set up of the ODEL department.

Future challenges - Future challenges appeared clearly from the evaluation and the institutional capacity assessment and are situated at the institutional level (need to enhance the development of knowledge management, infrastructure to improve quality of education for students and using the existing (and future) network in a more strategic way in order to realise the mission of MMU and its niche of environment, agriculture and tourism. Further challenges are related to research (and the further investment in human resources and preparation of a doctoral school (through post-docs) and education (further integration of research in education, the development and mainstreaming of a specific e-

pedagogy and the building of competences amongst teaching staff to apply and use e-pedagogy to support student centred learning).

With regards to outreach: the MMU has potential to further develop its action-research approach based on various experiences from the IUC and outside the IUC programme. The implementation of the community engagement model will have to entail (i) sensitization of, further discussion on the operationalisation with and training of staff, (ii) strategic engagement with the communities and external stakeholders (with view to uptake) and (iii) a clear focus on the specific role of the university and acceptance of its limitations and thus a strategy on how to 'exploit' the network to contribute to effectiveness and impact.

Overview of recommendations

In relation to	Who should act?	Recommendation
Efficiency	Future IUC stakeholders	1 Ensure to add additional qualitative measuring of changes (next to quantitative indicators) and take time for sensemaking during planning and coordination meetings to understand dynamics of change, contribution of activities to change and challenges/obstacles for further change.
Effectiveness and scientific quality	MMU and partners	2 Focus on quality of MSc programmes (to create a pool of future PhD candidates) and seek funding for financing of post-docs.
Relevance and uptake	MMU	3 Further develop and strengthen the action research approach as a way to engage with communities.
Uptake, effectiveness and impact	MMU	4. Develop an appropriate strategy for uptake (as part of the community engagement model) which takes into account obstacles at the level of various types of end-users for uptake and identification of external stakeholders that can address them
Sustainability	MMU VLIR-UOS	5. Community engagement and change management models developed under P2 should be adopted and integrated in the university in such a way that supportive systems, processes, structures, and people are put in place to drive the programme interventions. This calls for a redesign of future IUC programs as 'change management interventions' with clearly defined (and collectively agreed) change that is desired at different levels or with different actors in the University.
Benchmarking and learning with regards to institutional capacity development	VLIR-UOS	6. Analyse the current funding modalities to find opportunity to support missions between former IUC universities in Uganda to study practices and change management processes with universities in the East African Region and beyond.
Impact	VLIR-UOS	7. Explore how to make (better) use of the Joint Strategic Framework to support synergy, networks and collaboration with IUC universities

Table of contents

1. Introduction.....	1
1.1. Background.....	1
1.2. Context.....	2
1.2.1. Key social, political, economic, demographic contextual factors in the country	2
1.2.2. Higher Education	2
1.2.3. University level	3
1.3. Evaluation methodology and process.....	3
1.3.1. Evaluation framework and methodological approach.....	3
1.3.2. Evaluation process and activities	5
1.3.3. Limitations	6
1.4. Description of impact case	6
1.5. Structure of the evaluation report.....	7
2. Analysis and findings: programme level.....	8
2.1. Overview of programme performance.....	8
2.2. Relevance	8
2.3. Coherence.....	10
2.4. Effectiveness	11
2.5. Scientific quality	13
2.6. Efficiency	13
2.7. Impact.....	15
2.7.1. Impact on MMU as an institution.....	15
2.7.2. Wider impact.....	18
2.8. Sustainability.....	18
3. Brief assessment per project.....	22
3.1. Project 1. Agricultural action research and community engagement for development	22
3.2. Project 2. The Transversal Institutional Strengthening project.....	25
4. Impact case.....	27
5. Findings on the learning questions.....	34
5.1. How to support PhD trajectories, with a focus on optimising diversity/inclusivity (gender and Leave No One Behind)?	34
The lessons that were learned from the experience with the IUC are the following:	34
5.2. What factors and measures, at VLIR/IUC level and/or at partner institute level, support effective coordination of programmes?.....	34
The lessons that were learned from the experience with the IUC are the following:.....	34
5.3. How to ensure uptake of research results or new educational practices by political and societal actors and end-users?.....	35
6. Conclusions and recommendations	37
6.1. Conclusions	37
6.2. Recommendations	40
7. Annexes.....	42

7.1.	List of documents consulted	42
7.2.	Field visit programme.....	42
7.3.	List of people consulted/interviewed.....	43
7.4.	Overall scores for the assessment of the collaborative process/ overview of scores of analysis of institutional capacity	45
7.5.	Rubrics for assessment of the impact case.....	46
7.6.	Evaluation framework	1

Acknowledgements

The team of evaluators is grateful to VLIR-UOS for another opportunity to conduct this final evaluation of the IUC programme at MMU having earlier conducted the mid-term evaluation of the same. Our sincere appreciation to the coordinators of the programme; Prof. Edmond Kagambe at MMU and Prof. Dr. Xavier Gellynck at the Ghent University in Belgium for the support rendered before, during and after the mission. The warm reception by the new Vice-Chancellor at MMU and his assurance of full support from the institution was illustrative of the value attached to the IUC programme and its contribution to the current status of the university. The PSU and in particular Ms. Christine Kobugabe who wonderfully facilitated the evaluation process by making all the necessary appointments with all the people we have interviewed, organizing the institutional evaluation workshop at MMU and ensuring that all documents requested for reference were available to us. All people that have participated in the institutional assessment workshop, individual and group interviews including farmers visited and/or interviewed are greatly valued for their time and sincerity of the information provided. The farm manager at Kyembogo university farm (Phillip) is appreciated in a special way for organizing the farmers that we needed to interview or visit and personally led us to them. We can't hide the fact that we enjoyed the hospitality of the farmers visited. We are hopeful that this report represents the opinions of the diverse stakeholders we interacted with during the entire process of the evaluation and that our analysis and report is useful to MMU and future IUC programmes.

Paul Kibwika and Corina Dhaene, January 2024

1. Introduction

1.1. Background

Subject of this end of term evaluation is the Institutional University Cooperation programme (IUC), phase II implemented in partnership between the Mountains of the Moon University (MMU), Uganda, Rwenzori Region and the following educational institutions: Universiteit Gent (UGent, which had developed previous contacts and collaboration with MMU on aquaculture), KULeuven, Vrije Universiteit Brussel (VUB), HOWEST, Thomas MORE Hogeschool (University College).

The objectives and content of an IUC partnership between one partner institution in the South and Flemish universities and university colleges in the North are outlined in a partner programme (technical and financial file). All IUC programmes combine objectives of institutional strengthening and strategic thematic capacity building (linked to both institutional priorities and developmental priorities in a specific country). Each partnership consists of a coherent set of interventions (projects) geared towards the development of the teaching and research capacity of the university, as well as its institutional management.

In this IUC, phase 2, two projects were further developed as is described in the table below.

Phase 2	Project title and budget	Objective
Project 1	Agricultural action research and community engagement for development 572.700 euro/4 years	The project addresses key challenges affecting smallholder farmers engaged in dairy, fish and maize production. These challenges include inadequate quantity and quality of water for dairy cattle, declining yields due to soil infertility as a result of over cultivation, feeding inadequacies in dairy cattle leading to low milk production, poor water quality and insufficient knowledge among aquaculture farmers and general poor farm management practices. Therefore, as a general objective, the project aimed at improving the standard of living of farmers in the Rwenzori region. This was achieved through two specific objectives (i.e., academic and developmental objective). The specific academic objective is "MMU is able to develop and deliver innovative solutions in dairy nutrition, aquaculture, water and soil fertility management to promote sustainable agriculture in the Rwenzori region" while the specific development objective is "Farmers in the Rwenzori region is able to successfully improve their farming practices (i.e., dairy nutrition, dairy & aquaculture water management, soil fertility management) for increased productivity and income".
Project 2	The Transversal Institutional Strengthening project 392.780 euro/4 years	The Transversal Institutional Strengthening project (P2) aimed at enhancing institutional capacity of MMU to deliver quality education, research and community service through (1) development of ICT infrastructure; and establishment of a student data management system (2) human resources development through PhD training; e-pedagogy training and various targeted trainings such as mass online training delivery system (MOODLE); curriculum development and (3) establishment of MMU radio to facilitate university engagement with community and dissemination of research results.

Table 1. Projects

1.2. Context

1.2.1. Key social, political, economic, demographic contextual factors in the country

Uganda's long-term aspiration as articulated in its vision 2040 is a transformed society from peasant to modern prosperous country. Currently, over 70% of Uganda's population of about 46 million² people directly or indirectly depend on agriculture for livelihood, hence the aspiration places special emphasis on development of the agricultural sector. This is a daunting challenge given the high population growth rate of 3% per annum and having one of the youngest populations where 77% are below 30 years old. The vision 2040 is aligned to several other international and regional development frameworks such as the Africa Agenda 2063 whose vision is: *An integrated, prosperous and peaceful Africa, driven by its own citizens, representing a dynamic force in the international arena*³; the EAC and the global sustainable development goals (SDGs).

The short-term (five year) plan towards achieving the aspirations of vision 2040 is spelt out in the National Development Plan III (NDPIII) covering the period 2020/21 – 2024/25 whose goal is increased household incomes and improved quality of life of Ugandans³. The thematic focus of NDPIII is sustainable industrialization for inclusive growth, employment and wealth creation through harnessing Uganda's abundance factors of production in the knowledge-based economy by capitalizing on science, technology and innovation to improve the livelihood of its citizens. Among the 18 specified programmes for NDPIII are agro-industrialization and tourism development to which MMU positions itself to make significant contributions to national development. The NDPIII rightly notes adequate investment in science, technology and innovation (STEI) as critical for a country to industrialize and achieve sustainable development that is envisaged. It is further pointed out in the NDPIII that however, Uganda's human capital is characterized by low labour productivity (38 percent), low human development (HDI at 0.516) and fewer STEI graduates (2 out of 5 are STEI graduates). This in part contributes to the high levels of unemployment. Whereas Uganda's official unemployment was 4.28 in 2022, it is estimated that 64 – 70% of the working age are unemployed⁴. This calls for not only expanding the scope of education but also its relevance to assure employment and subsequent increase in household incomes. There is evidence that access to quality tertiary education helps create greater and more decent job opportunities for young men and women in developing countries including Uganda⁵. The fact that Uganda has one of the youngest populations and growing at a high rate calls for increased investments at all levels of education and more so in higher education that can help address the dilemmas of unemployment and enhance incomes of the productive workforce.

1.2.2. Higher Education

Following the substantial government investments in universal primary and secondary education since the 1990s and the growing population, the demand for higher education has greatly increased. Currently, there are 282 registered higher education institutions (public and private). Out of these, 12 are public universities in operation up from 8 in 2018. This follows the Government decision to take over some of the previously private universities namely Mountains of the Moon University in the Rwenzori region and Kabale University in Kigezi region among others. Two additional public universities (Busoga University in the Busoga region and Bunyoro University in Bunyoro region) are under preparation to start operations in the near future. Like many other sectors, the higher education sector suffered effects of COVID-19 pandemic registering a decline in most of the statistical higher education indicators including enrolment⁶. Most of the universities especially the private universities are located in the central region creating concerns on equity of access to higher education. It is for this reason that Government is expanding the public universities to other regions in order to create a balance in access to higher education.

² UBOS (2023) Uganda Profile

³ National Planning Authority (2022). The Third National Development Plan 2020/21 – 2024/5.

⁴ Development Aid (2023) available at: <https://www.developmentaid.org/news-stream/post/166655/uganda-youth-unemployment-rate#:~:text=The%20general%20unemployment%20rate%20in,of%20working%20age%20are%20unemployed.>

⁵ ILO (2015) Work4Youth, Uganda survey of School to work transition. Available at:

https://www.ilo.org/wcmsp5/groups/public/@ed_emp/documents/publication/wcms_429078~1.pdf

⁶ National Council for Higher Education (2022). The State of Higher Education and Training in Uganda 2019/20. Available at: <https://unche.or.ug/wp-content/uploads/2023/02/State-for-Higher-Education-Report-2019-2022.pdf>

The Mountains of the Moon University (MMU) is the only university located in the Rwenzori region which comprises of eight districts namely; Kasese, Kamwenge, Kabarole, Kyenjojo, Kibale, Bundibugyo, Kyegegwa, and recently created Ntoroko. It was established in 2005 as a private university with strong orientation to addressing the regional development challenges, hence the acquiring the label of a community university. The decision for government to take over MMU as a public university was made in 2018 following an application by the owners of the university to government. However, the processes of transition from private to public university went on until 2022 and started operation as a fully-fledged public university in 2023. In addition to aspiring for international and national credibility, MMU is committed to maintaining its local (regional) relevance as a community university. In this regard, MMU has carefully carved out its niche to focus on Agriculture, Tourism and Education (ATE), which are the sectors with high potential to transform and improve livelihoods of the majority of people in the Rwenzori region. MMU is strategically located in the centre of tourist attractions, including the snow-capped mountain Rwenzori and several national game parks and conservation areas. The fertile soils and cool environment present high potential for agriculture which has not been adequately utilised to transform the livelihoods with the majority of people practicing subsistence agriculture.

1.2.3. University level

The 2022-2025 strategy and vision of MMU is to be “*a centre of excellence in teaching, research and community engagement for sustainable development*” and the mission is “*to provide Innovative and transformative education, research and community engagement for socio-economic transformation*”. It is envisaged that all academic programs offered at MMU will as much as possible be oriented towards achieving this mission. As a young university, it has an opportunity to anchor itself and orient its programs and activities towards influencing developmental impact. The MMU philosophy is “*transformation of minds to enhance community engagement*”, something that will have to start with its staff and inculcated and domesticated as the reason for its existence.

For the evaluation, it was important to understand that the university, from 2018 onwards and its leadership was heavily involved in a transition process to become a public university, a process that is not yet finalised (new batches of staff still need to be hired) and that has slowed down (together with COVID) the change process of operationalising the experiences (for eg. In terms of developing courses, field work etc. of the IUC programme).

1.3. Evaluation methodology and process

This evaluation is part of a more comprehensive evaluation exercise of 8 VLIR-UOS IUC and Network programmes. It is based on an evaluation framework that looks at the 5 OECD-DAC criteria and orients the work of the evaluation team and the focus of data-collection and analysis. The starting point of the evaluation process are the self-assessments of the programme stakeholders (at programme and project level).

The team was comprised of a Ugandan and a Belgian evaluator, both also involved in the mid-term evaluation of the programme.

1.3.1. Evaluation framework and methodological approach

The evaluation framework consists of evaluation questions that are further elaborated through judgement criteria and specific points of attention that specify what the evaluators will look at to come to their judgement. The framework was the basis for the interview guidelines and structures this report. The full framework is added in annex (7.6.).

Criterion	Evaluation Question	Judgement criteria
1. Relevance	EQ1. To what extent are the objectives of the programme/project consistent with beneficiaries' requirements, country needs, global priorities and partners' and donors' policies?	1.2. What is the relevance (ex-ante) of the formulated outcome(s) and objectives?
		1.2. Extent to which changes in the external context or within the organisation influenced the relevance of the intervention, and how this was handled?
2. Coherence	EQ2. To which extent is the partnership programme coherent, internally and externally? What is the level of synergy and complementarity with other relevant (Belgian) actors?	2.1. Internal coherence
		2.2. External coherence
3. Efficiency	EQ3. To which extent resources/inputs (funds, expertise, time, etc.) are converted to results in an economic manner?	3.1. The cost-effectiveness (the usage of resources in relation to the achievement of objectives)
		3.2. The extent to which organisational management and structures of the programme/project are conducive for efficient implementation.
4. Effectiveness	EQ4. To what extent are the programme's objectives (expected to be) achieved, taking into account their relative importance?	4.1. The extent to which the programmes outputs and outcomes have been achieved and the likelihood that the predetermined outcomes will be achieved by the end of the implementation period.
		4.2. Inhibiting and facilitating factors and actors
		4.3. Scientific quality
5. Impact	EQ5. To what extent are (potential) positive and negative, primary and secondary long-term effects generated by the programme, directly or indirectly, intended or unintended.	5.1. Changes (intended and unintended, positive and negative) in stakeholders' lives and contexts contributed to by the programme
		5.2. Fostering 'collective impact'
6. Sustainability	EQ6. To what extent will the programme results continue after the programme is completed?	6.1. Level of institutional sustainability
		6.2. Level of financial sustainability
		6.3. Level of academic sustainability

Table 2. Evaluation framework⁷

The approach for this evaluation is participatory and appreciative with self-assessments as a starting point and in-depth preparation with stakeholders prior to the field mission. This allows stakeholders to orient the evaluation, to identify the main issues and to own the conclusions and recommendations of the evaluation.

The evaluation used and combined various entry points to assess the programme and get a holistic picture of dynamics and emerging changes, valorising the strong points and questioning strategic and operational choices that were made. The entry points were the following: (i) appreciation of self-assessments seeking clarification and further substantiation through desk-study and field mission, (ii) analysing progress in institutional capacity and contribution of the IUC using the analytical framework of the 5 core capabilities (a VLIR-UOS tool for analysing capacity of universities), (iii) selecting and analysing an impact case, (iv) collecting data to answer three learning questions.

The learning questions were defined prior to the evaluation (with participation of the coordinators of all programmes) and are the same for all IUC and Network evaluations, thus facilitating a cross-programme analysis. The learning questions are the following:

- Learning question 1: How to support PhD trajectories, with a focus on optimising diversity/inclusivity (gender and LNOB)?

⁷ For more information about the evaluation framework, the inception report of the framework assignment can be requested for consultation at the level of VLIR-UOS.

- Learning question 2: What factors and measures, at VLIR/IUC level and/or at partner institute level, support effective coordination of programmes?
- Learning Question 3: How to ensure uptake of research results or new educational practices by political and societal actors and end-users?

The data **collection** methods were the following:

- Desk study (self-assessments, documents of the programme, surveys related to the programme for eg. to assess appreciation of trainings to farmers, documents from the university)
- Key informant interviews (in group or individual, with stakeholders from the universities involved, and stakeholders from outside of MMU)
- Focus group discussions with key beneficiaries
- Workshop to analyse and discuss evolution in institutional capacity – to this end detailed guidelines were developed to prepare and organise the workshop and to come to conclusions.
- Workshop to share findings

To **analyse** findings, the evaluators collected data in excel sheets.

- For the learning questions, the evaluators looked at the measures that were put in place by the IUC partners. Then, for each measure the evaluators inquired after the effect/change of that measure, they assessed the strength of the evidence for that measure (rubrics for scoring are presented in annex 7.5.) and noted what elements in the measure contributed to the effect and what other factors influenced.
- For the impact case, a similar systematic approach was used (see further below).

1.3.2. Evaluation process and activities



Figure 1. Evaluation process (IUC evaluation)

Activities

Prior to the field mission - The evaluation team organised a number of activities prior to the field mission which consisted of a kick off meeting to present the approach, exploratory interviews with coordinators (N and S), interviews with MMU stakeholders to develop the impact case (and first development of impact claim, mechanisms of change, identification of respondents and interview guidelines), study of self-assessments to identify points to validate during the field mission.

During the field mission – The field mission started with the capacity analysis workshop (one full day). This workshop was introduced and attended by the university leadership, the IUC stakeholders and representatives of all faculties and administrative units of the university. The annex 7.3. gives an overview of the participants (more than 30 were engaged in the exercise).

The workshop was organised as follows: participants were put in small groups (6 groups), in each group, the evaluators ensured that there was a participant with a lot of experience in the programme, one with less but being present in the university, 1 new person in the university (as MMU hired over 26 staff in 2022-2023). The assessment in 2019 and currently was organised per capability and topic: every group (i) scored; facilitator collected the scores. Then (ii) there was a discussion in plenary at the level of the capability to understand if there was a change, to identify what the change is, and then to analyse together what factors have contributed and name them. The evaluators used the scores to come to an average and to make a visual (see annexe 7.4.). This visual was used during the restitution (9/10/2023) – highlighting the strong elements of the IUC, also making explicit the weaker aspects and engaging with the participants in a discussion.

Day 1 and the workshop was followed by two and a half days of interviews with IUC stakeholders. Two and a half days were dedicated to interviews related to the impact case. The field mission ended with a presentation of and discussion on the findings of the evaluation team with the IUC coordination, programme manager and PSU unit, the project team leaders South and the administrative support from the University of Ghent.

During the field mission, the evaluators checked available information from the programme (surveys, updates of indicators, etc.)

After the field mission – A presentation of findings was organised for the IUC coordinator and project team leaders and VLIR-UOS. The coordinator from the South and the assistant-coordinator from the South (previously North) participated as well. VLIR-UOS and 1 team leader provided feedback to the draft version of this report.

The programme of the evaluation and overview of the people and documents consulted is in attachment.

1.3.3. Limitations

The evaluators did not encounter major issues when executing the evaluation. It has to be noted though that the anticipated preparation of the institutional capacity analysis by MMU did not take place. Therefore, this analysis was not as detailed, but used the framework of the 5 core capabilities as a starting point for discussion about evolutions (rather than collecting data on each capability).

A few limitations were identified in relation to the impact case – see next point.

1.4. Description of impact case

What is this case about? - Under the IUC, several PhD students worked with farmers in the region, one particular group was composed of dairy farmers. Dairy is one of the priority areas for MMU's community engagement and thus integrating research and community engagement. Further to the PhD research and in parallel, the MMU with the support of the IUC developed the Kyembogo Dairy farm as the outreach engagement platform. The IUC program supported the development of competences of the farm manager (through study visits, for e.g., to Kenya on hay making, training at Mbarara University in Uganda, training on artificial insemination, ...) to be able to support dairy farmers to improve their management practices for higher productivity and value addition.

Whereas the first phase reached out to more than 200 farmers in the 8 districts that form the Rwenzori region, it was realized later that this scope of operation was too broad and could hardly make any impact given the limited capacity of MMU. In the second phase therefore, partners decided to scale down to focus on one organized group of dairy farmers called Kabarole Young Farmers Network (Kyofnet). The group was diverse in membership active, non-active members and even those who expressed intentions to become members.

Kyofnet started in 2015 as a group of farmers from Kabarole district. They have 32 active members (paying membership fee), of which at least 25 are in dairy farming (having at least 3 milking cows).

Whereas farming is their main occupation, they are also involved in non-farm income generating activities such as trade. Every month the farmers visit one or two farms to exchange experience; they contribute money (revolving fund) to support host farmers and also have an internal loan scheme from which members can borrow to invest in dairy. All farmers interviewed employed permanent workers (up to 5) on the farm. Majority of the farmers interviewed are also members in other groups (sometimes in other districts) and a nation-wide network called DAFAN8 that supports modern and improved dairy farming techniques. To be a member, every person needs to put in 20.000 UG shilling every year in addition to a capital of 1.000.000 UG shilling (for the loan scheme) and another 100.000 UG shilling monthly for the revolving fund.

Engagement of MMU and Kyofnet started through the mobilisation for the Rwenzori Dairy Platform and the creation of committees in each district, (in phase 1, not pursued).

Kyofnet farmers were involved in four of the IUC sponsored PhD students' research through some of the studies extended beyond this particular group of farmers and district. Some of the farmers interacted with more than one student in the due course of their research.

The PhD topics were:

- The cross-breed dairy cows in grazing systems of western Uganda; towards improved nutritional management (based on monitoring metabolic status)
- Bridging research and Practice to improve agricultural productivity: A case of dairy farming
- Preparing future higher education institutions for community engagement. A stakeholder Approach, which included research on an app for record keeping for farmers
- (Phase 1) Impact of chain governance structures on chain performance: the case of dairy sector in Uganda

And a MSc on: Quality of water used by dairy farmers in Rwenzori Region

Additional funds from a Joint VLIR-UOS project⁹ were available for topic 1 (from the list in the above) for a specific component on blood and milk analysis and a research experiment with a graduate PhD on: nitrogen fixation of some forages also reached to farmers through Kyofnet.

Data collection – Data collection was organized through farm visits combined with interviews with the farm owners (#2), interview with the District Veterinary Officer (DVO), individual interview with all PhDs involved (#4), interview with the Kyembogo Dairy Farm manager, 2 group interviews – one with most active group members (6 members of which one female) and another with less active members/members of Kyofnet (5 members of which 2 women). The evaluators also used a survey developed by MMU to assess appreciation of participants in trainings offered to farmers (see further, Kataike, 2022).

Limitation of the impact case analysis - The evaluators did not engage with MMU to develop a theory of change as there was not one specific focal point on the content of the interventions. A comprehensive list/database of farmers (by gender) reached by the IUC/PhDs, was not available to the evaluators. The evaluators therefore relied on the contacts of the Kyembogo Farm manager to identify the appropriate farmers to visit using criteria suggested by the evaluators. The evaluators also used documentary evidence available such as a satisfaction survey (Kataike, 2022) refers to 39 farmers from the Kabarole district that responded, but this information was only shared after the mission.

1.5. Structure of the evaluation report

The report follows with an analysis and findings at programme level focusing on the criteria to be evaluated (structure of the evaluation framework). This is followed by a brief description of the projects, based on the self-assessments, the analysis and conclusions related to the impact case, the presentation of information collected in relation to the learning questions. The conclusions are based on the analysis at programme level combined with the institutional analysis, impact case and learning

⁸ <https://www.linkedin.com/in/dafan-uganda-b22646103/?originalSubdomain=ug>

⁹ Joint endeavour to enhance dairy and beef production in Vietnam, Uganda and Ethiopia through Monitoring of Negative Energy Balance in early lactation.

questions. Recommendations follow at the end and address the different stakeholders (IUC and VLIR-UOS).

2. Analysis and findings: programme level

2.1. Overview of programme performance

Overall, the programme is rated between good and excellent. The appreciation is strongly influenced by a comparison between the starting point of the university at phase 1.

Criterion	Excellent (4)	Good (3)	Weak (2)	Poor (1)
Relevance		3+		
Coherence		3		
Effectiveness		3+		
Efficiency		3		
Impact		3+		
Sustainability		3+		

2.2. Relevance

The relevance of the programme is quite high when assessing its response to the strategy of the university and the government policies.

MMU had a history of aspiring to be relevant not only nationally and internationally but even more so to the development of the Rwenzori region where it is located – hence the vision of being a community-oriented university. This is illustrated by engagement in multi-stakeholder platforms as far back as 2008 through what was called the “Kasunga thinktank”, which was the springboard for the application for the IUC program.

Relevance for the university

The design of phase 2 was based on lessons learnt from the previous phase, the mid-term evaluation, and an assessment of future challenges rather than through a new comprehensive and systematic needs analysis involving various representatives of the community and participants in the value chain of dairy.¹⁰ The intention was to refocus efforts on dairy for higher impact of the programme.

Key feature in the IUC is that the programme is conceived as a programme that wants to contribute to the operationalisation of the mission of MMU of being a community owned and oriented university but with high quality teaching and research. Some policy guidelines for community engagement were formulated in 2020 to that end and looked at outreach and student placement through the creation of partnerships.¹¹ Strengthening communities with knowledge and innovations was aligned to also support execution of government development programmes in the communities such as Operation Wealth Creation (OWC) and the Parish Development Model (PDM) but needed supportive knowledge and sensitization to make better use of funds provided by government.

The realization of the vision to be a community owned university was visible in research and education and in outreach:

- Research: the programme focuses on action research in and with communities and addresses issues that are of interest to the communities (such as water harvesting, increasing milk production, strengthening fish farming with view to income generation). These priority areas of intervention at the community level were earlier determined through and participatory processes of engagement with various stakeholders.

¹⁰ Phase 1 organised a needs analysis taking into account the whole value chain of dairy, but it was decided to focus on the farmers and their production as a way to support income increase.

¹¹ MMU (2020) COMMUNITY PARTNERSHIP AND ENGAGEMENT POLICY

- Education: activities under the university function of education aimed at enhancing relevance by strengthening interaction with communities: by developing/improving a number of programmes paying attention to integrating practical work in the curricula through the preparation of a more consistent student placement mechanism (also aided and inspired by the Austrian development cooperation and the APPEAR project on Higher Education and Research for Development, phase 1 and 2 (2016-2025) looking at development of a stakeholder driven, regionally embedded and interdisciplinary Master's Curriculum in Agro-ecology and Natural Resource Management). The investments in e-learning and e-pedagogy (and the idea of having a diploma in pedagogy) can (amongst others) support stronger student centre learning which is relevant to boost the employment opportunities for students.¹²
- Outreach: In comparison to phase 1, the IUC partners did not longer try to coordinate the dairy value chain actors in the Rwenzori region: the shift from trying to coordinate collaboration between stakeholders in the dairy value chain (as attempted in Phase 1) to focusing on targeting organized farmer groups such as Kyofnet was a relevant one in terms of efficiency. The outreach function of the university received specific attention through the further strengthening of the radio and its programmes. One PhD was dedicated to the development of a community engagement framework but this is yet to be well elaborated and contextualized beyond the PhD thesis for application (see further under effectiveness).

The IUC remained very relevant to MMU as an institution: the IUC and its focus, also in phase 2 on the training of PHD students and consequent equipment of labs (plus internet infrastructure), responded to critical needs of MMU in terms of capacity of academic staff and capacity for better organising research, education and outreach. The attention for additional training of supporting staff (such as for radio, ODEL, library) and the research of a handful master students further contributed to strengthening the staff base. More in particular the internet infrastructure and ODEL facilities proved to be important to pick up with the educational offer as much as possible after 1 year of closure with the COVID pandemic.

In fact, the IUC was the operationalising of the MMU strategy and its execution further informed the formulation of the new strategy. For example, one of the objectives of the MMU strategic plan 2022-2025 is 'to improve the quality of teaching by utilising the capabilities of high-speed internet and shifting from traditional teaching to more innovative and practical teaching using various pedagogical methods'¹³ The IUC proved to be the main mechanism for pursuing the aspirations of MMU.

Relevance for government policies and specific target groups

The context description (in the above referring to national plans and the Uganda Vision 2040 on agricultural transformation) clarifies that the IUC, its focus in terms of activities (focus on human capacity and e-learning) and thematic field (agriculture) chosen was fully in line with the priorities of government. The IUC was relevant as it has put in place the basic requirements for a university which ensured continuity of services during the transition phase towards a public university (from 2018 onwards). An interview with local government confirmed the relevance of the IUC programme for boosting the capacity of the university in this region (more in particular to train future teachers).

Relevance for specific target groups, such as women, was weakly developed. For instance when thinking about explicit gender targeting (when designing activities), probably as this was not an explicit requirement from VLIR-UOS. It should be noted though that there was internal consideration to ensure gender representation in terms of numbers (for selection of PhD candidates and for selection of target groups for action research).

Some points of attention are:

The interests of the Flemish universities and the university colleges were not explicitly identified in the programme, which would have been interesting in order to assess their involvement and decision making. Clearly, supervision of PhD students and having them graduated is most important for the professors involved in the IUC.

The review of the educational programmes was based on interaction with stakeholders but the university does not (yet systematically) invest in tracer studies to check the relevance. A systematic approach

¹²However, this was affected by the transition process which maintained only academic programmes that existed in 2018. The diploma in pedagogy therefore could not be pursued.

¹³ Self-assessment South.

towards stakeholder engagement in order to inform curriculum development and community interventions (beyond initial contacts and exchanges) is not yet the reality. When developing activities (for e.g., action research) the students engage in needs analysis of end-users. This analysis is often limited (whereas the 'devil is in the detail') and not continuous: it is focusing for e.g. on problems identified by respondents of the community or gaps in their knowledge (with less effort to unpack the problems and to understand the potential mechanisms of change and obstacles or social-economic dynamics that complicate it); after an initial analysis, solutions are developed in line with the PhD research objectives and feedback loops are less frequent or intense, less involving beneficiaries along the line of thinking which can hamper uptake beyond what is of immediate interest to the farmer (see also learning question on uptake).

2.3. Coherence

In this section, the evaluators assess the internal and external coherence of the IUC.

Internal coherence - The internal coherence of the IUC programme is strong: between projects and between the direct involved faculties and the whole of the university.

Extra efforts were realised after the mid-term evaluation to ensure that transversal and topical projects reinforced each other. For e.g., by identifying the same group of dairy farmers for the innovative solutions (under P1) and the development of a community engagement platform (under P2). The action-research approach and the positioning of the PhD students strengthened coherence between the programme activities and the functions of the university. As the self-assessment (South) stated: 'the human resource capacity increases engagement with the community through research while the outcome of research is resource material in training'. The activities under P2 clearly targeted all the staff in the university and this demonstrated to staff in other faculties that the IUC also concerned them; they gradually owned the objectives of enhancing staff and research capacity and became more inclined to seek opportunities for further study (for e.g. by writing of and participating in new research proposals).

If the coherence was already ensured by design, it should also be noted that the strong involvement of MMU leadership in design and execution and the strong tandem between the North and South coordinators have contributed to this. The evaluators find that monthly research seminars provided opportunities for learning between PHD staff and researchers.

Coherent execution was further enhanced by the PSU unit, servicing the whole university (and other projects than the IUC programme) and functioning as 'one-stop-shop' for organising activities and research for students (PhD and MSc). Finally, the structures put in place to integrate the radio and ODEL in each faculty (through focal points) contributed to the coherence of the programme).

Some points of attention are:

- Training of farmers (P1) could have benefited from P2 (focusing on education, with researchers having some experiences in principles of andragogy), but this was not considered.
- A number of missing links in the result chain weaken the opportunities to influence on change: although a point of attention from phase 1 onwards, (only) one single model for community engagement has been presented at the end of phase 2 (with the graduation of a PhD student) and its application needs to be prepared as the majority of staff does not yet understand what it means, the decision not to pursue with the attempt to coordinate the dairy value chain through a Dairy Platform was a good one but was not replaced by another mechanism to ensure relevance and uptake of innovations; the assumption that farmers would train other farmers was not evidenced (moreover, trainings were not designed as such and there was no follow-up to ensure that initial trainings would be replicated and that knowledge would be disseminated amongst other groups).
- Although it is true that some interventions worked with the same group of dairy farmers (mainly from 1 organisation, called Kyofnet), more efforts could have been done upfront to identify specific communities and groups to benefit from several interventions in a more coordinated way. The main focus was on testing and demonstrating innovative solutions (to the extent that this was necessary for realising the PhD research and obtaining the degree) rather than given an impetus to development (taking into account variations in type of groups). This demonstrates a limitation of

realising PhD degrees in terms of influencing on development. Clearly, being a development actor cannot be realised through individual PhD research (only).

- The realisation of the Kyembogo dairy farm was an opportunity during phase 1 and was not part of the design of the IUC at the start. Although its role and functionality as a model farm and training centre (to align with the government to develop agro-industry) was established quite soon in the execution of the IUC and budgets ('seed money' with regards to the anticipated budget needed) in combination with sponsoring (from the Ugandan government and the Dutch NGO, SNV) used to help prepare the farm for that role (fencing, installation of food lab, pasteurizer and milk cooler), its potential was not yet realised which weakened the coherence with the action research projects.

External coherence - The coordinator from the North stimulated from the start joint visits to potential donors and partners (situated in Kampala or in Belgium) in order to build and enlarge the network of MMU and to expand on the financial resource base for the Universities' infrastructure and research (see also under sustainability). The initial analysis of the dairy value chain helped a lot to identify potential partners and funders. Partners in the South acknowledge to have learned a lot about the practice of networking and presenting their ideas about future developments to third parties.

The IUC programme with its coordinating and executing structures proved to be a good framework to accommodate these other projects.¹⁴ The new collaborations aimed at strengthening research at faculties (also other than agriculture and education) and were not always chosen to be coherent (or executed in a coherent way) with the IUC topics, unless the topics were really close to each other (for ex. joint VLIR-UOS project on nitrogen fixation of some forages).

Quite some projects were also supported by VLIR-UOS, entailed PhD scholarships (at least 8) and were the result of the Northern partners opening up their network and facilitating contacts with potential partners at various faculties and university colleges. One example is the PhD in health, supported by the university of Ghent and the VUB on enhancing the quality of life of youth living with HIV in Uganda (graduated in 2021) and which has facilitated new research and collaboration with NGOs (such as CARE).

Although there were contacts with Belgian and other NGOs, these were ad hoc and not integrated in the design of the programme in order to support the community outreach component. This was acknowledged by the self-assessment. The involvement of the university in the programme of the Dutch NGO SNV, however offering some opportunities, is also based on ad hoc activities and consultancy arrangements that are challenging to programme in the research or educational programmes of the university. SNV acknowledges that collaboration in general is often hindered by different timelines and expectations that come with each donor. The decision to sign an MoU with the NGO Rikolto to support the creation and development Food Centre at the Faculty of Agriculture (see also the section on impact and sustainability) is a step forward in creating and using relations with other organisations, and together working towards a specific and shared goal.

Overall, linkages and collaboration with government actors (also due to their weakness in capacity) were weak. There is evidence of a few collaborations with individual government extension workers (as consultants, for e.g., in specific researches) but it proved to be difficult to engage with government extension structures as a whole. The idea of developing ToT of government workers, which in sé is an interesting approach as support to farmers is within their mandate) was not considered (and, as argued in the above, trainings were not developed as ToT). Going beyond a ToT might be more difficult as this would require additional funds (from the IUC budget) to cover for operational/transport costs for extension workers.

2.4. Effectiveness

The effectiveness of the IUC programme is reflected in the enhanced capability for MMU to deliver on its mandate of quality teaching, research and community engagement (see also under impact).

¹⁴ An overview of projects was published in 2023, listing, besides the IUC programme, all the ongoing projects and planned ones. MMU (2023) Project profile.

Research - The IUC programme greatly enhanced the staff capacity through PhD training particularly for the faculties of Agriculture and Education and other short-term training for both academic and administrative staff. 12 PhDs were directly trained by the programme and out of these, 9 are retained at MMU. The project implementation was gender sensitive with respect to selection of these PhD scholars, 5 out of 12 (42%) were female though 2 of the females were among the 3 that were not retained by MMU. An additional 8 PhDs have been trained through grants connected with VLIR-UOS but not IUC. This is a tremendous contribution to a university that had only 3 staff with PhD before the IUC programme. The laboratory equipment acquired to facilitate PhD research has left behind relatively functional laboratories, which in addition to supporting training are also attracting private sector (tea and coffee estates) in the region access laboratory services in soil testing at a fee. These staff have assumed leadership responsibilities at various levels of the university and championing external resources mobilisation through writing projects. Currently there are 22 ongoing projects worth 4.8 million Euros. The projects come with new networks and collaboration which increase the confidence of stakeholders in MMU. Recently, MMU in partnership with the Ministry of Agriculture, Animal Industry and Fisheries are pursuing establishment of a Food and Agriculture Policy Research Institute to be hosted by the faculty of agriculture.

Education - The IUC investments in training on responsive curriculum development and review that takes into account stakeholder interests has enabled a systematic review of two MSc programs and development of a new BSc program in aquaculture and water resources management, the latter which have been accredited by the National Council for Higher Education (NCHE). This brings to a total of 67 academic programs with active accreditation. Enrolment on the BSc aquaculture and water resources management will take place in the 2024/25 academic year. Comprehensive tracer studies (some experience is there in the Faculty of Business) will be needed to inform curriculum review to foster relevance of the academic programs. In line with the aspiration of a community-oriented university and to foster problem-based learning, there are efforts (especially in the faculty of agriculture) to review the student attachment scheme with a view of making the students attachment period to community longer and more purposeful.

Student enrolment (estimated at max 2500 for all programmes) remains fairly low, which was also concluded by the National Council for Higher Education (but MMU would not be able to absorb more).

Supporting environment - Improvement of the ICT infrastructure by the IUC program to acquire a server and expand on the bandwidth coupled by training in e-pedagogy through ODEL have promoted e-learning and access to electronic resources. E-learning is now widely applied across all faculties as it leverages the constraint of teaching space and supports distance learning programs in the faculties of Health and Education. Because of the functional internet services, MMU has stocked the library with e-resources to facilitate learning and research. A survey¹⁵ of staff and students on the satisfaction and adoption of ICT in learning shows that on one hand, the staff are adopting the use of ICT in teaching but are sceptical on its use as a panacea – they still need more support to use it more effectively. On the other hand, students are stronger on their acceptance of ICT and testify that it also enables them to research more and consequently learn more. The last three months registered 134 logins and 7,043 downloads of articles and books – indicating a high level of usage.

The MMU radio established with IUC support is an important instrument for continuous engagement with the community albeit the limited coverage hinders reach and access. Every faculty is allocated air-time every week to engage community on various topics of interest – also a mechanism for dissemination of knowledge generated in the university but also a training facility for students of journalism. The Kyembogo university farm has great potential not only as a point of engagement with community but can also provide services that support transformation of agriculture in the region though this requires a lot more investment to make it a model farm where farmers (and students) can learn and adopt practices. With the minimal investment in the farm from IUC programme, it can only host some farmer training and provide Artificial Insemination (AI) services to a limited number of farmers. The equipment (provided in 2019), such as the pasteurizer and milk cooler are not yet installed. The action research engagement with dairy farmers (elaborated in the impact case) by some of the IUC sponsored PhD students for example demonstrates how the university research can directly influence changes in the community.

¹⁵ Kintu Mugenyi (2022). A report on the satisfaction, acceptance, adoption and use of ICT among MMU staff and students.

Drawbacks - Despite these achievements, there were also some drawbacks or unfulfilled targets namely; the loss of 3 out the 12 PhDs trained PhDs that could not be retained by MMU; delays in accreditation of the BSc aquaculture and water resources management – enrolment will start in 2024/25 academic year; inability to develop the electronic student management system due to lack of capacity at MMU ; the App developed with expertise of partners in the North to aid farmers manage farm records that is too complicated for farmers to use; the diploma in pedagogy could not be developed due to conditions of the transition process that only maintained programmes that existed in 2018; establishment of the Rwenzori journal that was not prioritized for funding.

2.5. Scientific quality

The IUC programme through the PhD training enhanced the capacity to publish in credible internationally peer-reviewed journals to contribute to global knowledge. The PhD scholars alone published 43 articles surpassing the target of 26 publications and with 590 citations – evidence of high quality of the research.

Research is also expected to feed into the teaching/learning and outreach to ensure up-to-date knowledge. In this regard, MMU is developing several instruments (drafts to be approved by the university council) to assure quality in those areas namely;

- A research policy that provides the principles for engagement in research to guarantee quality;
- A framework for research-teaching integration that will compel all staff to conduct research in their respective areas of specialty and integrate up-to-date knowledge in their teaching;
- Update of community engagement guidelines (2020) within the framework of NCHE.

The new structure of MMU as a public university has a Directorate of quality assurance which is expected to monitor and assure quality of all the services provided by the university.

2.6. Efficiency

Under this section, the evaluators will comment on the capacity of the programme-stakeholders to monitor the progress of the programme, and will appreciate the quality of execution and the responsible use of financial resources (including some challenges for timely execution) and knowledge management. To start with, the evaluators acknowledge the fact that the design of the second phase really took at heart the recommendations of the mid-term evaluation, which were amongst other to put in place an action-research approach (as a way to engage with communities) and to pay better attention to the management of change in the institution. New PhD scholarships thus (amongst other) focused on community engagement and change management.

Monitoring progress - It appears that the planning meetings (in the South and joint committee meetings) are the main tools to discuss progress and execution, rather than the results framework with (a limited number of) quantitative indicators. The target setting and the values are not clear from the framework, but the PSU unit has a clear view on how they are calculated. The calculation aims to present high percentages and numbers (overshooting the expected targets); in order to do so, sometimes results indirectly influenced by the IUC are calculated (for e.g., for the number of scientific publications), or interactions with farmers are counted by each contact. This underlines the good performance of the IUC (in terms of activities and producing output) but gives less clarity on the changes that were influenced or the quality. For example: a survey on farmer satisfaction (Kataike, 2022) demonstrates high satisfaction of farmers but does not specify what this satisfaction was about.

Quality of execution and use of financial resources - The IUC stakeholders have done a lot with a modest budget and were able to do so by making specific choices (such as, not having a programme vehicle), not paying PhD students a salary while in Uganda, they were paid for only the period spent in Belgium. The transparency of the budget design and use is to be underlined: all IUC stakeholders and PhD students had a clear view on the budget and the budget allocations. Budgeting for research activities in the field was a deliberate and relevant choice in order to realise the action research.

Two points of attention on cost-effectiveness:

- the (partial) funding of the development of the Kyembogo dairy farm that came as an opportunity but required much more funding than was available in order to ensure that investments could pay off/add value.
- The investment in the 3 PhDs that are no longer with MMU (see also under effectiveness) weakens the cost-effectiveness balance of this IUC (for MMU). Their departure however was partly compensated by team work and involvement of MSc students and research assistants.

The organisation of the IUC at MMU was excellent:

- The PSU grew in its role (with the last two programme managers) and was able to function as an independent unit, empowered to make decisions with minimal interference from the universities' administration. The PSU was the backbone and its management was aided by the management manual.
- The PhD students took responsibility for the execution of the planned IUC activities (they all knew the IRs they were responsible for), activities that were not essential for their PhD and demonstrated commitment to programmes' success. The PhD students from phase 1 took on a role as supervisor for the PhD students from Phase 2. The advantage of these arrangements was that it contributed to the project management capabilities of the PhD students and their skills as supervisors (learning from the feedback culture they experienced in Flemish universities). At the downside is the fact that this arrangement increased the workload of the students and that expectations to combine various roles were sometimes not realistic, for e.g., for the PhD student that worked on organisational change, expecting that he would also be a facilitator of organisational change at MMU. At that time, the university was already in the transition process to become a public university and this change process obviously had priority.
- Communication was good and clear thanks to the clear chain of command and reporting, the joint planning (really sitting together to work it out) and the clear timeline for activities. All participants had access to all information. Plans were executed by the PSU as agreed in the plans.

The PhD scholars were made to assume additional project responsibilities in line with their respective research topic, which also helped them acquire some experience in project management.

Overall, the IUC management and coordination was characterised by a climate of trust where everybody's voice was heard (albeit maintaining the focus on the objectives and spirit of the IUC programme), a good level of flexibility (taking into account challenges for PhD students, the context, such as COVID and the pressure of the transition process aimed at becoming a public university).

What helped is that coordinators openly communicated about challenges and dealt with it (which means they replanned). The evaluators underline that coordinators were not afraid to discuss and address risks. The crisis with the 3 PhDs resulting from misunderstanding of the terms and conditions of the scholarships was thus resolved internally, based on principles without affecting the execution and continuity of the programme and future institutional partnerships. Based on individual interviews by the evaluators, there were two perspectives that could have led to the misunderstanding. From the institutional side (MMU), the affected beneficiaries declined to commit to institutional bonding and thereby breaching the terms and conditions of the scholarships (capacity building for MMU academic staff), while on the side of the beneficiaries, they claimed they did not have or were not willing to enter a formal employment contract to commit themselves to bonding. Nevertheless, this impasse was resolved through mutual discussion and consensus without jeopardizing the programme. The coordinator in the North being assisted by someone from the South who understands the context better could have helped to create common understanding.

The flexibility of VLIR-UOS, more in particular in managing the challenges of COVID (and its impact on education and field working) was very helpful. A no-cost extension by 8 months was helpful to achieve a number of intended deliverables due to COVID. Funds not spent in the previous year could be carried over to AP 2021 and plans adjusted based on the prevailing circumstances. The self-assessment confirms that these provisions helped the projects to stay on course. This flexibility will come under some stress by the introduction of more bureaucratic procedures inherent to being a public university (for e.g., for managing the farm but also to run other projects or start business like initiatives) and it makes MMU consider to create an independent unit (registered as private company) to run a number of projects.

One point of attention:

- Some decisions however might have been influenced more by partners in the North e.g., the interviewing and final selection of some of the PhD beneficiaries especially those sourced from outside MMU largely because there was limited capacity at MMU in their respective disciplines.

Knowledge management - Although evaluators found that there were opportunities for learning (see under the section of coherence), they also found that tools and mechanisms for learning (beyond exchange and discussion of research findings) were lacking: learning requires further analysis of findings, consolidation and access and re-use of findings, and responsibility to distil those elements that could benefit other research and to design and implement mechanisms to integrate these elements in existing or new research and initiatives or to use them to further transform the operations of the university (what does the university have to focus on, what are implications for research, community engagement, education, etc.?)

The institutional capability analysis confirmed that knowledge management is not strongly developed and did not evolve with the IUC. An important gap is the realisation of the repository of research articles and findings, which was not an explicit objective of the programme but part of the upgrade of the library and the digital information management.

A few examples, where opportunities for learning were not used:

- the various models for community engagement that have been developed and practiced within the university. It was found that they did not influence each other in design nor execution, for e.g. citizen research in the faculty of Agriculture with a VIR-UOS funded SI¹⁶, communities of practice in the Faculty of Health (in collaboration with the NGO CARE), action research in the faculty of Agriculture (with the IUC).
- the e-learning and the strong integration of e-pedagogy in education.

An explanatory factor is that the exchange of research results during monthly seminars does not integrate experiences from the interactions with the community or does not elaborate on the approach in projects but only focuses on the research results, thereby missing the opportunity to learn beyond the typical research.

2.7. Impact

The impact section will first assess the impact on MMU as an institution and continues with other impact.

2.7.1. Impact on MMU as an institution

The analysis of impact is largely based on the institutional self-assessment (based on a model of capacity that distinguishes 5 core capabilities) where participants in the workshop scored the institution as it was in mid-2019 and as is now on the different parameters and provided explanations of what contributed to the change.

Overall, at institutional level, there has been improvement in all the capabilities assessed but at different levels. The IUC has been appreciated by MMU stakeholders as most impactful in the domains of research and positioning itself as a driver of change (capability to deliver upon results) and the domains of project management and putting the correct administrative procedures and mechanisms in place (capability to act and commit). Evidence of MMUs' responsiveness to other actors (both NGOs and decision makers) has been shared by various stakeholders during the evaluation mission and is an example of these capabilities. The progress of the university in terms of human capacity and presence/visibility in the region and at community level did not go unnoticed. It eventually led to the decision of government to allow MMU to become a public university and to position a new research and policy centre on food within the Faculty of Agriculture.

¹⁶ Enhancing community-based natural resources and hazard management in Rwenzori mountains project.

It is important to note that not all the changes reported are attributed to the IUC program but also other factors such as the transition from private to public university. Under this section, emphasis is placed more on those areas where the IUC program has had a significant contribution to the change. The important areas of impact for the IUC program are organised along the capabilities.

Capability to deliver upon results

Research capacity. The training of MMU staff at PhD level through the IUC program and the retention of the majority of them (9 out of 12) plus another 8 PhDs trained from VLIR-UOS related projects other than IUC greatly have generated a large number of publications in high quality international peer reviewed journals. These trained staff have continued to engage in several research projects with a wide range of partners to contribute to global knowledge. Research equipment acquired for PhD research (especially in the Faculty of Agriculture) has improved the laboratories to produce better quality research results to the extent that other stakeholders in the private sector (tea and coffee estates) trust and bring their soils to the laboratories for analysis. A major contribution to this capacity is the collaboration with experienced Flemish universities offering quality education at PhD level. The university is growing even stronger with recent recruitment of more academic staff including PhD holders under the new dispensation of public university.

Repositioning as driver of change: With the enhanced quality of academic staff, the university is now able to influence change in the community with credible knowledge that can influence change at the community and policy levels. The impact case documented in this report is an example of how university-based research can influence transformation in the dairy sector. To be able to influence change at the policy level, MMU in collaboration with MAAIF, are establishing the Food and Agricultural Policy Research Institute to be hosted at MMU. This is a sign of confidence in MMU as a driver of change. A major contribution to this capacity is the establishment of MMU radio under the IUC program. The radio, though limited in area of coverage, has been instrumental in facilitating engaging of MMU and the public on topical issues including delivering relevant information to support implementation of government development programs in the community such as OWC and the PDM. The farmers visited valued MMU as a knowledge provider. MMU is currently benchmarking with other universities in the East African region which have strong orientation to community development such as the Sokoine University of Agriculture in Tanzania and Egerton university in Kenya to learn lessons on how to strengthen and maintain the development role in an academic institution. However, to perform this role more effectively, MMU will need to develop and strengthen partnerships and collaboration with other service providers such as district local governments, NGOs, and private companies so that they are able to focus on where they are strong, i.e. provision of knowledge and knowledge and technologies.

Education. Impact of the IUC program on education is in the trainings of staff and students (through ODEL) on e-pedagogy and effective use of e-learning tools. This was the only way to sustain learning in the university during the COVID-19 lockdown. The other area of impact is in curriculum development and review – making curriculum responsive by integrating stakeholder interests. This intervention led to the review of two Masters programs and development of a BSc in aquaculture and water resources management.

Capability to act and commit

Project management and quality assurance. The IUC program has contributed to this capability through the PSU established to manage and coordinate the IUC program. The PSU is credited for effective coordination and management of project resources and with a high level of transparency and involvement of all actors. Because of that credibility and capacity developed, the PSU has now been absorbed in the university structure as the core of the Grants management unit to coordinate all externally funded projects in the university. All the PhD beneficiaries interviewed associate their timely completion to the effectiveness of the PSU and flexibility and social care of the Flemish promoters. Further, the strong ownership of the IUC program by the top university management and being a smaller university ensured closer monitoring but without interfering with functions of the PSU.

Administration, procurement logistics. This capability has greatly enhanced but it is largely associated with the transition to a public university which has put in place a procurement unit with competent human resources to be able to comply with the meticulous processes as prescribed in the Public Procurement

and Disposal of public Assets Act (PPDA). The fear with this is that the processes tend to delay procurements and requires prior planning for all envisaged procurements in a financial year.

Capability to relate

Financial resource mobilization. The transition from private to public university has come with a huge increase in financing compared to when the university was private. This has created stability in the university due to enhanced salaries as well as operational funding for other activities of the universities including some research funds that are accessed on a competitive basis and in line with the university research agenda. The IUC programme however is recognized for its contribution in the capacity for sourcing additional funding through projects. Most of the 22 ongoing projects worth 4.8 million Euro are led by the IUC trained staff. They are able to write proposals and use their networks established during PhD training to collaborate and win grants. An overview of the main projects (started during the IUC and running in October 2024) is presented below.¹⁷

(main) Faculties at MMU	Topic/domain	Funder (and budget)
Health	HIV AIDS	Vlir-UOS (75.000 euro)
All campus	Solar power	Howest and province of West-Flanders (80.000 euro)
Health	Food and nutrition security	VLIR-UOS, SI, (70.000 euro)
Health	Community of practice, on youth living with HIV/AIDS	VLIR-UOS, SI, (70.000 euro)
Health	Strengthening preventive capacity	DFID UK (100.000 euro)
Health	Curriculum development	Institute of tropical medicine, Germany (40.000 USD)
Environmental sciences	Tropical soil	Consortium under the lead of German university (not provided)
Environmental sciences	Finance literacy training	German Ministry of Economic Cooperation (52.000 euro)
Environmental sciences	APPEAR, phase 1 and 2, development and implementation of Master programme	Boku University Austria (359.000 + 389.000 euro)
Environmental sciences	Community based natural resources and hazard management	VLIR-UOS, SI, 75.000 euro
Environmental sciences	Strengthening business practices of small scale fish farmers	VLIR-UOS, SI (75.000 euro)
Environmental sciences	Disire, digital citizen science for community based resilient environmental management	VLIR-UOS Team project (280.000 euro)
Environmental sciences	Water treatment systems	Funder not specified (70.000 euro)
Environmental sciences	Epidemiology and bio statistics	VLIR-UOS, budget not specified
Kyembogo farm	Artificial insemination of cows	Kemin Europa, private company (100.000 euro)

Capability to maintain coherence

Vision, strategy, governance and organisation. Capabilities in these areas improved but this is more associated with the transition to a public university. MMU maintained its orientation to community both in vision and strategy. The difference has been the ability to actualize these due to more elaborate

¹⁷ Source: MMU (2023) Project profile.

governance structures as prescribed in the UOTIA and increased staffing to perform the various duties of the university.

Capability to adapt and to learn

Adaptive management and continuous improvement. It is noted by the evaluators that progress was judged by the MMU participants in the workshop based on the experiences of the transition process from a private to public university which prevailed since 2020 to 2022. Whereas one of the PhD students studied the topic of change management, there was evidence of the application in the institutional context after COVID with workshops organised to reflect upon the meaning of IUC interventions and how to consolidate, integrate and mainstream experiences in structures and procedures.

The critical areas of concern in the overall capacity of MMU are infrastructure (under the capability to act and commit) and knowledge management capabilities (under the capability to adapt and to learn). Infrastructure remains a major constraint for the growth and expansion of the University. With government funding, MMU is beginning to invest in infrastructure such as the construction of a building for the faculty of agriculture and expansion of the internet capacity. The IUC is strongly recognized for the “seed” investments in the internet infrastructure to support e-learning (ODEL) and access to electronic resources by both students and academic staff.

2.7.2. Wider impact

The wider impact for now is not yet fully visible. The evaluators have no doubt that being a public university with more funds and having more staff with higher and more stable wages will have an impact on the socio-economic development of the region. As so is the case with attracting private sector players to the area.

Influence on government policies and development processes is not yet noticed. There is however a strong desire to do and so the decision of government to install the NAFPRI at MMU clearly offers opportunities.

The impact case clarifies that action research does not suffice to have an impact on the community. Conditions for addressing obstacles in uptake and for outscaling, such as more strategic involvement with government actors and other development players need to be in place to make this happen. (see further the impact case)

2.8. Sustainability

Institutional sustainability - The IUC program was owned by the top university management right from inception through implementation. Mainstreaming nearly all the IUC interventions into the university programs and budget for government funding is demonstration of the highest level of ownership. Even though governance and leadership structures and personnel have changed since the transition to public university, the IUC interventions remain the core foundation of MMU operations.

The PSU staff and structure is absorbed in the grants office with capacity to manage relations with potential and new funders and the subsequent grants and programmes. The ODEL unit has been strengthened by 3 full time staff members. Every faculty has appointed focal points for the radio and for ODEL, thus ensuring attention throughout the university.

The MMU network is an additional factor of sustainability: the continuation of the relations with Flemish educational institutes should be underlined. New collaborations are planned with the Flemish partners and will continue to support human capacity development, research, strengthening the content and pedagogy of MSc programmes and organizing student exchange: a SIP or Strategic Institutional partnership was signed with UGent (looking at various thematic domains, the development of a joint doctoral programme, and using financial support of 25.000 euro/year from the VLIR-UOS programme of Global Minds) and a similar collaboration agreement with VUB is in preparation. An agreement was also signed with the university college HOWEST (that has worked with MMU on electricity and solar

panels). The three already engaged with MMU academic and other staff through other projects (outside of the IUC) over the last years. In addition to the above, existing relations with academic partners in Austria (BOKU-Austria), Germany (Triesdorf university-Germany) and Egerton University in Kenya plus exploration of collaborations with Sokoine University of Agriculture (SUA) in Tanzania can be mentioned as part of the expanding academic network. See also overview of projects in the above.

The attention of MMU for community engagement might need specific attention, there are not many universities that are strong in community action research, so this offers an opportunity and could bring the university recognition. However, the ambitions of being a community university will not be automatically realised with the new status and the MMU model of community engagement is, although recently developed, not yet operationalised nor tested and the majority of staff does not yet understand. Responsibility for putting in place lies with the new administration. The risks of drifting away from the community-based orientation are moderate: 3 people from the old board are in the new governing council, a critical mass of staff involved in the IUC (academic and supporting staff of the Kyembogo Dairy Farm, radio, electricity and ODEL) and convinced of the values of community engagement is almost 100% retained as staff in the public university¹⁸. All PhD students from Phase 1 and 2 that were retained (9/12) have finalised their PhD and are now appointed in higher positions (as lecturers, senior lecturers, professors). As the organisation grows, the number of 'IUC' people will inevitably decrease in numbers, hence the importance of strengthening the knowledge management and consolidate the IUC lessons learned with to mainstreaming throughout the university and new staff. Already management is thinking about developing programmes to ensure additional training for staff, for e.g., to be able to engage with communities.

Relations with Rwenzori institutions and farmer organizations have continued to develop over the years, the monitoring matrix shows an increase from 83 partners to 100 different organisations (whole university, not only IUC) that are interacting with external stakeholders. Three relations with farmer groups were added to the list under Phase 2 and thanks to the action research project of the IUC. These relations can support in executing student placements schemes and research but are not all equally active at the same time. The implementation of a community engagement model and strategy for relation building might better structure and organise the network. The institutional capacity analysis indicated that 'using' the network is still on the weaker side.

A promising initiative to underline is the collaboration with MAAIF with respect to establishment of and development of the Agriculture and Food policy research Center, supported by an MoU with the Belgian NGO Rikolto.

It must be underlined that the sustainability of the results of the IUC programme is largely ensured by the government take-over as a public university. This takeover comes with a higher overall budget and possibility to attract up to 270 staff members, amongst which many PhDs. The takeover guarantees higher chances for retainment because of higher and more secure wages and installs mechanism for protecting staff from arbitrary decisions by management. This will (finally) stabilise the institutional environment of MMU, which is necessary to consolidate change.

By becoming a public institution, MMU now operates under the overall institutional framework of public universities (UOTIA) and has to use the established management instruments. Internal support policies e.g., the research-teaching integration guidelines, research policy, community engagement guidelines) are in draft form pending approval by the University council. The ongoing investments from government funding to improve internet infrastructure (expansion of the server and connection to the national backbone) among other things, seeks to improve e-learning through ODEL and access to electronic resources are assurances for sustainability.

Financial sustainability - The major sustainability mechanisms for the IUC program lies in the human resources capacity which is now capable of mobilizing external funding (22 ongoing projects worth 4.8 million Euro) and in the networks established by the IUC program through which MMU continues to develop joint projects (see under institutional sustainability). It is evident that the faculty of agriculture which was the main focus for capacity building is leading in terms of projects with external funding (and

¹⁸ To be hired as staff under the status of the public university it was necessary to apply and be accepted through a specific appraisal procedure.

also takes the biggest share (27%) of the university budget). The MMU has the intention to further build on some experiences to monetize specific services e.g., the Kyembogo DDIC (for lab analysis, use of equipment and AI), Integrated Aquaculture unit and lab and MMU radio, developing a consultancy centre to support software development. But this is not what will ensure sustainability (maybe on the longer term).

Because of the enhanced capacity, the university is becoming attractive for partnership with private agencies to invest in infrastructure e.g., the envisaged partnership with the Deroose Plant with the intention of establishing a tissue culture and biotechnology laboratory. It is envisioned that the newly recruited staff with PhDs will make significant contributions in attracting external funding.

To the largest extent, financial sustainability is however assured more by the transition to a public university rather than mechanisms anticipated in the IUC program. The transition process was enabled by factors other than the IUC intervention. Nevertheless, it is important to mention that phase 1 of the IUC program helped to secure accreditation of MMU by obtaining a Charter which in turn allowed continuity of operation of MMU throughout the transition process – the transition did not interrupt the functioning of the university. The transition from private to public university was a life-breather into MMU and its budget as a public university is a strong guarantee for financial sustainability. Continuity of the IUC interventions and outputs are now taken care of by the university budget funded by government and substantial investments are already taking place e.g., improvement of the internet, recruitment of competent staff, payment of enhanced salaries for staff, construction of the building for the faculty of agriculture, implementation of radio programs, etc.

Financial management and procurement systems are more efficiently managed under the new dispensation with inherent checks and balances using established systems that apply to all public universities. Within the establishment, there is a Directorate of Planning and Resource Mobilization together with the Grants management (that absorbed the PSU and builds on its expertise) mandated to mobilize resources. The Annual plan 2022 has provisions for supporting attraction external resources, using government funding.

The university and faculty budgets incorporate budget lines to continue consolidation and further development of IUC realisations, such as library, labs, Kyembogo Dairy Farm, aquaculture unit, radio and ODEL and training of communities. The detailed budget and plan of the Faculty of Agriculture has been shared with the evaluators and gives evidence of this.

Academic sustainability - To sustain the research culture that was influenced by the IUC and ‘infected’ academic staff in other faculties to invest more in research, MMU has created research teams at Faculty level around the core topics, agriculture, environment and tourism. These topics represent the niche of MMU as specified in the strategic plan. MMU aspires to focus on Agriculture, Tourism and Environment (ATE) as contribution to national development. The choice of this strategic focus areas is influenced by the key resources in the Rwenzori region with high potential for agriculture that provides livelihoods for the majority of the population; tourism attraction (indeed Fort Portal city is known as the Tourist City), conservation of natural resources (forests, crater lakes and Mt. Rwenzori). The other faculties that are not directly in this line e.g. that the faculty of health and business are thus invited to think about the intersection of their domain with the three core topics in order to build the identity of the university. These agendas are being aggregated at university level.

It will be important to pick up again the educational programme for e-pedagogy and to further develop a model for andragogy.

Promising relations have recently been developed to support research and education:

- Deroose Plants to build a Biotechnology laboratory and provide infrastructure for student training and student placements
- With Enabel, the Belgian development agency to train future hotel workers to address the increasing demand in Fort Portal (growing in importance as tourism destination)

Conditions and challenges for sustainability – The PhD on change management¹⁹ (finalised in October 2023) provides some interesting lessons about change management. These point at particular challenges for effectiveness and sustainability. The following is important to retain from the study/thesis (according to the evaluators):

- Some level of stability is important to ensure effectiveness and sustainability of results: only now (and still, the coming months remain challenging) some degree of stability is obtained in the institution and this is necessary to create space for starting to operationalise experiences of the IUC and theoretical models developed by research.
- Development projects, such as this IUC, need to be strongly embedded in three ways: strategic, social and operational and this from the start (which was not the case for this IUC)
- The strategic embeddedness is of utmost importance: it means that university leadership needs to connect the project to the strategic plan on a continuous and daily basis (demonstrating ownership beyond personal involvement). In concrete this means that leadership at different levels needs to explain to all stakeholders and university what in the project relates to the strategy in order to clarify its importance and meaning. This requires that university leadership roles are more clearly and explicitly defined in operational terms. The thesis found that MMU staff acted in an opportunistic way to take advantages of immediate benefits to individuals such as training but the majority were not really inspired to change in order to make the institution (MMU) more relevant – possibly this could be attributed to limited understanding of the purpose or importance of IUC interventions and activities in as far as they enhanced strategic achievements.
- The operational embeddedness is to ensure that project plans connect to the operational plans of the university and the different depts. Joint planning between project stakeholders is fine, but project interventions should also clearly appear on the operational plans of faculties and their departments.
- A project coordinator also needs to be a change sponsor: this needs to be an explicit role.

Clearly, institutional change began with the change management analysis (and after COVID) with 3 major workshops with top and middle management, academic and admin staff: only then it became clear to all of them what the meaning of the IUC was. These interventions were followed by bilateral engagement of the PhD student with all services and departments concerned. The fact that the student was very familiar with MMU was helpful (but not enough as involvement of the leadership was necessary to commit other staff to the process). Only then people started planning for the structures and mechanisms to consolidate the results (ODEL unit, for ex.), integrating the Kyembogo farm or the grants unit, creating departments in the faculty of Agriculture, etc.

¹⁹ ANDREW RONNIE MUGENYI (2023) STAKEHOLDER BEHAVIOUR AND ORGANISATIONAL CHANGE OUTCOMES IN UNIVERSITY DEVELOPMENT COOPERATION PROJECTS.

3. Brief assessment per project²⁰

To appreciate the projects, the evaluators started from the self-assessment and the scoring from the self-assessment (which does not align with the OECD DAC criteria). The evaluators appreciate first the self-assessment and then use the OECD DAC criteria to briefly describe the main elements. Where they want to nuance the score, they indicate in the text.

Table 2. Scores by project based on self-assessments²¹

	P1	P2
Sustainability (Q3)		
Finance/economic sustainability	4	4
Level of ownership	4	4
Results will continue	4	4
Partnership (Q3)		
Quality of comm within the project/programme	4	4
Academic interest and commitment	No score	
Efficiency and project management (Q5)		
Value for money	3	3
Working relations with PSU	4	4
Active involvement	4	4
Mutual trust and joint decision making	4	4

Source: Self-assessments by projects

3.1. Project 1. Agricultural action research and community engagement for development

The self-assessment is understandable, coherent and supported by examples. The scoring is not done with regards to the objectives anticipated or with reference to the indicators. Information about how synergy with P2 is organised is rather limited as is reference to the Kyembogo dairy centre (which receives a lot of attention in the programme self-assessment).

The evaluators accept all the scores, except for 'results will continue', we would give a slightly lower score as some conditions need to be ensured, for e.g., to support learning and to operationalise the model for community engagement.

Below, the evaluators describe and comment on the findings of the self-assessment by referring to additional information obtained during the mission and referring to the information from the monitoring matrix²².

Relevance and coherence – The self-assessment refers to the relevance of and coherence of the project with the MMU vision (with focus on community engagement and agriculture) and the country strategies. This is confirmed by the context description provided in the introduction chapter of the evaluation report. The evaluators accept that the project paid attention to involving women farmers in the activities and the trainings but did not see evidence of a deliberate strategy targeting women farmers' participation. It is clear from the assessment and the evaluation mission that interventions, developed under project 2 have benefited P1 (radio, ICT, labs) and specific PhD research under P1 looked into the community engagement model and the development of a dairy app which included outreach to the same target group as under P1.

²⁰ To avoid duplication of information, this section focuses as much as possible on the specificities of each project. Other findings that cut-across the programme level are addressed in the section that discusses findings at programme level.

²¹ These scores correspond to projects in phase 2. In this section, the focus is on phase 2..

²² The final figures will only be available in the course of November 2023 (with the final progress report).

There are various other VLIR-UOS supported projects implemented at MMU. Although most of them were not related to agriculture, some of them entailed an interesting approach towards action research and community engagement. The evaluators have not seen evidence of efforts to organise learning on this.

Finally, the assessment refers to various relations with other programmes intervening in the region. The evaluators have not analysed these and only had one interview with an NGO partner, SNV. From the information in the documents and the interview, the evaluators conclude that collaboration with other partners is mostly activity based.

Effectiveness and efficiency – The evaluators confirm the overall positive self-assessment in relation to the results that were realised, however by pointing at the unfortunate and premature ending of 3 PhD scholarships under P1 which weakens effectiveness with regards to research capacity. This (negative) result was related to issues of commitment both on the side of the university (that was not able to hire the PhD students as staff when being a private university), as on the side of students (who were attracted from outside of the university and could no longer wait for a contract proposal) in the period of transition from a private to a public university that took more time than initially anticipated. In terms of efficiency, the self-assessment raised questions about value for money related to the building of human resources capacity and outreach:

- the self-assessment learned that the IUC continued to invest in the research activities of MSc students (4 in total in phase 1). This proved to be very efficient as it supported the research of the PhDs and could partly accommodate the void caused by the departure of three PhD students.
- From hindsight the P1 stakeholders learned that, in case of limited human resources, IUC partners might consider to invest more in scholarships for MSc students to gradually build a pool from which potential PhD students can be identified. The evaluators would support this, but also recognise that there is (time) pressure to have as much PhDs students as possible.
- The availability of a budget for research and outreach (action research) was very important to organise the interaction with the communities.
- The self-assessment critiqued the absence of funds for additional work as PhD supervisor. This was not brought up during the evaluation mission.

Efficiency, in terms of communication and project management was highly appreciated, which can be confirmed by the evaluators, although they would like to highlight that a lot was demanded from the PhD students with regards to managing the execution of project activities that were not directly related to their PhD study (even when the self-assessment states that other team members would take over tasks, which was not shared with the evaluators during the field mission).

Following results can be highlighted in relation to community engagement:

- PhD topics on agriculture were really aimed at defining practical solutions that are relevant for the community. Members of the community were enquired after their needs, were involved in the sample for experimenting and data collection and received information about the results of the research.
- Practical solutions were identified and applied.
- There is an evolution towards involving communities in research projects, however sometimes limited in terms of people involved. This resulted in a closer collaboration with three farmer groups in the region. The contacts with farmer groups and other stakeholders involved in agricultural programmes (such as SNV, an EU Erasmus + project) will assist the university in rolling out its student placement programme.
- The interaction with farmers was more intense than anticipated: already at the end of Y3 (2021), 141 interactions²³ (against 17 planned) were registered in the monitoring matrix. These reached 589 people in the communities (number of farmers reached is not specified).
- The feedback from farmers demonstrates appreciation for the training offered to them by MMU. At least 70% of the farmers that responded to a MMU survey expressed their satisfaction.

²³ These can be of different types: training, follow-up visit, exchange over phone, ...)

Overview of farmers involved is presented in the table below (source: self-assessment):

PhD and MSc research	Farms involved in the research	Farmers reached
Feed resources for lactating cows	13 (against 6 planned)	200 (training interventions)
Water management and quality for dairy farmers	40 (against 1 planned)	
Water management for fish farmers	No details	60 (training on the newly installed facilities at MMU) 100 reached (transfer of knowledge on artemisia production)
Intercropping	No details	50 farmers (soil fertility experiments)

Points of attention are the following:

- Relations with services for extension work: the interaction is more on an ad hoc basis and not always strategically engaging the structure (and their programmes and plans).
- The lack of a community engagement model during implementation: it was recognised in the self-assessment that a model could have been developed earlier. This had an effect both on effectiveness and efficiency. The evaluators found that this hampered a more coordinated planning and identification of communities/groups/farmers for the various research topics. A clearer model could also contribute to a more detailed and continuous analysis of needs throughout the process and each stage of the research (see also impact case).

The results with regards to research and teaching are the following:

- Project 1 clearly enhanced the research capacities. To start with, the project influenced a strong increase in number of scientific articles published in peer reviewed journals. From 4 articles at the end of phase 1, the number went to 24 (against 16 planned). Articles were published by the PhD students supported by the IUC but also other colleagues at the faculty (the figures in the matrix do not distinguish between the two). 5 MSc students were supported and involved in research activities.
- In the course of phase 2, 2 MSc courses (agro-ecology and agri business management) were reviewed (but no data (yet) on student enrolment for these) and a new BSc. Aquaculture and Water Resources Management was accredited (starting next academic year).
- The PhD students from Phase 1 grew in their capacity for project management, writing proposals for research and supervision of new PhD students.
- Both research capacity and evolutions in education were supported by the labs (installed under Phase 1) and further equipped under phase 2. The labs are serving research and offer services for stakeholders from outside.

It should be noted that curriculum review was also influenced by a project funded by the Austrian development.

As a result, and in line with the new vision of the university, the Faculty of Agriculture grew in importance and specialization, which explains the creation of 5 functional departments with their specific research agenda and the hiring under the transition to a public university (already 20 people added to the faculty staff). This also attracted attention from the government and MAAIF that decided that the Faculty of Agriculture will host NAFPRI (the National Agriculture Food Policy and Research Institute), that will be developed in partnership with the Belgian NGO Rikolto (based on a MOU).

Sustainability – The ownership of people directly involved in the IUC and P1 is high and has grown amongst other staff in the course of Phase 2. The self-assessment underlines that all project outputs are incorporated in the university strategic plan and annual budget of the department. Interaction with the Dean of the Faculty over the planning and budget of the faculty proves that maintenance and further development of results from the IUC (for e.g., labs, outreach to farmers, development of the dairy app are budgeted for and that further research is planned in detail and is already benefiting from government funding (being recognized as a public university)).

The monitoring matrix shows that the number of externally funded partnerships doubled during the second phase (from 12 to 23). This is supported by an IUC publication 'project profile 2023' which lists all externally funded programmes, next to the IUC. At least 9 projects are specifically aimed at agriculture. Most interesting for MMU and the faculty of agriculture in particular is the partnership signed

with the University of Ghent. Capacity for attracting external funds and establish relations is also demonstrated by the MoU with Deroose Plants. The partnership with this international private company with Flemish roots is about sharing and transferring expertise in biotechnology and tissue culture techniques to support a (planned) project by the faculty of Agricultural and Environmental Sciences of MMU (funded by the climate change programme of the province of West-Flanders, BE) that aims at developing agro-tech solutions.

3.2. Project 2. The Transversal Institutional Strengthening project

The Transversal Institutional Strengthening project (P2) aimed at enhancing institutional capacity of MMU to deliver quality education, research and community service through (1) development of ICT infrastructure; and establishment of a student data management system (2) human resources development through PhD training; e-pedagogy training and various targeted trainings such as mass online training delivery system (MOODLE); curriculum development and (3) establishment of MMU radio to facilitate university engagement with community and dissemination of research results.

The self-assessment for this project is understandable, coherent and well-explained with relevant examples. The evaluators are of the opinion that some elements of the project are over-rated, nevertheless, the evaluators accept all the scores and provide their views on the self-assessment.

Relevance and coherence - The project was conceived to address critical challenges (as described above) experienced by the university at the time including with regard to its capacity to deliver on the core mandate of training, research and community engagement. Its focus therefore on human resource capacity, ICT infrastructure and e-learning, curriculum development, and radio for community engagement scores highly on relevance of the IUC program.

The institutional capacity supported by IUC program was very relevant for building the credibility of MMU to attain a charter – meaning it had in place the basic essentials for a university to operate. The transition to public university now makes it easy for MMU to connect to existing management systems for public universities such as the student and financial management, and procurement systems.

With regard to its orientation as a community university, MMU radio guarantees regular engagement with the community on a variety of topics as all faculties in the university are allocated air-time every week to engage with community. It is also the functional connector between P1&P2.

Engagement of stakeholders and translation of their needs into curriculum content in the development of a new program in Aquaculture and water resources management demonstrated rigorous processes of ensuring relevance of academic programs, however, such processes also require financial resources which in this case were provided by the IUC program – the program has been accredited by the National Council for Higher Education. Additional support was provided for the Austrian Development.

Effectiveness and efficiency - Generally, the evaluators do not dispute the effects outlined to justify the self-assessment. IUC investment in ICT infrastructure by providing a server and other improvements on the internet access has been instrumental to the operations of MMU: It leverages to constraint of limited teaching space, it is the main learning channel through ODEL for the distance-learning programs e.g., in public health and education and during the COVID-19 pandemic, it was the only fall-back position for continuity of learning during lock-down. Currently, it is integrated in the normal way of learning at MMU and online presence is part of the criteria for staff performance. An internal assessment indicates positive attitude of students and staff towards e-learning and an increasing use of the e-resources. Students and staff are regularly trained in use of e-resources and in the last three months alone registered 7,043 downloads and 234 users (both students and staff) at the library, however the staff needs more technical support and orientation in e-pedagogy to be more confident and effective in use of e-learning tools.

The MMU radio functioned as the main mechanism for regular community engagement across all faculties of the University but there are challenges of limited coverage. The radio and the ICT infrastructure directly benefit all faculties unlike the PhD training that focussed on the faculties of agriculture and education and business.

While recognizing to the above achievements, the value for money under P2 however was limited by:

- It was not possible to develop an electronic student management system under the IUC program due to limited capacity at MMU until the transition to a public university where MMU is connected to AIMS that is used in all public universities.
- The integration of research and teaching is not yet institutionalized – it is still on individual will and initiative.
- The App developed with expertise of partners in the North to aid farmers manage farm records is not yet used by any farmers – still too complicated for farmers to use. It raises questions about how to start and best organise a process of co-creation. When further operationalising the model for community engagement, this would receive further attention.
- Some envisioned outputs such as a diploma in e-pedagogy was overtaken by the transition process that only approved programs that existed by 2018; further, establishment of the Rwenzori journal (would be more useful for local dissemination of knowledge than of international value in the short-term) was not prioritized though this has now been mainstreamed in the university budget under government funding.

Sustainability – The self-assessment and the findings of the evaluation visit give evidence of efforts to ensure sustainability. For e.g.

- Project interventions are mainstreamed in the university strategic plan and annual budgets
- Staff trained to PhD level are already empowered to mobilize research grants. This will remain very important as one cannot assume that mainstreaming project interventions in the university strategic plan fully guarantees financial sustainability: University plans and budgets are never fully funded 100%, even though MMU now is a public university;
- Relevant policies exist or are being developed to guide implementation of interventions initiated by the project e.g teaching-research integration, commercialization of radio for maintenance and investments, etc. ;
- University leadership stimulated faculties to integrate project activities related to various units into their annual plans and budgets;
- There are focal points for ODEL and the radio in all faculties to ensure planning of new activities and contribute to mainstreaming.

A point of attention of which IUC stakeholders are aware:

- The challenges of scaling-up interventions from three faculties targeted by the project to the entire university and sustainability of the same need to be further analysed and catered for. This appears also clearly from the PhD study on change management.

4. Impact case

Performance story - The impact claim that was formulated in consultation with MMU (IUC stakeholders) was the following:

The IUC interventions have led to an application of innovations, increased milk production and income and capacity for better informed decision making with regards to the management of the farm for the active members of the Kyofnet dairy farmer group.

The outreach model was based on training, which took into account the results of a training needs assessment (2019). Trainings were provided by the PhD students at the Kyembogo farm and by the farmer manager (that received specific training as MMU staff, amongst which in Kenya) and an MMU research assistant. The farm manager mobilised for trainings (12 separate trainings in total, involving usually 60 people in total from the Kabarole district, organised in two groups, mostly Kyofnet members but also two other groups that are active in the district)²⁴. It was expected that a least around 15 Kyofnet members can act as trainers themselves (ToT approach).

Further to trainings, visits to individual farms were organised in the framework of the PhD research (for demonstration and follow-up on experiments and data collection). Finally, the MMU reached out to farmers through the radio (either broadcasting programmes developed by the PhD students or other members of the Faculty of Agriculture, inviting the farm manager; either by visiting the farmers). There is a slot on the radio every Friday at noon (but not ensured at 100%).

Other stakeholders (other than MMU and the farmers) were involved, for e.g., the training on artificial insemination (2023) involved an input supplier, Cooper; and the DVO participated in the selection of animals to be involved in the research and checked upon the health of the animals in one experiment. Participation of government extension workers was facilitated (financial support for transport) for some trainings.

During the trainings and follow-up visits, the farmers were referred to input suppliers.

The 12 training interventions (in phase 2) covered the following topics: milk safety and quality, animal nutrition, animal breeding, animal health, managing dairy as a business, association governance, milk marketing, fodder cultivation, calf caring and record keeping. This came on top of trainings from phase one on (water quality for dairy cattle) and soil fertility (phase 1 and phase 2 with support of joint programme), and was complemented in 2023 with interactions on the utility and needs with regards to a dairy app and training on how to use (in order to assess difficulties) and train artificial insemination.

The coordination of training and research activities was based on the IUC planning, but still challenging. Although the Kyembogo Dairy Farm manager was in contact with all stakeholders; some PhD directly contacted the farmers for demonstration on the farm or to check upon progress.

Monitoring of progress is done within the framework of the PhD research (for e.g., topic one was researched with 15 farms) and by the Kyembogo Dairy Farm manager in an informal and non-systematic manner based on visits and interaction within the Kyofnet group. The IUC facilitated PhD mobility but not the mobility of the farm manager.

The table below presents an overview of mechanisms that were at play and needed to be analysed. They can be considered as 'assumptions' about how the project thinks that change can be influenced and realised. These mechanisms were identified on the basis of the self-assessment reports and the interviews during the mission.

²⁴ The trainings were not repeated. Some of the farmers also interacted with other MMU PhD students (for e.g. on water quality or fish pounds).

Mechanisms	Description
Project mechanisms (interventions related to the specific project under the IUC)	<ul style="list-style-type: none"> – Ad hoc trainings connected to the PhD topics will strengthen the knowledge and understanding of farmers – ToT approach will allow to reach a larger group of farmers – Field missions to collect data on progress (PhD research) and to give access to some inputs (for AI, some feed supplements, paper formats for record keeping) will support application by farmers – Radio programmes to inform farmers and organize interaction and feedback will further support application of innovations of a larger group of farmers – Feedback meetings (at least 3) to assess utility of product (Rwenzori Dairy App) will help to design a useful product that will be used by the farmers – Kyembogo Dairy farm as demonstration farm will inspire farmers on how to improve their farm
Collaborative mechanisms (interventions related to the broader IUC programme and or other actors aiming to achieve the same goal of the project or IUC programme)	<ul style="list-style-type: none"> – IUC budget for supporting field work of all PhD students – Kyofnet members with the ambition and the means to absorb, utilize and apply new knowledge – DVO involvement (on a consultancy basis, no MOU with the government structure)
Rival mechanisms (other actors and their interventions that are working in the same area with their own objectives)	<ul style="list-style-type: none"> – Government extension workers are providing support to farmers on agricultural techniques: orienting farmers on the 'how to' – SNV programme TIDE, the inclusive Dairy Enterprise, phase 2, 2020-2023) that became active in the district in 2022 (with a community-based approach, (online and offline) training modules on dairy production, dairy farm management, water quality), supplying inputs and equipment (at 50% co-financing) – Government programme on wealth creation, providing – DAFAN network
Contextual elements	<ul style="list-style-type: none"> – The members of the Kyofnet group have capacity to implement innovations: they have farms that are already well established (no subsistence farming), there are literate and well educated, they have financial resources and are well networked in the district – The dairy value chain in Uganda is largely dominated by some big players that leave little space for smaller farmers

Identification of changes and analysis of contribution - The evaluators were able to identify and validate changes at the level of some members of the Kyofnet group. The self-assessment reports of Project 1 indicate that changes were also noticed in other districts, without being very detailed about what changed²⁵. However, the changes described in this case are limited to Kyofnet group members that were also the main focus group with regard to engagement with dairy farmers in the second phase of the IUC implementation.

Changes - Changes validated based on documents and interviews during the field mission are presented in the table below.

Individual farmers of Kyofnet are more aware of importance of nutrition and adopted practices for improving nutrition of their animals. The self-assessment report of P1 underlined 30% adoption amongst farmers who participated in training on the making of mineral block for cows. During farm visits and interviews by the evaluators, it was confirmed that majority of Kyofnet members were making their mineral blocks and were happy with the results so far. Many farmers were experimenting supplementary feeding with a few zero-grazing cows or partly zero-grazing. The farmers were also found growing a wide range of forages such as Caliandra for supplementary feeding. Interviews confirmed that farmers

²⁵ The report only referred in an explicit way to 4 changes: 30% uptake of the production of mineral blocks amongst a total of 100 farmers trained; over 20 percent of fish farmers (total number not specified) have gone ahead to copy aspects of this fish farming pound model on their own farms; over 50 farmers of two districts conducted integrated soil fertility experiments with an increase in maize yield of over 65 percent recorded and replicated this on their farms; the IUC counted 5 farmers in total that are providing trainings to others (Self-assessment P1, page 4-5).

testify to have increased milk production by 80-100% in those animals on supplementary feeding. Data collected by one of the PhD students (Excel data shared by Lutakome, P) showed a sustained steady increase of milk production for 10/15 experimental cows for the period of Oct 2022-end of November 2022) but with variations among the cows. Their increase in milk production enabled them acquire a milk cooler of 13.000 litres capacity with support of a government program, Operation Wealth Creation (OWC) which they operate and has helped them to increase incomes though the increases in incomes could not be precisely specified by the farmers. It was however evident to the evaluators that the farmers were getting better incomes from their collective action to add value to milk (by cooling) and transporting it to Fort Portal city for better prices than what is offered in their villages. There are no consolidated data about income. Although interviewed farmers acknowledge an increase in income, they are not able to precisely state what the increase was.

Individual farmers from Kyofnet have improved their breed through Artificial Insemination (AI): farmers seem more inclined to use AI, but a minority is not convinced yet and some of them have had bad experiences of conception failures. All of them are however eager to continue experimenting with the AI services now provided at the Kyembogo farm. The manager at Kyembogo has been trained by the National Animal breeding centre to inseminate, and facilities for storage of semen have been acquired at the farm – this brings AI services closer to the farmers. The semen of improved breeds is supplied by private companies.

The individual farmers know who to contact when they have challenges: the farmers know the institutional landscape and they sometimes invite people from extension services to their meetings to provide technical information on selected topics. They have access to online sources and look for information on the internet. Some of them have become members in other groups and networks and/or invest in study visits to other regions to visit model farmers for purposes of learning in order to improve their dairy enterprises.

Individual farmers of Kyofnet have knowledge about the advantages of record keeping. However, the majority of them has not yet started keeping records in a systematic or regular way. If farmers are keeping records, their attention is on production, health and breeding mainly. They treat their farm records as private and are not keen to have their farm records kept online – one of the reasons for shunning the App that was developed by MMU in addition to it being comprehensive, complicated and requiring having good smart phones, access to electricity for charging the phones and internet. The DVO confirmed that interventions to influence farmers to keep farm records have not been successful – they may attempt if it is a project but when it ends, they do not continue. With good supervision and monitoring, the farmers are fairly comfortable with the estimated average daily production.

Farmers are organized to bulk their milks and collectively access better markets – thus participating in higher end of the milk value chain. The active members of Kyofnet have formed a committee that manages a milk cooler, transport to Fort Portal Market and sales there. They also buy milk from other farmers who are not members of Kyofnet and train them to manage milk quality from the farm to the cooler. There is a system to transport the milk to the market at least twice a week and to sell it there at a better price than the farmgate. They are also providing employment at the coolers and the transporters. The suppliers of milk to the cooler are paid every two weeks. Currently they are considering doing more value addition to milk like making yoghurts but this requires some investment in the equipment.

Kyofnet group cohesion has increased and has gained ability to collaborate and network: the group organizes regular monthly rotational visits among the members to share experiences, learn from each other and socialize. During these exchange visits, they contribute money and give to the host farmer as revolving fund. Further they contribute money to their Savings scheme (SACCO) from which

the members can borrow money at favourable interest rates, fair and without conditions for collaterals the commercial lending agencies like banks use(?).

Significance with regards to the impact claim - The significance of the changes for this group of farmers is moderate to significant with reference to increased production and/or improving breeds of dairy cows for higher productivity and increased income; they have set-up their learning mechanism and social support through regular rotational farm visits; and generate funds to support each other and enable cheaper credit access. The farmers can take advantage of economy of scale to engage in business along the value chain (such as marketing of milk choosing their own outlet) that can provide more income (including raising capital with the intention (for example to buy additional equipment for value addition). However new costs have to be taken into account, such as costs for workers, renting space for the cooler and fuel costs for cooler generator, and costs for building structures for supplementary feeding and/or zero-grazing unit. The milk cooler is critical in bulking, adding value, and collective marketing to access better prices. For now, the current milk production by members of Kyofnet and other farmers in the community cannot fill the cooler – this is ? an inspiration to increase production.

There was no sufficient evidence on the farms visited by the evaluators to the effect that farmers were keeping farm records so this impact claim was not validated. Factors that hinder are the following: farmers fear to keep records with suspicion that the records may be used for taxation – they would even hesitate to keep their records electronically in some data-base because they cannot control who accesses them; most farmer do not stay on the farm all the time and employ workers (most of whom are not literate enough to make good records); the farmers operate small farmers and do not feel they need to invest in record management systems – they can easily monitor daily milk production without elaborate records.

Contribution - The IUC contributed in particular through creating awareness and knowledge transfer (trainings and follow-up by PhD students) especially on animal feeding and nutrition, and breeding for increased dairy productivity. Lack of knowledge is considered by farmers interviewed to be the most important constraint to further develop the farm. The farmers appreciated MMU input because they want knowledge and because their participation is facilitated (transport costs). The satisfaction of farmers was surveyed in 2022²⁶ by MMU (Kataike 2022), with ¼ of respondents (total number of respondents not provided in the document) coming from Kabarole district dairy farmers: 60% of the farmers was satisfied and 9% very satisfied with the training (a distinction between the districts was not made). The training that was most appreciated was the one on feeding supplements (mineral block, types of plants for fodder). The farmers express strong interest to continue engaging with MMU primarily to access knowledge.

The contribution of the IUC to training on artificial insemination was complementary to other interventions, and bringing the AI services closer at Kyembogo farm. The farmers observe that the farm will need to tremendously improve the practices to enable the farmers to learn and copy from the university farm. Farmers prefer hands-on training which should also be reinforced with materials such as hand-outs for reference after the training. Some farmers raised concern that the trainings went fast, and did not provide handouts and were sometimes too complicated for some participants especially the elderly. These are hindrances to uptake by the farmers and the broader farmer community. It should be noted that some of the farmers have access to multiple sources of information about innovations including online and from other training by other agencies such as the Dairy Farmers Network (DAFAN).

The App introduced to aid record keeping did not contribute: the app was considered interesting by farmers but does not really respond to their current needs (still too complicated) and is not very applicable in their context as it requires smartphones, digital literacy and internet availability which are not assured to all farmers. Further there was suspicion on how data in such an App would be controlled to avoid access by other people. Farmers were hesitant to share sensitive information about the number of animals they own and their productivity on a system they are not sure how it is controlled in terms of access by other people.

²⁶ Joanita Kataike et. Al (2022) Satisfaction of dairy farmers with the training interventions: Empirical evidence from VLIR IUC MMU.

There was no contribution of the IUC to the increased capacity of farmers to add value to milk and access to market: the farmers were supported by the government programme OWC that donated a cooler and generator for bulking and collective marketing of milk.

Mechanisms	Description	Comments on the mechanisms
Project mechanisms	<ul style="list-style-type: none"> - Ad hoc trainings connected to the PhD topics will strengthen the knowledge and understanding of farmers and stimulate innovation - ToT approach will allow to reach a larger group of farmers – scaling out - Field missions to collect data on progress (PhD research) and to give access to some inputs (for AI, some feed supplements, paper formats for record keeping) will trigger adoption by farmers - Radio programmes to reach out to farmers will scale out impact of adoption of innovations to a larger group of farmers - Feedback meetings (at least 3) to assess utility of product (Rwenzori Dairy App) will help to refine the app to be used by the farmers - Kyembogo Dairy farm as demonstration farm will inspire farmers on how to improve their farm 	<ul style="list-style-type: none"> - Training worked well but was not adapted to all trainees, handouts could have enhanced knowledge retention, YouTube videos or pictures so support further study/comprehension or re-use - There was no TOT approach: the Kyofnet farmers were not trained to be trainers. The trained farmers shared their knowledge and experience with fellow farmers in a rather informal way – nevertheless they influenced some farmers outside Kyofnet. - If a few farmers (#5 as mentioned in the self-assessment of P1) told MMU that they have shared what they know with neighbouring farms (mostly in an informal and irregular way), that is probably more related to their personal competences (and previous experience) than to the training they received within the IUC. The training served to transfer knowledge not to equip farmers with trainer competences (no ToT). - Interaction with PhD students for purposes of sharing knowledge was much appreciated - Radio: reach is limited, all farmers know about the radio and some listen to it, but knowledge about what is discussed and added value for them is not clear - Feedback meetings and training did not suffice to ensure the app is useful. - The Kyembogo dairy farm does not (yet) function as a model farm or even demonstration area. SNV looked into the opportunity to involve the farm in its programme but eventually contacted another farm.
Collaborative mechanisms	<ul style="list-style-type: none"> - IUC budget for supporting field work of all PhD students - Kyofnet members with the ambition and the means to absorb, utilize and apply new knowledge - DVO involvement (on a consultancy basis, no MOU with the government structure) 	<ul style="list-style-type: none"> - This IUC budget made the outreach possible and was very much appreciated by PhD students - The interviews confirmed that uptake was largely due to the capacity of the Kyofnet group - DVO participated as a consultant and was supportive to guarantee the health of animals recruited for experiments of one of the PhD studies.
Rival mechanisms	<ul style="list-style-type: none"> - Government extension workers are providing support to farmers on agricultural techniques - SNV programme TIDE, the inclusive Dairy Enterprise, phase 2, 2020-2023) that became active in the district in 2022 (with a community-based approach, (online and offline) training modules on dairy production, dairy farm management, water quality), supplying inputs and equipment (at 50% co-financing) - Government programme on wealth creation, providing - DAFAN network 	<ul style="list-style-type: none"> - Overall Government extension workers are not actively engaged with MMU, have limited resources to support service delivery to farmers and are not aware of innovations championed by MMU - The Kyofnet group is also targeted by SNV staff and have the capacity to cost-share to acquire equipment for testing the quality of the milk - The OWC, government programme was key in realizing economies of scale and setting up a value chain when they donated cooler and generator to Kyofnet - Several farmers received training from other networks such as Dafan network
Contextual elements	<ul style="list-style-type: none"> - The members of the Kyofnet group were organized and ready for change. The farms that are already well established (no subsistence farming) and are not the typical subsistence farmers, they are literate and have 	<ul style="list-style-type: none"> - This has certainly contributed to the changes observed and the uptake of innovations.

	<p>non-farm income sources, they are also well networked in the district</p> <ul style="list-style-type: none"> - The dairy value chain in Uganda is largely dominated by some big players that leave little space for smaller farmers 	
--	---	--

The table below gives an overview of the assessment of changes, their significance and the contribution of the IUC. The assessment rubrics are specified in the annex.

Impact case – impact claim: dairy farmers implement innovations, increase production (and income) and farm management

Changes (at individual and group level)	Strength of evidence	significance	Contribution of IUC
Individual farmers of Kyofnet (are more aware of importance of nutrition and adopted practices for improving nutrition of their animals)	strong	strong	strong
individual farmers from Kyofnet have improved their breed through AI	moderate	strong	moderate
The individual farmers know who to contact when they have challenges	strong	moderate	weak
individual farmers of Kyofnet have the knowledge about the advantages of record keeping (but are yet to start keeping records in a systematic way; their attention is on production, health, breeding mainly)	strong	weak	moderate
farmers can together manage the increase in milk-production (and develop a value chain)	strong	moderate	none
Kyofnet developed more group cohesion and ability to collaborate and network	strong	strong	moderate

Conclusions - The change at the level of the Kyofnet farmers is a combination of direct access to knowledge (ensured by training by PhD researchers and Kyembogo farm) and self-organisation of the farmers to learn from each other through rotational farm visits; the capacity of the group to invest in the innovations; The support from government through OWC that donated to milk cooler and generator; additional support from SNV for the milk quality testing equipment. The result is a group of farmers that have adopted the innovations and are inspired to invest more in milk processing, as well as getting more productive breeds of dairy animals. The IUC budget for outreach and focussing on one organized group (phase 2) have greatly contributed to this achievement. Kyofnet has its system for mutual social and financial support that have enhanced the cohesion of the group. Kyofnet is a nucleus group that can support non-members but on purely business model.

The anticipation that Kyofnet would be responsible for training other farmers to create awareness and influence scaling up, uptake of innovation was not realized because the Kyofnet farmers were never trained nor supported to train the farmers.

The contribution of other project mechanisms to change; the radio, having the Kyembogo dairy centre as a demonstration venue, the ToT approach, and the added value of exchange meetings and training on the app were not confirmed by this impact study. A weaker point of the training was the lack of reference materials such as handouts.

The evaluators acknowledge that both the university and Kyofnet would not have the capacity (time, human and other resources) to create impact in the wider society. The best option for MMU to influence change at a larger scale is to enter a strategic partnership with other service providers, such as the district's local government, production departments, and NGO such as SNV (who have the mandate and resources to serve farmers). The satisfaction survey (Kataike, 2022) rightly recommended that government actors should be more intensively involved as the implementation of dairy farming

programmes is a devolved function (Kataike, 6) and should look into how the work in the dairy sector could provide opportunities for youth and women. Under these partnerships, MMU can provide technical support to the service providers, e.g., providing technical input in the SNV training modules.

An important lesson to foster relevance is investing in comprehensive needs assessment and continuously checking to clarify the real needs as farmers' needs are dynamic and sometimes ambiguous if taken on face-value – a thorough analysis is important to clarify and validate the real needs of the time. This would avoid investing in interventions that are less likely to be taken up by farmers e.g., the App for record management. Record keeping was identified as the least important training need (in 2016, Kataika, 1) and yet an intervention was undertaken to develop a sophisticated IT based App to aid record keeping by dairy farmers. The App is not used by any farmer until now due to numerous reasons e.g. it requires using smart phones which some farmers do not have; it is too comprehensive requiring farm details that farmers are not willing to share; it requires internet access to upload the information on the system which is not readily available or requires purchase of internet data; and generally farmers claim the app is very difficult for them to use – indicating challenges of digital literacy and possibly not enough training.

The use of Kyembogo as a model farm to influence change among dairy farmers will require substantial improvement in infrastructure and practices to enable the farmers learn and copy anything from the farm, otherwise at the moment, farmers have better practices and innovations than the Kyembogo farm, a change will require a long term development plan for the farm.

5. Findings on the learning questions

Not all learning questions were relevant for the MMU IUC or could be elaborated into much detail. Focus here was on the question of uptake taking into account the profile of MMU as a community university and the efforts done to engage with communities.

5.1. *How to support PhD trajectories, with a focus on optimising diversity/inclusivity (gender and Leave No One Behind)?*

The lessons that were learned from the experience with the IUC are the following:

- It is important that the guidelines and selection criteria of beneficiaries are clear on the minimum expectations with regard to gender equity and consideration of other factors that may perpetuate exclusion of some members of society. Otherwise, it is left to chance or conscience of the people in charge of selection.
- Clarity of entitlements to PhD scholars and transparency in implementation are essential to enable each party take their full responsibility without excuses or blaming other parties.
- Strong social support and flexibility is critical in the process of PhD training and facilitates competition without getting overwhelmed. This is even more for the female candidates who carry their reproductive and family care roles into the academic pursuit.
- Conflicts of interest may be inevitable, especially with regard to the commitment of selected PhD beneficiaries over a study period of 3-4 years. What is however important is that both parties (PhD beneficiary and institution) are aware of the mechanisms for resolving any conflicts in case they arise. This arises out of the circumstances that led to premature termination of three PhD scholarships associated with hesitancy of the affected beneficiaries to sign bonding agreements, while the beneficiaries claimed they did not have formal employment contracts to sign bonding agreements.

5.2. *What factors and measures, at VLIR/IUC level and/or at partner institute level, support effective coordination of programmes?*

The lessons that were learned from the experience with the IUC are the following:

Effective coordination comes forth from:

- Instilling collective responsibility for execution (at each level, including PhD)
- PSU unit that is empowered to act (beyond being a simple conduit for reporting)
- Transparency (on budget)
- Joint planning (with openness for flexibility and supporting understanding of what is going on in the project)
- Soft skills of coordinators to discuss challenging issues and being solution oriented (embracing complexity and diversity)

It needs to be taken into account that MMU is a small university with short communication lines and strong ownership (and involvement) of university leadership over the IUC. Three major events have put pressure on the execution of the programme: (i) the transition to a public university has taken a lot of time and attention of university leadership at MMU. The good basis of phase 1 and the growing performance of the PSU unit helped to cope with the lesser direct involvement of university leadership. (ii) the slow/cumbersome transition from a private to a public university had led to the loss of three PhD students (who could/would not wait for a final decision on their appointment, because they had to secure their livelihood). This was coped with by involving MSc students in the research and redistribution of tasks in the teams. (iii) Covid has caused some delays, more in particular in the execution of the field research.

Overall, it needs to be said that the key role for the PhD, although contributing to the effective coordination, also was hard to them. The execution of this IUC has demanded a lot on a personal level.

5.3. How to ensure uptake of research results or new educational practices by political and societal actors and end-users?

MMU took various measures that can contribute to uptake of research findings by societal actors. Most of the measures came forth from the community engagement policy that was drafted in 2020. This policy made a difference between outreach or community services on the one hand and internships on the other hand. The policy points at the creation of 'partnerships' with community as the main modality for community engagement.

Community was defined as any organised group of people and entails: farmer groups, households, local government institutions, NGOs, private sector and businesses etc. Only very recently a PhD developed a theoretical model for structuring community engagement taking into account various dimensions. This model is not yet operationalised.

Concrete measures under the current community engagement policy were the following:

- developing a student placement system for e.g., with farmers to improve their access to knowledge and innovations,
- providing specific services and products (such as organising trainings, for e.g., to farmer groups; or developing a product, for e.g., the Rwenzori Dairy app, or giving access to labs for analysis, or giving access to information through the radio),
- creating partnerships, for e.g., coordinating actors of the dairy value chain in a platform, engaging with the NGO SNV to ensure student placement and support in data collection/surveys, or with government actors (for e.g., MAAIF for the creation of a Centre for Food policy), or - this is an example from outside of the IUC, on health and HIV aids - setting up communities of practices in co-management with other stakeholders.

From these measures, change could only be observed as a consequence of the trainings and access to the radio. Other measures did either not produce change (for e.g., the dairy platform, the Rwenzori Dairy app) or are too early to see change. The change realised with the training is that, in the case of the farmers, there is some uptake of new knowledge. An external factor for uptake was the profile of the participants (and their resources to apply the knowledge that is offered).

The change influenced by the radio is that communities/farmers feel closer to the university and have access to new information. The evidence for the latter was weak.

The effect of communities of practice have not been analysed by the evaluators, but according to the respondent, these communities generate knowledge amongst the community. It works because there is strong joint responsibility and rotating leadership.

Further to the community engagement policy, two other strategies (types of measures) have been noticed:

- the application of an action research model that supposes that involving the target group in the research and in all the steps of the research will facilitate uptake.
- the writing of a policy paper with recommendations (Faculty of Health).
- A strategy that was not yet applied but that is on the wish list of MMU is trying to be asked by government (or others) as experts to give advice in specific commissions (for e.g., the budget commission in the Parliament).

Lessons learned from the IUC and MMU experience are the following:

1. Taking time and creating space for assessing needs with the end-users is of utmost importance as it creates interest in what the university is doing and can contribute to the relevance of what comes out of the research. This needs to be followed by co-creation of the solution, starting small and not working back from a fully-fledged model or tool to adapt or contextualise as happened with the Rwenzori Dairy app. This co-creation is a process that requires a lot of investment (in terms of time and resources) which is often beyond PhD research.
2. Training of Trainers is a specific form of training. It demands for co-creation of training content and a delivery approach in collaboration with people having field experience or people from the Faculty

of Education (with knowledge of andragogy, adult learners). This was not ensured, as such knowledge was transferred but competences to be a trainer were not developed. Furthermore, a ToT approach also requires an analysis of what is needed to replicate trainings (what resources, logistics, how organises and how)?

3. Partnerships with other stakeholders can work if there is a win-win and responsibility of all for shared objectives, and if the partnership is equitable (respecting the autonomy of each partner and ensuring flexibility in design and management). The current partnerships could not be assessed by the evaluators. MMU has experience with bilateral and multistakeholder partnerships: the communities of practice in health seem to work, the initiative of the dairy platform has stopped, demonstrating the need to reflect upon the limitations of a university when it comes to coordinate multi stakeholder partnerships.
4. Action research starts with participatory needs assessment, requires co-creation of solutions at the pace of end-users. This process of co-creation was not clearly defined. The programme proposal for Phase 2 of the IUC did not clearly define what action research is. When trying to influence uptake through action research, it is important and needs to take into account the obstacles encountered by the end-user to be able to use and apply new knowledge and innovations. These obstacles are related to specific socio-economic conditions that also need to be analysed at the start of the action research.

6. Conclusions and recommendations

6.1. Conclusions

The conclusions are organized according to the OECD-DAC criteria.

Relevance - The IUC programme was highly relevant (from multiple perspectives). By design, the IUC allowed to operationalize the MMU strategy and further shaped it. By design, attention for outreach and community engagement (through action research and radio) were integrated in the programme and were part and parcel of every PhD scholarship, which is rather exceptional in IUC programmes.

The design of the programme aimed to create synergy and coherence between the activities and this received continuous attention from the programme's coordination and management. All research activities (Project 1) were related to an initial analysis of the dairy value chain and integrated in one way or the other the challenges that were identified by the (dairy) farmers. A decision was then made to focus on quality and volume of production (with view to contribute to higher income and improved livelihood of farmers/farmer communities) and gaps in knowledge were identified with the farmers (topic list). Transversal activities (Project 2) helped to create conditions for ensuring quality of research, education and outreach, with the radio functioning as a bridge between P2 and P1.

Coherence – Actual realisation of internal coherence in the IUC (and the university) appeared to be less evident: attention for coherence was difficult to maintain under the stress of execution of each activity/PhD (complicated by COVID) and the choice of farmers and farmer communities to work with (thus not allowing a fully integrated approach combining interventions on water quality, diversification of production through fish farming and feed supplements and Artificial Insemination). External coherence was complicated by rules and timelines of different donors to which the stakeholders have to adhere.

Efficiency - The programme was executed in an efficient way and this was strongly influenced by a growing performance of the PSU unit, joint planning and a high commitment from all partners and in particular the PhD students. These combined their research with IUC project management (which was asking a lot of them on a personal level). Transparency on the budget and clear budget allocations contributed to the efficient execution and commitment of different stakeholders to execute their respective tasks. Specific budgeting for research activities in the field has been very helpful and was strongly appreciated by the students and staff. Monitoring of progress based on indicators was combined with smaller surveys on changes and discussion during (joint) coordination meetings, which was a good way to understand progress beyond numbers (quantitative indicators). Issues with commitment at the level of the university and three PhDs (sourced outside of MMU), in the context of the instability caused by the transition to a public university, resulted in a decision of MMU to stop the IUC scholarship and forced Flemish partners to seek funding elsewhere to secure finalisation. This did not lead to a breach in relations between the institutions involved in the IUC, which is due to the quality of the partnership and the capability of partners to engage in dialogue and conflict resolution.

Because of this and other activities/outputs that were not realized, the self-assessments were a bit more critical about the value-for money of the IUC which received a lower score (in comparison to the other items to be scored).

The 12-year partnership has expanded the network of MMU: programme stakeholders from the North facilitated access to their academic network and beyond which made it possible to attract some additional (VLIR-UOS and other) funding that benefited additional staff and faculties in MMU and supported specific IUC interventions (radio, Kyembogo Dairy Innovation Centre). Investment in relation building with potential donors and decision makers in Kampala and in Belgium was a key characteristic of the North-South coordination and increased visibility of MMU.

Effectiveness - The programme stakeholders have realized most of the results that were planned which has strengthened the research and educational function of MMU. The IUC has led directly to the realization of 9 PhDs (of 12 planned) and indirectly (often through other VLIR-UOS funds and involving Northern partners from the IUC) to another 8 PhDs. Which is a critical mass in a university that started with 3 PhDs only. Scientific and peer reviewed articles, more than anticipated at the start, have been written by IUC PhD scholars but also by other academic staff that was inspired by the IUC dynamic and

ambition (more in particular from Year 2, 2021 onwards). Academic staff is investing in writing new project proposals to attract funds or secure PhD scholarships. IUC PhD scholars have developed project management skills but also learned a lot from the feedback culture to support researchers and PhD students. Conditions (structures and budgets) have been put in place to support research and the integration of new teaching practices (e-learning and attention for research). A number of curricula have been reviewed and a new BSc in aquaculture can start next year. Quality of this has not been assessed by the evaluators but the process followed guidelines from the Higher Council for Education and was accredited. Action research and radio have diminished the distance between university and community which is a first requirement to ensure good interaction with communities and to improve understanding of the real challenges.

Impact - When it comes to the impact on the MMU as an institution, the cost-effectiveness (relatively modest budget compared to the impact on the institution) of this IUC cannot be underestimated. The IUC helped MMU to build and strengthen its core functions and to put it on the map and broaden its networks in Belgium and elsewhere. As an institution, all capabilities have been strengthened by the IUC programme which was sustained by ample examples of change provided during the evaluation mission.

However, the IUC has been appreciated by MMU stakeholders as most impactful in the domains of research and positioning itself as a driver of change (capability to deliver upon results) and the domains of project management and putting the correct administrative procedures and mechanisms in place (capability to act and commit). Evidence of MMUs' responsiveness to other actors (both NGOs and decision makers) has been shared by various stakeholders during the evaluation mission and serve as an illustration of these capabilities. The progress of the university in terms of human capacity and presence/visibility in the region and at community level did not go unnoticed and eventually led to the decision of government to become a public university and to position a new research and policy centre on food within the Faculty of Agriculture.

The direct impact of the IUC on the development of the Rwenzori region and the community needs to be nuanced/is mixed. The main strategy of the IUC was to realise impact for communities through action-research. This research was executed by identifying specific households and farmers in the community and collecting their input on needs and the challenges they experience. During execution, the focus was on the realization of relevant PhD research. Not all interventions were equally strong in applying a systematic and continuous action research mode and a theoretical/operational model for action research was not defined in explicit terms either. Although the approach has contributed to relevant research and diminishing distance between university and community, the evaluation and more in particular the impact case demonstrate that this is not enough to stimulate change at a larger scale (affecting communities beyond the people that were directly involved in providing data to the researchers and engaging with them on trials). Quite rightly, the IUC stakeholders acknowledge (in their own self-assessments) that the role of a university is limited (to knowledge transfer, development of innovations, translating research results into concrete policy recommendations) and that there is need for more strategic involvement of NGOs and government extension services to support the communities.

Sustainability - The sustainability of the IUC results is largely ensured at institutional, academic and financial level. Future institutional partnership with educational institutions in Belgium will help to ensure the academic (research and educational) sustainability and will without doubt further develop this function at the university. MMU leadership (including the new Vice Chancellor) demonstrate ownership, IUC involved staff has been retained, current budget and action plans give proof of budget allocations to pursue IUC results and outputs in order to further develop them. Maintaining the focus on the community engagement will largely depend upon how the transition to a public university will be managed and new staff is impregnated by some key principles and will nurture that ambition of continuing to be a community owned university. The PhD study on change management provides valuable lessons about how to ensure that project results really contribute to change and reveal that attention for processes of change management was insufficiently taken into account in the IUC modality and only received more attention starting from 2021, but are genuinely addressed since then (although slowed down by the instability of the transition process).

Internal and external factors that influenced the results of the IUC - Important factors of success, were the following:

- The nature of the partnership: strong commitment from the partners in the North (both universities and university colleges) to the objectives, a management approach that combined responsibility and flexibility at all levels (coordinators, programme managers, PSU, team leaders, PHD students);
- The effective and transparent coordination of the IUC (see also learning question on coordination in the above);
- the nature of MMU leadership: key people in the university demonstrated a strong will to succeed, always seeking for new opportunities to put MMU on the map. Leadership had a strong vision and plans were developed on a longer time horizon, which made it possible to grasp opportunities when they arised (for e.g. Kyembogo dairy farm) and to decide upon how to make best use of the IUC resources to make it work. MMU leadership was honest about what was possible, communicated about what went wrong and was able to replan and rethink along strategic lines and objectives of the IUC. MMU leadership is open to dialogue and willing to consider alternative ideas; for e.g., the way the IUC stakeholders owned the conclusions of the mid-term evaluation of the IUC programme and have seriously taken on board the recommendations is an illustration of that.
- The decision of government to make MMU a public university created a new dynamic and was key in capitalizing on the foundations that were created through the IUC. The transition was necessary to maintain commitment of staff to MMU and was a reward for the hard work of many people.
- The initial steps towards innovative pedagogy gained strength and momentum especially during emergency times of Covid 19 where an increased use of e-learning took place and the resulting structural set up of the ODEL department took shape at MMU.

Factors that have hampered:

- The formal programme of a diploma on e-pedagogy was not realized as the strategy of the transition was to maintain what existed in 2018. Also, diplomas are not considered to be a priority in public universities.
- COVID, more in particular in execution of field research activities and institutional change management process.
- The transition process (towards becoming a public university), although also a factor of success, made it more difficult to ensure sufficient attention (time, HR, leadership) for the actual institutional change process.

Future challenges - Future challenges appeared clearly from the evaluation and the institutional capacity assessment.

At the level of the institution: overall, the university stakeholders, disregarding the acknowledgement of progress, understand that they need to prioritize future investments to enhance the development of knowledge management (allowing access to research results, capitalising on them and ensuring they feed into new developments), the development of infrastructure to improve quality of education for students (at BSc and MSc level) and using the existing (and future) network in a more strategic way in order to realise the mission of MMU and its niche of environment, agriculture and tourism.

With regards to research, the further investment in human resources and preparation of a doctoral school (through post-docs), as well as the development and realisation of a focused research agenda will require further attention. The experiences of a small group of IUC PhD with supervision of new students and their experience in applying a constructive feedback culture shall be further developed, consolidated and mainstreamed as part of the MMU DNA (through relations with other universities, such as Mbarara University of Science and Technology and looking for funds to support post-doc arrangements and by ensuring clear communication on this with new staff.

With regards to education: the challenge is connected to the further integration of research in education, the development and mainstreaming of a specific e-pedagogy and the building of competences amongst teaching staff to apply and use e-pedagogy to support student centred learning. Specific measures will be needed to (in phase with infrastructure) to attract additional students to the university.

With regards to outreach: the MMU has potential to further develop its action-research approach based on various experiences from the IUC and outside the IUC programme. The implementation of the community engagement model will have to entail (i) sensitization, further discussion on the operationalisation and training of staff, (ii) strategic engagement with the communities and external stakeholders (with view to uptake) and (iii) a clear focus on the specific role of the university and acceptance of its limitations and thus a strategy on how to 'exploit' the network to contribute effectiveness and impact.

6.2. Recommendations

Taking into account the conclusions, findings from the learning questions and the future challenges, the evaluators formulate a number of recommendations.

Recommendation 1 - To strengthen monitoring of progress (efficiency), future IUC stakeholders should ensure to add additional qualitative measuring of changes (next to quantitative indicators, for eg. through surveys with target audiences) and take time for sensemaking during planning and coordination meetings to understand dynamics of change, contribution of activities to change and challenges/obstacles for further change rather than only focus on the results and indicators to be realised.

Recommendation 2 - To strengthen scientific quality (effectiveness), MMU and its future institutional partners should focus on quality of MSc programmes (to create a pool of future PhD candidates) and seek funding for financing of post-docs. As a public university, expectations about scientific quality will be maintained and high.

Recommendation 3 – To enhance relevance and contribute to uptake by the community, it is recommended that MMU further develops and strengthens the action research approach as a way to engage with communities. Existing experience (which is present in the university but not yet analysed across cases) could be analysed in detail to map and consolidate the MMU-action research approach, in order to mainstream it throughout the university.

Recommendation 4 - To contribute to uptake of research results (effectiveness and impact), the evaluators recommend that MMU develops an appropriate strategy (as part of the community engagement model). This strategy needs to ensure: identification in a detailed way of the end-users (beyond the participants in the research and looking at different categories and their specific need) and the obstacles at their level for uptake; identification of external stakeholders and engaging with them in an early stage (so they can support end-users in addressing the obstacles for uptake); development of a communication strategy that translates research to lay-people and combines it with concrete recommendations for decision makers; creation of opportunities (such as a think tank structure) to discuss the recommendations face-to-face and following a multi-stakeholder approach. The MMU research magazine, that was not realized as planned is still a good idea with view to engaging with stakeholders.

Recommendation 5 - To ensure consolidation and sustainability of the IUC results, the evaluators support the recommendation that was formulated in the self-assessment (North): both the MMU community engagement and change management models developed under P2 should be adopted and integrated in the university in such a way that supportive systems, processes, structures, and people are put in place to drive the programme interventions towards impact. This recommendation is also supported by the findings of the PhD thesis on change management. In fact, this calls for a redesign of future IUC programs as 'change management interventions' with clearly defined (and collectively agreed) change that is desired at different levels or with different actors in the University. This is not the case with the IUC program in its current form. The evaluators have seen the main focus was on PhD training with related support like internet, e-library, enabling primarily the PhD scholars to complete and do their typical science.

Recommendation 6 - To support benchmarking and learning with view to institutional development, the evaluators recommend that VLIR-UOS analyses its funding modalities to find opportunity to support missions between former IUC universities in Uganda to study practices and change management processes with universities in the East African Region and beyond. Already, VLIR-UOS ensures

eligibility of former IUC beneficiaries to the existing funding modalities, of which SI, Teams projects and Global Minds offer a number of possibilities, including scholarships for PhD, post doc and MSc at universities in Belgium. This is a positive measure, however there is a risk of losing the integrated and institutional perspective (which is part of the IUC modality and previous Network modality). Continue to allow budget for field research and equipment to be included in funding programmes and stimulate stakeholders to design and develop action-research approaches in order to strengthen the outreach functions and increase chances to contribute to impact.

Recommendation 7 – To ensure impact, VLIR-UOS could explore how to make (better) use of the Joint Strategic Framework with Belgian NGOs to support synergy, networks and collaboration with other IUC universities and NGOs in the country, developing parts of their programmes together.

7. Annexes

7.1. List of documents consulted

Programme documents

Share point documents with all programme documents. The evaluators used the following documents in depth:

- Excel sheets with standard indicators and overall indicators
- The self-assessments at project and programme level
- MMU IUC Partner Programme Phase II, including annexes related to P1 and P2 and theories of change of P1 and P2
- The annual plans and reports of 2022
- The IUC phasing out plan
- Kataike J. et. Al (2022) Satisfaction of dairy farmers with the Training Interventions: Empirical evidence from VLIR IUC MMU. Survey Report November 2022
- Mugenyi, K. (2022) REPORT ON THE SATISFACTION, ADOPTION, ACCEPTANCE AND USE OF ICT AMONG MMU STAFF AND STUDENTS
- Nanyanzi Alice Sheila, et a.l. (2021) Assessing higher education institutional stakeholders' perceptions and needs for community engagement: An empirical evidence from Uganda.
- ANDREW RONNIE MUGENYI (2023) STAKEHOLDER BEHAVIOUR AND ORGANISATIONAL CHANGE OUTCOMES IN UNIVERSITY DEVELOPMENT COOPERATION PROJECTS. A thesis submitted to the Faculty of Social Sciences & Solvay Business School in fulfilment of the requirements for the degree of Doctor of Philosophy in Business Economics

Other documents

- Dhaene, C. and Kibwika Paul (2019) Mid-term evaluation of the IUC with Mountains of the Moon University in Uganda
- Higher Council for Education (2021) A review and restructuring of Mountains of the Moon University
- Kimera Dr. in collaboration with the Community of Practice on Youth Living with HIV in Rwenzori region (S.d.) Policy Guidance Note to the Ministry of Health and Ministry of Education and Sports in Uganda on Quality of Life of Young People Living With HIV/AIDS in Uganda.
- MMU (2020) COMMUNITY PARTNERSHIP AND ENGAGEMENT POLICY
- MMU, Directorate of Graduate Studies, Research and Innovation (2022) Framework for research –teaching integration at Mountains of the Moon University.
- MMU Strategic Plan 2020/21 -2024/25

7.2. Field visit programme

Day	Activities
1/10/2023	Travel Kampala – Fort Portal
2/10/2023	Briefing by Professor Kagambe Courtesy meeting with the Vice Chancellor Workshop on institutional capacity analysis
3/10/2023	Interviews with IUC stakeholders
4/10/2023	Interviews with IUC stakeholders
5/10/2023	Impact case
6/10/2023	Impact case
7/10/2023	Impact case
8/10/2023	Preparation of restitution and data analysis/report writing
9/10/2023	Restitution at Fort Portal Travel Fort Portal - Kampala

7.3. List of people consulted/interviewed

Prior to the visit (all online)

Name	University	Position
Annick Verheylezoon	Ghent University	ICOS
Prof. Xavier Gellynck	Ghent University	Coordinator IUC North
Prof. Edmond Kagambe	MMU	Deputy Vice-Chancellor, South Coordinator IUC
Joshua Wesana	MMU	Dean of the Faculty of Agriculture, IUC PhD IUC PhD and assistant to the North coordinator IUC
Prof. Bart Van der Bruggen	KU Leuven	Team Leader P1
Prof. Dr. Chang Zhu	Vrije Universiteit Brussel	Team leader P2
Elisabeth Ahikiriza	Makerere	Former IUC PhD student MMU
Sheila Alice Nyanzi	MMU	IUC PhD MMU

Additional interviews after the field visit (all online)

Name	University	Position
Pius Lutakoome	Makerere	Former IUC PhD student MMU
Adyeeri Andrew Mugenyi	MMU	IUC PhD

Field visit

Kick-off workshop

List received from PSU MMU

	POST	NAME	SEX
1	Vice Chancellor	Achanga Pius Coxwell	M
2	Communications Officer - Public Relations	Brens Willie Wambedde	M
3	Principal Internal Auditor	Mayanja Issah	M
4	Dean of Students	Ssali Roseline	F
5	Deputy Vice Chancellor - F&A / Program Coordinator MMU-IUC PP	Kagambe Edmond	M
6	University Secretary	Tweheyo Gregory	M
7	Radio Manager	Matsiko Gilbert	M
8	University Bursar - Finance and Accounts	Mutego Ronard Hanguja	M
9	Deputy Director - Human Resource Management	Byaruhanga Joseph	M
10	Civil Engineer	Kagaba Geoffrey	M
11	Senior Legal Officer	Byaruhanga Dixon Atuhurra	M
12	Procurement Officer	Kyomugaso Emilly	M
13	Director Planning Investment and Development	Ndoleriire William	M
14	Senior Systems Administrator	Mugenyi Majidu	M
15	Deputy Vice Chancellor - Academics & Outreach	Kasenene John Massan	M
16	Director Graduate Studies and Research	Musinguzi Wilson Babu	M
17	Deputy Director, IUC PhD, team leader P2	Mugenyi Kintu Justice	M
18	Senior Research Officer – Grants, IUC programme manager	Kobugabe Christine	F
19	Lecturer (Non Science), Fac of Education	Kaahwa Mark	M

20	Senior Lecturer (Non Science), Fac of Economy, IUC PhD	Kataike Joanita	F
21	Lecturer (Non Science)	Rwakihembo John	M
22	Professor (Science)	Muhumuza Moses	M
23	Lecturer (Science), Faculty of Agriculture, IUC PhD	Okello Joseph	M
24	Lecturer (Science), Fac of Agriculture, IUC PhD	Sserwadda Martin	M
25	Associate Professor (Science), Fac of Agriculture	Kabaseke Clovis	M
26	Associate Proffessor (Science), project leader P1, IUC Phd	Kisakye Violet	F
27	Lecturer(science)	Ekyaligonza DeusMary	F
28	Associate Professor (Science), Dean of the Fac of Agriculture, IUC PhD	Joshua Wesana	M
29	Senior Lecturer (Science), Fac of Health Sciences	Kimera Emmanuel	M
30	Senior Program Coordinator (ODEL)	Babirye Lucy Nanteza	F
31	Senior Academic Registrar	Akora Ebirungi Benedicto	M
32	Accountant	Akankwatsa Wycliffee	M
33	University Councillor	Kugonza Gorretti	F
34	Principal Librarian	Lady Mary Kabapagasa	F

Interviews and focus groups

Name	University	Position
Violet Kisakye	MMU	Team leader P2, IUC PhD
Christine Kobugabe,	MMU	PSU, programme manager IUC
Wycliffe Akankwasa	MMU	PSU, accountant
Edmond Kagambe	MMU	Deputy Vice-Chancellor, IUC PhD and assistant to the North coordinator IUC
Joshua Wesana	MMU	Dean of the Faculty of Agriculture, IUC PhD
Prof Kasenene	MMU	Former Vice-Chancellor
Prof. Moses Muhumuza	MMU	Former IUC team leader P1 and P2
Ms. Veronica Kabasomi	MMU	Deputy Registrar
Ms Babirye Lucy N.	MMU	Senior Program Coordinator (ODEL)
Dr John Rwakihembo.	MMU	Dean Faculty of Business
Dr Okello Okello Joseph	MMU	IUC PhD
Dr.Martin Serwadda	MMU	IUC PhD
Dr. Kahwa Mark	MMU	IUC PhD
Mugenyi Kintu Justice	MMU	P2 Leader, IUC Phd
Lady Mary Kabapagasa	MMU	Head Library
Joanita Kataike	MMU	IUC PhD, senior lecturer Fac of business
Dr. Kimera Emmanuel	MMU	PhD with HoGent outside of IUC, dean of the Faculty of Health
Philip XX (name not known)	MMU	Kyembogo Farm Manager
Muhangi Collins	MMU	Msc student involved in PhD research, IUC support for research
Akora Ebirungi Ben	MMU	Msc student involved in PhD research, IUC support for research
Rogers Adiba	/	SNV, advisor on smallholder dairy development
Dean Kusiimakwi	/	DVO (district Veteranary officer)
James Musinguzi Kabagambe Araali	/	Farmer, Karubindi Dairy Farm
Name not known	/	Farmer
Richard Rwabuhinga	/	Chairperson of the District Local Government
Kyofnet group of farmers 1	/	
Kyofnet group of farmers 2		

Restitution workshop at Fort Portal 09/10/2023

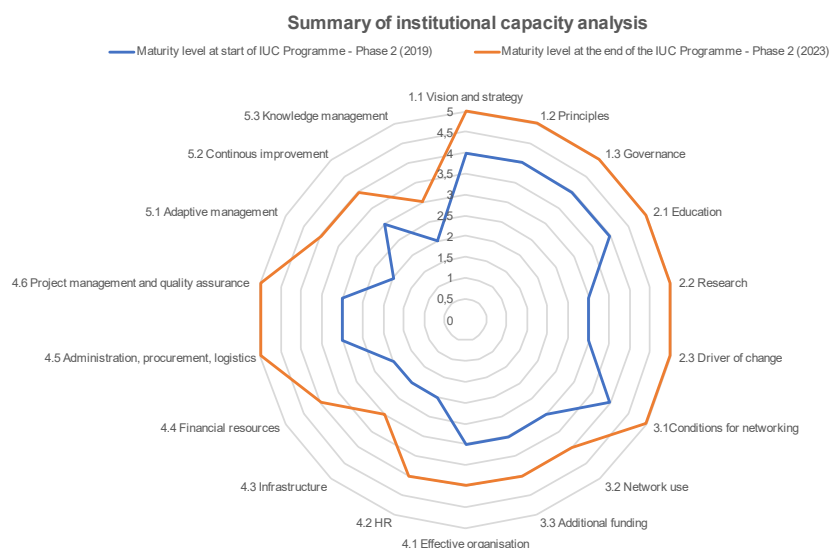
Name	University	Position
Annick Verheylezoon	University of Ghent	ICOS
Mugenyi Kintu Justice	MMU	P2 Leader, IUC Phd
Violet Kisakye	MMU	Team leader P2, IUC Phd
Christine Kobugabe,	MMU	PSU, programme manager IUC
Wycliffe Akankwasa	MMU	PSU, accountant
Edmond Kagambe	MMU	Deputy Vice-Chancellor, IUC Phd and assistent to the North coordinator IUC

Restitution with VLIR-UOS and Flemish coordinators / project leaders (25/10/2023) online

Name	University	Position
Prof. Xavier Gellynck	Ghent University	Coordinator IUC North
Edmond Kagambe	MMU	Deputy Vice-Chancellor, IUC Phd and assistent to the North coordinator IUC
Joshua Wesana	MMU	Dean of the Faculty of Agriculture, IUC Phd
Prof. Dr. Chang Zhu	Vrije Universiteit Brussel	Team leader P2
Joshua Eykens	VLIR-UOS	Monitoring and Evaluation Manager
Koen De Koster	VLIR-UOS	Head of Strategy and Operations
Laura Uwase	VLIR-UOS	Programme manager

7.4. Overall scores for the assessment of the collaborative process/ overview of scores of analysis of institutional capacity

Institutional capacity analysis



7.5. Rubrics for assessment of the impact case

RUBRICS USED	EVIDENCE	SIGNIFICANCE	CONTRIBUTION
Unacceptable	No evidence of change provided	Signal not logically related to the intended change	Not plausible that the project had any contribution
Weak	Only internal or anecdotal evidence	Lack of clarity how the signal functions as indication or step of change toward the intended change.	Some plausibility of contribution based on reflection of partner
Moderate	References to external evidence, but partial or indirect	Lack of clarity what further steps are required to move toward the intended change	Contribution very plausible based on reflection of partner
Strong	Reference to external evidence, almost undeniable	Clarity how the signal functions in the complete pathway toward the intended change	Contribution evident from reflection of partner and (direct effects of) outputs

7.6. Evaluation framework

Below we present the consolidated version of the evaluation framework developed during the inception phase, taking into account the learning questions that identified in consultation with VLIR-UOS. As such, the consultant came to a relevant though more limited set of evaluation questions.

Relevance	<i>EQ1 To what are extent the objectives of the programme/project consistent with beneficiaries' requirements, country needs, global priorities and partners' and donors' policies?</i>		
	Rationale Relevance refers to the extent to which the objectives and design of the intervention correspond to the needs, policies and priorities of the beneficiaries, the country, the international community and the partners/institutions. This criterion is not only about relevance in design and at the start-up phase, but also reviews to what extent the programme design and theory of change evolved appropriately in response to context changes as to remain relevant. As per ToR, the evaluation team will look at the extent to which the programme is addressing immediate and significant problems and needs of the concerned partners (institutional) as well as regional and national policy makers, including reference to the 2030 Agenda for Sustainable Development and the 17 SDGs aiming to end poverty, protect the planet, foster gender equality, defend and promote cultures and cultural understanding, and ensure prosperity for all.		
	Judgement criteria	Sources of verification	Areas of focus – programme level
	1.1. What is the relevance (at the start of the program, during the 1 st and 2 nd phase and at the end of the	<ul style="list-style-type: none"> - Programme documentation and self-assessments - International and national policies - University gender policy if available - University strategy 	<ul style="list-style-type: none"> - Was the prevailing context in which the programme intervenes well understood and documented at the time of programme formulation? - Relevance from the perspective of different types of beneficiaries - Relevance from the perspective of (institutional) partners - Relevance with respect to national and international policies with specific focus on the 2030 agenda for sustainable development and the SDGs

	programme) of the formulated outcome(s) and objectives?	<p>Start-up workshop and Interviews with</p> <ul style="list-style-type: none"> - University leadership: rector, heads of department - Programme coordination - project leaders (and staff) - Programme beneficiaries (impact case- - External stakeholders 	<ul style="list-style-type: none"> - To what extent was a gender sensitive approach prepared (and implemented)? (how introduced, how integrated, who ensures monitoring and strengthening capacity, were lessons learned identified and addressed,).
	1.2. Extent to which changes in external context or within the organisation influenced the relevance of the intervention	<ul style="list-style-type: none"> - Programme documentation - update of context (input from the national evaluator) <p>Interviews with</p> <ul style="list-style-type: none"> - University leadership: rector, heads of department - Programme coordination - project leaders (and staff) – only when questions came up after reading the self-assessments <p>Workshop at the start of the mission:</p> <ul style="list-style-type: none"> - highlight factors of importance through discussion 	<ul style="list-style-type: none"> - Review of significant changes that occurred over the years in the external context (country/partner/Covid-19 pandemic/etc.) or within the organisation (global and/or at country level, in terms of HR, institutional and/or financial) and how they influenced the relevance of the programme / project. - Review of the extent to which the design and implementation of the programme / project evolved to preserve and further improve its relevance with view to new challenges and trends (see adaptations in the programme to deal with new challenges)

Coherence	<i>EQ2 - To which extent is the partnership programme coherent, internally and externally? What is the level of synergy and complementarity with other relevant (Belgian) actors?</i>		
	Rationale Coherence refers to the extent to which the intervention is compatible with other interventions underway within a country, a sector or an institution. Included are internal coherence and external coherence. <ul style="list-style-type: none"> - Internal coherence concerns the synergies and interdependencies between interventions carried out by the same institution, as well as the coherence between the intervention and relevant international standards and criteria to which the institution adheres. All programmes and the cooperation between the partners are considered under this judgement criterion. - External coherence concerns the coherence between the intervention under consideration and those carried out by other actors in the same context. It encompasses complementarity, harmonization and coordination with other actors and verifies that the intervention provides added value whilst avoiding any overlapping of activities. 		
	Judgement criteria	Sources of verification	Areas of focus programme level
	2.1. Internal coherence	<ul style="list-style-type: none"> - Programme documentation - Vision and mission University Interviews with <ul style="list-style-type: none"> - University leadership: rector, heads of department - Programme coordination - project leaders (and staff) - academic staff involved in other VLIR-UOS programmes - 	<ul style="list-style-type: none"> - Interconnectedness, interdependence and internal synergies between disciplines, underlying projects and/or their outcomes. - Synergies and interdependencies with programmes funded by VLIR-UOS. - To what extent is the intervention logic of the programme coherent (result chain and missing links)? - To what extent is the programme coherent with the vision, mission and policies of the university and with how these are carried out?
2.2. External coherence	<ul style="list-style-type: none"> - Available documentation on other partnerships Interviews with <ul style="list-style-type: none"> - University leadership: rector, heads of department 	<ul style="list-style-type: none"> - The existence of complementary partnerships and interinstitutional collaboration within a programme, or as a result of the specific projects, with external actors. - Synergy and complementarity with relevant (Belgian and other) actors 	

		<ul style="list-style-type: none">- Programme coordination-external stakeholders that are involved in collaboration/interaction or have a good view on this	
--	--	--	--

Efficiency	<i>EQ3 - To which extent resources/inputs (funds, expertise, time, etc.) are converted to results in an economic manner?</i>		
	<p>Rationale</p> <p>Efficiency refers to the manner in which resources are used and/or inputs are processed for the delivery of the expected outputs in a timely and cost-effective manner.</p> <p>On the brink between efficiency and effectiveness, this evaluation question also appreciates the programme's/project's overall efficiency, performance management and planning-monitoring-steering-evaluation-accountability-learning framework; the intervention strategy and implementation practices are reviewed to understand how they fostered and/or hampered the cost-effectiveness of the programme/project.</p> <p>For the IUC programmes: the tool assesses the current institutional capacity of the universities vis-à-vis the five main capabilities of institutional capacity. This institutional assessment is related to questions on efficiency but also to questions on relevance, effectiveness, coherence, sustainability and impact.</p> <p>For the network programmes: the tool assesses collaborative processes is related to the question on efficiency (more in particular the part with the questions – the part on assessing the integration of programmes/activities is linked to the next question on effectiveness).</p>		
	Judgement criteria	Sources of verification	Areas of focus programme level
	3.1. The cost-effectiveness (the usage of resources in relation to the achievement of objectives)	<ul style="list-style-type: none"> - Programme documentation - Monitoring framework and reporting on indicators <p>Interviews with</p> <ul style="list-style-type: none"> - Programme coordination - project leaders - Staff support services (finance, admin, ...) involved in the programme 	<ul style="list-style-type: none"> - Does the monitoring framework inform result-oriented management and usage of resources? - Is the choice of activities in the programme cost-effective (most advantageous mix of inputs)? Is there sufficient consideration for costs, reflection about costs with view to anticipated results? Who is involved in budget decisions, what is the influence of programme stakeholders to adapt budget in relation to needs/changes in context? - The timeliness of the outputs: to what extent are the activities being carried out according to plan and outputs being achieved within the predefined term?
	3.2. The extent to which organisational management and	<ul style="list-style-type: none"> - Financial procedures - Risk management policy <p>Interviews with</p> <ul style="list-style-type: none"> - Programme coordination 	<ul style="list-style-type: none"> - To what extent are rules related to financial procedures clear, fair, appropriate and applied? - Appreciation of the programme management and coordination with respect to:

	structures of the programme/project are conducive for efficient implementation.	<ul style="list-style-type: none"> - project leaders (and their staff/team) - Staff support services (finance, admin, ...) - 	<ul style="list-style-type: none"> o factors that are hampering efficient management. o quality of communication (internal and formal); o transparency of decision making process; planning and risk management - To what extent do the organisational management, structures and task division of the programme/project stimulate cooperation and coordination between all actors involved? - How is cooperation and communication between all parties involved ensured (between projects and programme level, between projects, within projects, between programme and local university)?
		<ul style="list-style-type: none"> - M&E framework + reporting - Risk management system <p>Interviews with</p> <ul style="list-style-type: none"> - Programme coordination - project leaders - Staff support services (finance, admin, ...) - 	<ul style="list-style-type: none"> - Are appropriate tools for programme/project planning, monitoring and evaluation in place? - What is the quality of the indicators, - To what extent are M&E data used to inform and to review strategies and improve programme / project implementation? - Are appropriate and timely decision made in response to insights deriving from M&E? - To what extent are the risks (timely availability of staff for activities and programme management, institutional support, political instability, strikes, communication, ...) identified managed within the programme / project?

Effectiveness	<i>EQ4 - To what extent are the programme's objectives (expected to be) achieved, taking into account their relative importance?</i>		
	<p>Rationale</p> <p>The methods for data collection will allow for the validation of expected results and the identification of non-intended or unexpected results/changes (positive and negative).</p> <p>The evaluators will try to understand importance of changes (based on the perceptions of the stakeholders and within a given context) and what has contributed to those changes (within the programme but also outside of the programme). Explanatory factors for the realisation and non-realisation of planned results will be identified.</p>		
	Judgement criteria	Sources of verification	Areas of focus programme level
	<p>4.1. The extent to which the programmes outputs and outcomes have been achieved and the likelihood that the predetermined outcomes will be achieved by the end of the implementation period.</p>	<ul style="list-style-type: none"> - Programme documents and self assessments - Workshop for Institutional assessment IUC partner universities - Questionnaire for assessment of collaborative processes and results thereof (Network programmes) <p>Interviews with</p> <ul style="list-style-type: none"> - University leadership: rector, heads of department - Programme coordination - project leaders - Programme beneficiaries (PHDs) - External stakeholders that have a view on the context/higher education, represent Ministries, or other donors 	<p>For IUC programmes in particular</p> <ul style="list-style-type: none"> - To what extent is the organisational capacity (skills structures, resources) of the university strengthened? (Progress with regards to the 5 core capabilities). <p>For Network programmes in particular:</p> <ul style="list-style-type: none"> - the extent to which the Network programme stimulated collaborative processes between the universities in the country - the extent to which partners from the Flemish universities are part of this network/extend and stimulate the relations beyond the current partners and the country <p>For both type of programmes:</p> <ul style="list-style-type: none"> - Which outcomes can be identified regarding: research practices, education practices and the creation of new knowledge, applications or services? New infrastructure (up and running) - Completeness and quality of the programme / project outputs and outcomes (as per the programme/project ToC). - Access to outputs and outcomes for all key beneficiaries (gender, vulnerable groups, ...) – Programme / project performance vis-à-vis the ‘Leave No One Behind’ (LNOB) principle. - Are there non-expected results?

	<p>4.2. Inhibiting and facilitating factors and actors</p>	<ul style="list-style-type: none"> - Programme documents and self-assessments <p>Interviews with:</p> <ul style="list-style-type: none"> - IUC programme coordinator - Project leaders (and teams) - Other stakeholders (who are implementing programmes that are in the same domain/field) 	<ul style="list-style-type: none"> - What are the factors that influenced change? - What factors and forces contributed to or hampered achievement of programme objectives? - What has been the contribution of different actors? Has there been an influence of other factors/programmes/projects in achieving the targeted outputs and outcomes?
--	--	---	---

<p>Effectiveness <i>(continued)</i></p>	<p>4.3. Scientific quality</p>	<ul style="list-style-type: none"> - Documentation – evidence on quality of research and education Interviews with <ul style="list-style-type: none"> - University leadership: rector, heads of department - Programme coordination - project leaders and staff involved in the program - Programme beneficiaries (more in particular PhDs) - Interviews with groups of students - External stakeholders that have a view on the context/higher education 	<p><u>Remarks:</u> We propose to review “scientific quality” under effectiveness, as it is one of the key targeted outcomes.</p> <ul style="list-style-type: none"> - Quality of research is confirmed by data collected by the universities themselves: they can provide data on: <ul style="list-style-type: none"> o The extent to which the results have been incorporated in local or international (refereed) academic or professional journals, conference proceedings, or presented at an international conference. o Quality of publications based on Scopus and Science Citation Index. <i>(Programme and project actors will be requested to submit these figures themselves.)</i> - Quality of education <ul style="list-style-type: none"> o the extent to which new education practices are developed with main stakeholders o the extent to which information from the university shows that alumni easily get a job which fits their education profile; o (evolution in) the number / type of scholarships provided by other sources VLIR-UOS (foundations, governments, etc.); o the number of doctoral degrees delivered; o ratio of funded doctoral scholarships/delivered doctorates, if possible in comparison with relevant international benchmarks; o the extent to which student evaluations have introduced / are being used; o the evolution in number of registrations/graduates for new programs since the start o the number of teachers in the new programs o the number of publications by teachers in new programmes / the extent to which new programmes are building on research result and research reputation of academic staff involved.
--	---------------------------------------	--	---

Impact	<i>EQ5- To what extent are (potential) positive and negative, primary and secondary long-term effects generated by the programme, directly or indirectly, intended or unintended.</i>		
	<p>Rationale</p> <p><u>Impact</u>, defined as “positive and negative, primary and secondary, long-term effects produced by the programme/project, directly or indirectly, intended or unintended”, is essential from the perspective of accountability to the donor and to the other stakeholders of the programme. Impact should be further looked upon as the “difference”, or the “social value”, generated for the final beneficiaries.</p> <p>When evaluating inter-university collaboration programmes and projects, also “<u>potential (to be expected) impact</u>” will be taken into account. In particular, lasting effects of the programme / project on the capacity of the University, and of its (institutional) partners, to generate positive impact in the (near) future and to build further on the results will be assessed. As such, impact will be evaluated together with effectiveness and sustainability, as these aspects of programme/project performance are inherently linked; with effectiveness being about the achievement of set outputs and (intermediary) effects and impact looking at the subsequent (intended and unintended) changes that are making a difference in stakeholders’ lives and contexts.</p> <p>In each programme an impact case will be identified and studied.</p>		
	Judgement criteria	Sources of verification	Areas of focus programme level
	5.1. Changes (intended and unintended, positive and negative) in stakeholders’ lives and contexts contributed to by the programme	<p>Programme documents and self-assessments</p> <p>Interviews with:</p> <ul style="list-style-type: none"> - University leadership: rector, heads of department - Programme coordination - project leaders and staff involved in the program - Programme beneficiaries (PHDs, students, those identified in the impact case) - External stakeholders 	<ul style="list-style-type: none"> - To what extent has the programme generated or is it likely to contribute to or generate enduring changes in systems, norms, people’s well-being, human rights, gender equality or the environment? (Contribution to development changes.) - To what extent did and does the programme generate sufficient leverage for lasting change? - Added value of the programme for the institutional performance of the universities: what evidence is there about changes in performance. - Policy changes and or changes in behaviour at institutional level. - Added value of the programme for the role, capacity and performance of the university/universities as a development actor.

	5.1. Fostering 'collective impact'	Interviews with: <ul style="list-style-type: none"> - University leadership: rector, heads of department - Programme coordination - Academic staff involved in the program - Programme beneficiaries - External stakeholders, other donors, Ministries, ... 	<ul style="list-style-type: none"> - To what extent did the programme perform in its contribution to collective impact through networks and partnerships in the country, the region, international? - The extent to which the collaboration has led to joint developmental activities or similar collaborative models at the regional level. - The extent to which the collaboration has sparked other departments to initiate interuniversity collaboration, joint capacity building, synergies in fund raising, etc.
--	------------------------------------	--	---

Sustainability	<i>EQ6: To what extent will the programme results continue after the programme is completed?</i>		
	<p>Rationale</p> <p>Sustainability refers to the extent to which the results of the intervention will last over time or are likely to last over time. It encompasses an examination of the financial and institutional capacities of the institutions required to continue the change over time. This also includes analysis of resilience (with view to contextual challenges and trends), risks and potential trade-offs between priorities in the strategies of the involved institutions.</p>		
	Judgement criteria	Sources of verification	Areas of focus programme level
	6.1. Level of institutional sustainability	Programme documents and self-assessments Interviews with <ul style="list-style-type: none"> - University leadership: rector, heads of department - Programme coordination - Project leaders and staff 	<ul style="list-style-type: none"> - Ownership by the stakeholders, demonstration of agency - Are the programmes activities and results coherent with interventions supported by other donors/organisations and/or can they be integrated? (receive overview of other interventions) - Is the programme in alignment with the overall strategy of the University? Which measures are taken to integrate/incorporate the programme results in the University strategy and structures? - Strengths and weaknesses of the institution in terms of institutionalising the collaboration that was started with (various) external stakeholders
	6.2. Level of financial sustainability	Interviews with <ul style="list-style-type: none"> - University leadership: rector, heads of department - IUC programme coordinator - project leaders and staff - Staff support services (finance, admin, ...) 	<ul style="list-style-type: none"> - Availability of funds to continue the activities after the end of the programme - Which measures are taken to enhance financial sustainability? For e.g. strategies and initiatives to attract external funding - Availability of own funds to continue programme outcomes – evidence of co-funding. - Ability to set aside funds for operations and maintenance of physical infrastructure.

Sustainability <i>(continued)</i>	6.3. Level of academic sustainability	<ul style="list-style-type: none"> - Programme documents and self-assessments Interviews with: <ul style="list-style-type: none"> - University leadership: rector, heads of department - Programme coordination - Project leaders and staff - Programme beneficiaries (PHDs) 	<ul style="list-style-type: none"> - Curbing brain drain into sustainable brain circulation, installing incentives, “pull factors” against “push factors”. What are HR policies in the university and which measures are taken for retention of trained staff? - Intensification and/or formalisation of interuniversity collaborations (North- South and South-South). - Ability to produce joint proposals (fund raising, accessing funds for research). - Further developing or strengthening collaboration and exchanges outside of VLIR-UOS-programme.
---	---------------------------------------	---	---

VLIR-UOS supports partnerships
between universities and university colleges
in Flanders and the South
looking for innovative responses
to global and local challenges

VLIR-UOS

Julien Dillensplein 1, box 1A
1060 Brussels
Belgium
Tel. +32 (0)2 289 05 50
info@vliruos.be

Publisher: Kristien Verbrugghen, VLIR-UOS, Julien Dillensplein 1, box 1A, 1060 Brussels, Belgium
D/2024/10.960/04

www.vliruos.be

