



**Mid-term evaluation of the Institutional University Cooperation with
Bahir Dar University**

Table of contents

ACRONYMS	4
PREFACE	6
EXECUTIVE SUMMARY	7
1. Introduction	12
1.1. <i>Background</i>	12
1.1.1. What is an IUC?	12
1.1.2. The IUC with BDU	12
1.1.3. Terms of Reference of the Evaluation	15
1.2. <i>Context</i>	15
1.3. <i>Evaluation methodology and process</i>	16
1.4. <i>Structure of the evaluation report</i>	18
2. Overall evaluation findings	19
2.1. <i>General overview</i>	19
2.2. <i>Evaluation of the programme level</i>	20
2.2.1. Relevance	20
2.2.2. Overall effectiveness (progress in achieving the overall objectives)	24
2.2.3. Efficiency	33
2.2.4. Sustainability	35
2.3. <i>Evaluation per project</i>	38
2.3.1. Project 1	38
2.3.2. Project 2	48
2.3.3. Project 3	60
2.3.4. Project 4	71
2.3.5. Project 5	82
2.3.6. Project 6	93
3. Conclusions and lessons learned	103
4. Recommendations	107
4.1. <i>Recommendations for programme and projects</i>	107
4.2. <i>Recommendations for Bahir Dar overall university management</i>	109

ANNEXES

111

ACRONYMS

AMU	Arba Minch University
BDU	Bahir Dar
CRGE	Climate Resilient Green Economy strategy
D4D	Digitalization for Development
DAC	Development Assistance Committee
DGD	Directorate-general Development Cooperation and Humanitarian Aid (Directie-Generaal Ontwikkelingssamenwerking en Humanitaire Hulp)
FGD	Focus Group Discussion
GIS	Geographic Information System
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH
HPC	High Performance Computing
HRD	Human Resource Development
ICOS	Institutional Coordinator for Development Cooperation
ICT	Information Communication Technology
IR	Intermediate Result
IUC	Institutional University Cooperation
KRI	Key Results Indicator
KUL	Katholieke Universiteit Leuven
JICA	Japan International Cooperation Agency
JSC	Joint Steering Committee
LSC	Local Steering Committee
MOSHE	Ministry of Science and Higher Education
MoU	Memorandum of Understanding
MSc	Master in Science
MTE	Mid-Term Evaluation
MUA	Memorandum of Understanding and Agreement
N(A)RM	Natural Resource Management
OECD	Organisation for Economic Cooperation and Development
P	Project
PC	Project Coordinator
PhD	Doctor of Philosophy

PL	Project Leader
PP	Partner Programme
PSU	Programme Support Unit
SDG	Sustainable Development Goal
SLM	Sustainable Land Management
TISP	Transversal Institutional Strengthening Project
ToR	Terms of Reference
UA	University of Antwerp
UGent	University of Gent
VLIR-UOS	Vlaamse Interuniversitaire Raad – Universitaire Ontwikkelingssamenwerking
VP	Vice President
VUB	Vrije Universiteit Brussel

PREFACE

This report highlights the results of the IUC at Bahir Dar University as it is halfway its execution and identifies points of attention. The evaluation team hopes the conclusions and recommendations will contribute to the reflection on the progress made so far and the development of the second phase of the IUC.¹

The evaluators feel privileged to have met very committed and enthusiast academic and other staff of Flemish partner universities and of Bahir Dar University (BDU). The commitment to the execution of the IUC programme is commendable. The evaluators have enjoyed (online) interaction with BDU staff and thank them for the open exchange of perceptions and experiences.

Nancy Jaspers, Eshetu Demissie and Ass. Professor Mesfin Tilahun Gelaye, Mechelen,

February 2021.

¹ The information and views set out in this evaluation report are those of the author(s), independent evaluators, and do not necessarily reflect the opinion of VLIR-UOS or the universities/university colleges involved.

EXECUTIVE SUMMARY

Context and objectives of the evaluation

Bahir Dar University (BDU) was established in the year 2000 by merging Bahir Dar Teachers College and Bahir Dar Polytechnic Institute which were established in 1972 and 1963, respectively. It has now 14 Colleges/Institutes/Faculties/Schools/ and eight research centres. Bahir Dar University is expected to play pivotal roles in addressing societal challenges. Like other higher education institutions, teaching, research and community service are key areas of its mission. It is responsible to train graduates who are demanded by the labour market. Aim of the IUC is to generate knowledge/technologies that address societal needs and to communicate these to the wider communities in the Upper Blue Nile basin (the Tana-Beles area). Next to institutional strengthening, research outputs of the different projects in the IUC programme with BDU are expected to solve problems at grass-roots level and help to frame policy decisions related to the Climate Resilient Green Economy Strategy (CRGE), developed by the Ethiopian government.

This midterm evaluation comes at a moment where the first phase of the VLIR-IUC IUC programme at Bahir Dar University enters its fifth and final year (2021). **The evaluation objectives were multiple:** (1) **to feed internal learning** between the North and South partners and VLIR-UOS (what worked well, what didn't and why), (2) **to support decision making processes** related to the formulation of the second phase of the IUC, and (3) **to inform donors** on the current performance of the programme while validating or complementing monitoring data (accountability). The evaluators chose to **focus more on the steering function of the evaluation** so to formulate recommendations for the second phase of the IUC programme. Next to the evaluation questions related to the 5 OECD Development Assistance Committee (DAC) criteria (with focus on efficiency and effectiveness and attention for scientific quality), the Terms of Reference (ToR) specified three additional questions: (1) related to the incorporation of gender, (2) on progress made regarding internal and external synergy and (3) a question related to social relevance.

Evaluation methodology

The evaluation was executed by an **evaluation team of three persons**: one international evaluator and two evaluators from Ethiopia. Due to the pandemic Covid-19, the evaluation visit to Bahir Dar university was coordinated from a distance by the international evaluator. The evaluation followed **three phases: an inception phase, a phase of data-collection and a phase of analysis and reporting**. An **evaluation framework** was developed, composed of evaluation questions related to 4 of the five OECD DAC evaluation criteria. Impact as such was not measured but progress towards impact was assessed as part of overall effectiveness at project and programme level. The evaluation questions consisted of different judgement criteria and guiding questions or points of attention. For each of the judgement criteria an **appreciation scale** was developed as requested in the ToR to assess performance of the programme, at project and programme level. A four-point qualitative scale was used, from poor (1) to excellent (4) performance. This scale did not intend to cover all indicators/guiding questions but was above all helpful in formulating a balanced judgement in a transparent manner. The scores were not intended to compare the projects amongst each other but the overview of scores helped to reflect upon the overall judgement for this IUC.

The main methods used in this evaluation were a **desktop study**, semi-structured **interviews** (either individual or in small groups) held during an **on-site visit** to Bahir Dar university, and a **short survey**,

based on outcome harvesting. Briefing and debriefing sessions were envisaged as opportunities to discuss findings and to learn from them.

Main findings and conclusions

Programme level						
The relevance of the programme	4					
Alignment with a more outcome-oriented research approach	3					
Progress in achieving the overall objectives	3					
Potential to contribute to impact	3					
Overall (financial) management	3					
Role division	4					
Sustainability of the programme	3					
Project level	P1	P2	P3	P4	P5	P6
Relevance						
The objectives of the projects are consistent with needs of different stakeholders	3	4	3	3	3	3
Synergy between IUC projects (internal synergy)	3	3	3	3	3	3
External synergy and complementarity	3	2	3	3	4	3
The project is coherent	2	3	3	4	3	4
Effectiveness						
Realization of the specific objectives	3	3	3	3	3	4
Contribution to national development priorities	3	3	4	3	3	3
Scientific quality	3	4	3	3	3	4
Efficiency						
Delivery of intermediary results	2	4	4	3	3	3
Support to ensure quality of research	3	4	3	3	3	3
Qualitative assessment on use of means and results	3	4	3	3	3	3
Efficiency of project management	2	4	3	3	3	3
Sustainability						
Academic and institutional sustainability	3	3	3	3	3	3
Financial sustainability	3	3	3	3	3	3

In summary, with mainly scores varying between ‘good’ and ‘excellent’, the assessment of the IUC programme at Bahir Dar university illustrates that it is **performing well**. The overall programme and individual projects are **relevant** and in line with (intern)national priorities.

Promising examples illustrate indications of effects of a more **outcome-oriented research culture**, but it is still (too) early to know how widespread these effects are, after four years of implementation. Institutional capacities are being strengthened; most of the PhD students are on track with their research and are expected to graduate within the programme period.

Points of attention refer to the relatively slow progress made in the implementation of the gender strategy and delivery of some of the transversal project results such as the RIMS, the unease in the projects ventilated with respect to the M&E system used (logframe), not clearly reflecting the dynamics at project and programme level (e.g. behavioural change, mentality changes...) and focusing too much on numerical indicators.

At the project level, examples illustrate that **internal and external synergy** are sought and realized, although the intensity of initiatives differ from project to project. Multiple reasons for this lie underneath. Promising examples illustrate multidisciplinary collaboration within the university, and with external stakeholders. Evidence could be found of internal and external synergy as a leverage for joint implementation of research projects, aimed at 1) enhancing research-based capacity building at project and overall level and 2) contributing to the CRGE, although efforts differ from project to project. Stimulating joint publications may have a positive impact on the quality of research results and the outreach, but the national norm regarding single named publications puts pressure on the potential of joint publishing.

Overall, synergy-strengthening processes require time and patience since multidisciplinary cooperation is – traditionally – not actively stimulated between students.

Besides of gender-sensitive attention to recruitment, the IUC programme has a specific (transversal) gender component in the IUC programme. During phase I, a **gender strategy** was developed but not rolled out yet and therefore, no real progress has been made on getting gender better integrated in the programme and the university.

Overall, projects are **managed efficiently**. Points of attention are the complex and tedious procurement system at BDU, and the project management of project 1 where communication and cooperation between North and South partners did not work out so far due to several reasons, influencing the delivery of expected results. The **programme management unit (PSU)** supports the projects in different ways (logistics, monitoring, coordination of programme activities among other) which is appreciated by the project leaders and programme coordination.

The **logical framework** serves as a planning and monitoring framework but turns out to be less effective as joint learning instrument and in measuring progress in achieving the overall objectives, due to the existence of mainly quantitative indicators and the unclear link between project and programme indicators. The latter does not allow to reflect on the dynamics at project and programme level (e.g. behavioural change, changes in mindset or attitude).

The evaluation revealed that the different projects are contributing to **strengthening research capacities and increasing ‘cutting edge’ knowledge**. The contribution of the **transversal project** was relevant during phase I of the programme. Nevertheless, ambitions could only be partially realized, due to too many topics in the project, a lack of focus, and difficult cooperation between North and South partners.

The evaluation could not assess whether examples found, related to the achievement of the IUC overall objective of strengthening research/education capacities, are already common practice or well embedded in the university, although some **mechanisms for influencing the programme on policies could be detected at the university level**, and not only at the project level.

Although examples illustrate emerging progress towards achieving the overall objectives, it is still **early to see effects of the institutional strengthening on the environment and life conditions** of people in the Northwest of Ethiopia. External stakeholders appreciate the research that the IUC is conducting, but state that the programme **needs to consolidate the results from phase I and conduct development-oriented outreach activities** towards the involved communities and other external stakeholders.

The findings reveal that already in phase I, initiatives are undertaken to ensure **sustainability** of the programme, although some aspects need to be taken up in phase II to strengthen this further (for instance lab training, strengthening of resource mobilization skills, rolling out of approved policies).

Recommendations

The recommendations were grouped according to whom they are directed.

The evaluators suggest to **optimizing the design, management and implementation of phase II** of the programme, by reinforcing North mobility (when possible), by ensuring a gender focus, by improving the decision-making process to come to a deliberate and balanced choice of research topics, by reflecting on how to consolidate the research results of phase I at university and (external) stakeholder level, so that the outcome-oriented research also benefits the local stakeholders involved. At programme and

project level, **the outcome- oriented approach should be further enhanced so** that it can become a common practice and part of the research culture within Bahir Dar university.

To **increase further the impact of the transversal project**, the added value of this project should be more explicitly linked to the needs of the other thematic projects. Progress made in this project could also be more highlighted and a clear and feasible focus should be defined, possibly resulting in attracting more users of the services, offered by the involved departments and increased attention for the results of the PhD students, involved in project 1.

The progress made on gender so far does not reflect a well thought concept of gender mainstreaming in most of the projects and at programme level. The evaluators suggest to closely follow up the implementation of the recently approved **gender strategy**, to ensure that gender mainstreaming within Bahir Dar can become a common practice and example for other universities. It is essential that the university management is involved in this process and is committed to invest resources and to actively promote gender equality in the university at different levels (organization, intake of students and research processes).

Although synergy is not an objective in itself and not always relevant to undertake, the evaluation has shown that synergy can support and strengthen progress towards achieving the programme objectives. A **synergy strategy** at programme level could help in reinforcing these projects with less knowledge of and involvement in local, national and international contacts and networks. Both approaches, an 'organic' way of strengthening multidisciplinary collaboration next to a more institutional approach, could co-exist and strengthen each other. If feasible and realistic, some research topics for phase II could include **an interdisciplinary agenda** from the outset (beyond the own project).

To make sure that progress towards achieving the overall objectives can be measured and monitored, **alignment between project indicators with programme indicators at overall objective level should be improved** to allow a better insight in how projects contribute to the overall objectives at programme level.

At university management level (of Bahir Dar), it is suggested to **develop a solid exit plan** that explains how the project activities will be continued and research results rolled out in a sustainable way, once the programme comes to an end. This should ensure the contribution to development impact and to academic and institutional impact. This plan should include how research results will be further rolled out once the programme ends, how other funding will be attracted to continue the project activities, what capacity strengthening is needed to ensure sustainability of the programme such as enhancement of resource mobilization skills, and the funding and training of lab technicians. In this plan, the university should further describe how it will ensure that the mechanisms for programme influence on university policies will become common practice and integrated in the university (research) processes. In line with this recommendation, it is suggested that the university management actively supports the promotion and application of instruments and tools, developed by several projects, that could attract a broader public within the university and beyond (external stakeholders at governmental level, community level, the private sector etcetera), so to attract more users and to create more possibilities for spinoff and other initiatives with external stakeholders. It is further recommended that the university management of Bahir Dar is actively involved in the integration of gender equality in project and university activities to ensure that gender mainstreaming takes place, not only at programme level but also within the university.

At the level of VLIR-UOS, it is recommended to investigate how yearly **budget expenditures** could be done in a more flexible way without jeopardizing the pace of the programme, to further increase the

efficient use of the programme budget. Another recommendation is to analyze the current, limited possibility of the **logical framework as a joint learning instrument** and to explore how other tools, next to the existing ones, could complement or fill in this learning gap.

1. Introduction

1.1. Background

1.1.1. What is an IUC?

The ToR for this assignment (in annex 1) clearly describe what an Institutional University Cooperation (IUC) programme is. It is defined as a long-term (12 years) institutional partnership between a university in the South and Flemish universities and university colleges. The programme supports the partner university in its triple function as provider of education, research and extension (also identified as 'societal services'/'outreach'). It aims at empowering the local university to better fulfil its role as a development actor in society.

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.

A **generic Theory of Change for all IUC programmes** is developed, which summarizes the expected output, outcome and impact of the supported change processes and which highlights the importance of the partnership and collaboration between the educational institutions concerned and the interaction between sub-projects. Output refers to deliverables related to education improvement, research deliverables, strengthened research or education capacities, improved infrastructure and equipment, and deliverables related to extension (level of efficiency). These outputs are assumed to contribute to outcomes related to improved research practices, improved education practices and new knowledge, applications or services that are also taken up by relevant stakeholders (level of effectiveness). In the long term, the IUC partner programme aims at contributing to development changes.

IUC programmes are managed by local and Flemish steering committees and a joint North-South steering committee in which VLIR-UOS is also participating. North and South coordinator are managing the programme with the support of a programme manager in the South, and an administrative support, both in North and South. Each project is managed by two project team leaders (North and South) who are taking part in the steering committees.

1.1.2. The IUC with BDU

Execution of the IUC with Bahir Dar University (BDU). Bahir Dar University was established in the year 2000 by merging Bahir Dar Teachers College and Bahir Dar Polytechnic Institute which were established in 1972 and 1963, respectively. It has now 14 Colleges/Institutes/Faculties/Schools/ and eight research centres. It is governed by a President and five vice presidents (Academic Affairs, Administrative Affairs, Research and Community Services, Business and Development and Information and Strategic Communication).

Bahir Dar University is expected to play pivotal roles in addressing societal challenges. Like other higher education institutions, teaching, research and community service are key areas of its mission. It is responsible to train graduates who are demanded by the labour market. Aim of the IUC is to generate knowledge/technologies that address societal needs and to communicate these to the wider community. Boosting its human and physical capacities is required to discharge such responsibilities.

This is well articulated in BDU's Five Years' Strategic Plan of 2016 to 2020 (Strategic Plan, 2015). **BDU's vision is to become a globally respected leading research university in Africa.** The Strategic Plan document also identified six major strategic issues including a) ensuring access and quality of education, b) undertaking demand-driven research and technology/knowledge dissemination, c) staff capacity building, d) infrastructure development (digital library, e-learning facilities, laboratories, ICT facilities), e) strengthening institutional leadership and f) communication and partnership. The IUC with BDU links to this strategic plan, by focusing on research, innovation, education, and extension of the cooperation results in the Upper Blue Nile basin (the Tana-Beles area).

The IUC is meant to boost research capacity in **22 departments/units of the university** through 6 projects (see next Table 1), including a transversal one, intended to contribute to institutional strengthening of the university.

Overview of projects in the IUC-BDU	Involved departments (BDU)	Involved Belgian universities
Project 1: Transversal Institutional Strengthening Project (TISP) The BDU-IUC has a TISP component that addresses a range of cross-cutting issues that have hampered the major functions of the university, education, research and community services. These are ICT, library, laboratory strengthening (originally included in P1), gender, extension and English language skills. It is planned to upgrade ICT infrastructure, library information management systems and staff technical skills. Different activities are planned to reduce gender inequalities, and to improve English language skills. One PhD student will be addressing extension of technologies.	Different departments including Social Work, Natural Resource Management (NRM), Rural Development and Extension (RDE), Chemistry, English, Chemical and Food Engineering (CFE) and units or offices (Community Service, ICT/library and Gender Directorate) of the university	Hasselt University (PL North) KUL UGent UA VUB Norwegian University of Life Sciences
Project 2: Land Resilience Building land resilience is crucial when building a climate resilient green economy in NW Ethiopia. With the Land Resilient project, we aim at strengthening knowledge on present and past land degradation processes and ecosystem functioning, focussing on the importance of ecologically connected forests in agricultural landscapes. Through capacity building and the involvement of stakeholders, we ultimately aim improve food security and ecosystems functioning for better livelihoods.	The involved BDU departments and institutes include (i) Natural Resources Management, (ii) Land Administration and Management, (iii) Institute of Disaster, Risk Management and Sustainable Development, (iv) Civil and Water Engineering, (v) Irrigation and Water Resource Management and (vi) Blue Nile Water Institute.	UGent (PL North) KUL Ferrara University (Italy)
Project 3: Water management and its implications to the hydro-system in the Tana-Beles area, Upper Blue Nile basin [Hydro(geo)logy]	The units to be strengthened by the project are the Faculty of Civil and Water Resources Engineering and the Department of Earth Sciences.	UGent (PL North) VUB KUL

<p>This project addresses knowledge gaps mainly on the surface-groundwater dynamics, understanding of impacts on the hydro-system of the water resources development projects and aims to contribute for a better agricultural water management in the Tana-Beles basins in Ethiopia. It provides training opportunities for Bahir Dar University staff and enhancement of research (publication of papers in peer reviewed international journals).</p>	<p>Major activities are teaching, research and community service focusing on land and water resources. The Faculty of Civil and Water Resources Engineering will bring in expertise on hydrology and water management, while the Department of Earth Sciences will contribute with expertise in hydrogeology, in order to cover all relevant components of the hydrological cycle in the project.</p>	
<p>Project 4: Postharvest and food processing in northwest Ethiopia</p> <p>On top of limited market during peak harvest, high postharvest losses and low productivity of major vegetable and fruit crops are very critical for farmers and growers in northwest Ethiopia. This project proposal aims at increasing the productivity of apple and reducing postharvest losses of vegetables (onion, tomato and potato) and fruits (mango) in northwest Ethiopia. This will be achieved through human and infrastructure capacity building, optimising the value chain of produces and dissemination of the acquired knowledge.</p>	<p>The department of Plant Sciences, Faculty of Chemical and Food Engineering, and Department of Agricultural Economics</p>	<p>KUL (PL North) UGent</p>
<p>Project 5: Aquatic ecology and waterborne diseases in the Lake Tana basin</p> <p>The Lake Tana UNESCO Biosphere Reserve plays a central role in the food-energy-environment nexus in Ethiopia and is of immense value as cultural heritage site and hotspot of biodiversity. The aim of this project is to increase the research capacity of BDU in order to assess the ecological status and water quality of Lake Tana and its tributary rivers, monitor the occurrence of waterborne diseases, study the ecology of its wetlands and fish, and deliver the scientific data to underpin a sustainable management plan of the lake's resources.</p>	<p>The Department of Biology (Science College), the Department of Fisheries, Wetlands and Wildlife Management (College of Agriculture and Environmental Science), the Department of Microbiology, Parasitology and Immunology (College of Medicine and Health Sciences), and the Department of Geography and Environmental Studies (Faculty of Social Science).</p>	<p>UGent (PL North) KUL VUB Hogeschool Gent University of Hasselt/ PXL University College Royal Institute for Natural Sciences</p>
<p>Project 6: Socioeconomics, sustainable livelihood and environmental management in northwest Ethiopia</p> <p>The socioeconomic project is needed to understand and to find scientific solutions to the food security, environment management and livelihood problems in NWE. The project will also contribute in promoting environmental issues including socioeconomic impact of dams, land deals, animal feeding, geo-tourism and internal migrations. The project will facilitate the achievements of CRGE goals through PhD and masters training. The project will also develop the research capacity of involved departments of BDU.</p>	<p>(i) Agricultural Economics, (ii) Disaster Risk Management and Food Security, (iii) Economics, (iv) Geography & Environmental Studies, (v) Land Administration, (vi) Rural Development & Agricultural Extension, (vii) Social Work, (viii) Tourism and Hotel Management.</p>	<p>UA (PL North) UGent KUL Norwegian University of Life Sciences</p>

Table 1: Overview of the 6 projects, involved in the IUC BDU (Source: IUC-PP final)

1.1.3. Terms of Reference of the Evaluation

The Terms of Reference (ToR) formulated following evaluation purposes: (i) **learning** - what worked well, what didn't and why? (ii) **steering** - supporting decision making processes, more in particular, this mid-term evaluation should support the actors concerned in the formulation of the second phase of the IUC and (iii) **accountability** - assessing performance of the programme and validating or complementing monitoring data. The formulation of recommendations mainly focuses on the development of the second phase of the IUC programme.

Next to the evaluation questions related to the 5 OECD Development Assistance Committee (DAC) criteria (with focus on efficiency and effectiveness and attention for scientific quality), the ToR specified a question related to the incorporation of gender, an additional question on internal and external synergy and an extra evaluation question on societal relevance and interactions with society.

The evaluation had to consider the effects of the Covid-19 pandemic. The consultant was invited to share a document highlighting how the effects of pandemic would be managed in terms of the organisation of the evaluation mission and in defining the evaluation questions.

1.2. Context

As mentioned in the Terms of Reference for this evaluation, Ethiopia has gone through a transition period, following a period of **political unrest** in 2017-2018. A process of democratization was undertaken. Many challenges remain though, such as lack of jobs especially for young people. Inflation has increased at an alarming rate in 2020, increasing the cost of food and imported items. Land and environmental degradations are major developmental challenges to communities in Ethiopia. Resource degradations are expected to be intensified if Ethiopia follows a conventional development pathway to achieve its vision of becoming a middle-income country by 2025. In response to such challenges, the Ethiopian government developed a **Climate Resilient Green Economy** strategy as a development roadmap. This development strategy revolves around four pillars, including 1/agriculture, 2/ecosystem rehabilitation, 3/renewable energy generation from water resources and 4/make use of advanced technologies such as improved waste management.

In November 2020, **long-rising tensions** between the federal government and the leadership of the northern Tigray region escalated into military confrontation². Prime Minister Abiy Ahmed launched what he called a “law-and-order operation” targeting domestic terrorists, but it involved large deployments of the Ethiopian National Defense Forces and aerial bombardments—a far cry from a domestic law enforcement operation. By November 28, federal forces had taken control of the region’s capital and declared victory, but the security situation is unstable in parts of Tigray, and many analysts are concerned about the prospect of a drawn-out insurgency. If Ethiopia fails to consolidate a new political arrangement that accommodates its diverse population of 110 million and ensures basic measures of security and justice, it could be riven by further conflict that prompts a massive and destabilizing refugee crisis. An important voice for African interests on the global stage would be lost, and external actors who view the strategically important region as a venue for proxy conflict would be empowered.

² <https://www.cfr.org/in-brief/conflict-ethiopia-tigray-region-what-know>

In addition to political challenges, **land and environmental degradations** are major developmental challenges to communities in Ethiopia. Resource degradations are expected to be intensified if Ethiopia follows a conventional development pathway to achieve its vision of becoming a middle-income country by 2025.

As described above, aim of the IUC is to generate knowledge/technologies that address societal needs and to communicate these to the wider community. Next to institutional strengthening, research outputs of the different projects in the IUC programme with BDU are expected to solve **problems at grass-roots level and help to frame policy decisions related to this CRGE**. In addition, the identified BDU-IUC programme components are well in line with VLIR-UOS's Country Strategy for Ethiopia whereby agriculture, food security, water, environment, social development and health are identified as priority areas of VLIR-UOS's cooperation.

1.3. Evaluation methodology and process

This evaluation was executed by a team with an evaluator from Belgium (Nancy Jaspers, on behalf of ACE Europe) and two national consultants from Ethiopia (Eshetu Demissie (independent consultant) and Associate Prof. Mesfin Tilahun Gelaye (Mekelle university)). In the following, the report highlights the evaluation framework used by the evaluators, the activities undertaken, the limitations of this evaluation and quality assurance.

Evaluation framework - The evaluation was implemented in three phases: an inception phase, a phase of data-collection and a phase of analysis and reporting. During the inception phase an evaluation framework (see inception report) was developed, composed of evaluation questions related to 4 of the five OECD DAC evaluation criteria (impact as such was not measured but progress towards impact was assessed as part of overall effectiveness) at project and programme level. At programme level, specific attention was given to the integration of gender and to efforts done to improve internal and external synergy. An additional question was added on social relevance (interaction BDU and local society).

The evaluation questions were elaborated based on the evaluation questions formulated in the ToR and the assessment criteria used in the self-assessment reports. The evaluation questions consist of different judgement criteria and guiding questions or points of attention. These points of attention clarified what information would be looked for and as such guided the data-collection and development of interviews. Under these points of attention, the effects of the Covid-pandemic were considered (effects on execution, on relevance, on effectiveness).

For each of the judgement criteria an appreciation scale was developed as requested in the ToR. A four-point qualitative scale was used.

<i>Judgement scale</i>
4 Excellent/very good performance
3 Sufficient/Good performance
2 Insufficient/performing with problems
1 (very) Poor /major difficulties

This scale is not intended to cover all indicators/guiding questions (as some of them are more important or relevant in the final judgment than others, depending on the project content) but was above all helpful in formulating a balanced judgement in a transparent manner. **The scores are not intended to compare the projects amongst each other, the overview of scores simply helps to reflect upon the overall judgement for this IUC.** The evaluation questions as well as the judgement criteria and guiding questions are part of the evaluation framework and an integral part of the inception report, developed prior to the evaluation visit to Bahir Dar.

Activities undertaken and methodology – The main methods used in this evaluation were a desktop study and **semi-structured interviews (either individual or in small groups)**, held during **an on-site visit** to BDU and in Belgium **and a short survey**, based on outcome harvesting. Briefing and debriefing sessions at Bahir Dar were envisaged as opportunities to discuss findings and to learn from them. The methods used are briefly described below.

The evaluators made optimal use of existing documentation (planning and reporting documents) and in particular of the self-assessment reports. The self-assessment reports were studied and analysed before effective data-collection through (group) interviews took place.

Semi-structured interviews were conducted with a variety of internal and external stakeholders. In case, the respondents were more than three, the evaluators choose to have a focus group discussion on specific topics, proposed by the evaluator. Respondents were in all cases invited to add issues, the evaluators did not ask for but were felt important to them. Key respondents included the IUC coordinators and project leaders, IUC programme manager and ICOS, university leadership, representatives of the academic staff involved in each of the projects and not involved academic staff, post-graduate students involved in the projects, and several external stakeholders (see annex 4 for a complete overview of interviewees).

A number of ‘change agents’ were identified for the outcome harvesting survey (one per involved institute (department)). The survey focused on two questions: the extent to which the programme has contributed, so far, to increased internal and external synergy and the extent to which the programme actors have interacted so far/interact with surrounding communities (to get more insight in the social relevance of the programme). The survey was sent to 28 people, 13 of whom completed the survey.

A debriefing session was organised at the end of the data collection: coordinators and team leaders, together with VLIR-UOS participated in a joint discussion of findings based on written project assessments and a presentation of the overall analysis at programme level. Before the write-up of this report, comments on the project assessment were provided by the team leaders and programme coordination and taken into account.

Limitations of the evaluation – In general, the MTE was very well organised by the IUC South coordinator and the programme manager. Due to the Covid-19 pandemic, the international consultant was not able to participate in the field visit. Next to the exploratory interviews with the programme coordination, ICOS and programme management prior to the inception note, she conducted the online interviews with the overall programme coordinator and North project leaders. The online meetings went very well (technically).

Project reporting and initial quality control took much more time than was planned for, leaving little time for a thorough joint analysis of the findings at project and programme level and for drawing conclusions and recommendations.

Joint analysis between international-national consultants from a distance did not allow to achieve the in-depth level that is normally attained when both international and national evaluators execute the field visit.

Quality assurance – ACE Europe developed a Covid-19 proof approach for its evaluations and shared this with colleagues and with the IUC stakeholders. The combination of different sources (more in particular: interviews, focus group discussions, self-assessments, programme documents, and outcome harvesting) allowed for sufficient triangulation of information.

1.4. Structure of the evaluation report

Next chapter 2 gives an overview of main findings at programme level, followed by the findings at project level. Based on the findings, main conclusions and recommendations were developed in chapter 3.

2. Overall evaluation findings

2.1. General overview

The general overview below (Table 2) is the summary of scores given at project and programme level, based on the evaluation findings and triangulated against different sources of information.

The evaluation questions consist of different judgement criteria and guiding questions or indicators. These indicators and guiding questions indicate what information was looked for and as such guided the data-collection and development of interview guidelines. As explained earlier above, for each of the judgement criteria (unless specified otherwise), a four-point qualitative scale was used. This scale was helpful in formulating a balanced judgement in a transparent manner.

Programme level						
The relevance of the programme	4					
Alignment with a more outcome-oriented research approach	3					
Progress in achieving the overall objectives	3					
Potential to contribute to impact	3					
Overall (financial) management	3					
Role division	4					
Sustainability of the programme	3					
Project level	P1	P2	P3	P4	P5	P6
Relevance						
The objectives of the projects are consistent with needs of different stakeholders	3	4	3	3	3	3
Synergy between IUC projects (internal synergy)	3	3	3	3	3	3
External synergy and complementarity	3	2	3	3	4	3
The project is coherent	2	3	3	4	3	4
Effectiveness						
Realization of the specific objectives	3	3	3	3	3	4
Contribution to national development priorities	3	3	4	3	3	3
Scientific quality	3	4	3	3	3	4
Efficiency						
Delivery of intermediary results	2	4	4	3	3	3
Support to ensure quality of research	3	4	3	3	3	3
Qualitative assessment on use of means and results	3	4	3	3	3	3
Efficiency of project management	2	4	3	3	3	3
Sustainability						
Academic and institutional sustainability	3	3	3	3	3	3
Financial sustainability	3	3	3	3	3	3

Table 2. Summary assessment scores given at project and programme level

In summary (see further under 2.2. for more details), with mainly scores varying between 'good' and 'excellent', the assessment of the IUC programme at Bahir Dar university shows that it is **performing well**. The overall programme and individual projects are **relevant** and perform well in making **progress in achieving its overall objectives**. Promising examples illustrate indications of a more outcome-oriented research culture, but it is still early to know how widespread these effects are.

The findings reveal that already in phase I, initiatives are undertaken to ensure **sustainability** of the programme, although some aspects need to be taken up in phase II to strengthen this further (for instance lab training, strengthening of resource mobilization skills).

Points of attention refer to the relatively slow progress made in some of the PhD projects and in the implementation of the gender strategy, the unease in the projects ventilated with respect to the M&E system used (logframe), not clearly reflecting the dynamics at project and programme level (e.g. behavioural change, mentality changes...) and focusing too much on numerical indicators.

At the project level, examples illustrate that **internal and external synergy are sought and realized**, although the intensity of initiatives differ from project to project. Reasons for this are the research topics (no or little match with other projects), changes in project leadership (North and/or South), and the fact that these processes require time and patience since multidisciplinary cooperation is – traditionally seen– not actively stimulated between students.

Overall, projects are **managed efficiently**. Points of attention are the complex and tedious procurement system at BDU, and the project management of project 1. The evaluators point to the **complex and tedious procurement system**, forcing the IUC team to order items in Belgium, which is sometimes faster, sometimes cheaper and sometimes offering better quality (better value for money), although budget for this kind of support is not foreseen in Belgium. This also has been on the IUC management agenda since the start, according to the programme coordination, but straightforward, satisfactory solutions do not seem to lie within immediate reach. In project 1, **communication and cooperation between North and South partners did not work out so far**, influencing the delivery of expected results. This is due to several reasons such as the frequent changes in South project leadership, the complexity of the project having to deal with (too) many topics and the way how this complexity has been dealt with until now (loss of focus).

Internal communication within and between projects functions well (with exception of project 1).

The **programme management unit (PSU)** supports the projects in different ways (logistics, monitoring, coordination of programme activities among other) which is appreciated by the project leaders and programme coordination.

2.2. Evaluation of the programme level

2.2.1. Relevance

At programme level, relevance has been assessed by using one main judgement criterium:

The relevance of the programme can be confirmed from various perspectives	Score 4 (excellent)
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Relevance of the IUC programme at Bahir Dar was assessed in different ways, considering relevance from different angles: one important perspective is the extent to which the **leadership of the university** confirms the relevance of the IUC and its different (project) components. Another angle is the extent to which the programme responds to the **needs of communities and other external stakeholders** to improve environment and life conditions of people in the Northwest of Ethiopia. Relevance of the programme also relates to the extent to which it aligns with the **national priorities of Ethiopia and the research strategic plan of BDU**, and to the extent to which the IUC programme **adds value** (in terms of budget, approaches) compared to other interventions at BDU (financed by others). Another way to look at relevance relates to the extent to which **gender and environment** are included in the design of the programme. Relevance can further be assessed against the extent to which the programme design allows for **internal and external synergy** and joint actions between the involved stakeholders.

1 Leadership of the university confirms the relevance of the IUC and its (project) components

Based on interviews with programme coordination, project leadership and institutes within the university, it was confirmed that the programme research thematic areas are **highly relevant** to the university ten-year overall strategic plan. In addition to this, the selected IUC-research topics, based on a match making exercise between the North partners and BDU, relate strongly to key thematic areas in the university five-year research strategic plan and its ten-year overall strategic plan. However, the evaluation revealed that in several projects, the selection of the research topics was felt 'pushed' to some extent, by the North partners (who had not perceived it this way).

2 The programme design is consistent with the needs of communities and other external stakeholders to improve environment and life conditions of people in the Northwest of Ethiopia

The programme design strongly **responds to improving environment and life conditions** of the people in the Northwest of Ethiopia. From the interviews with respondents, it became clear that during the formulation phase, many discussions were held to make sure that the programme responds to the local people's needs, which could be associated with their livelihood and life conditions.

The IUC programme also **addresses the interests and needs of external key stakeholders**, operating in the programme area for instance the population density in the Tana and Beles basins is high and livelihood depends mostly on agriculture. The regional government plans to develop irrigation schemes that can irrigate 125000 ha of land but there is a need for studies that can inform on the level of land degradation/sedimentation from different land uses and hence establish efficient conservation structures. In this regard the research results from the land resilience project 2 are expected to be valuable in informing policy makers. Project 6 on socioeconomics and sustainable livelihoods deals with research themes like migration and displacement of farmers due to urban expansion, ecotourism and agricultural extension which are issues that determine life conditions of people living in the area.

3 The programme is aligned with (inter)national priorities

Multiple examples could be found, illustrating that the programme is aligned with the national priorities in Ethiopia. The BDU-IUC programme proposal reveals that **poverty eradication** is the central target of development efforts of the Ethiopian government. Therefore, improving agricultural productivity to ensure food security for most of the rural communities is on top of the agenda of the nation to pave ways for an agriculture-led industrial economy. In the IUC programme for instance, project 2 on land resilience and project 4 on postharvest loss are directly related to the national development objective of achieving food security.

Protecting the environment and maintaining a healthy productive community are given due attention in the country's **Climate Resilient Green Economy (CRGE)** strategy. Renewable energy from water resources is one of the pillars of the CRGE strategy and the IUC programme realizes projects dealing with water resources such as project 3 on Water management and project 5 on Aquatic Ecology and Water borne diseases.

Besides, the IUC programme contributes to the **institutional strengthening of BDU** which is in line with the national educational strategy for higher education: within the context of the country strategy,

the Ministry of Science and Higher Education (MOSHE) emphasizes capacity building to improve scientific research. Within 5 years, the Ministry plans to enroll 5000 PhD graduates in the local PhD programmes of the research universities of the country, which is an ambitious plan. Through the strengthening of research capacities and investment in lab-capacity, the BDU-IUC programme offers important resources in support of MOSHE's plan.

The self-assessment reports of both North and South coordination give multiple examples to illustrate that the IUC programme is aligned with these **national priorities**, and this was also confirmed during the field visit. In addition, university leadership confirmed the alignment of the programme with **international priorities** (SDGs, the Africa Agenda 2063, the VLIR-UOS country focus for Ethiopia, transversal focus topics of the Belgian cooperation such as D4D, gender, environment).

4 Gender and environmental sustainability as transversal themes are taken into account in the programme design

Gender

Gender is a component of the transversal project 1 in the programme, aimed at reducing gender inequalities and mainstreaming of gender in all IUC projects. When starting the formulation of phase I of the programme, only **14%** of the academic staffs were women. Female students made only 28% of the total students and their dropout rates were much higher than among male students. Empowering female staffs of BDU has been foreseen in the design of the programme. Seven female staffs of BDU were planned to receive predoc training opportunities in Flemish universities out of which two would be supported by the TISP. As part of the follow-up of the planning and implementation of the gender component within the BDU-IUC projects, coaching services were planned to be given to these female candidates to enter the predoc and PhD programmes. The programme design also includes gender mainstreaming in course materials and training programmes, with a focus on the specific BDU context and needs. Provision of trainings, especially to staffs of the Gender Affairs office of BDU through the project, should contribute to better address gender equalities in the university. It was also planned to provide support to female students to better cope up with the problems they face in campus life as students and beyond. Selected BDU staffs would also visit Flemish Universities for sharing their experiences, through workshops organized to share experiences and lessons. All this was planned to be contributed to BDU's Five Years' Strategic Plan of 2016 to 2020 (Strategic Plan, 2015), in which it is expected that the female lecturers' share increases from 14% (2015) to 35%.

Environment

Environment is included as one of the strategic themes in this IUC programme. It is prominently visible in the programme: the overall development objective of the programme aims at improving the environment and life conditions of people in the Northwest of Ethiopia thanks to application of new knowledge created through research. **Environmental sustainability** is at the core of several projects such the projects dealing with land degradation, siltation, depletion of fish stock/biodiversity, aquatic ecology, postharvest losses etcetera.

5 The programme allows for internal and external synergy and joint action between the involved stakeholders

Internal synergy

The programme allows for internal synergy and joint actions within and between the different projects. Multiple examples are given in this report at project level (see further below). It was a deliberate choice at programme level to work as much as possible in the **same geographical area**. Project one can be considered as the overall servicing project, supporting all teaching/research efforts of the programme, which is clearly explained in the phase I programme document. This document also shows **the cross-cutting issues between the focus topics of the thematic projects**, as formulated during the programme formulation phase (see next table below).

	Hydro	Postharvest	Aquatic	Socio-economic
Land	<ul style="list-style-type: none"> - Impact of land management on water cycle - Flooding frequency and floodplain development 	<ul style="list-style-type: none"> - Floodplain characteristics influence properties of tomato and onion - Birds and insects as pests for crops 	<ul style="list-style-type: none"> - Sediment from land to lake - Nutrient transport into the lake - Papyrus 	<ul style="list-style-type: none"> - Geo-tourism and landscape - Social determinants of land management - Bird watching - Cultural role of church in forest protection
Hydro		<ul style="list-style-type: none"> - Impact of irrigation on quality of fruits and vegetables 	<ul style="list-style-type: none"> - Water quantity and quality 	<ul style="list-style-type: none"> - Impact of dam building on the water cycle - Water administration - Irrigation and social conflicts
Postharvest			<ul style="list-style-type: none"> - Herbicides and pesticides - Nutrient loading 	<ul style="list-style-type: none"> - Value chain - High value crops - Income generation and livelihood
Aquatic				<ul style="list-style-type: none"> - Impact of tourism on lake and vice-versa - Dams and fish migration routes - Overfishing - Urbanisation and pollution - Pressures on wetlands
	Hydro	Postharvest	Aquatic	Socio-economic

Table 3 : Identification internal synergy between projects (source: IUC Programme document Phase 1 (September, 2016).)

The project level reports further below illustrate to what extent internal synergy has been achieved (see also under 2.2.2. overall effectiveness).

External synergy

The IUC programme aims at complementing and enhancing several other initiatives, as explained in the phase I programme document. BDU has relations with more than 20 universities in more than 15 countries. At the start of the programme, BDU was leading the Amhara Region Universities' Forum whereby 7 universities are involved in experience sharing and discussion with the government on the support. BDU has direct links with regional and national governments. The phase I programme document also shows that the IUC builds further upon earlier cooperation experiences with VLIR-UOS, and that the hydro(geo)logy project of the BDU-IUC programme would cooperate with the Belgian private company "Koga Veg" in irrigated water management for vegetable production in Koga irrigation scheme.

In addition to this, the programme also planned to collaborate and exchange with other Ethiopian universities like Mekelle, Jimma, and Arba Minch, all benefiting from previous or present VLIR-UOS interventions.

The project reports, further below, illustrate the extent to which this external synergy has been established so far (see also under 2.2.2 overall effectiveness).

6 There is an added value of the IUC programme (in terms of budget, approach) compared to other interventions at BDU (financed by others)

The added value of the IUC programme compared to other interventions is multiple and can be summarized as follows:

- One of the objectives of the programme is to *strengthen the outcome-oriented research* which should also have a positive effect on education (*more research-based education*);
- *Focus on strengthening institutional capacities and outreach*. The IUC is not limited to strengthening academic capacities and infrastructure, but also includes an objective where the link is made between improved research and outreach through application of new acquired knowledge;
- The fact that it is a 10- year programme allows for *transformational changes* (in research) and not only changes related to improvement of what already exists;
- The funding spread over 10 years versus short term or punctual funding allows for *deepening working relationships and networking with Belgian counterparts and other external stakeholders*. This period should also allow for sufficient time of developing strategies concerning sustainability of the project results and investments made;
- The programme enhances *different disciplines in a complementary and synergetic way* (ICT, library, different thematic topics).

2.2.2. Overall effectiveness (progress in achieving the overall objectives)

The evaluation assessed the extent to which progress was made to achieve the overall objectives, by looking at the attainment of the specific objectives at project level and their contributions to the overall objectives (overall effectiveness), and the potential to contribute to impact.

The programme is aligned with a more outcome oriented research approach including extension and outreach	Score 3 (good)
The programme has made progress in achieving its overall objectives	Score 3 (good)
The programme has the potential to contribute to impact	Score 3 (good)

7 The programme is aligned with a more outcome-oriented research approach including extension and outreach, although results differ between projects

The IUC programme wants to strengthen institutional capacities not only in numbers (more PhD), but also through the creation of a culture in which students become acquainted with methods and ways of working which increase their level and capacities to do research in a **more analytical, qualitative and underbuilt way**. This should allow for more impact at institutional level (e.g. more publications in high-ranking journals) and beyond (e.g. research results that are useful for policy makers)

To practice an outcome-oriented approach, respondents indicated that it is **important to reflect on how the project results could benefit the university/academic level and the external (local) stakeholder level** (such as communities, governmental offices at regional and national level). In some cases, interesting examples could be found, **illustrating external synergy** at the same time (see following case and other examples below).

Case - 1 “Our project was formulated based on problems observed on the ground and information from the local community and scientific reports. It has focused on the rural community and others whose lives are associated with aquatic environments in the Lake Tana sub-basin. We are also working to understand critical problems and solve issues figured out using scientific approaches to the better and sustainable use of the lake's resources. We researchers, agricultural experts, and officers in the study area develop awareness, responsibility, and cooperation towards a common goal (i.e., sustainable resource use and management). This is important because most of our research activities in the project is mainly focused on basic and applied research that enables fishery managers and other concerned agencies to use the findings to formulate a proper management plan for the sustainable use of the aquatic /fishery/ resources”. (Source: extract from outcome harvesting survey (dec.2020), College of Agriculture and Environmental sciences).

Case - 2 “Different governmental and non-governmental organizations as well as the farmers themselves are increasingly working with our faculty. Based on these initiatives several projects have been developed resulting in more academic staff than before who are engaged in these projects and enhancing the life quality of the farmer and society in general. This helps the university to get more funds to engage the academic staff in research and community services besides teaching-learning activities and technology development. Furthermore, this helps the university to achieve its vision which is to become one of the top ten research universities in 2025.” (Source: extract from outcome harvesting survey (dec.2020), Faculty of Chemical and Food Engineering).

For instance, project 3 has attracted the private company Koga Veg (owned by Durabilis) to collaborate with; at field level the project works in close coordination with Koga irrigation project office. Similarly, face-to-face discussions, workshops, field visits and joint monitoring have been realized with other offices such as Abay Basin Office. Another research project supported by Japan through JICA is working on related themes (e.g. water and sediment balance) in the Water Resources Institute of BDU. They have started to use the research findings of the IUC programme to build upon existing knowledge and

experience. In project 6, the PhD students are communicating with local stakeholders (Land Administration, Tourism Bureau etc..). which will facilitate the uptake of project results when conducting outreach activities since these stakeholders are implementing organizations.

Another example indicates that, at the inception stage of the IUC, different external stakeholders (Water bureau, Abay basin authority, fishery and other aquatic life research center, German NGO (NABU) working on Tana Biosphere Reserve etc..) were already consulted but since then no follow-up has been done, mainly because the research results were not ready yet for outreach. Next to this, the regional government has a plan of developing irrigation schemes on 125.000 ha of land and this requires knowledge on the water balance of the catchment and the Tana basin; it is foreseen that the programme will feed this knowledge gap through the anticipated study results.

8 Progress is made in strengthening institutional HRD and research capacities

The KRI-monitoring table with 8 standard indicators at programme level follows closely progress made at the level of **institutional capacity building**: as stated in the TOR for this evaluation, Bahir Dar university is expected to produce highly qualified graduates, gender balanced, at different levels in different disciplines and to conduct relevant research to feed policy improvement and strategic planning.

Phase 1 of the IUC programme at BDU supports **17 PhD students**. Most of the students are on track with their research, some are expected to graduate in the course of 2022. Next table shows the number of PhD students per project and overall progress made at the moment of the evaluation (end of 2020).

Project	KRI-Number of PhD students (IUC-funded)	Progress made (end of 2020)
1 Transversal	1 (since 2018, moved to P6)	Some delay
2 Land Resilience	3 (one female)	On track
3 Hydro(geo)logy	3 (no female)	On track
4 Postharvest	3 (one female)	Some delay
5 Aquatic ecology	3 (one female)	On track
6 Socioeconomics	4 (no female)	Some delay

Table 4. Progress on KRI-targets related to HRD (Source: table IUC-BDU standard indicators (2019))

The project assessments by the national evaluators reveal **rather slow progress in publications**, realized by PhD students. This is understandable seen the fact that the evaluation fell in the period in which students were starting to process their collected data into papers. However, the overall publication record at programme level reveals that many publications have already been realized³: 15 publications in **international peer-reviewed journals** (part of ISI Web of Science), 4 papers international refereed journals (publications submitted or in preparation), 11 abstracts of communications in congresses (published) next to 20 other papers.

Reasons for delay in research are diverse:

- In some cases, Covid-19 has caused delays in data collection;

³ Source: compilation by PSU office during evaluation (December 2020).

- The expertise/knowledge level of starting PhD students is sometimes not sufficient yet to start their PhD study. Several students participated in predoc programmes (2 out of the 3 female PhD students did) or followed extra courses in the beginning. This offers a great opportunity for these students to lift their skills in different areas (research methods, statistics, communication, language etcetera) but also requires time (in case of the extra courses; the predoc were done in addition to the PhD study time) and therefore puts some pressure to finish within the given period.
- Lack of lab-experience resulting in delay (problems with quality of samples so that research needed to be repeated).
- PhD students in the programme also have other tasks and responsibilities in the university; they are more than 'only' students, although all students are said to be exempted from education tasks except when they want to do this on a voluntary basis, against payment. Unless students are involved in any tasks by their own interest (which is not asked or requested by BDU), they are free from any responsibilities in the university.

9 Progress is made in extension services, but results differ from project to project

Regarding education, phase I of the programme did not foresee to develop or adjust MSc programmes or courses, with exception of an English language training course package (foreseen in project 1, although this seems to lie outside its actual goals and finance).

One of the objectives of the programme aims at **rolling out the acquired research results towards involved communities and external stakeholders**, through publications, presentations that are community related, extension workshops and training module packages.

The KRI-table at programme level shows (end of 2019) that project 1 had initially planned many workshops and presentations (project-related), but the extension component of the project was moved to other projects. Therefore, project 3 and particularly project 6 realized more extension workshops than originally planned.

Project	KRI on Extension - number and reach of presentations (community related) or extension workshops (IUC supported)		KRI on Extension - Number of training module packages developed (IUC supported)	
	Target	Achieved (Y3)	Target	Achieved (Y3)
1 Transversal	240	0	1	0
2 Land Resilience	5	0	0	0
3 Hydro(geo)logy	2	19	2	1
4 Postharvest	0	0	0	0
5 Aquatic ecology	5	2	0	0
6 Socioeconomics	15	98	5	0

Table 5. Progress on KRI-targets related to Extension (Source: table IUC-BDU standard indicators (2019))

10 Progress made in gender mainstreaming has been less than expected

The IUC programme supports 17 PhD students, 14 male and 3 female students.

Project	KRI-Number of PhD students (IUC-funded)
1 Transversal	1 (since 2018), moved to P6
2 Land Resilience	3 (one female)
3 Hydro(geo)logy	3 (no female)
4 Postharvest	3 (one female)
5 Aquatic ecology	3 (one female)
6 Socioeconomics	4 (no female)

Table 6. Progress on KRI-targets related to Gender (Source: table IUC-BDU standard indicators (2019))

Out of the 25 MSc students supported by the programme, 6 are female (**20%**). Next to this, **17,6%** of all PhD students, supported through the programme so far, are female. This is a very low percentage, given that the programme anticipated on getting a gender balance in the programme.

The explanation given by interviewed project leaders is that no suitable female candidates could be found, because only few female candidates came forward or did not meet the criteria for selection. This means that striving for a more gender balanced PhD student pool does not guarantee female participation in the programme.

Besides of this gender-sensitive attention to recruitment, the IUC programme has **a specific (transversal) gender component in the IUC programme**. One of the North project team members (project 1) is a gender expert; it is her specific role in the BDU-IUC programme to coordinate the development and implementation of a **gender strategy**. During the debriefing session of this evaluation with the project members North and South, the approval of the gender strategy by the Senate of the University was confirmed. Next to this, some training activities have already been realized in the course of phase I such as **gender awareness training** to high level BDU management staff, and Bahir Dar takes also part in the **VLIR-UOS JOINT project “Towards a more gender sensitive and inclusive academic culture in Ethiopia”** between Mekelle, Bahir Dar and Arba Minch university. This initiative focuses on increasing academic capacities, with specific attention to gender equality. This initiative includes a yearly summer school (the involved universities rotate the hosting role on a yearly basis) with 50/50 participation of female and male academic staff. The approach applied in this summer school is based on a model used at Stanford university: fix the numbers (recruitment), fix the organization (working culture and environment) and fix the knowledge (gender equality in each phase of research). This is an innovative project and has resulted, so far, in 5 male and 5 female staff of BDU participating in this initiative. Normally this summer school should have taken place at Arba Minch in 2020 but unfortunately it was cancelled because of Covid-19; it should be organized at Bahir Dar university in 2021 but because of the same reason (Covid-19), this is not certain yet.

Based on the evaluation results, it can be concluded that some **efforts have been realized to mainstream gender within the projects** (e.g. working with female enumerators, consulting female farmers in the communities, but there is still a long way to go (even though the national government increasingly pressures that attention should be given to gender equality). Although opinions differ between project leaders and team members at BDU, it seems still a challenge for women to gain respect and to be seen

equal to men in their professional life. Solutions that are e.g. proposed to integrate gender range from providing different opening hours in labs and libraries to building another library to ensure the safety of women. These solutions do not contribute to gender mainstreaming. It rather shifts the challenges related to gender equality to creating specific environments for women, while gender mainstreaming requires efforts from both men and women. In addition, it requires certain efforts of changes in mindset, attitudes and investments; especially the latter meets with some resistance.

11 All projects contribute to strengthened institutional (research) capacities

The evaluation revealed that the different projects are **contributing to strengthening research capacities and increasing ‘cutting edge’ knowledge**. According to respondents, this is very important since academic staff can increase their academic rank and the university improves the ratio of academic staff with a PhD.

The purchase of lab equipment and supplies has helped in enhancing evidence-based research. Activities **enhancing internal synergy** (see further below) within and between projects/departments were further mentioned as contributing to enhancing institutional capacities. Another contributing factor is the **expertise and support provided by senior academics (North and South academic staff)**, through coaching, punctual training and continuous advice (example see next case below and in the project reports), and the working relationship with the North partners.

Transversal project 1 was meant to support strengthening institutional (research) capacities and supporting the other projects in a transversal way. The project started with a (too) high ambition in six domains (laboratories, ICT, Information and Knowledge Management, gender, outreach and technology transfer and the improvement of the English language Center). These ambitions could only partly be met e.g. laboratory investments were shifted to other projects (project 2 and project 4), but in some areas progress could be made: an open access policy and a research management policy are ready to be presented to the university authorities, an open source software platform to manage the research information has been introduced to support these policies. In the last months, BDU has negotiated the possibilities to set up a TOEFL test center for English. Results are not yet there but are expected to become visible during phase II. A TOEFL test center for English can have an impact on the university and the region, giving opportunities for people to study and work in the UK, Europe and the USA.

12 Through examples, evidence could be found of internal and external synergy as a leverage for joint implementation of research projects, aimed at 1) enhancing research-based capacity building at project and overall level and 2) contributing to the CRGE, although efforts differ from project to project

To get a better insight in the extent to which internal and external synergy have been achieved so far, in function of enhanced research-based capacity building with support from the IUC programme, the evaluation team developed a **short survey**, based on outcome harvesting, which was sent out to 28 heads of departments (no project leaders) and PhD students. 13 responses were received.

Internal synergy

Collaboration between projects of the IUC programme could be illustrated during the evaluation, although not to the same extent within and between all projects. Overall, projects collaborate(d) with each other during selection of PhD candidates, joint monitoring (every quarter), financial management and procurement. They meet during joint (local and overall) steering committees to discuss progress

made and exchange experiences. During these committee events, excursions are organized (normally, the joint steering committees take place, alternating in Belgium and in Ethiopia).

At project level, the programme design identified possible areas for cooperation, synergetic actions and complementarity between the projects. By working in **overlapping geographical areas and topics**, projects can share the same cars, lab facilities etcetera. For instance, project 2 research activities are implemented in the same watershed as other projects, allowing the use of the same enumerators, logistics and joint data sharing. Soil and plant analysis lab is serving multiple projects (project 2, 3 and 4), at the same time contributing to increased efficiency of the projects and thus also of the programme. In addition, project 2 shares socio-economic data with project 6 and execute joint analyses. Similarly, project 2 shares sedimentation data with project 5 and realizes joint analyses.

***Case 3-** Thanks to the IUC-project within Bahir Dar University, we made a strong collaborative research plan with the department of biology and department of fishery-wetland to collect data in the field and in the laboratory. Hence, we shared professional experience from academic staff and laboratory materials. This is important because of a more efficient use of resources (e.g. money, equipment, car and boat for field work) and to minimize duplication of efforts (time) during data collection in the field. Collaboration also helped in developing a team spirit of working together particularly in research activities in the laboratory and in the field. (Source: extract outcome harvesting survey, College of Medicine and Health Sciences (Dec. 2020)).*

In project 3 and 6, PhD students work on the same watershed. A PhD student of project 3 is undertaking an experiment on irrigated and non-irrigated lands and shares biophysical data with a PhD student of project 6 who looks at the socioeconomic impact of dam construction and the economic impact of irrigation. Moreover, project 6 students' research findings on postharvest loss have been communicated to project 4, and a PhD student of project 6 working on the assessment of geo-tourism sites has received support from a PhD student of project 3 in identifying and classifying rock samples collected from the geo-tourism sites.

By **sharing information**, PhD students could potentially come to publications of better quality, add more (joint) publications to their name, and more (internal and external) stakeholders could benefit from the results of their research. However, the IUC objective of stimulating joint publications contrasts with the national normative that single named publications are more rewarded than joint publications. This makes it challenging to introduce another way of working. Some respondents mentioned that joint research has brought a change from working on one discipline to a more multidisciplinary approach and research.

***Case 4 -** This project contributes significantly in changing the attitude of our academic staff concerning conducting research collaboration with university staff from different disciplines and research institutes outside the university. The importance of this change is (i) to boost the capacity of BDU particularly our department and to uplift the overall institutional capacity of BDU through joint implementation of research projects. (ii) to enhance their research skills for junior staff via creating a chance for them to work with well experienced senior staffs. (iii) to help MSc students to conduct their thesis under the supervision of several senior staffs from different disciplines and (iv) to get extra funds and (v) a good thesis topic. Academic staffs, students, and the university in general benefit of these changes. (Source: extract outcome harvesting survey. Faculty of Chemical and Food Engineering)*

Another example of change is the **MoU, signed between BDU and Flemish Universities** for joint supervision of local PhD students.

The examples on internal synergy reveal that **stimulating internal synergy has created multiple positive effects** such as increased efficiency, the possibility for joint publications, a more multidisciplinary approach in some cases enhancing the vision of involved staff on their own discipline and acquiring

more insights in other disciplines. According to respondents, joint research also contributes to stronger learning of the researcher/staffs.

External synergy

External synergy activities have taken place/take place with different purposes: to stimulate collaboration beyond the university borders, to enhance research and other capacities of university staff, to stimulate joint learning and to allow for more efficient and effective outreach of research results.

For instance, a PhD student of project 5 from BDU collaborated with another PhD student of AMU-VLIR-IUC, both working on aquatic ecology, tuning their research protocols to work on lake Tana and lake Chamo. The two students paid a joint visit to these places and they plan a joint publication. Still in project 5, one student received a PhD scholarship in Belgium with another source of fund due to the existing network. The Amhara Public Health Institute has provided materials to one of the PhD students of project 5.

To enable effective application of the research findings, several projects indicated that it is needed to find ways of **synergy and collaboration with external actors at different levels** (communities, governmental offices at regional and national level etcetera).(see also above, under 'progress towards achieving the overall objectives').

Several **exchange and external synergy visits** were planned for 2020 but not realized due to Covid-19 e.g. there were plans to undertake experience sharing visits to Arba Minch University, Jimma University and Mekelle University, and short term trainings (on lab management) were planned in Belgium for BDU lab technicians (project 4).

The project reports reveal that in some projects, internal and/or external synergy is less practiced. Multiple reasons were given for this: lack of means to coordinate multidisciplinary interaction, projects have been designed to focus on its thematic area with little space to plan and implement interdisciplinary research practices, few contacts to connect with in the beginning of the project implementation and time needed to build a network, no or little (thematic) match with other projects, and changes in project leadership (North and/or South). Another reason is that these processes require time and patience; multidisciplinary cooperation is – traditionally seen – not actively stimulated between students, resulting in a culture where knowledge and information is not easily shared with others. Even when there is willingness to do so, some students and project staff need to develop the skills and capacities, required for working in a more multidisciplinary environment. Also, project leaders have strong local/national/international networks and contacts while others have not. Additionally, between some projects there is more possibility to overlap in research topics and thematic focus and to come to collaboration and a synergetic way of working than in other projects.

13 Progress towards academic and institutional impact at the university level could be illustrated with examples

Mechanisms for programme influence on university policies have been identified/defined although not all these mechanisms have already been rolled out and/or are well integrated yet in the university so to call them common practices. Examples are the **gender strategy**, formulated and recently approved by the BDU Senate; the **Research Information Management System**, including the open access policy have been developed and sent to BDU senate for endorsement; **ICT has been improved** through the purchase of servers to support and introduce institutional e-mail to BDU staff; a **research**

grant policy for BDU internal research fund calls has been uplifted to a multidisciplinary programme with **interdisciplinary research potential**, and project 4 has started a process of **ISO-certification** (quality) which could be inspirational to other projects.

Although still in phase I, the IUC programme has also already started to catch the attention and interest of other, external parties e.g. the programme has attracted new funds (from KfW) and caught the interest of other universities (e.g. the Kenyan University of Eldoret and KU Leuven), resulting in the development of new research proposals with these universities and activities with KfW.

Concerning **emerging effects of the volume of new postgraduates, research facilities and infrastructure on BDU**, respondents stated that the introduction of research facilities and infrastructure has and will have impact on the quality of research data and results, and broader to the quality of the research processes within BDU in general (see also under 'academic and institutional impact'). At the moment of the evaluation, no evidence could be found yet to confirm this. This, as well as concrete evidence that the programme has contributed to attracting more local PhD students, will normally be easier to demonstrate by the end of phase II of the programme.

Further, **the impact of the progress made by project 1 on BDU cannot be underestimated**, not even with an underperforming project management. The quality of internet has been considerably improved with impact on the quality of online meetings and communication with the Belgian counterparts (among others), which is of huge importance in times like these when Covid-19 prevents the Belgian partners to travel to Ethiopia. The transversal project 1 has also established an e-learning lab facility together with the Education Innovation Service Center of BDU which does not only benefit the IUC-participants but also BDU. E-learning training has been set up on how to use Moodle for classrooms. Short-term trainings on cyber security and server configuration of HPC (High Performance Computing) have been given to staff and based on this, a mirror data center has been established at the Chamo Campus of BDU. More examples can be found further below in the project reports (and in the annual progress and the midterm self-assessment reports elaborated by the project leaders and programme coordination of the IUC programme). In other areas the project has made less progress (and thus less impact) than expected e.g. the rolling out of the Research Information Management System (RIMS) has been approved and is being rolled out. A missing element is the Open Access Policy which still needs to be approved by the BDU Senate.

14 Progress towards development impact: Improvement of environment and life conditions of people in Northwest Ethiopia thanks to application of new knowledge created through research (development impact) is still early to assess, but some examples could be identified

Overall, respondents indicated that **it is still early to see effects of the institutional strengthening on the environment and life conditions of people** in the Northwest of Ethiopia. Research is still going on and application of newly gained knowledge and skills is mainly expected during phase II; progress made on outreach activities is limited until now.

External stakeholders interviewed by the national evaluators such as farmers involved directly/indirectly in the research of students, priests, agricultural development agents, municipalities, fishermen, fishery and other aquatic resource research institutes, Abay Basin Authority, Amhara Bureau of Water Resources etcetera, **appreciate the research** that the IUC programme is conducting. Nevertheless,

they stated that the **programme needs to consolidate the results from phase I and conduct development-oriented outreach activities towards the involved communities and other external stakeholders.**

Some examples were mentioned during the evaluation to illustrate emerging progress made towards the overall objectives:

- **Different stakeholders benefit from each other through extension workshops.** This is possible thanks to changes in attitudes and approaches of students towards these external stakeholders, more specifically there exists more openness than before to receive advice from each other (Source: Dept. BDU- local government, local communities).
- **Increased awareness of getting more involved and interact more actively with (targeted) communities** is a visible effect of a more outcome-oriented approach, as stated by one respondent: *“for quite a long time, my staff members did not pay attention to organizing excursions to Bahir Dar University community. It improved the relationship of my department with Bahir Dar University communities”.*
- **Some external stakeholders acknowledge the potential of this programme and use the research results** e.g. photos of geo-sites taken during field visits are made available to the local government as well for promoting tourism in that area.
- **Communities become aware of what university departments are doing and how this relates to their daily life.** This is important, according to respondents, because it helps in getting more attention from communities and it can attract visitors for services so that project resources can be exploited/used in a more effective way.

2.2.3. Efficiency

Concerning efficiency, following judgement criteria were assessed:

Overall management of the execution of the IUC is done in an efficient way	Score 3 (good)
Role division is clear	Score 4 (excellent)
Transparent financial management and support to execution of procurement	Score 3 (good)

15 Overall (financial) management of the execution of the IUC is efficient

The IUC programme has brought a new way of **programme budget administration**, with the introduction of a new financial manual and management system. The system is relatively efficient for managing payments, recruiting staff and producing financial reports. The system produces financial reports which facilitates the close follow up of the programme budget and expenditures.

The **university purchasing procedure** is challenging, since it is bureaucratic and causes delays in purchasing goods. Sometimes it is cheaper, sometimes it is more quickly or sometimes the quality is better to purchase certain goods in Belgium instead of in Ethiopia. Therefore, the purchase of goods and infrastructure regularly takes place in Belgium and not in Ethiopia since the value for money is much better in Belgium (but still more items are bought in Ethiopia than in Belgium). This is not an ideal situation since products need to pass customs which also takes time, efforts to go to pick up products in

Addis Abeba and close follow up by the programme management. It also puts pressure on sustainability of installed working procedures.

Overall, the programme does **not show significant over or underspending of the budget**. To some extent, budgets can be shifted between projects in case needed. Covid-19 has caused underspending in all projects, but the Belgian donor has allowed temporary flexibilization of spending deadlines so that budgets, planned to be spent in 2020 can still be used in 2021. Although the programme is a five-year programme, budgets must be developed and spent annually. This is not conducive to the efficiency of the programme, as expenditures are sometimes made in order not to lose the budget at the end of the year. A point of attention is that, according to respondents, the level of **efforts and incentives** for project staff are not comparable (efforts not being remunerated sufficiently against the efforts done according to S project staff), which can be demotivating and affect performance. In addition, the IUC programme does not provide for staff salaries in Belgium to carry out the considerable administrative and technical workload.

Project management of the transversal project 1 has been quite challenging during phase I of the programme. South project leaders changed several times and the North project leader resigned recently, with a negative impact on communication and cooperation between North and South project leaders. The project was very (too) ambitious with 6 intermediate results to be achieved on different topics (see project report below for more detail). Although the topics could be linked to each other to some extent, it did not work out well and focus got lost. Progress in achieving results has been partly achieved but due to the challenging and overloaded programme and difficulties at the level of the project management, this progress was less than expected.

16 Planning and monitoring are mainly based on numerical indicators

The **programme design, implementation and monitoring system** are supported by different project documents and formats (logical framework, project document, reporting formats, implementation plan etc.). To some extent, these instruments help the programme to efficiently follow up the project budgets and financial expenditures.

While the self-assessment reports are quite rich in information and interesting to understand the dynamics of the progress made and challenges encountered, the **logical framework** is considered as a useful **planning and monitoring instrument**, but not very helpful as an instrument for joint learning.

When looking at the project level, indicators have been developed at the level of intermediate results and objective level. The indicators at IR level are mainly output and quantitative indicators and in general relatively easy to monitor. The quantitative and sometimes qualitative indicators at objective level give an indication of the extent to which academic capacities are strengthened and used, such as the number of PhD, the number of (successful) proposals and publications, the number of farmers starting to implement the communicated guidelines, interaction with stakeholders etcetera. It is not clear how progress on these project indicators at objective level, specifically the qualitative indicators are monitored or measured.

With exception of the quantitative indicators, the link between the qualitative objective indicators at project and programme level is not very clear. This makes it challenging to monitor progress in achieving the overall objectives at programme level (beyond the project level) in a coherent way.

17 Overall, role division and communication are clear and transparent

The **management manual** of the programme describes the roles, function and tasks of the main participants in the management of the IUC. This manual is detailed and seen as a convenient tool when needed. **Internal communication and cooperation within and between the projects** function well and is transparent and clear, overall seen (with exception of project 1). The **local and joint steering committee meetings** are useful and carried out in an efficient way. Decisions are taken on time and project leaders are said to be engaged and supportive.

Role division between the project coordination, management and project leaders is clear without significant challenges. Project team members do not always know what has been discussed at the JSC or LSC, but they 'blame' this also to themselves (not remembering if minutes or shared; other priorities). Project leaders do not seem to share frequently project documents with involved departments so that the latter are not always up to date with the latest updates and developments.

Some find it unfortunate that PhD students cannot be project leaders at the same time; the PhD students know the project's research inside out which is not the case with all project leaders. Yet there is also a common understanding for this rule, since project leaders also deal with other matters such as the general coordination and logistic and administrative support of the projects (which is sometimes a challenge for these project leaders with less project management experience and skills). Another reason for not allowing PhD students to be the project leader is that there may be conflict of interest when decisions of financial or personal nature need to be made. And, maybe the main reason, PhD students should be able to fully focus on their study.

The **programme unit** has established a good working relationship with the projects and programme coordination in North and South, there is a strong working relationship. The programme unit is said to communicate well, to share information with the relevant persons, to closely follow up the progress of the programme and projects and to provide support where needed and relevant.

Interaction with the university leadership at BDU is effective: the university leadership supports the programme and participates in the joint monitoring, provides conference rooms and office facilities to the programme.

Within all projects, **support from the Flemish partners** is appreciated, through training, concrete advice, coaching, partnership meetings and follow-up. Some project leaders in the South would like to see more proximity and follow up from the North promoters.

2.2.4. Sustainability

The evaluation has looked at the extent to which institutional sustainability has been achieved so far (**including academic and financial sustainability**). Since this is a midterm evaluation, it is still early to assess this criterium. Therefore, the evaluation mainly focused on indications or signs of progress into the direction of sustainability.

Sustainability	Score 3 (good)
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18 Efforts are done to retain staff at BDU

PhD students **sign an agreement** with the university to serve the university at least for eight more years after finishing their studies. This helps in reducing staff turn-over which takes place, for example, due to

rather low salaries according to project staff. Staff retention also helps in consolidating research and education knowledge and skills. At the same time, respondents indicated that graduated students leaving the university should not necessarily be considered as an indication of not achieving the overall objectives of the programme. When graduated students contribute to the overall objectives of the programme, whether this takes place within the university or at another workplace, this should be considered as a positive effect of the programme.

Overall, the **working environment** is good and there are efforts done by the university to improve it further (office facilities, internet, transport, etc). Most of the project leaders interviewed hope that graduated PhD students will and can continue collaborating in the IUC phase II, as a project team member or staff member at the university, since normally the IUC phase II builds further upon research results, achieved during phase II.

19 Academic research staff and students recognize the added value of the approach of working together in a joint and synergetic way (for their own work/career)

To uplift the project to a higher level, it is important that students and project staff recognize the importance of **not working on an island or in an ivory tower**. This seems logical but sharing findings and information and collaborating require time and patience in an environment where these practices are – traditionally – not so common. (See also above progress made related to internal and external synergy).

There is strong support from North and South promoters towards the PhD students. Moreover, during the joint steering committee meetings, joint excursions are organized, and students appreciate the feedback they get during these excursions.

20 Consolidation of knowledge, tools and spinoff activities developed by BDU to benefit other users within and outside the university could be illustrated through examples

Most of the projects are still in a phase where collected data are being processed by students into papers and publications. It was said that it is **still too early to give concrete examples to show how knowledge and tools acquired will benefit other users** inside and outside the universities, although research results seem to be promising, according to respondents.

Some **examples could be found, illustrating consolidation of knowledge and tools acquired through the IUC programme, although not widespread yet**. For instance, at department level, all IUC investments such as ICT facilities (e-learning platform, video conference rooms, digital library, all campuses connected by VPN), lab supplies and equipment are used by all relevant departments of the university and supporting the research and teaching/learning processes. The website interface of the programme has been developed and each project has an interface to upload data and information that can be shared with others. Local PhD and MSc students are linked with the programme as project team members and some of them receive support such as logistics to facilitate field data collection.

At BDU level, the programme exchanges experiences on the evaluation of research proposals at universities in the Amhara region. Other examples are the fact that 3 academic staff members from BDU and Debre Tabor University received a PhD fellowship in Belgium; the IUC programme is supporting these students with logistics. A MoU has been signed between BDU and Flemish universities for co-promoting local PhD students, and two workshops were hosted at BDU to design a programme related

to the Tana Biosphere Reserve in the presence of UNESCO representatives. Overall, because of the experience from the BDU-VLIR-IUC, staffs are motivated to write proposals for obtaining external funds.

A point of attention is the fact that the university needs further strengthening in running and maintaining **laboratory facilities**; if not, this might have a negative effect on the sustainability of some of the infrastructure investments made. Next to this, some projects also indicated a lack of capacities in resource mobilization, needed to write quality proposals that can attract new external funding and stakeholders.

21 Evidence could be found that the programme functions as a leverage to attract other donors and funds

Bahir Dar university attracts other funds from VLIR-UOS, other donors and countries. Respondents stated that overall and because of the experience with this IUC programme, staff members are motivated to write additional proposals for funding and support.

Other external funds attracted also contribute to the programmes' objectives, according to respondents, like e.g. the VLIR-UOS JOINT-project *"Towards a more gender sensitive and inclusive academic culture in Ethiopia"*, in collaboration with Mekelle university and Bahir Dar university; a Science and Technology Partnership Programme (SATREPS) funded by Japan is running at BDU and it supports 15 PhD scholarships; VLIR-UOS supported a joint project on Gender and Dairy. Recently the proposal *"Enhancing the quality of science and mathematics education in Ethiopia"* in partnership with Juba University and the NORHED programme (Norway) has also been successful.

22 Availability of funds for operations and maintenance of physical infrastructure at university level will be assured to some extent once the programme ends

At project level, funds will be available for operations and maintenance of physical infrastructure at university level, once the programme ends. Some projects indicated that attracting external funds would help in this respect (see further below in the project reports), since they will not have sufficient funds to maintain all activities.

2.3. Evaluation per project

2.3.1. Project 1

TITLE OF PROJECT 1: TRANSVERSAL INSTITUTIONAL STRENGTHENING PROJECT (TISP)

INTRODUCTION

Originally, the Transversal Institutional Strengthening Project (TISP) has ICT, library, laboratory, gender, extension, and English language components. Later during implementation, the Joint Steering Committee Meeting BDU-IUC Programme of 22nd March 2019 decided and moved lab component along with the budget and re-allocated to Project 2 (soil and plant lab) and Project 4 (post-harvest lab). Moreover, the extension component along with the allocated budget moved to Project 6. Corresponding to this, the project IR-1 moved to project 2 and project 4 and IR5 moved to project 5. These changes affected the original project result linkage and implementation approaches.

Before the project restructured; the activities were implemented by Social Work, Natural Resource Management (NRM), Rural Development and Extension (RDE), Chemistry, English, Chemical and Food Engineering (CFE) and units or offices (Community Service, ICT/library and Gender Directorate).

The general objective of the project is to improve research, education and community service capacities of Bahir Dar University and strengthening the role of the university as a development actor. The project has two specific objectives i.e. improve the university infrastructures and services and enhance capacities of staffs. The project has **6 intermediate results** that focus on coaching BDU to set up two high quality scientific laboratories, improving ICT infrastructure and management, integrate and strengthen information and knowledge management systems, mainstream gender in the projects and university, improve outreach and technology transfer capacities and English language centre capacity. 6 IR in P1 turned out to be overambitious. Overall, **focus lied on the information management over education, and strengthening the research and library platforms.**

Next to this, during implementation, BDU assigned 4 different South project leaders in a period of 5 years. The northern team was stable. The North project leader resigned though after it became clear that BDUs' efforts to have a focused team were not successful. Too much workload and losing interest to work and support the project activities were the major reasons. It was said that working in a project with (too) many different topics that lack coherence is quite complicated and less motivating.

FACTUAL DATA

Hosting faculty	The active units were, ICT/library and Gender Directorate and in a lesser degree Community Service and the faculty of English
Number of staff in research group	659 (but most of them not directly involved in the project)
Status of staff (fixed position, service contract, others)	All are in fixed position
Number of PhD finished/ongoing (with VLIR funding)	N/A in this project
Number of PhD finished/ongoing outside VLIR funding	N/A

Number of publications in peer reviewed journals	N/A
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EVALUATION QUESTIONS

Relevance (EQ 1 – EQ 1 – To what extent is the project relevant?)	
<p>1.1 Responds to needs</p> <p>The objectives of the project are consistent with the country (CRGE)/local needs, the needs of the university, the VLIR-UOS strategy and donor's policies</p> <p>Score: Good</p>	<p>The mechanisms of interaction with beneficiaries (students, UL members,...) of the project</p> <ul style="list-style-type: none"> – The mechanism of interaction with project beneficiaries was good. This includes video conference, IUC-websites, e-mails and meetings. – A gender policy guideline was developed. During development of the policy guideline, the project organized a workshop and made consultation with university female administrative staffs. <p>The positioning of the project within the respective departments/institutes/units: what are the needs at this level and how are these answered? What have been the dynamics in the departments so far?</p> <p>This particularly interesting for P1 (TISP) as transversal project.</p> <ul style="list-style-type: none"> – The positioning of the project within the respective departments and institutes is very important. The project developed Research Information Management System (RIMS), e-learning platform Moodle and the IUC programme website. This facilitated the teaching and learning process of the departments and institutes. – There are a lot of needs from projects and departments that required immediate response, such as a system to store and retrieve research data (a database), E-library system, techniques of mainstreaming and measuring gender and IT technical support. Having all this different kind of needs was not feasible to satisfy. – Gender policy guideline, open access policy, research management policy, opensource software platform and TOEFL test centre for English were the major dynamics promoted by the project. <p>The link of the project with the transversal themes of Belgian development cooperation (gender, environment and D4D, digitalisation for development)</p> <ul style="list-style-type: none"> – The project developed gender policy guideline directly linked with themes of Belgian development cooperation. – The project designed and promoted a video conference training system and e-learning platforms (all are paperless) that are directly linked with environment and D4D Belgian development cooperation. <p>Extent to which gender and environmental sustainability are effectively integrated in each project</p> <ul style="list-style-type: none"> – The project sustainably integrates environment because the project used and promote e-learning system (more paper less teaching). – Gender is not integrated within the project. Gender sustainability integration needs gender mainstream and measurement strategy. This can be done in the next phase.

<p>1.2 Synergy</p> <p>There have been efforts made to ensure synergy between (thematic) IUC projects (internal synergy)</p> <p>Score: Good</p>	<p>The extent to which projects P2-P5 interact in a relevant manner with the TISP</p> <ul style="list-style-type: none"> – There has been interaction with all the projects. This interaction helps to develop IUC websites and e-learning platform. <p>The extent to which crosscutting coordination/joint action/collaboration exists between projects (particularly between the thematic projects (hydro, postharvest, aquatic, socio-economic and land))</p> <ul style="list-style-type: none"> – Coordination and collaboration between projects was good. This coordination helps to conduct joint monitoring and move the project budget and intermediate results to other projects; develop gender policy guideline for the projects and set up English TOEFL center. <p>What has been done to improve internal synergies?</p> <ul style="list-style-type: none"> – The project has made a lot of effort to make internal synergy and organize and conduct different meetings project and workshops with project staffs and other projects. <p>What could be done better in the 2nd phase of the project to further improve internal synergies?</p> <ul style="list-style-type: none"> – The project recognizes the need to improve internal synergy, to conduct internal evaluation once a year, and to organize training about how to conduct seminars, workshops. – Besides, the project needs to allocate sufficient budget to ICT infrastructure and improve service. This will attract projects staffs and improve internal synergy.
<p>1.3. Synergy & Complementarity</p> <p>There have been efforts made to ensure complementarity and synergy with other (externally funded) projects/ (Belgian) development actors</p> <p>Score: Good</p>	<p>The extent to which the project is looking for synergy with other VLIR-UOS interventions in the country or at regional level</p> <ul style="list-style-type: none"> – There is evidence that shows the project is looking for synergy with other VLIR-UOS interventions. 4 ICT experts attended training on Cyber security-related attacks and Shell Scripting at Jimma University, organised in the framework of the VLIR-UOS NETWORK programme. <p>The extent to which the project is looking for synergy with projects supported by other donors, more in particular Belgian development actors</p> <ul style="list-style-type: none"> – There is no evidence that shows the project is looking for synergy with projects supported by other donors. <p>What has been done to improve external synergies?</p> <ul style="list-style-type: none"> – The project has contacted Addis Ababa University and St. Mary's University. This contact helps the university to gain experience and set up a TOEFL centre. While at the start it was considered as an exploratory task (therefore the limited budget), later it was considered by BDU project leaders as a goal by itself. This decision was made without communicating with the Belgian partners choice were made. – Furthermore, project team members participated in a workshop organized by Jimma University. – A session has been organised related to the elaboration of a video conferencing platform. This involved experience sharing with universities in the Ethiopian network as well as in Cuba.

	<p>What could be done better in the 2nd phase of the project to further improve external synergies?</p> <ul style="list-style-type: none"> – The project strategy puts emphasis on the need to increase external synergy. To this end, the project needs to organize independent ICT workshops, engage relevant stakeholders and design common program thematic areas and design a synergy plan and strategy.
<p>1.4 Coherence</p> <p>The project is coherent</p> <p>Score: Insufficient</p>	<p>There is coherence between expected results, specific objectives and the overall objective</p> <ul style="list-style-type: none"> – There was little coherence between expected results, specific objectives and overall objective. Too many IRs on different topics. As a result of this, during implementation the project moved IR1 and IR5 to other projects, without changing the overall and specific project objective. <p>The choice of activities is relevant to obtain results and objectives</p> <ul style="list-style-type: none"> – The project moved IR1 and IR5 activities to project 2 and project 5. Furthermore, the project added TOEFL test center set up activities to obtain the project intermediate Result 6. This implies that the project made activity changes and choices to fit the project results. But some choices of activities did not bring the intermediate results. For example, result 4 states that “Gender inequalities are reduced and gender is mainstreamed in all IUC projects” but there were no activities that contributed to mainstreaming gender in the IUC programme. <p>The indicators are well chosen to monitor progress and to support learning.</p> <ul style="list-style-type: none"> – The indicators are weak and not SMART to monitor the project progress. For example the project overall objective indicators are: <i>Quality of graduates increased by 25%, Papers published in high impact international journals improved by 40%, Community services activities increased by 15%</i>. Similarly the project specific objective indicators are: <i>Quality of services improved by 40% and Satisfaction of stakeholders increased by 50%</i>. It is hard to measure these indicators, this needs more time, resources and a baseline survey etc. <p>Is the formulation of the project still relevant, taking into account changes in context (such as Covid-19 but also changes in the departments, new dynamics?)</p> <ul style="list-style-type: none"> – Originally the topics were interconnected. For example, English was seen as a good topic for e-learning. But this needed a strong project leadership. All the changes on the leadership in the South have jeopardized this approach. It is very difficult to find a project leader/project coordinator who is interested, has experience to all these different components and provide technical and management support.
<p>Final judgement/comments</p> <p>Assessment by the evaluator (summary of bullet points and analysis, issues to be put in perspective):</p> <ul style="list-style-type: none"> – The project has made a lot of efforts to achieve internal synergy. But there was weak coherence between expected results, specific objectives and overall objective. – The choice of activities is relevant to obtain results and objectives, but choices of some activities are not bringing the intermediate results. 	

- The indicators are not SMART to monitor the project progress.
- The project topics may be relevant, but the complex design (many different topics) has made it very difficult to realize this project (among other reasons).

Effectiveness EQ 2 – To what extent have the project’s specific objectives been achieved (effectiveness)?

2.1 Academic

Extent to which the specific objectives of the project with regards to research and education strengthening have been realised

Score: Good

Progress in indicators developed for the specific objective at project level related at research and education strengthening of capacities and infrastructure

- For the thin-client project, two-weekly sessions were organised, involving several ICT staff of BDU. In this framework, hardware was purchased and commissioned. Unfortunately, after a few sessions, the local staff did not show interest to pursue in these regular meetings.
- It is too early to conclude, but the project is progressing towards achieving the project specific objective. The project achieved results associated with the project specific objectives. For instance, the project upgraded ICT and Library services and infrastructures and provides technical support to staff (ICT, library, language, technology transfer) and developed gender policy guideline.
- Budget allocated to some activities is small and project specific objectives associated to this activity might not fully be realized. For example, the budget allocated for infrastructure is very small and the project might not realize specific objective 1.

Progress made in gender mainstreaming and environment as cross-cutting issue at project level

- The project developed gender policy guideline but needs a gender strategy to mainstream gender elements within the project and between projects.

Factors contributing to the level of achievements at project level (both positive and negative), e.g. the influence of Covid-19

Positive contributing factors:

- IUC-BDU independent management unit; support made to project staff capacity and university leadership commitments contributed to the level of project achievements.

Hindering factors

- Covid-19; project leaders, project coordinator frequent change; limited allocation of budget against level of activities and continuous internet interruption were the major factors hindering the level of project activities.

Appreciation of progress made by respondents involved

- Many respondents appreciated the project progress, but they also suggested that the project need to work more and support other projects. For example, progress made to improve ICT infrastructure, training provided to ICT and library staffs, support made to TOEFL center needs, mainstream gender in the project needs more work and attention.

	<p>The extent to which the way forward (as specified in project self-assessments) is sufficiently geared towards the realisation of the specific objective and the overall objective.</p> <ul style="list-style-type: none"> – The original choice was to work on the different topics (English, information management, outreach and extension with ICT in support. The ICT infrastructure development was never a goal by itself. Even the major issues were on the level of internet connection, which could not be solved by a VLIR-UOS programme. – The programme delivered hardware specifically for services: two servers for the RIMS, e-learning, etc and one for the computer classes in the library. – Finally, the ICT experts who visited the ICT installations in 2018 advised explicitly to focus on the reorganization of the service and on related trainings before any new investment. These were never organized (lack of clear focus and steering).
<p>2.2. Extent to which the specific objectives of the project with regards to the contribution to the CRGE⁴ have been realised</p> <p>Score: Good</p>	<p>Progress in indicators developed for the specific objective at project level related to the contribution to the CRGE from project perspective</p> <ul style="list-style-type: none"> – The project developed a gender policy guideline that helps to integrate gender in the university research and other activities. <i>The integration of gender issues into Ethiopia's climate policy framework (CRGE) and governmental organizations depends on the extent to which gender issues are appreciated, understood, and reflected within the core processes of key government actors such as universities.</i> – Digital library and IUC website were developed by the project and share environment information and research findings. This significantly contributes to the CRGE objectives. <p>Factors contributing to the level of achievements (both positive and negative), e.g. the influence of Covid-19</p> <ul style="list-style-type: none"> – University leadership and joint collaboration with department during designing gender policy guideline were the major positive contributing factors. – The fact that two components of the projects were moved to other projects (lab component IR 1) to project 2 and the extension component (IR 5) to project 3 and 6 can be considered as positive and negative factors (positive since the moved components can be adjusted more directly to the needs of specific projects; negative because these changes took time). <p>Appreciation of external stakeholders</p> <ul style="list-style-type: none"> – Many respondents appreciate the VPN-video conference education and e-learning management system. Ministry of Science and Education and Regional Education Bureau appreciated VPN-video conference education system.

⁴ Climate Resilient Green Economy

	<p>Level of reflection with regards to existing relations and networks (maybe the 2nd phase requires new expertise or networks?)</p> <ul style="list-style-type: none"> – The level of existing relations with the projects is weak. The project network with external actors is better. The project is sharing technical skills and experience with Jimma University and Addis Ababa University. This is a good initiative but needs strategic planning.
Final judgement/comments	
<ul style="list-style-type: none"> – The project is progressing towards achieving the project specific objective. – The project developed gender policy guideline but needs gender strategy to mainstream gender elements within the project and between projects. – The project design was the major problem to effectively implement the project activities. – Many respondents appreciated the project progress, but they also suggested that the project needs to increase its activities and support other projects. – The project has limitations to realize the specific objective and the overall objective. – Digital library and IUC website developed by the project share environment information and research findings. This significantly contributes to the CRGE objectives. – The level of existing relation with the other projects is weak. The project network with external actors is better. 	

Efficiency EQ 3 – What is the level of efficiency in the project?	
<p>3.1. Intermediate results have been delivered</p> <p>Score: Insufficient</p>	<p>Level of realisation of intermediate results according to indicators formulated in the logical framework (with specific attention to the number of topics to be covered in P1 in relation to available resources).</p> <ul style="list-style-type: none"> – The project will partially achieve the project results. Results associated with ICT infrastructure due to budget limitation might not be achieved. The project not fully achieved Intermediate Result-4, because the IUC projects did not receive gender technical support from the project. <p>Factors contributing to the level of achievements (both positive and negative), for e.g. how realistic were the planned results given the resources and time available in the framework of the project?</p> <ul style="list-style-type: none"> – Some project planned results are not matching to the level of the project budget. – The time available to realize the project is considered to be sufficient. <p>Outlook towards full achievement of IR in remaining year</p> <ul style="list-style-type: none"> – The project will fully achieve part of the project results but not the results associated with ICT infrastructure.
<p>3.2. Support was provided to ensure the quality of the research and educational processes</p> <p>Score: Good</p>	<p>The project provides adequate training, support, mentoring and follow-up for students (PhD and MSc, including support in managing effects of Covid-19 on their research)</p> <ul style="list-style-type: none"> – The project provided shell scripting and cyber security to ICT experts. But these trainings were not enough. The project did not provide adequate mentoring to staffs because of frequent change of coordinator and project leaders. <p>The project provides adequate training and support for students in terms of grant writing and job searches (particularly for MSc students; PhD students are mainly university staff)</p>

	<ul style="list-style-type: none"> – There is no PhD or Msc student in this project. – The project did not provide training or support for project staffs about grant writing. <p>The project contributes to a ‘modern research culture’ as described under the rationale of efficiency</p> <ul style="list-style-type: none"> – The project is not doing research. <p>There is a clear link and interaction with IC programme to feed research results into education</p> <ul style="list-style-type: none"> – There is a clear link and interaction with the IC programme to feed research results into education because the project developed an IUC website and plans to share information and research findings. Furthermore, the project developed an e-learning platform, which will facilitate sharing research findings in the education programme. <p>lab facilities can be used for education</p> <ul style="list-style-type: none"> – Not applicable to this project <p>Appreciation of project alumni</p> <ul style="list-style-type: none"> – Not applicable to this project
<p>3.3. Relationship between means and results achieved and objectives (qualitative assessment)</p> <p>Score: Good</p>	<p>Share of missions from the partner in the North, PhD’s, trainings, investment costs and operational costs is reasonable in relation to the realisation of the intermediate results</p> <p>The Northern partners organized about 15 to 20 visits of experts to BDU and different internships in Belgium. Agreements to organize specific activities by BDU team members about the library system and the RIMS were never materialized (lack of clear focus and clear steering).</p> <p>Relevance of the expertise that was mobilised from Flemish universities and other partners</p> <ul style="list-style-type: none"> – The project contains different components that are not interrelated. It was very hard to get relevant experts that qualify and fit into the different project components. <p>Management of spending and rate of over- and/or underspending (and explanatory factors)</p> <ul style="list-style-type: none"> – The project financial management was good because there is an independent unit at BDU, responsible for managing the finance, – There is no over or under spending because the unspent budget was moved to other budget line activities. <p>Choice of activities: cost-effectiveness is being pursued in programme design and management</p> <ul style="list-style-type: none"> – The project financial management was good and cost effective, for example the project bought a server from Belgium, which is much cheaper than the local servers.
<p>3.4. Project management is conducive for efficient and effective project implementation</p>	<p>Good working relation within the project team (clear guidelines, transparency, communication flows, timeliness of planning and execution of activities, etc.)</p> <ul style="list-style-type: none"> – There is a good relation within the project team because there is clear financial guideline, financial reporting system, and progress reporting system. There were meetings and information was shared and project staffs were informed about the

<p>Score: Insufficient</p>	<p>project progress. Nevertheless, there was an underperformance of the local team because of too many changes in leadership and loss of focus.</p> <p>The extent to which the project teams can be flexible in project execution (taking into account emerging needs, challenges from the context, amongst which Covid 19)</p> <ul style="list-style-type: none"> – The project team had to be flexible considering the conditions on the ground, for example the project lab component along with the budget was re-allocated to Project 2 and Project 4. Furthermore, the extension component with the budget was transferred to Project 6. Furthermore, the project set up a TOEFL testing centres based on the university emerging needs. <p>Factors hampering efficient management have been identified timely and managed well</p> <ul style="list-style-type: none"> – Cooperation between North and South leadership was challenging. <p>Bureaucracy related to procurement (equipment purchases, travel approval...) has been managed well by the project team</p> <ul style="list-style-type: none"> – The university procurement bureaucracy is still a challenge, but the project manages to purchase ICT materials from Belgium.
<p>Final judgement/comments</p>	
<p>Assessment by the evaluator (summary of bullet points and analysis, issues to be put in perspective, identification of explanatory factors)</p> <ul style="list-style-type: none"> – The project will partially achieve the project results. – Some project planned results are not matching to the level of the project budget. – The project provided gender training to higher officials and server management, shell scripting and cyber security to ICT experts. But these trainings were not sufficient to achieve the expected results. – The university procurement bureaucracy is still a challenge, but the project manages to purchase ICT materials from Belgium. – Overall cooperation between Belgium and the South leaders was challenging and jeopardized the progress and choices made. 	

<p>Sustainability EQ 4 – To what extent will the project results continue after the IUC programme is completed (sustainability)?</p>	
<p>4.1 Institutional</p> <p>Level of academic and institutional sustainability</p> <p>Score: Good</p>	<p>Level of (personal) commitment of stakeholders within the department/school concerned</p> <ul style="list-style-type: none"> – The level of commitments of departments/university is good, for example the university purchased 25 chairs, 24 headsets and 25 tables from the university's internal budget. <p>Measures taken for retention of PhDs and trained staff</p> <ul style="list-style-type: none"> – The project provided training to ICT staffs but there is no measure to retain these staffs. <p>joint research interests for both the Northern and Southern academics involved, are identified and pursued</p> <ul style="list-style-type: none"> – There is no research in the project.

	<ul style="list-style-type: none"> – The northern experts proposed to use the project as a start up around research information management where the ICT staff and other staff could be involved. This is progressing (but slowly). <p>Evolution in networking with other national universities</p> <ul style="list-style-type: none"> – There are some initiatives with Jimma university but networking with other universities was initially not planned and started.
<p>4.2 Financial</p> <p>Level of financial sustainability</p> <p>Score: Good</p>	<p>Allocation of funds by Flemish universities (e.g. giving fellowships or by allowing academics to go to the field, matching funds)</p> <ul style="list-style-type: none"> – This question is not applicable to this project. <p>Availability of funds for operations and maintenance of physical infrastructure at university/college level</p> <ul style="list-style-type: none"> – The project is committed to allocate operations and maintenance cost because the university leadership gave due attention to support the project activities, has plan and strategy to strengthen the TOEFL center, E-learning system. <p>Availability of proper funds (at university or college level) to continue all or a number of activities that are important/relevant</p> <ul style="list-style-type: none"> – There will be a budget to continue the project activities: the university senate wants to endorse and implement gender guideline, plan to effectively implement a TOEFL center in the region and allocate budget to strengthening the ICT infrastructure. <p>Capacity for resource mobilisation to build on the achievements (Strategy and initiatives to attract external funding (from other donors, government, private sector, ...), skills of staff, task division for resource mobilisation, networks, ...)</p> <ul style="list-style-type: none"> – There is limited skill and experience for resource mobilization at all level. <p>Development of business approaches towards financing</p> <ul style="list-style-type: none"> – The project developed business approaches towards financing the ICT department, for example the project developed a Video conference learning system for the Regional Education Bureau and other universities.
Final judgement/comments	
<p>Assessment by the evaluator (summary of bullet points and analysis, issues to be put in perspective, identification of explanatory factors)</p> <ul style="list-style-type: none"> – The level of commitments of departments/university was good so far. – The project provided training to ICT staffs but there is no measure to retain these staffs. – The project is committed to allocate operation and maintenance costs once the programme stops. There will be an internal budget allowing to continue the project activities. – There are limited skills and experience for resource mobilization at all level. – The project developed business approaches towards financing the ICT department. 	

2.3.2. Project 2

Title of project: Land Resilience

INTRODUCTION

The overall objective of the project is building land resilience in NW Ethiopia to strengthen the environment and ecosystem services. The project specific objectives focus on assimilate and integrate knowledge on present and past environmental dynamics and strengthen the research and outreach capacity on land resilience. The project has 6 intermediate results connected to research on land degradation, spatio-temporal sedimentation, terrestrial ecology (birds) and forest improving the capacity of BDU and relevant stakeholders. The project is implemented by different departments and managed by an independent support unit established by North and South partners. During execution of the project there was no significant change from the original development implementation plan and approach.

FACTUAL DATA

Hosting faculty	Department of Natural Resource Management
Status of staff (fixed position, service contract, others)	Fixed
Number of PhD finished/ongoing (with VLIR funding)	3
Number of PhD finished/ongoing outside VLIR funding	0
Number of publication in peer reviewed journals	3

EVALUATION QUESTIONS

Relevance (EQ 1 – EQ 1 – To what extent is the project relevant?)	
<p>1.1. Responds to needs</p> <p>The objectives of the project are consistent with the country (CRGE)/local needs, the needs of the university, the VLIR-UOS strategy and donor's policies</p> <p>Score: Excellent</p>	<p>The mechanisms of interaction with beneficiaries of the project</p> <ul style="list-style-type: none"> – The project sufficiently interacts with project beneficiaries. – The project interacts with project beneficiaries through meetings, emails, workshops, enumerators and model farmers. <p>The extent to which advice and indigenous knowledge from communities is sought and taken into account in the research</p> <ul style="list-style-type: none"> – The project consulted the local community and used advice and indigenous knowledge. The research focuses on restoration and use of church forest that are protected and conserved by the local community and church leaders. <p>The extent to which there is sufficient focus towards rural communities and autochthonous people in the Beles basin</p> <ul style="list-style-type: none"> – The project has been very relevant and focuses on the community felt need. The relevance of the project is highly appreciated by community involved. Agriculture production is extremely low due to poor soil fertility and land degradation. The project conserves forest in the church, this conservation improved biodiversity in the area. <p>Relevance of research findings for external stakeholders</p>

	<ul style="list-style-type: none"> – In general, the project has been very relevant to external stakeholders. One of the main goals of the project is providing scientific research on land degradation management and forest conservation techniques. Major stakeholders participated in the project formulation and validated the relevance of the research objectives. – Discussion with stakeholders proved that, the major constraints are the lack of scientific data and research findings about the cause and management of land degradation. The project provides scientific information/data and delivers solutions. <p>The positioning of the project within the respective departments/institutes/units: what are the needs at this level and how are these answered? What have been the dynamics in the departments so far? This is particularly interesting for P1 (TISP) as transversal project.</p> <ul style="list-style-type: none"> – The positioning of the project within the respective departments was satisfactory. The project shares data and lab facilities with other departments. Moreover, the project implements the research activities in the same area as other projects and departments; this provides the project to share resources and technical advice with other departments/units and projects. <p>The link of the project with the transversal themes of Belgian development cooperation (gender, environment and D4D, digitalisation for development)</p> <ul style="list-style-type: none"> – The project is relevant to the transversal themes of the Belgian development cooperation. The theme of environment (forest and land degradation) is evidently addressed in the project. – Consultation with respondents proved that attention was paid to gender (2 female predoc), but no real gender integration has been taken place so far in this project (or any other project of the programme). – There is no evidence that shows the project design and implementation was linked to D4D, the project is not well linked with P1 and developed data management system for monitoring. <p>Extent to which gender and environmental sustainability are effectively integrated in each project</p> <ul style="list-style-type: none"> – Conditions are in place to support environmental sustainability. – There is no sign how gender is integrated in the project besides of the female predoc, there is no strategy and approach.
<p>1.2. Synergy</p> <p>There have been efforts made to ensure synergy between (thematic) IUC projects (internal synergy)</p> <p>Score: Good</p>	<p>The extent to which projects P2-P5 interact in a relevant manner with the TISP</p> <ul style="list-style-type: none"> – There is no evidence that shows that the project effectively interacts in a relevant manner with the TISP. <p>The extent to which crosscutting coordination/joint action/collaboration exists between projects (particularly between the thematic projects (hydro, postharvest, aquatic, socio-economic and land))</p> <ul style="list-style-type: none"> – The project has collaborated with other projects during selection of PhD candidates, joint monitoring (every quarter), joint financial management and procurement.

	<ul style="list-style-type: none"> – The project jointly collects and share data for example P2 shares socio-economic data with P6 and made joint analyses. Similarly, P2 shares sedimentation data with P4 and made joint analyses. <p>The extent to which joint research between projects lead to (spinoff) master theses or paper publications</p> <ul style="list-style-type: none"> – There is no evidence that shows the project has already led to spinoff effects like master theses or join publications. <p>What has been done to improve internal synergies?</p> <ul style="list-style-type: none"> – The project shares data with other projects. – Every quarter the project realizes joint monitoring. – The project research activities are implemented in the same watershed with other projects. This supports researchers to use the same enumerators and logistics which allows for synergies. <p>What could be done better in the 2nd phase of the project to further improve internal synergies?</p> <ul style="list-style-type: none"> – There is a need to plan and conduct internal evaluations (once a year) in addition to excursion or joint monitoring. – The project needs to develop a synergy plan with clear roles and responsibilities. – During selection of research topics more discussion is required. The research topic needs to attract interest of other units/departments.
<p>1.3. Synergy & Complementarity</p> <p>There have been efforts made to ensure complementarity and synergy with other (externally funded) projects/ (Belgian) development actors</p> <p>Score: Insufficient</p>	<p>The extent to which the project is looking for synergy with other VLIR-UOS interventions in the country or at regional level.</p> <ul style="list-style-type: none"> – There is no evidence that shows the project is looking for synergy with other VLIR-UOS interventions in the country or at regional level. – Attempts were not made (yet) to look for synergy with VLIR-UOS interventions in the country. – Synergies related to church forest protection. These involve Colgate University in the US, and the Ethiopian Orthodox church. <p>The extent to which the project is looking for synergy with projects supported by other donors, more in particular Belgian development actors</p> <ul style="list-style-type: none"> – There is no evidence that shows the project is looking for synergy (yet) with projects supported by other donor and Belgian development actors <p>What has been done to improve external synergies?</p> <ul style="list-style-type: none"> – The synergy with the other donors and Belgian development actors is non-existent so far, mainly because of lack of capacity, time and resources. <p>What could be done better in the 2nd phase of the project to further improve external synergies?</p> <ul style="list-style-type: none"> – The project team needs to develop a more collaborative culture. – Develop a data sharing system and protocols. – Develop a synergy strategy with sufficient budget.
<p>1.4. Coherence</p>	<p>There is coherence between expected results, specific objectives and the overall objective</p>

<p>The project is coherent</p> <p>Score: Good</p>	<ul style="list-style-type: none"> – The project intervention logic and result chain i.e. expected results, specific objectives and overall objectives are coherent. <p>The choice of activities is relevant to obtain results and objectives</p> <ul style="list-style-type: none"> – The choice of activities is appropriate to realize the project expected results: the activities contribute to the project results and specific objective + there was no major activity change during the project implementation time. – During project meetings and joint monitoring time the choice of project activities were validated with the results. <p>The indicators are well chosen to monitor progress and to support learning.</p> <ul style="list-style-type: none"> – Overall, the project indicators are SMART and disaggregated by gender. But some indicators need revision, for example, “Number of technical reports and extension manuals” and “Number of trainings, workshops and reach” are not a good indicator for the project specific objective 2 that focus on strengthening the research capacity and outreach. This objective needs higher level indicators. <p>Is the formulation of the project still relevant, taking into account changes in context (such as Covid-19 but also changes in the departments, new dynamics?)</p> <p>To a certain extent the project design and formulation is relevant because:</p> <ul style="list-style-type: none"> – It must be acknowledged that the project formulation is still relevant. Recently the project team reviewed the overall project formulation, approach and implementation including the effect of Covid-19. It was concluded that the project is going well and will be completed according to the project operational plan. – It is justified that the time taken for the project formulation was limited and the project did not involve many actors. This needs attention in the next phase.
<p>Final judgement/comments</p> <ul style="list-style-type: none"> – The project sufficiently interacts with project beneficiaries. – The project consulted the local community and used advice and indigenous knowledge. – The project has been very relevant so far and focuses on the communities' needs. – In general, the project has been very relevant to external stakeholders. – The project is relevant to the transversal themes of the Belgian development cooperation. Attention is paid to gender, but no specific actions are known by the evaluators. – Conditions are in place to support environmental sustainability. There is no sign how gender is integrated in the project. – There is no evidence that shows that the project effectively interacts in a relevant manner with the TISP. – The project collaborates and realizes joint action with others. – There is no evidence that shows the project leads already to spinoff effects like to master theses or joint publications. – There is no evidence that shows that the project is looking for synergy with other VLIR-UOS interventions in the country or at regional level. 	

- There is no evidence that shows the project is looking for synergy with projects supported by other donors (Belgian development actors).
- The project intervention logic is coherent. The choice of activities is appropriate to realize the project expected results.
- Overall, the project indicators are SMART and disaggregated by gender. But some indicators need revision.
- The project formulation is still relevant.

Effectiveness EQ 2 – To what extent have the project’s specific objectives been achieved (effectiveness)?

2.1 Academic

Extent to which the specific objectives of the project with regards to research and education strengthening have been realised

Score: Good

Progress in indicators developed for the specific objective at project level related at research and education strengthening of capacities and infrastructure

- The project is advancing to attain the specific objective. The project improved its research infrastructure, collects and compiles research data, PhD students and MSc attended trainings, research publications were made and some are going well.

Progress made in gender mainstreaming and environment as cross-cutting issue at project level

- The project paid attention to gender but no specific actions are known by the evaluators. The project provides an opportunity for women to become involved in PhD and MSc program, (of the 3 PhD 1 is female and of the 5 MSc students none is female).
- The research findings support women but there is no mechanism how to integrate and capture gender in the project execution and outreach.
- With the purpose of preserving natural forests and rehabilitate land degradation the project mainstreams environment in its activities.

Factors contributing to the level of achievements at project level (both positive and negative), e.g. the influence of Covid

- IUC-BDU independent support unit, the project staff commitment, team work and North support are the major positive contributing factors.
- Covid-19 slightly affected the project implementation, limiting North to South travel and organization of internal meetings and workshop.

Appreciation of progress made by respondents involved

- Progress towards the achievement of the specific objectives is promising. Many respondents highly appreciated the project progress. They are expecting the research findings and plan to design a development project/programme.

The extent to which the way forward (as specified in project self-assessments) is sufficiently geared towards the realisation of the specific objective and the overall objective.

- The project has appropriately been designed to be able to realize the project objectives. Because the project identified key issues, developed a solid implementation plan and allocated sufficient budget.

<p>2.2. Extent to which the specific objectives of the project with regards to the contribution to the CRGE have been realised</p> <p>Score: Good</p>	<p>Progress in indicators developed for the specific objective at project level <u>related to the contribution to the CRGE from project perspective</u></p> <ul style="list-style-type: none"> – The project is progressing well towards for the contributing to the nation CRGE program. CRGE initiative follows a sectoral approach and has so far identified and prioritised more than 60 initiatives. The initiative plan addresses improving crop and livestock production practices for higher food security and farmer income while reducing emissions and protecting and re-establishing forests for their economic and ecosystem services, including carbon stocks. The project contributes to further strengthening these initiatives. <p>Factors contributing to the level of achievements (both positive and negative), e.g. the influence of Covid-19</p> <ul style="list-style-type: none"> – University leadership commitment and support, the team capacities are major positive contributing factors. North project leader is senior, highly experienced and committed, his contribution is immense. The South project leader is also senior, there was no staff turnover. These elements significantly contribute to the project achievement. – Covid-19 caused some delays but not significantly. – The project lengthy procurement procedures delayed some of the project activities, for instance the purchase of local materials. <p>Appreciation of external stakeholders</p> <ul style="list-style-type: none"> – From the interviews with external stakeholders, it was learned that stakeholders appreciate the project objective and activities towards its contribution to the CRGE. But in the future, they want to increase their engagement. <p>The extent to which the way forward (as specified in project self-assessments) is sufficiently geared towards the realisation of the specific objective and the overall objective.</p> <ul style="list-style-type: none"> – The project developed communication and discussion mechanisms for informing policy direction and outreach activities. <p>Level of reflection with regards to existing relations and networks (maybe the 2nd phase requires new expertise or networks?)</p> <ul style="list-style-type: none"> – The project internal relationship was good; there is also a good relationship and guidance from the North partners. – External relationship with stakeholders was weak to some extent. – Attempt are made to establish a network with AMU. But there is no initiative and plan to establish a strong network with external actors. – The project needs to plan networking mechanism. Project staffs need to improve skills for creating network with others.
<p>2.3Scientific quality</p> <p>Score: Excellent</p>	<p>What information is available about <u>quality of research</u> (e.g. publications) and <u>education</u> (e.g. fellowships received from foundations, job prospects for alumni)</p> <ul style="list-style-type: none"> – The project has realized 3 publications. – The publication was accepted in referred journals after passing lengthy process and research quality checks.

	<ul style="list-style-type: none"> – One of the PhD students got a fellowship grant from IFS (International Fund for Science) <p>Does the project refer to ‘cutting edge’ knowledge and what evidence is the project referring to?</p> <ul style="list-style-type: none"> – The project has brought new knowledge: sediment Isotope classification, source of sediment identification, bird sound recording, and identification are new approaches and scientific knowledge in the university. The research findings will also bring new research ideas for the future. <p>Are there clear examples of <u>quality</u>:</p> <ul style="list-style-type: none"> – Sediment classification is a good example of quality of the research because the data collection and analysis system were supported by high lab facilities and skills from the North. <p>What are issues of concern according to you in relation to scientific quality?</p> <ul style="list-style-type: none"> – There is no major concern because some research papers are published.
Final judgement/comments	
<ul style="list-style-type: none"> – The project is advancing to attain the specific objective. – The project paid attention to gender but no specific actions are known by the evaluators. – The research findings support women but there is no mechanism on how to integrate and capture gender in the project execution and outreach. – IUC-BDU independent support unit, the project staffs commitment, the team work and North support are the major positive contributing factors. – The project has appropriately been designed to realize the project objectives. – The project is progressing well in contributing to the nation CRGE program. – Stakeholders appreciate the project objective and activities towards its contribution to the CRGE. – The project internal relationship was good. External relation with stakeholders was weak. – There is an attempt to establish a network with AMU. But there is no initiative and plan to establish strong network with external actors. – The project has made 3 publications. – The project has brought new knowledge that strengthens the university research capacities, related to the project’s topic. 	

Efficiency EQ 3 – What is the level of efficiency in the project?	
<p>3.1. Intermediate results have been delivered</p> <p>Score: Excellent</p>	<p>Level of realisation of intermediate results according to indicators formulated in the logical framework (with specific attention to the number of topics to be covered in P2 in relation to available resources)</p> <ul style="list-style-type: none"> – The project is progressing well towards achieving the project intermediate results, because research infrastructure purchased and lab facilities has improved, PhD's and MSc students received training. <p>Factors contributing to the level of achievements (both positive and negative), for e.g. how realistic were the planned results given the resources and time available in the framework of the project?</p>

	<ul style="list-style-type: none"> – The project design, planned results, the resource and time allocated for realizing the project results were realistic. – The project activities are implemented according to the project plan. – Project intermediate results not changed from the original plan. – Program Support Unit, North follow up and technical assistance, university leadership commitment and support, PhD student commitment and having senior project leaders are the key positive contributing factors. <p>Outlook towards full achievement of IR in remaining year</p> <ul style="list-style-type: none"> – The project will achieve the project intermediate results within the project period. Because there is sufficient budget, the research activities are going well, the university leadership committed and IUC-DBU independent office has capacity to facilitate and monitor the project progress.
<p>3.2. Support was provided to ensure the quality of the research and educational processes</p> <p>Score: Excellent</p>	<p>The project provides adequate training, support, mentoring and follow-up for students (PhD and MSc, including support in managing effects of Covid-19 on their research)</p> <ul style="list-style-type: none"> – PhD and MSc students received the required training and support. In some cases, North advisors did not review and provide input to PhD on time. This discourages a PhD student and affects follow up activities. <p>The project provides adequate training and support for students in terms of grant writing and job searches (particularly for MSc students; PhD students are mainly university staff)</p> <ul style="list-style-type: none"> – During project formulation, North partners shared their experience and provided a project proposal writing training. – During the project implementation period, project staff and students did not receive grant writing and job searches training. – Grant writing training is very crucial to outreach the research findings and fully realize the project overall objective. <p>The project contributes to a ‘modern research culture’ as described under the rationale of efficiency</p> <ul style="list-style-type: none"> – The project significantly contributed to a modern research culture because new ways of data collection such as sediment isotope classification were introduced in the research process. <p>There is a clear link and interaction with IUC programme to feed research results into education</p> <ul style="list-style-type: none"> – The initiative was taken to link the project with the IC program, for example project-1 had developed an e-learning platform for sharing the project research findings into education program. But this link is not so strong as it was planned. This needs attention in the next phase. <p>Lab facilities can be used for education</p> <ul style="list-style-type: none"> – The lab facilities are used for education purposes, but this could still be further expanded. The university has no sufficient lab technician to fully utilize lab facilities for education purposes.

<p>3.3. Relationship between means and results achieved and objectives (qualitative assessment)</p> <p>Score: Excellent</p>	<p>Share of missions from the partner in the North, PhD's, trainings, investment costs and operational costs is reasonable in relation to the realisation of the intermediate results</p> <ul style="list-style-type: none"> – The share of the North partner was effective and contributes a lot in realizing the project results/ – It is very hard to conclude the share of budget because they are responsible for the investment cost, but their contribution was vital, especially during designing of the research, training and mentoring students. <p>Relevance of the expertise that was mobilised from Flemish universities and other partners</p> <ul style="list-style-type: none"> – Expertise mobilized from Flemish universities is very relevant, competent and highly experienced; because of this expertise, the research activities are going well and some students made already a publication. <p>Management of spending and rate of over- and/or under spending (and explanatory factors)</p> <ul style="list-style-type: none"> – The project receives support from an IUC independent support unit, the unit efficiently manages the budget and there is no significant over or underpinning. – The project leaders are seniors and follow up the budget very effectively. – Regular meetings are conducted to monitor the budget plan and expenditure, if there is excess budget the management shifts it to other projects within the budget shift limit. <p>Choice of activities: cost-effectiveness is being pursued in programme design and management</p> <ul style="list-style-type: none"> – The project uses a financial manual developed by the program, payments are usually made based on local prices for example enumerator fee and PhD student allowance. The project has used the programme mileage system. All these helps to use the budget efficiently with a reasonable cost.
<p>3.4. Project management is conducive for efficient and effective project implementation</p> <p>Score: Excellent</p>	<p>Good working relation within the project team (clear guidelines, transparency, communication flows, timeliness of planning and execution of activities, etc.)</p> <ul style="list-style-type: none"> – There is a smooth working relationship and close collaboration within the project teams, for example during data collection the project teams use the same car, same enumerators (the extent possible), and made joint monitoring. – The project proposal, financial management guidelines, the operational plan, reporting formats, budget and expenditures shared within the project team. This creates a good working relationship, and transparency and execution of the project on time. – The existence of a good relationship within the project and a good working environment, support from the project leader and the North partner were key to the success of the project. <p>The extent to which the project teams can be flexible in project execution (taking into account emerging needs, challenges from the context, amongst which Covid 19)</p>

	<ul style="list-style-type: none"> – The project team is flexible in project execution, for example workshops can be postponed due to Covid-19. <p>Factors hampering efficient management have been identified timely and managed well</p> <ul style="list-style-type: none"> – The project team, especially IUC-BDU independent support unit identified problems on time and made action, for example the management decided to purchase lab facilities from Belgium after identifying the university lengthy procurement process, so that the research activities could be implemented on time; an additional car was purchased after the project team identified the need to frequently travel to the research sites. <p>Bureaucracy related to procurement (equipment purchases, travel approval...) has been managed well by the project team</p> <ul style="list-style-type: none"> – It is hard to change and manage the university procurement system; the project purchased lab facilities and materials from Belgium since these were cheaper and easier to purchase in Belgium.
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Final judgement/comments

- The project is progressing well towards achieving the project intermediate results.
- The project design, planned results, the resources and time allocated for realizing the project results were realistic.
- PhD and MSc students received the required training and support.
- In some cases, North advisors did not review and provide input to PhD on time. This discourages PhD student and affect follow up activities.
- During project formulation, North partners share their experience and provide project proposal writing training.
- The project significantly contributes to a modern research.
- There is an initiative to link the project with IUC programme, but this link is not so strong as it was planned.
- The lab facilities are used for education purpose, but facilities are not fully utilized.
- The share of the North partner is cost-effective and contributes a lot in realizing the project results.
- The project has an IUC independent support unit, the unit efficiently manages the budget and there is no significant over or underpinning.
- There is a smooth working relationship and close collaboration within the project team.
- The project team, especially IUC-BDU independent support unit identifies problems on time and undertakes action

Sustainability EQ 4 – To what extent will the project results continue after the IUC programme is completed (sustainability)?

4.1 Institutional

Level of academic and institutional sustainability

Level of (personal) commitment of stakeholders within the department/school concerned

- Stakeholders commitments within the department is strong, for example project leaders are working almost with no incentives, departments assist PhD student during data collection.

Measures taken for retention of PhDs and trained staff

<p>Score: Good</p>	<ul style="list-style-type: none"> – The PhD students made an agreement with the university to work for 8 years. After graduation, they will engage more on research activities, realize publications. These are good incentives. <p>joint research interests for both the Northern and Southern academics involved, are identified and pursued</p> <ul style="list-style-type: none"> – The research topics were selected in close consultation and discussion with North and South. But to a certain extent North partners influence and dictates the research topics selection process. – In the next phase, North partners shall involve in providing more technical advice than participating in and influencing the research topic selection process. – In the next phase, research topics selection needs more time and discussion. So far, the project did not identify and pursued research topics for phase II. <p>Evolution in networking with other national universities</p> <ul style="list-style-type: none"> – There was no network established with a national university. But there were initiatives with AMU and Jima university for sharing experiences.
<p>4.2. Financial</p> <p>Level of financial sustainability</p> <p>Score: Good</p>	<p>Allocation of funds by Flemish universities (e.g. giving fellowships or by allowing academics to go to the field, matching funds)</p> <ul style="list-style-type: none"> – Except the VLIR-UOS fund for the IUC program, there is no fund from other Flemish universities. – Flemish universities provide allowance and fund to North MSc students to conduct research in the field. <p>Availability of funds for operations and maintenance of physical infrastructure at university/college level</p> <ul style="list-style-type: none"> – The university allocates sufficient budget for operations and maintenance of lab facilities, for example currently the university allocates budget for soil lab renovation. Besides, the university allocates budget to recruit a lab technician. <p>Availability of proper funds (at university or college level) to continue all or a number of activities that are important/relevant;</p> <ul style="list-style-type: none"> – The project has sufficient budget to complete the remaining activities. But the university did not design an outreach and sustainability strategy (yet) to realize the project overall objectives and to continue the related activities after the project ended. <p>Capacity for resource mobilisation to build on the achievements (Strategy and initiatives to attract external funding (from other donors, government, private sector, ...), skills of staff, task division for resource mobilisation, networks, ...)</p> <ul style="list-style-type: none"> – The project capacity to mobilize resources to build upon the achievement of the project results is (still) limited. There is limited capacity for grant proposal writing, establishing networks and attract and engaged different stakeholders. <p>Development of business approaches towards financing</p> <p>Not yet developed.</p>

Final judgement/comments
<ul style="list-style-type: none">– Stakeholders' commitments within the department are strong,– The research topics were selected in close consultation and discussion between North and South. But to a certain extent North partners influence and dictate the research topics selection process,– There was no network established with a national university.– Except VLIR-UOS funding for the IUC program, there is no funding from Flemish universities.– The university allocates sufficient budget for operations– The project has sufficient budget to complete the remaining activities.– The project capacity to mobilize resource to build on the achievement of the project results is still limited.

POINTS OF ATTENTION FOR THE FUTURE

- Incentives are required for local co-promoters
- Selection of topics, thematic research area needs discussion with wider university community/departments
- Support made to lab facilities was good but needs training of lab technicians about how to use the lab facilities (among other measures to improve sustainability of the use and maintenance of laboratory services)
- **The research approach created high expectations at the community level; consequently, the project needs to find ways to implement the research findings. The community is expecting the research findings. If not, it could be difficult to do field-based research in the future.**

2.3.3. Project 3

TITLE OF PROJECT-3: WATER MANAGEMENT AND ITS IMPLICATIONS TO THE HYDRO-SYSTEM IN THE TANA-BELES AREA, UPPER BLUE NILE BASIN (HYDRO(GEO)LOGY

INTRODUCTION

The general objective of the project is to contribute for equitable, efficient and sustainable water management in Tana-Beles basins. The project has two specific objectives i.e. generate and disseminate knowledge on hydro(geo)logy and upgrade research capacity. To realize these specific objectives, the project has seven intermediate results that focus on improving knowledge on the water balance of Tana basin and Beles basin, improving water productivity in agriculture, contribute for sustainable water management, disseminating the research findings and improving human capacity. The project is implemented by the department of Water Resources Engineering, the department of Natural Resources Management (NARM) and Earth Sciences, involving Project leaders and team members from North, South and other relevant actors.

During implementation, there were no major changes related to project approaches and results. But there were few changes on some activities, for instance the synoptic metrological station installation activity was not realized. As a replacement, the project purchased thermometers /rain gauges and collected the necessary data.

FACTUAL DATA

Hosting faculty	Bahir Dar University, Department of Water Resources Engineering, Earth Science Department, NARM
Status of staff (fixed position, service contract, others)	Fixed
Number of PhD finished/ongoing (with VLIR funding)	3
Number of PhD finished/ongoing outside VLIR funding	0
Number of publication in peer reviewed journals	1

EVALUATION QUESTIONS

Relevance (EQ 1 – EQ 1 – To what extent is the project relevant?)	
1.1. Responds to needs The objectives of the project are consistent with the country (CRGE)/local needs, the needs	The mechanisms of interaction with beneficiaries of the project – The project communication interaction was strong. Emails, face to face discussions, regular meetings, workshops and excursion were the major communication mechanisms. – Especially the water use and soil improvement demonstration sites were the major communication mechanism with communities for collecting their feedbacks. The extent to which advice and indigenous knowledge from communities is sought and taken into account in the research

of the university,
the VLIR-UOS
strategy and do-
nor's policies

Score: good

– The research process considered advice and indigenous knowledge from the community, for example researchers use farmers' agronomic practices experience and advices for making water use and soil improvement experimental plots.

– During monitoring ground water level, farmers' advices and indigenous knowledge were consulted and included in the research data.

The extent to which there is sufficient focus towards rural communities and autochthonous people in the Beles basin

– Efficient and fair utilization of water resource in the Beles basin are the major priorities because there is 7000Ha irrigable area in the Koga Basin but due to poor water management only 5000Ha is cultivated. The research findings will find ways for effective utilization of water for the whole irrigable area.

– Scientific ways of ground water monitoring techniques and looking after water quality testing also respond to the major community needs identified during the survey period. The research responds to this need.

– Nevertheless, the needs of the indigenous Gumuz community that occupies the major part of the basin seem to be neglected. Research only addresses the settler's needs.

Relevance of research findings for external stakeholders

– The project is relevant to external stakeholders. There are many water resource developments initiatives in the basin (i.e. Tana Beles irrigation and Hydropower, Koga irrigation etc.) implemented by different stakeholders (water office, irrigation office, hydro power office etc). These stakeholders need to know the "Water Balance" in the basin and implement sustainable water management system. The research findings respond to this need.

The positioning of the project within the respective departments/institutes/units: what are the needs at this level and how are these answered? What have been the dynamics in the departments so far?

This particularly interesting for P1 (TISP) as transversal project.

– The positioning of the project within the respective departments is very vital. Water research and study is one of the university excellence areas. The project collects and compiles data such as water discharge. Other departments like NRM uses the water discharge rate.

The link of the project with the transversal themes of Belgian development cooperation (gender, environment and D4D, digitalisation for development)

– Belgian development cooperation themes are aligned with the project; the project is strongly linked with environmental issues, gender and D4D. The project responds to efficient utilization of water which is linked to environment requirement.

– The research compiles and applies improved techniques of data collection and analysis (used thermometer, rain gages data). This data help for project monitoring and outreach.

– Water research is highly related to gender, research findings related to measuring water balance, testing water quality, monitoring ground level, all respond to gender need.

	<p>Extent to which gender and environmental sustainability are effectively integrated in each project</p> <ul style="list-style-type: none"> – The project integrates environmental sustainability. – A female pre-doc was selected and started abridged 1-year MSc programme in Belgium but disappeared after the first semester.
<p>1.2. Synergy</p> <p>There have been efforts made to ensure synergy between (thematic) IUC projects (internal synergy)</p> <p>Score: Good</p>	<p>The extent to which projects P2-P5 interact in a relevant manner with the TISP</p> <ul style="list-style-type: none"> – The extent to which the projects interact in a relevant manner with the TISP is weak, there is no evidence. Besides, there is no strategy to link with TISP in the next phase. <p>The extent to which crosscutting coordination/joint action/collaboration exists between projects (particularly between the thematic projects (hydro, postharvest, aquatic, socio-economic and land))</p> <ul style="list-style-type: none"> – There was strong collaboration and joint action between projects: there was cooperation for data sharing (discharge rate data) with project 5. Project 3 measures discharge rate and shares findings with project 5. Similarly, Project 6 shares socio-economic data with project 3. – There is joint monitoring of the research activities. In fact, this is done once and needs improvement. – Project 3 is working with Project 5 and plans a publication document. – During field data collection, and enumerators training, the project cooperates and works together with project 5. <p>The extent to which joint research between projects leads to (spinoff) master theses or paper publications</p> <ul style="list-style-type: none"> – The project research activity leads to a master theses paper; from hydrology PhD student data and preliminary results, a new MSc research topic (water logging effect on irrigation) came out and was conducted. An MSc thesis (University of Gent) was conducted on the hydrogeology of Gilgel Abbay catchment. – Similarly, from PhD research on dealing with water productivity in Koga irrigation, a MSc master thesis dealing with soil fertility was produced. <p>What has been done to improve internal synergies?</p> <ul style="list-style-type: none"> – Joint workshops, meetings, excursion were conducted in different periods. – Onsite demonstrations were developed, field days were organized. <p>What could be done better in the 2nd phase of the project to further improve internal synergies?</p> <ul style="list-style-type: none"> – More resources should be allocated, synergy should be included in the project plan, clear meaning and responsibility of synergy need to be communicated and discussed.
<p>1.3. Synergy & Complementarity</p> <p>There have been efforts made to ensure complementarity and</p>	<p>The extent to which the project is looking for synergy with other VLIR-UOS interventions in the country or at regional level</p> <ul style="list-style-type: none"> – There was a strong interaction with the VLIR-UOS TEAM-project “Hydrogeological framework of Lake Tana Basin” (Kristine Walraevens/Fenta Nigate), which ended last year, and which transferred its meteo and groundwater monitoring networks to the Hydrogeology project of BDU-IUC.

<p>synergy with other (externally funded) projects/ (Belgian) development actors</p> <p>Score: Good</p>	<p>The extent to which the project is looking for synergy with projects supported by other donors, more in particular Belgian development actors</p> <ul style="list-style-type: none"> – The project has not yet started looking support from other donors, but has already attracted a private company i.e. Koga Veg. Company (a Belgian company working in vegetable production). <p>What has been done to improve external synergies?</p> <ul style="list-style-type: none"> – At field level the project works in close coordination with Koga Vege. Company. – Face to face discussions, workshops, field visits and monitoring were made with different offices such as Abay Basin Office, Koga irrigation project office. <p>What could be done better in the 2nd phase of the project to further improve external synergies?</p> <ul style="list-style-type: none"> – It is highly recommended to engage stakeholders during the formulation of the project, so that the stakeholder's interest will be included in the project. As a result, they will actively participate in the project implementation process. Stakeholders, such as water authorities, have been involved during project formulation, through interaction with individual project members.
<p>1.4.Coherence</p> <p>The project is coherent</p> <p>Score: Good</p>	<p>There is coherence between expected results, specific objectives and the overall objective</p> <ul style="list-style-type: none"> – The expected results, specific objectives and overall objective are coherent. – The project was well designed because the university has a lot of expertise in the thematic area. <p>The choice of activities is relevant to obtain results and objectives</p> <ul style="list-style-type: none"> – The project activities are relevant and will lead to the expected objective. <p>The indicators are well chosen to monitor progress and to support learning.</p> <ul style="list-style-type: none"> – The indicators are weak and not SMART to measure the project high level results. – The project specific objective 2 (upgrade research capacity) indicators (i.e. new PhDs, MSc and female predoc indicators) only capture training results and missed support made related to lab facilities and other. <p>The project specific objective 1(generate and disseminate knowledge on hydro(geo) has only one indicator (i.e. number of farmers that start to implement the communicated new water use guidelines). This indicator misses to measure the project effect on other key stakeholders.</p> <p>Is the formulation of the project still relevant, taking into account changes in context (such as Covid but also changes in the departments, new dynamics?)</p> <ul style="list-style-type: none"> – The project is still relevant and not affected by internal or external factors influencing the project implementation, such as Covid-19 and changes in the university system.
<p>Final judgement/comments</p> <ul style="list-style-type: none"> – The project communication interaction is strong. – The research process considers advice and indigenous knowledge from the community. – Nevertheless, the needs of the indigenous Gumuz community that occupies the major part of the basin seem to be neglected. Research only addresses the settler's needs. – The project is relevant to external stakeholders. 	

- The positioning of the project within the respective departments is very vital.
- Belgian development cooperation themes are aligned with the project.
- The project sustainability integrates environment, but the evaluator did not identify evidence that shows the project sustainability integrates (mainstream) gender in the project.
- The extent to which the project interacts in a relevant manner with the TISP is weak.
- There is strong collaboration and joint action between projects.
- The project research activity leads to a master theses paper.
- There is evidence that shows the project is looking for synergy with other VLIR-UOS interventions e.g. with the TEAM project.
- The expected results, specific objectives and overall objective are coherent.
- The indicators are not covering sufficiently the objectives and are not SMART enough to measure the project high level results.

Effectiveness EQ 2 – To what extent have the project's specific objectives been achieved (effectiveness)?

2.1 Academic

Extent to which the specific objectives of the project with regards to research and education strengthening have been realised

Score: Good

Progress in indicators developed for the specific objective at project level related at research and education strengthening of capacities and infrastructure

- The project is on the right track in achieving the project specific objective.
- PhD students attend training and do the research activities as per the project operational plan.
- Publications are underway and some are already published, like the water balance study, specially analysing water efficiency and effectiveness.
- Research is going well with different actors included e.g. the farmers working in the irrigation project.

Progress made in gender mainstreaming and environment as cross-cutting issue at project level

- The project considers gender issues in the research process for example women farmers participate in the irrigation study and were initially consulted and their opinion was included in the research data/information.
- However, the project needs a more detailed gender mainstream strategy aimed at more sustainable project results considering gender differences.

Factors contributing to the level of achievements at project level (both positive and negative), e.g. the influence of Covid

- The university experience, leadership commitment, IUC-BDU independent management unit contribute for the project achievements.
- Covid-19 and security (to a certain extent) delayed some project activities operation.
- Security in Beles basin affected slightly delays in the data collection (because indigenous communities think that the project helps settlers expanding their territory).

Appreciation of progress made by respondents involved

	<ul style="list-style-type: none"> – All consulted respondents appreciated the project progress, especially research activities associated with irrigation in Koga area. This stakeholder is interested and waiting the research finding for large scale implementation. <p>The extent to which the way forward (as specified in project self-assessments) is sufficiently geared towards the realisation of the specific objective and the overall objective</p> <ul style="list-style-type: none"> – The project will realize the project objective and overall objective. But the project needs to develop an outreach strategy for sustaining the project results.
<p>2.2. Extent to which the specific objectives of the project with regards to the contribution to the CRGE have been realised</p> <p>Score: Excellent</p>	<p>Progress in indicators developed for the specific objective at project level related to the contribution to the CRGE from project perspective</p> <ul style="list-style-type: none"> – Too early to show evidence, but there are signs that shows the project research activities related to efficient water utilization (irrigation program) are contributing to the nation CRGE program plan. CRGE program focuses on improving crop and livestock production without compromising the environment, efficient utilization of water resources. <p>Factors contributing to the level of achievements (both positive and negative), e.g. the influence of Covid-19</p> <ul style="list-style-type: none"> – Stakeholder's commitment and contribution was immense, for example woreda Agriculture office provided research demonstration site for irrigation. This significantly helps to make scientific research and efficient water application. – Covid-19 and security are/were the major problems during phase I of the program. <p>Appreciation of external stakeholders</p> <ul style="list-style-type: none"> – Most consulted stakeholders highly appreciate the project progress. The project creates massive awareness about the importance of effective and efficient water utilization through demonstration sites. Stakeholders are waiting the findings for large scale implementation. <p>Level of reflection with regards to existing relations and networks (maybe the 2nd phase requires new expertise or networks?)</p> <p>The level of existing relations with external stakeholders needs improvement. There were initiatives to create interaction with AMU and Jima University, but it was not well planned and meant for networking. The interaction was only one time and intended to share experiences.</p>
<p>2.3 Scientific quality</p> <p>Score: Good</p>	<p>What information is available about quality of research (e.g. publications) and education (e.g. fellowships received from foundations, job prospects for alumni)</p> <ul style="list-style-type: none"> – The project made one publication in a reading journal and several other publications are underway. – One PhD student received a fellowship from Canada and presented the research findings. <p>Does the project refer to 'cutting edge' knowledge and what evidence is the project referring to?</p>

	<ul style="list-style-type: none"> – It is too early to conclude but there are signs about application and use of efficient use of water in Koga irrigation (Tana Basin). This will bring new knowledge in the region. <p>Are there clear examples of quality</p> <ul style="list-style-type: none"> – There are examples of quality of the research. Techniques of doing Irrigation demonstration site and measuring water balance are good examples. <p>What are issues of concern according to you in relation to scientific quality?</p> <ul style="list-style-type: none"> – No issues because the research is going well with close follow up and technical advice from the North and south. Research papers are jointly reviewed, feedback is provided and some are submitted for publication.
Final judgement/comments	
<ul style="list-style-type: none"> – The project is on the right track in achieving the project specific objective. – The project is responding to gender, but the project needs a more detailed gender mainstream strategy for sustainable project results. – The university experience, leadership commitment, IUC-BDU independent management unit contributes to the project achievements. – All consulted respondents appreciate the project progress, especially research activities associated with irrigation in Koga area. – The project will realize the project objective and overall objective. But it needs to develop an outreach strategy for intervention and sustaining the project results. – Stakeholder's commitment and contribution was immense so far. – The level of existing relations with external stakeholders like other universities needs to be elaborated further. – The project made one publication so far. 	

Efficiency EQ 3 – What is the level of efficiency in the project?	
<p>3.1. Intermedi-ate results have been delivered</p> <p>Score: Excellent</p>	<p>Level of realisation of intermediate results according to indicators formulated in the logical framework (with specific attention to the number of topics to be covered in P1 in relation to available resources)</p> <ul style="list-style-type: none"> – The project has achieved some of the project results and underway to achieve the others for example the project installed discharge measuring stations, groundwater monitoring stations, experimental plots on farmers' fields are conducted, practical training organized in the field and 3 PhD and 6 MSc students received training. <p>Factors contributing to the level of achievements (both positive and negative), for e.g. how realistic were the planned results given the resources and time available in the framework of the project?</p> <ul style="list-style-type: none"> – Project leaders are senior and committed; there is a clear financial guideline and effective financial system managed by independent IUC-BDU unit. These significantly contribute to the project achievements. <p>Outlook towards full achievement of IR in remaining year</p>

	<ul style="list-style-type: none"> – The project will fully achieve the project results in the remaining period, publications and conference will be conducted as per the project operational schedule.
<p>3.2. Support was provided to ensure the quality of the research and educational processes</p> <p>Score: Good</p>	<p>The project provides adequate training, support, mentoring and follow-up for students (PhD and MSc, including support in managing effects of Covid-19 on their research)</p> <ul style="list-style-type: none"> – The project provides adequate training and support, specially conducting research activities, data collection and analysis. North support is very important here. – Still, short term training to the lab technician is very crucial to effective use of the lab facilities and materials provided, and also training related to measuring water discharge rate. <p>The project provides adequate training and support for students in terms of grant writing and job searches (particularly for MSc students; PhD students are mainly university staff)</p> <ul style="list-style-type: none"> – The project did not provide training or support for students for grant writing, job search to PhD or MSc students. In fact, this is very important to implement the project findings. <p>The project contributes to a ‘modern research culture’ as described under the rationale of efficiency</p> <ul style="list-style-type: none"> – The project contributes to modern research culture, for example how to conduct scientific demonstration sites, techniques of collecting data using improved techniques such as measuring water discharge rate. <p>There is a clear link and interaction with IUC programme to feed research results into education</p> <ul style="list-style-type: none"> – The link with IUC program is weak and needs improvement and a strategy. <p>Lab facilities can be used for education</p> <ul style="list-style-type: none"> – The project facilitated and linked lab facilities, data and information collected for education purpose, some MSc students made their researchers using the lab facilities.
<p>3.3. Relationship between means and results achieved and objectives (qualitative assessment)</p> <p>Score: Good</p>	<p>Share of missions from the partner in the North, PhD’s, trainings, investment costs and operational costs is reasonable in relation to the realisation of the intermediate results</p> <ul style="list-style-type: none"> – The share of the North partners through missions and support was vital and help the project to conduct scientific research. This may be enhanced further. <p>Relevance of the expertise that was mobilised from Flemish universities and other partners</p> <ul style="list-style-type: none"> – All the expertise mobilized from Flemish universities were professional, highly experienced and committed. <p>Management of spending and rate of over- and/or underspending (and explanatory factors)</p> <ul style="list-style-type: none"> – The project financial management was good because there is an independent IUC programme unit responsible for managing the finance. Project leaders are also informed about the financial progress and take action on time.

	<p>Choice of activities: cost-effectiveness is being pursued in programme design and management</p> <ul style="list-style-type: none"> – The project is designed and implemented based on local prices, for example data collectors, PhD student's allowance, and purchase of local materials are made according to the local price. Besides, the PhD students jointly use vehicles and other resources. This makes the financial management efficient.
<p>3.4. Project management is conducive for efficient and effective project implementation</p> <p>Score: Good</p>	<p>Good working relation within the project team (clear guidelines, transparency, communication flows, timeliness of planning and execution of activities, etc.)</p> <ul style="list-style-type: none"> – There is a good working relation within the project team. Because there is a clear financial guideline, financial reporting system, and progress reporting system. Meetings are conducted regularly; project progress and information are shared to staff on time. The team leaders are senior, they create a good working environment and build team spirits. <p>The extent to which the project teams can be flexible in project execution (taking into account emerging needs, challenges from the context, amongst which Covid-19)</p> <ul style="list-style-type: none"> – The project team is flexible based on conditions on the ground, for example, during data collection the project uses more enumerators and budget as compared to the planned target. <p>Factors hampering efficient management have been identified timely and managed well</p> <ul style="list-style-type: none"> – The project management is effective and manages problems on time because there are regular meetings and challenges are discussed and solutions are identified on time. The university leadership is committed and provides advices. <p>Bureaucracy related to procurement (equipment purchases, travel approval...) has been managed well by the project team</p> <ul style="list-style-type: none"> – The university procurement process is still a challenge, but the project manages to purchase some materials from Belgium such as lab materials that needs quality and timely supply for conducting the research activities, as it is planned.
<p>Final judgement/comments</p>	
<ul style="list-style-type: none"> – The project has achieved some of the project results and is underway to achieve the remaining results. – The project fully achieves the project results in the remaining period. – The project provides adequate training and support, specifically conducting research activities, data collection and analysis. – The project did not provide training or support for students for grant writing or future job search. – The project contributes to a more modern research culture. – The link with the IUC program (P1) is weak and needs improvement and a strategy. – The share of North mission and support is vital and helps the project to conduct scientific research. – The project financial management is good, there is no over or under spending. – There is a good working relationship within the project team and the project team has been flexible based on conditions on the ground. – The university procurement process is still a challenge. 	

Sustainability EQ 4 – To what extent will the project results continue after the IUC programme is completed (sustainability)?	
<p>4.1 Institutional</p> <p>Level of academic and institutional sustainability</p> <p>Score: Good</p>	<p>Level of (personal) commitment of stakeholders within the department/school concerned</p> <ul style="list-style-type: none"> – The level of commitments of departments is good, for example co-advisors from the involved department work without incentive, participate in field research work and provide technical inputs. <p>Measures taken for retention of PhDs and trained staff</p> <ul style="list-style-type: none"> – PhD students sign 8 years contract agreement with the university, so there is no job security problem. They will be de-load with assignment and engage more in research activities. <p>Joint research interests for both the Northern and Southern academics involved, are identified and pursued</p> <ul style="list-style-type: none"> – During the formulation of the project, the research topics have been designed based on both North and South interest (according to the South project team the N influence was high/ North PL sees this differently). – The main research lines have been set from the beginning but details indeed remain to be defined. <p>Evolution in networking with other national universities</p> <ul style="list-style-type: none"> – There are some initiatives with AMU and Jima University (sharing experiences) but networking with other university is not well planned and started. – The concept of synergy and networking are new concepts in the university. There is no culture of networking.
<p>4.2. Financial</p> <p>Level of financial sustainability</p> <p>Score: Good</p>	<p>Allocation of funds by Flemish universities (e.g. giving fellowships or by allowing academics to go to the field, matching funds)</p> <ul style="list-style-type: none"> – Flemish universities allocate sufficient fund for North advisors to go to the field and provide technical assistance. There is the Global Minds project of Ghent University, in the framework of which a project was approved to execute Radon measurements on Lake Tana water, in order to identify groundwater discharge. Due to Covid-19, however, this project had to be postponed. <p>Availability of funds for operations and maintenance of physical infrastructure at university/college level</p> <ul style="list-style-type: none"> – IUC-BDU program is a big program for the university. The leadership wants to sustain the project results and allocate operational maintenance, for example currently the university is in the process of recruiting a lab technician, and of renovating the soil lab. <p>Availability of proper funds (at university or college level) to continue all or a number of activities that are important/relevant</p> <ul style="list-style-type: none"> – There will be budget to continue the project activities, but this needs discussion and a sustainability strategy. For example, there is budget foreseen for monitoring the groundwater monitoring stations after the project ends, because the university want to keep tracking of the data. <p>Capacity for resource mobilisation to build on the achievements (Strategy and initiatives to attract external funding (from other donors, government,</p>

	<p>private sector, ...), skills of staff, task division for resource mobilisation, networks, ...)</p> <ul style="list-style-type: none"> – There are limited skills and experience for resource mobilization at all level, though IUC-BDU program motivates staffs to search grant. <p>Development of business approaches towards financing</p> <ul style="list-style-type: none"> – There is no development of business approaches towards financing
Final judgement/comments	
<ul style="list-style-type: none"> – The level of commitments of departments is good. – During formulation of the project, the research topics were designed based on both North and south interest, but the North influence has been very high (Yet, all project objectives were identified by the South). – Flemish universities allocate sufficient fund for North advisors to go to the field and provide technical assistance. – The leadership wants to sustain the project results and allocate operational maintenance. – There will be budget to continue the project activities, but this needs discussion and sustainability strategy. – There are limited skills and experience for resource mobilization at all levels. 	

POINTS OF ATTENTION FOR THE FUTURE

The Project has brought a lot of learning such as:

- Ethics of publication culture is promoted in the university, as compared to before the project period, now more publications are in the pipeline;
- New ways of doing research and research ethics are promoted;
- In the second phase more stakeholders have to participate and take responsibility, because the research approach needs more stakeholders' engagement, according to BDU respondents;
- Formulation needs more time, specifically the selection of research area/topics because it needs consultation with stakeholders, community.

2.3.4. Project 4

TITLE OF PROJECT: POSTHARVEST AND FOOD PROCESSING IN NORTHWEST ETHIOPIA

INTRODUCTION

The project aims at increasing the productivity of apple and reducing postharvest losses of vegetables (onion, tomato and potato) and fruits (mango) in northwest Ethiopia. This will be achieved through human and infrastructure capacity building, optimizing the value chain of produces and dissemination of the acquired knowledge. The main outputs of the project in phase I include training of staffs at PhD (3), predoc (1), and MSc. (so far 5 and 4 positions have been advertised) levels, strengthening lab facilities for involved departments, and conducting outreach activities based on research results. The project has received the lab component of the TISP project since 2019. The progress of PhD students is not as expected and there is a need for continuous follow-up so that they will be successful in completing their studies whereas the performance of MSc. students and the activities made to enhance post-harvest lab facilities are very encouraging and in the right track. The project has not yet conducted any outreach activities as PhD students are still in the process of doing their research and results are not ready for outreach.

FACTUAL DATA

Hosting faculty	6 Departments from different colleges are involved (Plant science, Horticulture, Biology, Postharvest Technology, Chemical and Food Engineering, Agricultural Economics)
Number of staff in research group	134
Status of staff (fixed position, service contract, others)	Fixed position
Number of PhD finished/ongoing (with VLIR funding)	3PhD + 1Predoc + 9 MSc scholarships (of which 4 MSc scholarship positions are recently advertised)
Number of PhD finished/ongoing outside VLIR funding	0
Number of publication in peer reviewed journals	1 paper on workshop proceeding, 5 papers published/accepted for publication by 3 of the MSc students

EVALUATION QUESTIONS

Relevance (EQ 1 – To what extent is the project relevant?)	
1.1. Responds to needs Score = 3 (good)	The mechanisms of interaction with beneficiaries of the project <ul style="list-style-type: none"> - The mechanism of interaction with beneficiaries of the project is transparent. - Project documents are shared to internal stakeholders. - Progress of the project is communicated to involved departments. The extent to which advice and indigenous knowledge from communities is sought and taken into account in the research <ul style="list-style-type: none"> - In the project design, both local and north partners of the project were in Fogera (rural area in northwest Ethiopia) to discuss with communities facing postharvest loss and the views of the communities were taken into account in designing the research themes of project. - MSc students conducted key informant interviews and Focus Group Discussions (FGD) with local agricultural/development agents, local farmers,

	<p>wholesalers and retailers of horticultural products (onion and tomato) and used the information in refining their research instruments.</p> <p>Relevance of research findings for external stakeholders at the local and national level</p> <ul style="list-style-type: none"> - Results of the MSc student are used as input to PhD students. - Based on the MSc thesis results, an outreach plan has been developed and will be implemented soon. <p>The positioning of the project within the respective departments/institutes/units: what are the needs at this level and how are these answered? What have been the dynamics in the departments so far?</p> <ul style="list-style-type: none"> - Although there are 6 departments involved in the project, the PhD scholarships are offered to staffs of 2 departments (Biology 1PhD + Postharvest 2 PhDs). - Most of the lab facilities purchased by the project are used for strengthening postharvest lab. <p>The link of the project with the transversal themes of Belgian development cooperation (gender, environment and D4D, digitalisation for development)</p> <ul style="list-style-type: none"> - Environment: The PhD research themes focus on the use of solar energy for developing technologies for reducing postharvest loss. - Gender: The project has 1 female PhD student out of 3, and 1 female pre-doc, 3 female out of 5 MSc students and recently advertised 4 MSc positions and anticipate to hire more female candidates. - D4D: The project uses virtual means as the main communication method. <p>Extent to which gender and environmental sustainability are effectively integrated in each project</p> <ul style="list-style-type: none"> - Except for the existence of link of the project to gender and environment, there is not yet real gender strategy has been implemented so far by the project, even if there is a gender guideline/strategy that has been developed at university level.
<p>1.2. Synergy</p> <p>There have been efforts made to ensure synergy between (thematic) IUC projects (internal synergy)</p> <p>Score = 3 (good)</p>	<p>The extent to which crosscutting coordination/joint action/collaboration exists between projects (particularly between the thematic projects)</p> <ul style="list-style-type: none"> - Initially at the designing stage, there was a discussion with the other projects, ending up with a thematic focus in which to some extent a number of departments representing different disciplines are involved. - There is some collaboration with other projects but limited (not because there is no willingness but due to the kind of research and project). <p>The extent to which interdisciplinary research practices (involving more than one project) and inherent synergy takes place</p> <ul style="list-style-type: none"> - The project has been designed to focus on its thematic area and there is no room to plan and implement interdisciplinary research practices. - However, within the thematic focus of the project, there is interdisciplinarity and different disciplines involved (Biology, Agricultural economics, Horticulture, Plant Science, Postharvest, Food and Chemical Engineering). - See also project 2, collaboration takes place.

	<p>The extent to which joint research between projects lead to (spinoff) master theses or paper publications</p> <ul style="list-style-type: none"> - No <p>What has been done to improve and consolidate internal synergies? What could be done better in the 2nd phase of the project to further improve internal synergies?</p> <ul style="list-style-type: none"> - Joint steering committee meetings were used as a platform for sharing ideas among projects and knowing of their work and progresses. However, this is not enough to create internal synergy. Joint discussion, planning of joint activities and joint implementation of the planned activities need to be undertaken. This will start already during the designing of the 2nd phase of the programme.
<p>1.3. Synergy & Complementarity</p> <p>Score = 3 (good)</p>	<p>The extent to which the project is looking for synergy with other VLIR-UOS interventions in the country or at regional level</p> <ul style="list-style-type: none"> - At the designing stage of the project, there was communication with Jimma University and Mekelle University. There were plans to undertake experience sharing visits to Arba Minch University, Jimma University and Mekelle University (but due to Covid-19 not materialized yet). - The project had also a plan of providing short term trainings (on lab management and lab technicians) in Belgium to staffs of BDU who are working in the lab as lab technicians (due to Covid-19 not brought into practice yet). <p>The extent to which the project is looking for synergy with projects supported by other donors, more in particular Belgian development actors</p> <ul style="list-style-type: none"> - Involved departments have been engaged in collaborative projects e.g. The project called "Benefit Realize" is a new project funded by Netherland Gov't and the departments involved in P4 have been also engaged in this new project and their VLIR-IUC experience has helped them to attract such a project. - Members of the project have written a proposal on Youth Employment: How to engage youth in postharvest business and reduce postharvest loss. - There is a need for developing the skill of staff on grant proposal writing. <p>What has been done to improve external synergies?</p> <ul style="list-style-type: none"> - Staff are trying to write proposals for external funding. - The project is working with Enjibara University related to the research on Apple dormancy. <p>What could be done better in the 2nd phase of the project to further improve external synergies?</p> <ul style="list-style-type: none"> - There is a need for stakeholdermapping and plan to engage them.
<p>1.4. Coherence</p> <p>The project is coherent</p> <p>Score = 4 (Excellent)</p>	<p>There is coherence between expected results, specific objectives and the overall objective Yes, there is. For example, the human and infrastructure capacity building will lead to achieve the objectives of getting the required technology for reducing postharvest losses.</p> <p>The choice of activities is relevant to obtain results and objectives</p> <p>Yes, it is relevant. There have not been major changes in the logical framework of the project during phase 1, although slight changes in a few activities of IR2</p>

	<p>(apple dormancy) and IR3 (onion and tomato postharvest) have been made during the execution period of the project as they are very research-intensive. Besides, setting up a high-quality postharvest research laboratory has been transferred since 2019 from TISP (P1) to P4: it has been included in project 4 as additional IR6 with its 6 major activities.</p> <p>The indicators are well chosen to monitor progress and to support learning.</p> <p>Yes, but there are some delays and North partners need to increase their support in pushing students for producing papers for publication.</p> <p>Is the formulation of the project still relevant, taking into account changes in context (such as Covid but also changes in the departments, new dynamics?)</p> <p>Yes, it is still relevant; the focus has not changed. Apple dormancy problem is still the critical bottle neck for limiting apple production in the area, as well as postharvest losses of vegetables and fruits.</p>
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Final judgement/comments

- The main objective of the project is to increase the productivity of apple and reducing postharvest losses of vegetables (onion, tomatoes and potato) and fruits (mango) in Northwest Ethiopia through developing technologies that reduce postharvest losses. This is consistent with the country's need for achieving food security, which is also the need of local communities in the study sites.
- The objective of the project is consistent with VLIR-UOS country strategy priority for Ethiopia, which is achieving food security.
- The PhD research activities on developing solar energy based post-harvest technology and the fact that 1 out of the 3 PhDs, 1 predoc, and 3-5 out of 9 MSc (4 of the 9 scholarships are recently advertised) scholarships are awarded to female imply that the project addresses two of the transversal themes (environment and gender) of the Belgian Development cooperation.
- Except for sharing experiences with other thematic projects through the joint steering committee meetings and join excursions, the project has no synergy with other thematic projects in terms of conducting interdisciplinary research practices or creating spinoff (as master thesis of paper publications) from such practices.
- For the 2nd phase there is a need to start a dialogue from the designing stage so that it is possible to create more internal synergy through conducting interdisciplinary research practices and joint publications.
- Although there are efforts by the project and involved departments and staff to strengthen external synergy (through experience sharing with other local universities, writing grant proposal for external funding, etc..) it needs improvement and more effort.
- Most respondents emphasised the need for short term training on grant proposal writing.
- The project is coherent in that the human and infrastructure capacity building will lead to achieve the objectives of getting the required technology for reducing post-harvest losses.

Effectiveness EQ 2 – To what extent have the project's specific objectives been achieved (effectiveness)?

2.1 Academic Extent to which the specific objectives of the project	<p>Progress in indicators developed for the specific objective at project level related at research and education strengthening of capacities and infrastructure The 2 PhD students are lagging behind and need a contentious follow-up by their North promoters.</p>
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<p>with regards to re- search and edu- cation strengthen- ing have been re- alised</p> <p>Score = 3 (good)</p>	<ul style="list-style-type: none"> - The other 1 PhD student working on Apple dormancy and genome analyses: her experiment has failed twice, and it is likely that she may not finish in time. Underlying reasons for this that were mentioned were the lack of laboratory experience of the student and the quality of samples. - MSc students are on the right track and 4 out of 5 have graduated and the project is advertising 4 additional MSc positions. - Lab facilities are in place at the postharvest lab and there has been efforts to register the lab and get the ISO certification. <p>Progress made in gender mainstreaming and environment as crosscutting issue at project level</p> <ul style="list-style-type: none"> - The female PhD student conducted FGD with communities in the study area and female key informants took part in the FGD. - Women also took part in the outreach workshop as stakeholders. - All the themes of the PhD topics are directly related to environmental issues (land degradation, salinity of soils, landslides etc..). <p>Non-expected effects that have emerged (not specified by indicators)</p> <ul style="list-style-type: none"> - None <p>Factors contributing to the level of achievements at project level (both positive and negative), e.g. the influence of Covid</p> <p>Positive Factors:</p> <ul style="list-style-type: none"> - There has been strong support from PSU, BDU leadership/management in facilitating the core activities of the project (PhD student research works) - Local communities are very supportive to PhD students during their field work - Apple Research ORCHID established - Green house (horticulture) - Postharvest lab <p>Negative factors:</p> <ul style="list-style-type: none"> - PhD students are lagging behind because of lack of strong follow-up and supervision. - Covid-19 state of emergency made it difficult to conduct fieldwork- and surveys during the state of emergency. <p>Appreciation of progress made by respondents involved</p> <ul style="list-style-type: none"> - MSc students appreciate the opportunity they got so far. <p>The extent to which the way forward (as specified in project self-assessments) is sufficiently geared towards the realisation of the specific objective and the overall objective</p> <ul style="list-style-type: none"> - The progress of MSc students is very good and some of them published papers. - Lab infrastructure is in place. - PhD students are lagging behind and they may need some additional time and strong support from their promoters to finish their studies.
<p>2.2 Development Extent to which the specific objec- tives of the project with regards to the</p>	<p>Progress in indicators developed for the specific objective at project level related to the contribution to national development priorities from project perspective</p> <ul style="list-style-type: none"> - Results in terms of publications are not yet realized to inform policy makers as the PhD students are lagging behind and only 1 paper by a PhD student

<p>contribution to national development priorities have been realised</p> <p>Score = 3 (good)</p>	<p>has been published in conference proceeding and 5 papers are published by MSc students.</p> <ul style="list-style-type: none"> - Also, all extension related and outreach activities of P4 are only planned in the last 5th year (2021). Thus, how its performances related to extension activities were evaluated with zero (0) values seems not to be applicable. Similarly (Page 66) + there is a plan to undertake outreach to stakeholders in phase II of the project. <p>Non-expected effects that have emerged (not specified by indicators)</p> <ul style="list-style-type: none"> - The experiment by 1 PhD student on apple dormancy that involves genome analysis has failed twice and she is doing it for the third time; it is anticipated that her experiment will be successful. Her promotor is co-funding her experimental costs. <p>Factors contributing to the level of achievements (both positive and negative), e.g. the influence of Covid</p> <ul style="list-style-type: none"> - Not applicable as there are no results/evidence yet that can show the extent to which achieved objectives contribute to national development priorities. - BDU has covered the cost of green house. - The PhD students need strong follow-up and support from their promotors so that they can progress their studies. <p>Appreciation of external stakeholders</p> <ul style="list-style-type: none"> - Key stakeholders in the tomato and onion supply chain (which include, farmers, wholesalers, and retailers) are keen to see and use the technologies under study that are aiming to reduce postharvest loss. <p>The extent to which the way forward (as specified in self-assessments) is sufficiently geared towards the realisation of the specific objective and the overall objective</p> <ul style="list-style-type: none"> - With some delays on the part of PhD students, the project anticipates that the objectives will be realized. - The performance and progress of MSc students is very good and lab facilities are in place. <p>Level of reflection with regards to existing relations and networks</p> <ul style="list-style-type: none"> - The project leaders stated that the existing work relationships in the project team and network is excellent. - PhD students indicated that they have good working relations with promotors, they undertake biweekly meetings with their promotors.
<p>2.3 Scientific quality</p> <p>Score = 4 (Excellent)</p>	<p>What information is available about quality of research (e.g. publications) and education (e.g. fellowships received from foundations, job prospects for alumni)</p> <ul style="list-style-type: none"> - 6 papers are published (1 paper on proceedings by a PhD student and 5 papers by 3 MSc students). <p>Does the project refer to 'cutting edge' knowledge and what evidence is the project referring to?</p> <ul style="list-style-type: none"> - The project staff has gone in the direction of a more outcome-oriented research culture <p>Examples of quality</p> <ul style="list-style-type: none"> - The post-harvest lab is well organized.

	<ul style="list-style-type: none"> - The MSc students have published papers. <p>What are issues of concern according to you in relation to scientific quality?</p> <ul style="list-style-type: none"> - No
Final judgement/comments	
<ul style="list-style-type: none"> - The progress of the 3 PhD students is not as expected and requires strong follow-up and support so as to enable them to complete their studies in time. - The progress made by 5 of the MSc students is very encouraging and some of them have managed to publish papers. - In terms of lab facilities, there is a very good progress, and the project has started the process to get the post-harvest lab ISO certified. - The project has not yet conducted outreach activities as the PhD research activities are ongoing and results for outreach are not yet available. - Key stakeholders in the tomato and onion supply chain are keen to see and use the technologies under study that are aiming to reduce postharvest loss and the project has a plan to undertake outreach activities when results are ready. - There is evidence of scientific quality in that 6 papers have been published of which 5 are by MSc students and the post-harvest lab is well organized. 	

Efficiency (EQ 3 – What is the level of efficiency in the project?)	
<p>3.1 Intermediate results</p> <p>Intermediate results have been delivered</p> <p>Score: 3 (good)</p>	<p>Level of realisation of intermediate results according to indicators formulated in the logical framework</p> <ul style="list-style-type: none"> - The level of realization of most of the IRs is good. - However, PhD students may not finish their studies in the time remaining for Phase I. Therefore, it may be important to run the last part of Phase I in parallel with the start of phase II so that the PhD students will complete their studies. - MSc students are on the right track and 4 out of 5 have graduated and the project is advertising 4 additional MSc positions. - Lab facilities are in place at the post-harvest lab and there has been effort to register the lab and get the ISO certification. <p>Factors contributing to the level of achievements (both positive and negative), for e.g. how realistic were the planned results given the resources and time available in the framework of the project?</p> <ul style="list-style-type: none"> - Refer 2.1 <p>Outlook towards full achievement of IR in remaining year</p> <ul style="list-style-type: none"> - Except for possible delays of PhD students in finishing their studies, in the remaining time most of the IRs will be achieved.
<p>3.2 Support was provided to ensure the quality of the research and educational processes</p> <p>Score = 3 (good)</p>	<p>The project provides adequate training, support, mentoring and follow-up for students (PhD and MSc, including support in managing effects of Covid-19 on their research)</p> <ul style="list-style-type: none"> - The project provides adequate support, mentoring, and follow-up to all the PhD and MSc students. - But as stated by the project leader, the PhD students lack the required focus on their studies and they also need continuous follow-up by their promotor. - Whereas the progress of MSc students, this is very encouraging. - Both PhD and MSc students witnessed that the project is very supportive and communication is smooth.

	<ul style="list-style-type: none"> - PhD students indicated both local and north promoters are very supportive and - There are regular virtual meetings with North promoters. <p>The project provides adequate training and support for students in terms of grant writing and job searches (particularly for MSc students; PhD students are mainly university staff)</p> <ul style="list-style-type: none"> - No training on grant proposal writing but PhD students stated that they have taken statistical software training (SAS). - Most respondents suggest the need for training on grant proposal writing in the 2nd phase. <p>The project contributes to scientific quality as described under the rationale of efficiency</p> <ul style="list-style-type: none"> - We anticipate that the project will contribute to scientific quality. - So far 6 papers have been published mostly from the theses of MSc students. - The project contributes to a 'modern research culture' as described under the rationale of efficiency. - There is a clear link and interaction with IUC programme to feed research results into education. - Lab facilities can be used for education. - Appreciation of project alumni.
<p>3.3 Relationship input-output</p> <p>Relationship between means and results achieved and objectives (qualitative assessment)</p> <p>Score = 3 (good)</p>	<p>Share of missions from the partner in the North, PhD's, trainings, investment costs and operational costs is reasonable in relation to the realization of the intermediate results</p> <ul style="list-style-type: none"> - Investment (inputs) are reasonable in relation to realized intermediate results. - Students suggest that the budget to MSc research is very small but there is co-funding from BDU. - PhD students are likely to lag behind and this may cause additional costs both in time and money. <p>Relevance of the expertise that was mobilised from Flemish universities and other partners</p> <ul style="list-style-type: none"> - The expertise that was mobilized from Flemish universities is highly relevant; they share their experience to local staff. <p>Management of spending and rate of over- and/or underspending (and explanatory factors)</p> <ul style="list-style-type: none"> - The project has mostly overspending and this is due to mainly the need for establishing post-harvest lab facilities and unexpected increase in prices The program has financed the overspending through budget transfers from projects with underspending. <p>Choice of activities: cost-effectiveness is being pursued in programme design and management</p> <ul style="list-style-type: none"> - Yes, for example the project purchased lab equipment mostly through direct purchases from Belgium and the equipment are of high quality and relatively less costly than what could have been purchased from local market. This has also saved/ shorten the lengthy procurement procedure.
3.4 Project management	<p>Good working relation within the project team (clear guidelines, transparency, communication flows, timeliness of planning and execution of activities, etc.)</p>

<p>Project management is conducive for efficient and effective project implementation</p> <p>Score = 3 (good)</p>	<ul style="list-style-type: none"> - There is a good working and transparent relationship within the project team, according to interviewed team members. <p>The extent to which the project teams can be flexible in project execution (taking into account emerging needs, challenges from the context, amongst which Covid 19)</p> <ul style="list-style-type: none"> - Budget reallocation is made after evaluating progress and based on discussion. - There is flexibility in execution of activities, for example a PhD student has to go to other universities (Adam and Haramaya) to get access to lab facilities that are not available at BDU. - The project also allocates expenses for maintenance costs based on discussion. - The project allocates budgets for tomato postharvest experiment and for apple dormancy studies twice because the first experiments failed. <p>Factors hampering efficient management have been identified timely and managed well</p> <ul style="list-style-type: none"> - PhD students have not made the necessary progress and this has to be discussed; all stakeholders (PhD students and promotor) have to work hard so that the PhD will be successful in their studies. - The TISP project was not properly designed and the extension and lab components were transferred to P2, 4 and 6, based on discussion. <p>Bureaucracy related to procurement (equipment purchases, travel approval...) has been managed well by the project team</p> <ul style="list-style-type: none"> - Procurement procedures at BDU are very lengthy and need improvement. - Products for lab (equipment) from local markets are of low quality. - The project has made direct purchase from Belgium with the help of North partners and the products are of high quality.
<p>Final judgement/comments</p> <ul style="list-style-type: none"> - The progress of MSc students, and strengthening of the post-harvest lab with equipment is very good and most of the IRs of the project will be achieved in the remaining time of phase I. However, PhD students are likely to lag both in terms of finishing their studies in the remaining time and achieving publication targets. As a result, it may be less likely that the project will accomplish its outreach activities within the remaining time. Therefore, in phase 2 of the project it is important to focus on consolidating results of phase I and undertaking outreach activities so as to meet its objective of reducing post-harvest loss in northwest Ethiopia. - The investments (inputs) are reasonable in relation to realized intermediate results. Students, however, suggest that the budget to MSc research is very small, and they manage to do their research because of the co-funding from BDU. - Respondents indicated that the expertise that was mobilized from Flemish universities are highly relevant and share their experience to local staff. - The project provides adequate support, mentoring, and follow-up to all the PhD and MSc students. But as stated by the project leader, the PhD students need continuous follow-up by their promotor whereas the progress of MSc students is very encouraging. - The project has not provided any short-term trainings to staff or project members. Most respondents suggest the need for training on grant proposal writing in the 2nd phase. 	

- The 6 publications and the well- equipped post-harvest lab are good indicators of the contribution of the project concerning scientific quality.
- Most respondents confirm that there exist very good working relationships in the project and the project is also flexible in managing emerging needs but all respondents raise their concerns on the lengthy procurement procedure at BDU that needs improvement.

Sustainability EQ 4 – To what extent will the project results continue after the IUC programme is completed (sustainability)?

<p>4.1 Institutional Level of academic and institutional sustainability</p> <p>Score = 3 (good)</p>	<p>Level of (personal) commitment of stakeholders within the department/school concerned</p> <ul style="list-style-type: none"> - The level of commitment of stakeholders (PhD students, team members, PL, PSU, university management, and relevant departments) is very good. - However, PhD students are lagging behind and there is a need on the part of both PhD students and promoters to exert more efforts so that the students will be successful. <p>Measures taken for retention of PhDs and trained staff</p> <ul style="list-style-type: none"> - PhD students have signed an agreement with BDU to serve the university after finishing their studies. - The working environment is good and there are efforts by the university to improve it. <p>Joint research interests for both the Northern and Southern academics involved, are identified and pursued</p> <ul style="list-style-type: none"> - Not yet <p>Evolution in networking with other national universities</p> <ul style="list-style-type: none"> - There was a plan to make visits to AMU, Jimma University and Mekelle University and a plan to send staff to Flemish universities for a short term training for lab management and lab technician. But both plans were not implemented due to Covid. - There is a good working relationship with Adama and Haramay universities. One PhD student went to these universities and got access to lab facilities.
<p>4.2 Financial Level of financial sustainability</p> <p>Score = 3 (good)</p>	<p>Allocation of funds by Flemish universities (e.g. giving fellowships or by allowing academics to go to the field, matching funds)</p> <ul style="list-style-type: none"> - The funds allocated for 3 PhD students are enough. - PhD students indicated that the per diem rate for field activities is very small and does not consider the cost of living. <p>Availability of funds for operations and maintenance of physical infrastructure at university/college level</p> <ul style="list-style-type: none"> - Yes, but soliciting a research fund through grant application would help and this requires more training on grant proposal writing to staffs of BDU. <p>Availability of proper funds (at university or college level) to continue all or a number of activities that are important/relevant</p> <ul style="list-style-type: none"> - Yes, at least for some activities but soliciting a research fund through grant application would help and this requires more training on grant proposal writing to staffs of BDU. <p>Capacity for resource mobilisation to build on the achievements (Strategy and initiatives to attract external funding (from other donors, government,</p>

	<p>private sector, ...), skills of staff, task division for resource mobilisation, networks, ...)</p> <ul style="list-style-type: none"> - There is a weak capacity for resource mobilization. - For attracting big external funds, increasing the capacity of staff in grant proposal writing, project planning and management and related short-term trainings would help and shall be planned in phase II <p>Development of business approaches towards financing</p> <ul style="list-style-type: none"> - Not applicable
Final judgement/comments	
<ul style="list-style-type: none"> - The level of commitment of stakeholders (PhD students, team members, PL, PSU, university management, and relevant departments) is very good. However, PhD students are lagging behind and there is a need on the part of both PhD students and promoters to exert more efforts so that the students will be successful. - The project has not yet identified joint research interests together with its North partners and this needs to start as early as possible so as to facilitate the designing of very good project for the 2nd phase. - The project also needs to strengthen its network with other national universities. - Most respondents stated that the fund allocation for PhD students is sufficient. However, per diem rates for field activities are insufficient and do not take into account the cost of living and inflation. - For maintaining purchased lab equipment and continuing research activities, respondents argue that there might be funding from the university but that may not be sufficient and there is a need for mobilizing funds through grant proposal writing and application for funding. However, there is a limited capacity in this regard and there is a need for organizing and training staff with short-term training on grant proposal writing. 	

POINTS OF ATTENTION FOR THE FUTURE

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- The project (S) suggested to purchase more lab equipment from Belgium;
 - Mobility should be planned in consultation with students;
 - Promoters should increase their support and follow-up of PhD students;
 - Studies in the 2nd stage need to focus also on losses at production stage, not only post harvest loss;
 - Involving relevant mainly internal stakeholders (departments for example) at the designing stage will help and facilitate implementation.

2.3.5. Project 5

TITLE OF PROJECT: AQUATIC ECOLOGY AND WATERBORNE DISEASES IN THE LAKE TANA BASIN

INTRODUCTION

The project aims to improve the research capacity and research-based education on the Lake Tana Basin ecosystem in Bahir Dar University and ensure an optimised, balanced and more sustainable use of the Lake Tana Basin ecosystem by providing the scientific baseline data needed for conservation planning and the involvement of diverse stakeholders. The specific objectives include developing an efficient ecological monitoring program of the lake and its tributary rivers, study the causes of water borne diseases, impact sources of organic and chemical pollution and the water quality of the lake, rivers and waste water influents, study the lake's food web, the fish stock and fish migrations between the lake and its spawning grounds, and assess the diversity and disturbance of wetlands and monitor and reconstruct past changes in their spatial cover and that of floating macrophytes. The main outputs of the project in phase I include training of staffs at PhD (3), predoc (2) and MSc (4) levels, strengthening lab facilities for involved departments, and conducting outreach activities based on research results. Except for possible delays in meeting publication targets and delivering of outreach activities, PhD and MSc students are on the right track and will finish their studies in the remaining time of phase I, and lab of involved departments have been strengthened with lab equipment as foreseen.

FACTUAL DATA

Hosting faculty	3 Departments from different colleges are involved (Biology, School of Fisheries and Wildlife, and Department of Microbiology, Immunology and Parasitology)
Number of staff in research group	112
Status of staff (fixed position, service contract, others)	Fixed position
Number of PhD finished/ongoing (with VLIR funding)	3PhD + 2Predoc + 4 MSc scholarships
Number of PhD finished/ongoing outside VLIR funding	0
Number of publication in peer reviewed journals	No publication yet

EVALUATION QUESTIONS

Relevance (EQ 1 – To what extent is the project relevant?)	
1.1. Responds to needs The objectives of the projects are consistent with the country/local needs, the needs of the university, the	The mechanisms of interaction with beneficiaries of the project <ul style="list-style-type: none"> - Regarding the students: there is teamwork (example during site selection and field campaign) and close supervision of PhD students. When problems arise, we solve them through discussion. Interaction of PhD students with North and south promoters is smooth and north promoters are diligence in responding feedbacks. Initially there was a limitation in logistics which has been solved over time. PhD students indicated that they have regular discussion with N-promoters using virtual means while students are in South. - The communication mechanism of interaction with beneficiaries of the project is transparent.

<p>VLIR-UOS strategy and donor's policies</p> <p>Score = 3 (good)</p>	<ul style="list-style-type: none"> - This is in line with the country's climate resilient green economy strategy where sustainable natural resource management, particularly water resources, has been one of the priority pathways for the country to achieve its development objectives including food security. - The project is in line with the needs of BDU in strengthening capacity of its staff and lab facilities that are important in achieving its mission of delivering quality education, research and outreach services. <p>The extent to which advice and indigenous knowledge from communities is sought and taken into account in the research</p> <ul style="list-style-type: none"> - In the case of research component on fish and wetland, discussion was held with sector offices (Water bureau, Abay basin authority, Fishery and other aquatic life research center, German NGO (NABU) working on Tana Biosphere Reserve). - Stakeholder analysis has been done in project formulation. - Fishers have been consulted for example to identify fish samples and specimen migration roots and in determining gear and net size efficiency. <p>Relevance of research findings for external stakeholders at the local and national level</p> <ul style="list-style-type: none"> - Although research activities are ongoing and no outreach activity has been made yet, the project anticipates the following as relevant to external stakeholders: the project will bring research-based solutions for livelihood and environmental management issues like sustainable water resource management, ensuring food security and input for development strategy. <p>The positioning of the project within the respective departments/institutes/units: what are the needs at this level and how are these answered?</p> <p>What have been the dynamics in the departments so far?</p> <ul style="list-style-type: none"> - This is particularly interesting for P1 (TISP) as transversal project. The different departments involved in the project have benefited in terms of the lab equipment purchased, staff capacity building, and networking. <p>The link of the project with the transversal themes of Belgian development cooperation (gender, environment and D4D, digitalisation for development)</p> <ul style="list-style-type: none"> - Environment: The PhD research themes focus on aquatic ecology and (fish and wetland) are directly related to the theme of environment. - Gender: The project has 1 female PhD student out of 3, and 2 female predoc and 2 female MSc students. <p>Extent to which gender and environmental sustainability are effectively integrated in each project</p> <ul style="list-style-type: none"> - Except for the existence of link of the project to gender and environment as stated above, there is not yet real gender strategy has been implemented so far by the project, even if there is a gender guideline/strategy that has been developed at university level.
<p>1.2. Synergy</p> <p>There have been efforts made to ensure</p>	<p>The extent to which crosscutting coordination/joint action/collaboration exists between projects (particularly between the thematic projects)</p> <ul style="list-style-type: none"> - Initially at the designing stage, there was a discussion with the other projects. But there is no joint action in terms of doing interdisciplinary research with other

<p>synergy between (thematic) IUC projects (internal synergy)</p> <p>Score = 3 (good)</p>	<p>projects during the implementation of the project. Exchange of information with land resilience.</p> <ul style="list-style-type: none"> - Joint excursions and joint steering committee meetings are organized. <p>The extent to which interdisciplinary research practices (involving more than one project) and inherent synergy takes place</p> <ul style="list-style-type: none"> - No - Interdisciplinary research practice shall start from the designing stage. The project has been designed already to focus on its thematic area and little has happened to implement interdisciplinary research practices. <p>The extent to which joint research between projects lead to (spinoff) master theses or paper publications</p> <ul style="list-style-type: none"> - No <p>What has been done to improve and consolidate internal synergies? What could be done better in the 2nd phase of the project to further improve internal synergies?</p> <ul style="list-style-type: none"> - Joint steering committee meetings were used as a platform for sharing ideas among projects and knowing of their work and progresses. - However, this is not enough to create internal synergy. - Joint discussion, planning of joint activities and joint implementation of the planned activities need to be undertaken. This has to start during the designing of the 2nd phase of the programme.
<p>1.3. Synergy & Complementarity</p> <p>There have been efforts made to ensure complementarity and synergy with other (externally funded) projects/ (other (Belgian) development actors)</p> <p>Score = 4 (excellent)</p>	<p>The extent to which the project is looking for synergy with other VLIR-UOS interventions in the country or at regional level</p> <ul style="list-style-type: none"> - A PhD student of the project from BDU and another PhD student of AMU-VLIR-IUC, both working on aquatic ecology have tuned their research protocols to work on lake Tana and lake Chamo. - The two students made a joint visit to Tana land and lake Chamo and they have a plan for a joint publication. <p>The extent to which the project is looking for synergy with projects supported by other donors, more in particular Belgian development actors</p> <ul style="list-style-type: none"> - One student has got a PhD scholarship in Belgium with another source of fund due to the existing network. - The Amhara Public Health Institute has supported with materials for one of the PhD students of the project. - The PhD and MSc students of the project are using the lab facilities/equipment purchased by other projects of the IUC programme. <p>What has been done to improve external synergies?</p> <ul style="list-style-type: none"> - A project proposal on aquatic pollutants was developed and submitted to the EU but it was not successful. - The project lent its boat to the Water Hyacinth eradication campaign. - One of the strengths of P5 is establishment of a South-South synergy with Arba Minch University. I feel that we should have been green here. E.g. A joint field campaign was conducted and two Female PhD students from the two institutions have worked on a harmonized protocol on sediment removal efficacy of wetlands.

	<p>What could be done better in the 2nd phase of the project to further improve external synergies?</p> <ul style="list-style-type: none"> - There is a need for stakeholders mapping and plan to discuss with them. - Creation of awareness about the project and the program using the Amhara Universities Forum and involve these universities.
<p>1.4. Coherence</p> <p>The project is coherent</p> <p>Score = 3 (good)</p>	<p>There is coherence between expected results, specific objectives and the overall objective</p> <ul style="list-style-type: none"> - Yes, there is. For example, the IRs have both academic and development objectives. But, although the project initially intends to focus its research on both aquatic ecology and water born diseases, much of the study is on aquatic ecology and the project shall address on water born diseases in the 2nd phase. <p>The choice of activities is relevant to obtain results and objectives</p> <ul style="list-style-type: none"> - Yes it is to a large extent relevant. IR2 for example has been changed to some extent. IR 2 was supposed to work on water borne diseases, identification of impact sources of pollution and water quality and recommendation of prevention measures recommended. This topic was identified with the local communities and relevant; both N and S PL wanted to work on it. But it turned out to be difficult to find Belgian partners for this. Therefore, the result has been framed a bit differently (without changing the logframe). <p>The indicators are well chosen to monitor progress and to support learning.</p> <ul style="list-style-type: none"> - Yes, students are on the right track though there are delays in publications and lab facilities are in place <p>Is the formulation of the project still relevant, taking into account changes in context (such as Covid but also changes in the departments, new dynamics?)</p> <ul style="list-style-type: none"> - Yes, it is relevant, the aim of the project, which is improving the research capacity and research-based education on the Lake Tana Basin ecosystem in Bahir Dar University and ensure an optimized, balanced and more sustainable use of the Lake Tana Basin ecosystem by providing the scientific baseline data needed for conservation planning and the involvement of diverse stakeholders, is relevant taking into account the changes in context.
<p>Final judgement/comments</p> <ul style="list-style-type: none"> - The main objective of the project is to improve the research capacity and research-based education on the Lake Tana Basin ecosystem and ensure an optimised, balanced and more sustainable use of the Lake Tana Basin ecosystem by providing the scientific baseline data needed for conservation planning and the involvement of diverse stakeholders. - This is in line with the country's climate resilient green economy strategy where sustainable natural resource management, particularly water resources, has been one of the priority pathways for the country to achieve its development objectives including food security. - The objective of the project is also in line with the needs for conservation and sustainable management of the depleting fish resource in lake Tana in which local communities (eg. Communities engaged in the fishery sector) are dependent for their livelihood. - The PhD research topics are focusing purely on lake tana basin ecosystem, which is an environmental issue and the fact that 1 out of the 3 PhDs, 2 predoc, and 2 out of the 4 MSc scholarship are awarded to women imply that the project addresses to some extent two of the transversal themes (environment and gender) of the Belgian Development cooperation. 	

- Except for sharing experiences with other thematic projects through the joint steering committee meetings and joint excursions, the project has no synergy with other thematic projects in terms of conducting interdisciplinary research practices or creating spinoff (as master thesis or paper publications) from such practices.
- For the 2nd phase there is a need to start joint discussion starting from the designing stage so that it is possible to create more internal synergy through conducting interdisciplinary research practices and joint publications.
- There are efforts by the project and involved departments and staff to strengthen external synergy (through experience sharing with other local universities, writing grant proposal for external funding, etc.) A good example of such synergy in this project is that a PhD student of the project from BDU and another PhD student of AMU-VLIR-IUC, both working on aquatic ecology have tuned their research protocols to work on lake Tana and lake Chamo and have planned joint publications. The project, however, shall make more effort in enhancing external synergies in the future and for this most respondents emphasised the need for short term training on grant proposal writing.
- The project is coherent in that the IRs have both academic and development objectives. But, although the project initially intends to focus its research on aquatic ecology and water borne diseases, much of the study is on aquatic ecology and the project shall address on water borne diseases in the 2nd phase.

Effectiveness EQ 2 – To what extent have the project's specific objectives been achieved (effectiveness)?

<p>2.1 Academic Extent to which the specific objectives of the project with regards to research and education strengthening have been realised</p> <p>Score = 3 (good)</p>	<p>Progress in indicators developed for the specific objective at project level related at research and education strengthening of capacities and infrastructure</p> <ul style="list-style-type: none"> - The PhD and MSc students are on the right track. - Lab facilities are in place and lab equipment purchased directly from Belgium are of high quality. But, purchased equipment (boat and engine) from the local market are good with some limitation in terms of quality. Equipment like -18 deep freezer has not yet been installed for use, because of lack of expertise. <p>Progress made in gender mainstreaming and environment as cross-cutting issue at project level</p> <ul style="list-style-type: none"> - Refer 1.1 <p>Non-expected effects that have emerged (not specified by indicators)</p> <ul style="list-style-type: none"> - The project lent its boat to relief service to rural people affected by flood in the Tana basin. <p>Factors contributing to the level of achievements at project level (both positive and negative), e.g. the influence of Covid</p> <ul style="list-style-type: none"> - Positive Factors: <ul style="list-style-type: none"> o There has been strong support and commitment from PSU, BDU leadership/management in facilitating the core activities of the project (PhD student research works). o Local communities/fishers are very supportive to PhD students during their field work. - Negative factors <ul style="list-style-type: none"> o Because of the lack of awareness by some local fishers, sample fishes with tags of microchips for tracking their migration have been caught by
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	<p>fishermen and the PhD student lost some of his samples. This has affected the data collection.</p> <ul style="list-style-type: none"> ○ Covid-19 state of emergency made difficult to conduct field work and surveys during the state of emergency. <p>Appreciation of progress made by respondents involved</p> <ul style="list-style-type: none"> - Although the project has no publications yet as anticipated (some of the PhD students are still in the process of data collection), the research activities are on the right track. - There is some indication that the lab facilities are used for teaching-learning activities by different departments of the university. - PhD and MSc students appreciate the kind of support they get from the project. <p>The extent to which the way forward (as specified in project self-assessments) is sufficiently geared towards the realisation of the specific objective and the overall objective</p> <ul style="list-style-type: none"> - The project will achieve its objectives within the remaining time except the publication targets.
<p>2.2 Development Extent to which the specific objectives of the project with regards to the contribution to national development priorities have been realised</p> <p>Score = 3 (good)</p>	<p>Progress in indicators developed for the specific objective at project level related to the contribution to national development priorities from project perspective</p> <ul style="list-style-type: none"> - The project is at the stage of generating knowledge and results in terms of publications are not yet realized to inform policy makers. - There is a plan to undertake outreach to stakeholders at the end of phase I ,but this will be unlikely as results are not yet published and the 2nd phase shall focus on consolidating the results for outreach. <p>Factors contributing to the level of achievements (both positive and negative), e.g. the influence of Covid</p> <ul style="list-style-type: none"> - Not applicable as there are no results/evidence yet that can show the extent to which achieved objectives contribute to national development priorities. <p>Appreciation of external stakeholders</p> <ul style="list-style-type: none"> - Sector offices and research institutes (Amhara Water Bureau, Abay Basin Authority, Fish, Fishery and other aquatic research center, and NABU (German NGO) working on Tana Biosphere Reserve) appreciate our project and the research it is undertaking. - These stakeholders, however, have their expectations from the project in terms of getting the results of studies for outreach as well as training and access to facilities. - The project has a plan to undertake outreach activities after the results are ready. <p>The extent to which the way forward (as specified in self-assessments) is sufficiently geared towards the realisation of the specific objective and the overall objective</p> <ul style="list-style-type: none"> - Despite the limitation in meeting publication targets, the project will achieve its objectives in the remaining time. <p>Level of reflection with regards to existing relations and networks (maybe the 2nd phase requires new expertise or networks?)</p>

	<ul style="list-style-type: none"> - The project leader stated that the existing relation and network including the relation with north partners is very good. - The project has a good working relationship with AMU, particularly two PhD students from BDU and AMU are jointly doing their research and have plans for a joint publication. - The relation with other local stakeholders (local Universities) is loose and need to be improved. - Internal synergy with other thematic projects needs to be strengthened in the 2nd phase.
<p>2.3 Scientific quality</p> <p>Score = 3 (good)</p>	<p>What information is available about quality of research (e.g. publications) and education (e.g. fellowships received from foundations, job prospects for alumni)</p> <ul style="list-style-type: none"> - No publication yet, but the quality of the experimental designs and the data collected so far are very good and it is anticipated that good publications will come out. <p>Does the project refer to ‘cutting edge’ knowledge and what evidence is the project referring to?</p> <ul style="list-style-type: none"> - Not yet in the strictest sense of cutting-edge knowledge, but the project staff has been getting a more modern research culture. <p>Are there clear examples of quality (to verify during field mission) (optional) In case you have some ideas already:</p> <ul style="list-style-type: none"> - Not yet publication wise, but the lab facilities have been improved and are supporting the teaching-learning process, and local MSc and PhD students have access to these facilities. - Boats are used for research and practice- based teaching. - Science visitors are also using the boats (Eg. The Hydrology project is using the boats for transporting science visitors to research sites) <p>What are issues of concern according to you in relation to scientific quality?</p> <ul style="list-style-type: none"> - No
<p>Final judgement/comments</p> <ul style="list-style-type: none"> - The progresses of the 3 PhD students, 2 Predocs and 4 MSc students is good and they all are on the right track although there are delays in meeting publication targets, as there is no publication output from the project yet. In terms of lab facilities, there is very good progress and the lab facilities are used for teaching-learning activities by different departments of the university and local MSc and PhD students have access to such facilities. - The project has not yet conducted outreach activities as the PhD research activities are ongoing and results for outreach are not yet available. - Key stakeholders (For example The Amhara Water Bureau, Abay Basin Authority, Fish, Fishery and other aquatic research centre, and NABU (German NGO) working on Tana Biosphere Reserve) appreciate the project’s research activities and are keen to see the results and the project has a plan to undertake outreach activities when results are ready. 	

Efficiency	
<p>3.1 Intermediate results</p> <p>Intermediate results have been delivered</p> <p>Score = 3 (good)</p>	<p>Level of realisation of intermediate results according to indicators formulated in the logical framework (with specific attention to the number of topics to be covered in P1 in relation to available resources)</p> <ul style="list-style-type: none"> - PhD and MSc students are on the right track, but publications will not be on track as originally foreseen. - Lab facilities are in place, but some lab equipment purchased (eg. -18 deep freezer) is not yet functional and need to be installed for use. - With some degree of modification in some of the IRs as stated above, the level of realization is good and on the right track. <p>Factors contributing to the level of achievements (both positive and negative), for e.g. how realistic were the planned results given the resources and time available in the framework of the project?</p> <ul style="list-style-type: none"> - Refer 2.1 <p>Outlook towards full achievement of IR in remaining year</p> <ul style="list-style-type: none"> - Except for possible delays in meeting publication targets, PhD and MSc students will finish their studies in the remaining time and most of the IRs will be achieved.
<p>3.2 Support was provided to ensure the quality of the research and educational processes</p> <p>Score = 3 (good)</p>	<p>The project provides adequate training, support, mentoring and follow-up for students (PhD and MSc, including support in managing effects of Covid-19 on their research)</p> <ul style="list-style-type: none"> - The project provides adequate support, mentoring, and follow-up to all the PhD and MSc students. <p>The project provides adequate training and support for students in terms of grant writing and job searches (particularly for MSc students; PhD students are mainly university staff)</p> <ul style="list-style-type: none"> - No training on grant proposal writing has been given to staff. - Most respondents suggest the need for training on grant proposal writing in the 2nd phase. <p>The project contributes to scientific quality as described under the rationale of efficiency</p> <ul style="list-style-type: none"> - It is anticipated that the project will contribute to scientific quality - Quality of data collected is very good as per the view of the project leader and PhD students.
<p>3.3 Relationship input-output</p> <p>Relationship between means and results achieved and objectives (qualitative assessment)</p> <p>Score = 3 (good)</p>	<p>Share of missions from the partner in the North, PHD's, trainings, investment costs and operational costs is reasonable in relation to the realization of the intermediate results</p> <ul style="list-style-type: none"> - Investment (inputs) are reasonable in relation to realized intermediate results. <p>Relevance of the expertise that was mobilised from Flemish universities and other partners</p> <ul style="list-style-type: none"> - Not applicable, there were no mobilized experts. <p>Management of spending and rate of over- and/or underspending (and explanatory factors)</p> <ul style="list-style-type: none"> - Spending is balanced. <p>Choice of activities: cost-effectiveness is being pursued in programme design and management</p>

	<ul style="list-style-type: none"> - Yes, for example the project purchased lab equipment mostly through direct purchases from Belgium and the equipment are of high quality and relatively less costly than what could have been purchased from local market. This has also saved/ shorten the lengthy procurement procedure.
<p>3.4 Project management</p> <p>Project management is conducive for efficient and effective project implementation</p> <p>Score= 3 (good)</p>	<p>Good working relation within the project team (clear guidelines, transparency, communication flows, timeliness of planning and execution of activities, etc.)</p> <ul style="list-style-type: none"> - There is a good working and transparent relationship within the project team, project documents are shared to internal stakeholders. - There is good communication within the project team and the Project leaders know the program management guideline. <p>The extent to which the project teams can be flexible in project execution (taking into account emerging needs, challenges from the context, amongst which Covid 19)</p> <ul style="list-style-type: none"> - There is flexibility in execution of activities. PhD students and promoters discuss on mobility plans of students and project activities. <p>Factors hampering efficient management have been identified timely and managed well</p> <ul style="list-style-type: none"> - There have been issues (delays) in procurement, material acquisition and distribution. Problem have been solved through discussion with the top university management. - Not able to get a qualified PhD candidate for one of the PhD positions from senior academic staff members. Therefore, a decision was taken to select from junior staff and this turned out well. <p>Bureaucracy related to procurement (equipment purchases, travel approval...) has been managed well by the project team</p> <ul style="list-style-type: none"> - Procurement procedures at BDU are very lengthy and need improvement. - Products for lab (equipment) from local markets are of low quality. - The project has made direct purchase from Belgium with the help of North partners and the products are of high quality.
Final judgement/comments	
<ul style="list-style-type: none"> - The progress of PhD, Predoc and MSc students, the strengthening of the labs of involved departments with equipment (since this is helping the teaching-learning process at BDU) is very good and most of the IRs of the project will be achieved in the remaining time of phase I. However, PhD students are likely to lag in terms achieving publication targets. As a result, it may be less likely that the project will accomplish its outreach activities within the remaining time. - In phase 2 of the project it will be important to focus on consolidating results of phase I and undertaking outreach activities so as to meet its objective of providing the scientific baseline data needed for conservation planning and the involvement of diverse stakeholders of the Lake Tana Basin. - The investment (inputs) is reasonable in relation to realized intermediate results. Respondents indicated that there is no expertise that was mobilized from Flemish universities and the project need to consider this for 2nd phase as such mobilization of expertise from Flemish university is important for knowledge transfer and networking. - The project has not provided any short-term trainings to staff or project members. Most respondents suggest the need for training on grant proposal writing in the 2nd phase. 	

- The lab facilities of involved departments are supporting the teaching-learning at BDU and local PhD and MSc students have access to the labs. This is a good indicator of the contribution of the project for enhancing scientific quality in academics at BDU.
- Most respondents confirm that there is a very good working relation in the project and the project is also flexible regarding the fact that PhD students and promoters discuss on mobility plans of students and project activities and make the necessary adjustments.
- All respondents raise their concerns on the lengthy procurement procedure, delays in material acquisition and distribution at BDU that needs improvement.

Sustainability EQ 4 – To what extent will the project results continue after the IUC programme is completed (sustainability)?

<p>4.1 Institutional Level of academic and institutional sustainability</p> <p>Score = 3 (good)</p>	<p>Level of (personal) commitment of stakeholders within the department/school concerned</p> <ul style="list-style-type: none"> - The level of commitment of stakeholders (PhD students, team members, PL, PSU, university management) is very good. - However, there is variation in terms of the level of commitment of relevant departments: the department of fisheries and wildlife studies has a very good level of commitment whereas the department of Biology less, because there is no visible benefit e.g. in terms of scholarship. Thus, the commitment is good but not as expected. Also, at the level of the department of Microbiology, Immunology and Parasitology, though benefited in terms of scholarship, the level of commitment is not as good as expected by the PL. <p>Measures taken for retention of PhDs and trained staff</p> <ul style="list-style-type: none"> - PhD students have signed an agreement with BDU to serve the university for several years after finishing their studies. - The working environment is good and there are efforts by the university to improve it. <p>Joint research interests for both the Northern and Southern academics involved, are identified and pursued</p> <ul style="list-style-type: none"> - There has been a discussion with North partners and some topics have already been identified in the thematic areas of fishery and microbiology for phase II of the project. - The project has also created a platform to get together with staff at BDU and write proposals for other funding sources (e.g. NORHED). <p>Evolution in networking with other national universities</p> <ul style="list-style-type: none"> - There is a strong network with Arba Minch University, in that two PhD students (one from BDU of P5 and the other from AMU have aligned their PhD research protocols and conducting studies on Lake Tana and Lake Chamo. They are planning also for joint publications) from Addis Ababa University and Debre Tabor University.
<p>4.2 Financial Level of financial sustainability</p> <p>Score = 3 (good)</p>	<p>Allocation of funds by Flemish universities (e.g. giving fellowships or by allowing academics to go to the field, matching funds)</p> <ul style="list-style-type: none"> - The funds allocated for 3 PhD students are enough. - Allocations for other activities (lab etc) are also sufficient. <p>Availability of funds for operations and maintenance of physical infrastructure at university/college level</p>

	<ul style="list-style-type: none"> - Yes this is anticipated, but soliciting research fund through grant application would help and this requires more training on grant proposal writing to staffs of BDU. <p>Availability of proper funds (at university or college level) to continue all or a number of activities that are important/relevant</p> <ul style="list-style-type: none"> - No, it is not anticipated to use proper funds from the university or college, therefore research fund needs to be solicited through grant application would help and this requires more training on grant proposal writing to staffs of BDU. <p>Capacity for resource mobilisation to build on the achievements (Strategy and initiatives to attract external funding (from other donors, government, private sector, ...), skills of staff, task division for resource mobilisation, networks, ...)</p> <ul style="list-style-type: none"> - There is weak capacity for resource mobilization. - For attracting external funds, increasing the capacity of staff in grant proposal writing, project planning and management and related shortterm trainings would help and shall be planned in phase II. <p>Development of business approaches towards financing</p> <ul style="list-style-type: none"> - Not that much but giving water transport service can be thought of like lending the boats on mileage/ fee basis and use the revenue for covering maintenance costs.
Final judgement/comments	
<ul style="list-style-type: none"> - The level of commitment of stakeholders (PhD students, team members, PL, PSU, university management) is very good. However, there is variation in terms of the level of commitment of relevant departments as stated by the project leader and this need to be improved in the 2nd phase. - The project has started discussion with North partners and is in the process of identifying joint research. - The project has a good network with Arba Minch, Addis Ababa, and Debre Tabor Universities and needs to strengthen its network with other national universities. - Most respondents stated that the fund allocation for PhD students and lab facilities is sufficient. However, for maintaining purchased lab equipment and continuing research activities, respondents argue that the availability of funding from the university may not be sufficient and there is a need for mobilizing funds through grant proposal writing and application for funding. - There is limited capacity in this regard and there is a need for organizing and training staff with short-term training on grant proposal writing. - Following the development of business approaches towards financing is a good idea and the project leader stated that the project shall think of giving water transport service using the project's boats on mileage/ fee basis and use the revenue for covering maintenance costs. 	

POINTS OF ATTENTION FOR THE FUTURE

- Project formulation requires sufficient time and there is a need to start the designing and formulation of the 2nd phase as soon as possible.
- PSU should have a section for internal communication to maintain institutional memory and to avoid information gaps that could arise because of staff turnover involved in the projects. (not only for this project).

2.3.6. Project 6

TITLE OF PROJECT: SOCIOECONOMICS, SUSTAINABLE LIVELIHOOD AND ENVIRONMENTAL MANAGEMENT IN NORTHWEST ETHIOPIA

INTRODUCTION

The main objective is to improve livelihood in Northwest Ethiopia through increased agricultural productivity and improved sustainable tourism. The research themes of the project focus on understanding and finding scientific solutions to the food security, environment management and livelihood problems in Northwest Ethiopia. It also aims to contribute to generating evidence for policy action on environmental issues including socioeconomic impact of dams, land deals, animal feeding, geo-tourism and internal migrations. The main outputs of the project in phase I include training of staffs at PhD (5), 1 female predoc and MSc (2) levels and conducting outreach activities based on research results. Except for delays in meeting the outreach target that the project had planned but could not deliver due to Covid-19, the progress of PhD and MSc students is very promising and almost all students are on the right track and PhD students have published 6 papers and also submitted another 5 papers.

FACTUAL DATA

The factual data required will depend on the evaluation framework decided/see indicators scientific quality

Hosting faculty	6 Departments from different colleges are involved (Geography and Environmental Study, Economics, Rural Development and Agricultural Extension, Agricultural Economics, Social works, and Tourism and Hotel management)
Number of staff in research group	117
Status of staff (fixed position, service contract, others)	Fixed position
Number of PhD finished/ongoing (with VLIR funding)	5PhD + 1 predoc + 2MSc scholarships
Number of PhD finished/ongoing outside VLIR funding	0
Number of publications in peer reviewed journals	5 publications

EVALUATION QUESTIONS

Relevance (EQ 1 – To what extent is the project relevant?)	
1.1. Responds to needs The objectives of the projects are consistent with the country/local needs, the needs of the university, the VLIR-UOS	The mechanisms of interaction with beneficiaries of the project <ul style="list-style-type: none"> - The PhD candidate selection procedure was transparent. - There has been a strong follow-up by the North and south promoters and smooth communication with PhD students. - Project leader and PSU manager are very supportive. - PhD students have sitting rooms at the BDU-VLIR IUC office and this facilitated face to face communication. - The objectives are in line with development objectives of the country like food security and improving livelihood options.

<p>strategy and donor's policies</p> <p>Score: 3 (good)</p>	<ul style="list-style-type: none"> - The research topics are responsive to local needs and consistent with BDU's strategic plan and thematic research priorities. <p>The extent to which advice and indigenous knowledge from communities is sought and taken into account in the research</p> <ul style="list-style-type: none"> - PhD students held focus group discussions and key informant interviews. with local communities and pilot surveys to refine their research questions and survey instruments (eg. PhD students working on tourism, extension). - Consultative meetings were held with stakeholders from municipalities, bureau of tourism, Agriculture Bureau and feedbacks are used to refine PhD proposals. <p>Relevance of research findings for external stakeholders at the local and national level</p> <ul style="list-style-type: none"> - Three of the 5 PhD students have published 5 papers. - Although there was a plan to undertake outreach workshop to disseminate the research results to stakeholders, it has not yet been conducted due to Covid-19. <p>The positioning of the project within the respective departments /institutes/units: what are the needs at this level and how are these answered?</p> <p>What have been the dynamics in the departments so far?</p> <ul style="list-style-type: none"> - Some of departments involved in the project have benefited in terms staff capacity building (Geography 1 MSc, Economics 2 PhD, Rural Development and Agricultural Extension 1PhD and 1 MSc, Land Administration 1PhD, and Hotel and Tourism management 1 PhD). <p>The link of the project with the transversal themes of Belgian development cooperation (gender, environment and D4D, digitalization for development)</p> <ul style="list-style-type: none"> - Environment: The PhD research theme for example on tourism is dealing with assessment of geo-tourism site for development. The objective of the topic of geo-tourism is to do research on the potential of geo-tourism in the targeted area. This is closely related to environment since geo-tourism is a kind of tourism that focuses on landscape and geology. It promotes tourism to specific natural sites while conserving and appreciating it in its natural environment. - Gender: The project has 1 female predoc, Some PhD students in conducting surveys for their research their samples are composed of female and male headed households. <p>Extent to which gender and environmental sustainability are effectively integrated in each project</p> <ul style="list-style-type: none"> - Except for the existence of link of the project to gender and environment, there is not yet real gender strategy has been implemented so far by the project, even if there is a gender guideline/strategy that has been developed at university level.
<p>1.2. Synergy</p> <p>There have been efforts made to ensure synergy</p>	<p>The extent to which crosscutting coordination/joint action/collaboration exists between projects (particularly between the thematic projects)</p> <ul style="list-style-type: none"> - Initially at the designing stage, there was a discussion with the other projects. As a result of this, there is no joint action in terms of doing interdisciplinary

<p>between (thematic) IUC projects (internal synergy)</p> <p>Score = 3 (good)</p>	<p>research with other projects during the implementation of the project. The interviews with project staff made clear that joint excursions and joint steering committee meetings were organised. PhD students of P6 discuss with PhD students of the other 4 thematic projects and sometimes share/get study site maps.</p> <p>The extent to which interdisciplinary research practices (involving more than one project) and inherent synergy takes place</p> <ul style="list-style-type: none"> - Not that much, but a PhD student of P3 is undertaking experiment on irrigated and non-irrigated lands and shares biophysical data to a PhD student of P6 who looks at the socioeconomic impact of dam construction and the economic impact of irrigation. - Project 6 students' research findings on postharvest loss have been communicated to P4. - PhD student working on the assessment of geo-tourism sites has got support from PhD student of Project 3 in identifying and classifying rock samples collected from the geo-tourism sites. - Interdisciplinary research practice shall start from the designing stage. The project has been designed already to focus on its thematic area and there is no room to plan and implement interdisciplinary research practices. This will be foreseen in phase II. <p>The extent to which joint research between projects led to (spinoff) master theses or paper publications</p> <ul style="list-style-type: none"> - No, not yet <p>What has been done to improve and consolidate internal synergies? What could be done better in the 2nd phase of the project to further improve internal synergies?</p> <ul style="list-style-type: none"> - Joint steering committee meetings were used as a platform for sharing ideas among projects and knowing of their work and progresses. - However, this is not enough to create internal synergy. - Joint discussion, planning of joint activities and joint implementation of the planned activities need to be undertaken. - This has to start during the designing of the 2nd phase of the programme.
<p>1.3. Synergy & Complementarity</p> <p>There have been efforts made to ensure complementarity and synergy with other (externally funded) projects/ (other (Belgian) development actors)</p>	<p>The extent to which the project is looking for synergy with other VLIR-UOS interventions in the country or at regional level</p> <ul style="list-style-type: none"> - At the designing stage, visits were paid to Jimma and Mekelle Universities to share experiences. Even though these are interesting initiatives, it does not create synergy in itself, but only a basis to come to eventual synergies later. - The project has a plan to undertake visits to Arba Minch University. <p>The extent to which the project is looking for synergy with projects supported by other donors, more in particular Belgian development actors</p> <ul style="list-style-type: none"> - No <p>What has been done to improve external synergies?</p> <ul style="list-style-type: none"> - The PhD students communicate with local stakeholders (Land Administration, Tourism Bureau etc.). This will facilitate the uptake of results of the project when conducting outreach activities for the fact that these stakeholders are implementing organizations.

Score = 3 (good)	<p>What could be done better in the 2nd phase of the project to further improve external synergies?</p> <ul style="list-style-type: none"> - There is a need for stakeholdermapping and plan to engage with them - Creation of awareness about the project and the program using the Amhara Universities Forum and involve these universities better. - Writing joint research proposals and applying for funding sources.
<p>1.4. Coherence</p> <p>The project is coherent</p> <p>Score = 4 (Excellent)</p>	<p>There is coherence between expected results, specific objectives and the overall objective</p> <ul style="list-style-type: none"> - Yes, there is. The different intermediate results examine the different topics included in the SO from different angles and all contribute to more knowledge and research practices about these topics. For instance, if geo-tourism could be promoted, then this could contribute to reduction of migration by the creation of local job opportunities etc. <p>The choice of activities is relevant to obtain results and objectives</p> <ul style="list-style-type: none"> - The project activities are relevant to the national, BDU, and involved departments objectives. - It is helping BDU in international networking and skills/knowledge transfer - The research topics by PhD students on geo-tourism (employment and income diversification), urban land expansion and its impact on farmers, socio-economic impact of dam construction, and agricultural extension and technology transfer are very relevant topics from which the research results will inform policy makers in the respective sectors. <p>The indicators are well chosen to monitor progress and to support learning.</p> <ul style="list-style-type: none"> - Yes. <p>Is the formulation of the project still relevant, taking into account changes in context (such as Covid but also changes in the departments, new dynamics?)</p> <ul style="list-style-type: none"> - Yes, it is relevant.
Final judgement/comments	
<ul style="list-style-type: none"> - . The research topics are responsive to local needs and consistent with BDU's strategic plan and thematic research priorities. To a certain extent, the project addresses the two of the transversal themes (environment and gender) of the Belgian Development cooperation. - The PhD research theme for example on tourism is dealing with assessment of potential geo-tourism site for development and hence dealing in assessing environmental resources. - Though the project has only one female predoc student and all the PhDs and MSc scholarships are awarded to male candidates. - PhD students confirmed that their data from household surveys are gender disaggregated. - Except for sharing of experience with other thematic projects through the joint steering committee meetings and join excursions, the project has no synergy with other thematic projects in terms of conducting interdisciplinary research practices or creating spinoff (as master thesis of paper publications) from such practices. - For the 2nd phase there is a need to start joint discussion starting from the designing stage so that it is possible to create more internal synergy through conducting interdisciplinary research practices and joint publications. 	

- The efforts made by the project and involved departments and staff to strengthen external synergy are very limited. The project shall make more effort in enhancing external synergies and for this most respondents emphasised the need for short term training on grant proposal writing.
- The project is coherent in that its objectives and activities are relevant to the national, BDU, and involved departments objectives and helping BDU in international networking and skill/knowledge transfer.
- The research topics of PhD students on geo-tourism (employment and income diversification), urban land expansion and its impact on farmers, socioeconomic impact of dam construction, and agricultural extension and technology transfer are very relevant topics from which the research results will inform policy makers in the respective sectors.

Effectiveness EQ 2 – To what extent have the project’s specific objectives been achieved (effectiveness)?

<p>2.1 Academic</p> <p>Extent to which the specific objectives of the project with regards to research and education strengthening have been realised</p> <p>Score = 4 (Excellent)</p>	<p>Progress in indicators developed for the specific objective at project level related at research and education strengthening of capacities and infrastructure</p> <ul style="list-style-type: none"> - The PhD except one PhD student who had to do a predoc and all the MSc students are on the right track. - Three of the 5 PhD students have published papers and there are also 6 papers submitted. <p>Progress made in gender mainstreaming and environment as cross-cutting issue at project level</p> <ul style="list-style-type: none"> - Refer 1.1 <p>Non-expected effects that have emerged (not specified by indicators)</p> <ul style="list-style-type: none"> - No <p>Factors contributing to the level of achievements at project level (both positive and negative), e.g. the influence of Covid</p> <ul style="list-style-type: none"> - Positive Factors: <ul style="list-style-type: none"> o There has been strong support and commitment from PSU, BDU leadership/management in facilitating the core activities of the project (PhD student research works). o PhD students are highly committed to their studies. o Local communities are supportive to PhD students during their field work. - Negative factors <ul style="list-style-type: none"> o Per diem rate is small (not sufficient to cover relevant expenses made) and no per diem is foreseen for locations less than 15 km from BDU. o Sample respondent households do not receive a payment for the time they spent during interviews. o Covid-19 state of emergency made it difficult to conduct field work and surveys during the state of emergency, but most of the PhD students of the project had already conducted surveys before Covid and after the lifting of the state of emergency. Therefore, the impact of Covid in creating delays is not significant. <p>Appreciation of progress made by respondents involved</p> <ul style="list-style-type: none"> - The project is on track and PhD students have started publishing papers.
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	<ul style="list-style-type: none"> - Both PhD students and staff are getting good experience in developing more modern research culture. - The co-supervision of local PhD students by Flemish promoters is also helping the capacity building effort of BDU. <p>The extent to which the way forward (as specified in project self-assessments) is sufficiently geared towards the realisation of the specific objective and the overall objective</p> <ul style="list-style-type: none"> - Except one PhD student who started his study with a 1 year predoc, all the PhD students will finish their studies in the remaining time of phase 1. - The project anticipates that almost all objectives including outreach will be achieved in the remaining time. But Covid has delayed the implementation of outreach activities so far and though the project still intends to conduct the outreach within the remaining time of Phase I, it will be subject to the Covid situation in the country.
<p>2.2 Development</p> <p>Extent to which the specific objectives of the project with regards to the contribution to national development priorities have been realised</p> <p>Score: 3 (good)</p>	<p>Progress in indicators developed for the specific objective at project level related to the contribution to national development priorities from project perspective</p> <ul style="list-style-type: none"> - The project is at the stage of generating knowledge and some results are already written down in terms of publications (5 papers published) - There is a plan to undertake outreach to stakeholders but due to Covid-19 it has not been implemented yet. <p>Non-expected effects that have emerged (not specified by indicators)</p> <ul style="list-style-type: none"> - No <p>Factors contributing to the level of achievements (both positive and negative), e.g. the influence of Covid</p> <ul style="list-style-type: none"> - There is a plan to undertake outreach to stakeholders for at least disseminating the results from the published works but due to Covid-19 it has not been implemented yet. <p>Appreciation of external stakeholders</p> <ul style="list-style-type: none"> - There are no outreach activities conducted but feedback from stakeholders will be needed after conducting the outreach activities. - However, some external stakeholders like private tourist guides, experts at district level agricultural offices highly appreciate the research works of the PhD student on geo-tourism and the PhD student working on issues of agricultural extension and technology transfer. <p>The extent to which the way forward (as specified in self-assessments) is sufficiently geared towards the realisation of the specific objective and the overall objective</p> <ul style="list-style-type: none"> - The project is on the right track and will achieve its objectives in the remaining time. <p>Level of reflection with regards to existing relations and networks</p> <ul style="list-style-type: none"> - The project leaders stated that the existing relations and network is good. - The relation with local stakeholders (universities and local stakeholders like Land Administration, Tourism Bureau etc.) is loose and most communications are limited to the communications through the PhD students and need to be improved.

	<ul style="list-style-type: none"> - Internal synergy with other thematic projects needs to be strengthened in the 2nd phase
<p>2.3 Scientific quality</p> <p>Score = 4 (Excellent)</p>	<p>What information is available about quality of research (e.g. publications) and education (e.g. fellowships received from foundations, job prospects for alumni)</p> <ul style="list-style-type: none"> - The project is on the right track; 6 papers have been published and another 5 papers have been submitted. - The published and some of the submitted papers are as follows: <p>Does the project refer to ‘cutting edge’ knowledge and what evidence is the project referring to?</p> <ul style="list-style-type: none"> - Not yet in the strictest sense of cutting-edge knowledge, but the project staff has been getting a more modern research culture. <p>Are there clear examples of quality?</p> <p>Yes: The published papers above are published on high impact factor journals.</p>
Final judgement/comments	
<ul style="list-style-type: none"> - The progress of the 5 PhD students, 1 predoc and 2 MSc students is very good and all are on the right track. - The PhD students have in total published 6 papers and submitted another 5 papers that are under review. - The project also has a plan to conduct outreach activities within the remaining time of phase I. The papers are published in high impact factor journals indicating the presence of scientific quality in the works of project 6. 	

Efficiency (EQ 3 – What is the level of efficiency in the project?)	
<p>3.1 Intermediate results</p> <p>Intermediate results have been delivered</p> <p>Score = 3 (good)</p>	<p>Level of realisation of intermediate results according to indicators formulated in the logical framework (with specific attention to the number of topics to be covered in P1 in relation to available resources)</p> <ul style="list-style-type: none"> - Most PhD and MSc students are on the right track. - PhD students have started publishing papers and submitted more. - The project is on the right track except that it could not undertake outreach activities as planned due to Covid-19. <p>Factors contributing to the level of achievements (both positive and negative), for e.g. how realistic were the planned results given the resources and time available in the framework of the project?</p> <ul style="list-style-type: none"> - Refer 2.1 <p>Outlook towards full achievement of IR in remaining year</p> <ul style="list-style-type: none"> - Except one PhD student who started with predoc, all the PhD and MSc students will finish their studies in the remaining time and the project's IRs will be achieved.
<p>3.2. Support was provided to ensure the quality of the research and educational processes</p>	<p>The project provides adequate training, support, mentoring and follow-up for students (PhD and MSc, including support in managing effects of Covid-19 on their research)</p> <ul style="list-style-type: none"> - The project provides adequate support, mentoring, and follow-up to all the PhD and MSc students.

Score: 3 (good)	<p>The project provides adequate training and support for students in terms of grant writing and job searches (particularly for MSc students; PhD students are mainly university staff)</p> <ul style="list-style-type: none"> - No training on grant proposal writing has been given to staff. - Most respondents suggest the need for training on grant proposal writing in the 2nd phase. <p>The project contributes to scientific quality as described under the rationale of efficiency</p> <p>Yes (see publications listed in section 2.3)</p>
<p>3.3. Relationship input-output</p> <p>Relationship between means and results achieved and objectives (qualitative assessment)</p> <p>Score: 3 (good)</p>	<p>Share of missions from the partner in the North, PHD's, trainings, investment costs and operational costs is reasonable in relation to the realization of the intermediate results</p> <ul style="list-style-type: none"> - Costs are reasonable in relation to realized intermediate results. - But there are no reasonably sufficient payments to staffs involved in project leadership related to the time and energy devoted to the project work. <p>Relevance of the expertise that was mobilised from Flemish universities and other partners</p> <ul style="list-style-type: none"> - Not applicable, initially North promoters came during the project design and afterwards no expert from Flemish universities mobilized to BDU. <p>Management of spending and rate of over- and/or underspending (and explanatory factors)</p> <ul style="list-style-type: none"> - Underspending one year but the rest is balanced. Overall, cost-effectiveness is being pursued in programme design and management
<p>3.4 Project management</p> <p>Project management is conducive for efficient and effective project implementation</p> <p>Score: 3 (good)</p>	<p>Good working relation within the project team (clear guidelines, transparency, communication flows, timeliness of planning and execution of activities, etc.)</p> <ul style="list-style-type: none"> - There is a good working and transparent relation within the project team, project document is shared to internal stakeholders. - There is good communication within the project team and the Project leader knows the program management guideline. - But, involved departments indicate there is a gap in communicating progress. This is partly due to frequent changes of department heads and lack of system in transferring information to the new department heads. <p>The extent to which the project teams can be flexible in project execution (taking into account emerging needs, challenges from the context, amongst which Covid 19)</p> <ul style="list-style-type: none"> - Yes discussions on emerging needs are done but on finance there is some reservation in terms of settling expenses and getting advance payments in time. <p>Bureaucracy related to procurement (equipment purchases, travel approval...) has been managed well by the project team</p> <ul style="list-style-type: none"> - The project has not faced any bureaucracy related to procurement mainly because of the nature of the project that is does not require material purchases. Most expenses are related to filed survey
Final judgement/comments	
<ul style="list-style-type: none"> - PhD students have started publishing papers and submitted more and the project is on the right track except that it could not undertake outreach activities as planned due to Covid-19 but it has a 	

plan to deliver the outreach in the remaining time of phase 1. Therefore, the progress of PhD, Predoc and MSc students and the plan to deliver outreach activities in the remaining time of phase 1 indicate that the project will accomplish its the IRs and achieve its objective of generating evidence for policy action on environmental issues including socio-economic impact of dams, land deals, animal feeding, geo-tourism and internal migrations.

- The investments (inputs) are reasonable in relation to realized intermediate results. But respondents stated that there are no reasonably sufficient payments to staffs involved in project leadership commensurate to the time and energy devoted to the project work.
- Per diem rates for field work are also too small to cover costs.
- Except for the designing stage, respondents indicated that there is no expertise that was mobilized from Flemish universities and the project need to consider this for 2nd phase as such mobilization of expertise from Flemish university is important for knowledge transfer and networking.
- The project has not provided any short-term trainings to staff or project members. Most respondents suggest the need for training on grant proposal writing in the 2nd phase.
- Five papers are published in high impact factor journals indicating the presence of scientific quality and the contribution of the project for enhancing scientific quality in research and academics at BDU.
- Most respondents confirm that there are very good working relations within the project, and this needs to be strengthened and involve relevant internal stakeholders like departments in terms of communicating progress of the project.

Sustainability EQ 4 – To what extent will the project results continue after the IUC programme is completed (sustainability)?

<p>4.1 Institutional Level of academic and institutional sustainability</p> <p>Score: 3 (good)</p>	<p>Level of (personal) commitment of stakeholders within the department/school concerned</p> <ul style="list-style-type: none"> - The level of commitment of stakeholders (PhD students, team members, PL, PSU, university management) is very good. - However, there is variation in terms of the level of commitment of relevant departments mainly due to communication gap and frequent change of department heads. <p>Measures taken for retention of PhDs and trained staff</p> <ul style="list-style-type: none"> - PhD students have signed an agreement with BDU to serve the university after finishing their studies. - The working environment is good and there are efforts by the university to improve it. <p>Joint research interests for both the Northern and Southern academics involved, are identified and pursued</p> <ul style="list-style-type: none"> - There has been a discussion with North partners for identifying joint thematic topics for Phase II, and the project anticipate they will identify within the remaining time of Phase I. <p>Evolution in networking with other national universities</p> <ul style="list-style-type: none"> - At project level, there is no strong network with other national universities
<p>4.2 Financial Level of financial sustainability</p>	<p>Allocation of funds by Flemish universities (e.g. giving fellowships or by allowing academics to go to the field, matching funds)</p> <ul style="list-style-type: none"> - The funds allocated to 5 PhD students are enough. - There are no matching funds.

Score: 3 (good)	<p>Availability of funds for operations and maintenance of physical infrastructure at university/college level</p> <ul style="list-style-type: none"> - Not relevant <p>Availability of proper funds (at university or college level) to continue all or a number of activities that are important/relevant</p> <ul style="list-style-type: none"> - Yes this is anticipated to a limited extent, therefore it is needed to solicit a research fund through grant application but this requires more training on grant proposal writing to staff of BDU. <p>Capacity for resource mobilisation to build on the achievements (Strategy and initiatives to attract external funding (from other donors, government, private sector, ...), skills of staff, task division for resource mobilisation, networks, ...)</p> <ul style="list-style-type: none"> - There is weak capacity for resource mobilization. - For attracting external funds, increasing the capacity of staff in grant proposal writing, project planning and management and related short-term trainings would help and shall be planned in phase II. <p>Development of business approaches towards financing</p> <ul style="list-style-type: none"> - No.
Final judgement/comments	
<ul style="list-style-type: none"> - The level of commitment of stakeholders (PhD students, team members, PL, PSU, university management) is very good. - There is a variation in terms of the level of commitment of relevant departments mainly due to communication gaps and frequent changes of department heads of involved departments; this needs to be improved in the 2nd phase. - The project has started discussions with North partners and is in the process of identifying joint research topics for Phase II. - At the project level there is no network with other national universities except some visits to Jimma and Mekelle Universities to share experience at the designing stage of the project and the plan to undertake visits to Arba Minich University. - Most respondents stated that the fund allocation for PhD students is sufficient. However, there are no sources of matching funds for continuing research activities, and respondents argue that the funding from the university may not be sufficient and there is a need for mobilizing funds through grant proposal writing and application for funding. There is limited capacity in this regard and there is a need for organizing and training staff with short-term training on grant proposal writing. 	

POINTS OF ATTENTION FOR THE FUTURE

- Project formulation requires sufficient time; it is needed to start the designing and formulation of the 2nd phase as soon as possible.
- Local staff involved in the project as project leaders and promoters should be compensated and their contributions should be credited.
- Short term trainings to staff on grant proposal writing, project management and other based on demand of the staff shall be considered for the 2nd phase.
- Department heads of involved departments and other internal stakeholders should be communicated about the progress of the project so that it is possible to strengthen ownership of the project.

3. Conclusions and lessons learned

1 Overall, the IUC programme at Bahir Dar university is relevant and responds to the needs of involved stakeholders at different levels (local, regional and (inter)national level)

When designing the programme, **relevance was considered from different angles**: from the perspective of institutional needs at Bahir Dar university such as outcome-oriented research needs, confirmed by the leadership of BDU university, and needs of communities and other external stakeholders to improve environment and life conditions of people in Northwest Ethiopia. Next to this, the programme is highly relevant because it aligns with the national priorities of Ethiopia and the five-year strategic plan of BDU. The programme also adds value (in terms of budget, approaches) compared to other interventions at BDU (financed by others). The programme design also allows for internal and external synergy and joint actions between the involved stakeholders.

Another perspective to look at relevance is the extent to which gender and environment is included in the design of the programme. Environment is at the core of the programme, while gender mainstreaming is included in the programme in a transversal way (in project 1).

A point of attention is that in some projects, the final selection of research topics was felt by the South partner to some extent as 'pushed' by the North partners (while this was not perceived as such by the Northern partners).

2 The programme shows progress in achieving its overall objectives, although it is still early to find widespread examples of outcome-oriented research approaches

The findings within Bahir Dar reveal that **progress is made in the implementation of the programme and results achieved so far**. Part of the **PhD students** are on track with their research; it is expected that several students working in different projects will graduate with some delay (= not within phase I).

Progress towards a more **outcome-oriented approach** depends on several factors: the extent to which the university is able to create, to consolidate and to embed an outcome-oriented research culture with support of the IUC and the extent to which involved staff see the benefits of this approach. To this end, capacities need to be enhanced, internal and external synergy stimulated since collaboration with others also seem to contribute positively to this approach and its effects, and progress needs to be monitored in function of adjustments of plans and actions if needed.

Based on the answers of respondents of the outcome harvesting survey, and confirmed with interviews during the evaluation, interesting examples of **emerging changes at external and local stakeholder level could be found, although not widespread yet**. At this stage of the programme it is too early to speak already of a common practice, although within the projects, there is a common understanding on the benefits and importance of the research results, at institutional level and also at community level, with duty bearers and other involved external stakeholders.

The evaluation could not assess whether the strengthened research capacities have already attracted more **local PhD students** than before (which does not mean that this has not happened yet). The extent to which institutional capacity building leads to more local PhD students should be easier to assess at the end of phase II of the programme.

Several mechanisms for influencing the programme on policies at the university level could be detected, although not all these policies are rolled out yet, well embedded or a common practice (e.g. the gender strategy, the RIMS etc.).

Synergy and complementarity have been promoted within and between projects, resulting in several examples of collaboration within and between projects, and with external stakeholders. The findings revealed that synergy, both internal and external can lead to multiple positive effects, at project and institutional level and beyond. At the same time, several projects engage less in activities to strengthen internal and/or external synergy. Different reasons for this lie underneath but overall, whether or not internal or external synergy is achieved, depends mainly on (to be enhanced) knowledge, the necessary capacities, willingness, and whether or not it is believed that synergy adds value to the project, the programme the university and beyond.

3 Overall (financial) management of the execution of the IUC programme is done in an efficient way, with clear division of roles and transparent communication between North and South

Development and use of manuals, project documents and templates for reporting, a new way of programme budget administration as well as support provided by the PSU and programme management in Belgium allow **efficient (financial) management** of the programme and the projects. The programme does not show significant under or overspending, although Covid-19 has caused some delays in spending of the project budgets. The fact that the five-year programme works with yearly budgets that need to be spent within the year is not very conducive to the overall efficiency: this sometimes results in less necessary expenses within a year (the budget 'must' be spent) while unforeseen expenditures are limited to the boundary of the annual budget.

Within the programme, project staff and students are encouraged to collaborate beyond the own project which results in joint monitoring, digitalization of data and digitalized data collection (less paper use), shared use of logistics etc. Investments done within one project are sometimes also used others during research processes e.g. tablets for data collection. These joint efforts have a positive effect on the overall efficiency of the programme.

The existing manuals allow for a **clear division of roles**. Joint and local steering committees contribute to communication between the projects and between North and South partners. Alternating joint steering committees in Belgium and Ethiopia are a good practice, allowing more project members to participate to these meetings and to exchange and learn from their peers in the North and South. An exception is the **transversal project 1** where North/South cooperation and communication was not optimal, partly influencing the delivery of the results.

4 The logical framework serves as a planning and monitoring framework, but turns out to be less effective as joint learning instrument and in measuring progress in achieving the overall objectives

Both at project and programme level, the **logical framework** is used by the project leaders and programme coordination and management to plan and monitor progress in achieving the overall objectives. At the project level, indicators at (intermediate) result level are quantitative and mainly capture the progress made by the project at output level. Project indicators at overall objective level are often quantita-

tive and sometimes qualitative. Programme indicators to monitor progress in achieving the overall objectives level are mainly quantitative. It is not clear how the qualitative project indicators contribute in a coherent way to the overall objectives at programme level, specifically with regard to outreach of research results (development objective).

The **key results indicators (KRIs) at programme level** give an indication of the institutional progress made in the areas of HRD, strengthening of research and education and extension services. These indicators are quantitative and interesting to monitor overall progress made at institutional level, although they capture only part of the desired changes (the quantitative part), and less the quality of the progress made.

5 It is still (too) early to assess academic and financial sustainability of the programme, but initiatives that are undertaken to contribute to sustainability look promising

The evaluation findings reveal that sustainability in terms of embedment of research results, of ensuring the application of knowledge achieved within and outside the university, of setting up spinoff initiatives is still too early to assess, since the programme has just finished its fourth year of implementation. Nevertheless, initiatives are undertaken that **support retention of staff**, which contributes to sustainability in terms of HR-capacities.

The deliberate choice at the start of the programme to **work in overlapping geographical areas and topics** allows to develop and apply multidisciplinary approaches, with possibly more impact and outreach towards more external stakeholders than in the case of single discipline research. Examples of **internal and external synergies** within and between projects and with external stakeholders seem promising with regard to their contribution to institutional sustainability, however not practiced (yet) with the same intensity by all projects.

Networking and partnerships with external stakeholders and writing winning proposals are practices applied by BDU to work towards financial sustainability, the latter sometimes hindered by some of the staff members still lacking resource mobilization skills.

6 The implementation of the IUC programme is influenced by both internal and external factors, contributing or hindering progress towards achieving the overall objectives

Factors influencing positively the progress made so far are mainly and overall related to the **strong support from the PSU unit** at BDU and **support provided by the North and South programme coordination**; the **motivation and engagement** of PhD students, **(senior) expertise** of project coordination, project leaders and project staff at North and South; **University management at BDU being overall very supportive** in providing logistics such as conference rooms etcetera, and **ownership for the programme** by North and South partners. The **willingness and openness** of the communities in the targeted area and **interest of external actors** to contribute and collaborate are other influencing factors.

Hindering or limiting factors have been, so far, the (slow and bureaucratic) **procurement procedure** of BDU; the fact that **gender integration/mainstreaming takes time** (but with the gender strategy approved, progress is expected during phase II); the fact that **synergy and complementarity** require resources (capacities, time, sometimes funding which is not always available) and preparedness to share information for joint action; **contextual factors** such as Covid-19, resulting in reduced mobility N-

S and to the communities, and political tensions (specially in 2020), resulting, among other, in increased risks for students doing field work and reduced mobility of university staff and students.

7 The existence of a gender-sensitive recruitment procedure does not guarantee a gender-balanced PhD student pool, neither is it sufficient to mainstream gender in the organization and research processes.

Gender mainstreaming, a transversal theme in the programme, has not shown as much progress and results as expected so far.

The evaluation findings reveal that the existence of a **gender-sensitive recruitment procedure** does not guarantee a gender-balanced PhD student pool. To some extent, the predoc programme or extra courses offered in Belgium solved this challenge. However, this does not solve the rather low intake of female students yet.

Within the first period of the programme, several gender mainstreaming activities have been executed, coordinated by the gender expert who is part of the North project team and also co-promotor of a PhD student at Arba Minch university. Nevertheless, **gender mainstreaming –as a transversal topic - does not have a meaningful role in the programme implementation**. Gender equality is not a widespread practice and solutions introduced to improve gender mainstreaming in the university indicate that the concept of gender mainstreaming is not (yet) well understood and should be revisited with regards to gender integration in the organization, the intake of female students and research processes.

8 Working towards internal and external synergy and collaboration is a process that requires time and resources to create the right ‘mindset’

During the evaluation, examples could be found that working together in a joint and synergetic way takes already place, within and between projects, and with external stakeholders as well. However, these examples are not common practice yet and some projects score low on performance regarding internal and/or external synergy. Although synergy is not an objective in itself, and not always relevant to undertake, examples collected during the evaluation have **illustrated the benefits of this approach**. It takes time though to see the advantages and benefits of joint collaboration, and to let go for instance the tradition of not sharing collected data or information with others and not working together. Students are not used to work together towards joint publications and the national norm that rewards publications under one name is even putting pressure on this practice.

Hence, joint (multidisciplinary) actions between projects are considered by some projects as an added value, but not all projects practice this approach (yet). From this point of view, interdisciplinary research topics, although very interesting, may be difficult to achieve within the scope of the IUC-programme (at least in phase I), since this could set the ‘mindset’ (too) high for selected students and project members from the outset.

4. Recommendations

In line with the findings and conclusions following recommendations were developed. The recommendations are grouped according to whom they are directed.

4.1. Recommendations directed to programme and projects

1 The outcome- oriented approach should be further enhanced so that it can become a common practice and part of the research culture within Bahir Dar university

This recommendation proposes that phase II ensures **consolidation of this approach**, by continuing to work on multiple tracks: (i) consolidation of the introduced methods and ways of working that enhances a more outcome-oriented research culture, (ii) the strengthening of relevant internal and external synergy activities that support an outcome-oriented way of working, (iii) to remain assured of the willingness of external stakeholders to continue collaboration with BDU researchers. The latter implies that researchers regularly invest time and efforts to share their results with involved external stakeholders (from farmers and communities to duty bearers).

2 It is recommended to align expected results of project I better to the needs of the other thematic projects in phase II in a realistic and feasible way and to highlight the achieved results

The contribution of the transversal project 1 was relevant during phase 1 of the programme. At the same time, too many components in project 1 that in the end were not sufficiently linked to each other did not turn out well, resulting in a lost focus and difficult cooperation between project leaders in North and South. The recommendation **to align the transversal project better with the other thematic projects, to define a clear and feasible focus and to highlight more the progress made so far** could result in more users of the services, offered by the involved departments and beyond. It is also suggested to monitor well the enrollment of the RIMS, since this system could strengthen BDU significantly in its research-based data management and attract many users in the university.

3 It is suggested to closely follow up the implementation of the recently approved gender strategy, to ensure that gender mainstreaming within Bahir Dar can become a common practice and example for other universities

The progress made on gender so far does not reflect a well thought concept of gender mainstreaming in most of the projects and at programme level. This can and hopefully will change when the recently approved gender strategy will be rolled out from 2021 onwards. To this end, the JOINT VLIR-UOS project that supports better integration of gender in research, the organization and intake of staff/students, can be inspiring. At the same time, it is essential that the university management is involved in this process and is committed to invest resources and to actively promote gender equality in the university at different levels (organization, intake of students and research processes).

For the gender strategy to be successful, it is necessary that this strategy is ambitious, but also realistic and feasible to be realized within the given timeframe of phase II of the programme (and the remaining

time in phase I). In general, there is no strong gender aware culture in universities. Consequently, it is better to set achievable and step by step targets towards more gender equality.

4 It is suggested to reflect on how internal and external synergies could be reinforced at the IUC programme level

The evaluation revealed the added value of a synergetic way of working, based on examples that illustrate that this may contribute to more outreach to more stakeholders, more efficiency and possibly more (development) impact. This approach requests the right mindset and time to develop from bottom up. and therefore, it should not be imposed.

Nevertheless, a **synergy strategy** at programme level could help in reinforcing these projects with less knowledge of and involvement in local, national and international contacts and networks. Lifting this way of working to the programme level, in addition to the project level, would reduce the risk that the creation of synergy and collaboration would mainly occur because of engagement or knowledge of individual project members. Working this way, this could create opportunities where otherwise they may remain unexploited. To this end, **joint learning from successes and failures and sharing good practices during LSC and JSC meetings or other events** could also help to get inspired by each other. Both approaches, **an 'organic' way of strengthening multidisciplinary collaboration next to a more institutional approach**, could co-exist and strengthen each other.

If feasible and realistic, some research topics for phase II could include an **interdisciplinary agenda** from the outset (beyond the own project).

5 Indicators at overall objective level in the logical framework should be developed in a more coherent way with the project indicators and allow for better monitoring and measurement during and at the end of the programme

To make sure that progress towards achieving the overall objectives can be measured and monitored in such a way that it not only captures part of the desired changes at institutional level as it does now (the quantitative indicators at institutional level), but also the changes that are more difficult to measure (e.g. changes in terms of an increased outcome oriented research culture, multidisciplinary approaches, synergetic partnerships at university level etcetera), BDU should reflect on **how the (qualitative) indicators could be monitored during implementation** and measured at the end of the programme.

In addition, it is recommended to **align better the project indicators with the programme indicators** at overall objective level, so that it becomes more clearly how the projects contribute to desired changes at overall objective level.

Next to the existing PMEAL- tools, it should be analysed if other tools could be used that can **measure the contribution of the programme to the desired impact** at the end of the programme at the level of involved external (local) stakeholders, such as, among other, outcome harvesting, the most significant change tool etcetera.

6 It is suggested to optimize the design and management and implementation of the programme phase II, as follows:

The **North mobility to the South** should be reinforced, from the moment this is possible, to enhance transfer of knowledge to both PhD students and local staffs of BDU and joint collaboration between the project leaders.

During the formulation of phase II, it is suggested to improve the decision-making process to come to a deliberate **choice of research topics** which balances the research interests of both North and South partners (so that some South projects do not perceive the research topics as 'pushed' by the North). The match making exercise that is done is a good approach and strategy although it seems that it was sometimes difficult to select research topics all parties were happy with. This because some research topics, preferred in the S were not considered to be sufficiently relevant for the N partners. It doesn't matter if N nor S partners have more or less experience in this process or whatever the arguments may be to 'push' on topics, sufficient time to discuss this together and a participatory decision process all parties are satisfied with is crucial. This is essential for the ownership and sustainability of a project and it seems that this part of the process has not always been respected. If this joint agreement remains difficult to achieve despite respecting the process described above, then there may be a problem with the design of the project that needs to be looked at (for instance, is the lead N university/faculty the right one to collaborate with the lead S university/faculty for this project).

It is further suggested to include sufficient **female participation** in the design of phase II of the programme. Although this does not guarantee yet a stronger gender focus of the programme, it could help in having more attention paid to it (if this participation is done in a sufficiently gender-oriented way).

The design of the phase II programme should illustrate **how to consolidate the research results of phase I at university and (external) stakeholder level**, so that the outcome-oriented research also benefits the local stakeholders involved. This is important to ensure continuous support from and participation of local communities and other stakeholders in research projects in the future.

A mechanism should be sought that allows **frequent sharing and communicating of project documents and other relevant information to involved departments** in the IUC. This would allow these departments to gain more insight in the progress made and could enhance internal cooperation and joint learning.

4.2. Recommendations directed to Bahir Dar overall university management

7 An overall exit plan should be developed that explains how the project activities will be continued and research results rolled out in a sustainable way. This should ensure the contribution to development impact and to academic and institutional impact

This plan should include **how research results will be further rolled out** once the programme ends, and **how other funding will be attracted** to continue project and spinoff activities.

This plan should also describe the **capacity strengthening** that is needed to ensure sustainability of the programme such as reinforcing resource mobilization skills, and the funding and training of lab technicians.

In this plan, and in line with the idea that the university excels further as a research university, the university should further express how to ensure that introduced **university policies will become common practice and well-integrated** in the university (research) processes such as gender mainstreaming, ICT services (RIMS among other).

8 It is strongly suggested to actively involve the overall university management in the integration of gender in project and university activities

This can be done from the start of rolling out the gender strategy. The university management level should be an active supporter of gender mainstreaming because, without this engagement, gender mainstreaming will be much more difficult to realize and become common practice at all levels in the university.

9 The level of efforts and incentives for staff are not comparable. It is suggested to clarify this better before designing phase II

BDU has developed a university guideline on incentives for staff engaged in research and mobilization of funds for research and capacity building. Nevertheless, it is important to clarify once again what activities will be financially supported and what not. It should also be clear that project management cannot simply be financially compensated if this was never the intention within this programme (not in the South and not in the North), although it is understandable that there are expectations if within BDU other policies circulate and are applied. This needs to be clarified so to prevent demotivation and eventual negative effects on performance results.

4.3. Recommendations directed to VLIR-UOS

10 It is suggested to reflect how budgets could be used in a more flexible way, allowing more tailor-made spending within the overall programme period of 5 years.

This to respond to the conclusion that planning and spending budgets on a yearly basis, with only a limited margin to shift budget to the year thereafter, sometimes resulting in less efficient use of budgets.

11 It is suggested that VLIR-UOS rethinks the use and application of the logical framework as a joint learning instrument

The recommendation does not want to eliminate the logical framework as it is considered useful by the programme management and coordination to follow up overall progress of the projects.

However, the logical framework with only quantitative indicators is not sufficient to measure the more complex changes at the level of the general objectives at project and programme level. Moreover, the current framework does not allow for the measurement of impact at the level of beneficiaries.

To promote mutual learning and at the same time monitor and measure the more complex changes, it is recommended that VLIR-UOS considers which tools could complement the logical framework.

ANNEXES

Annex 1:	Terms of Reference
Annex 2:	Evaluation framework
Annex 3:	Programme on-site visit to BDU
Annex 4:	List of persons consulted
Annex 5:	List of documents consulted

ABOUT VLIR-UOS

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

We fund cooperation projects between professors, researchers and teachers. In addition, we award scholarships to students and professionals in Flanders and the South. Lastly, we contribute to strengthening higher education in the South and internationalising higher education in Flanders.

The information and views set out in this evaluation report are those of the author(s), independent evaluators, and do not necessarily reflect the opinion of VLIR-UOS or the universities/university colleges involved.

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