



Mid-term of the NETWORK programme Ethiopia with Jimma University, Hawassa university, Ambo University and Debre Zeit veterinary institute of AAU

Table of contents

ACRONYMS	4
PREFACE	5
EXECUTIVE SUMMARY	6
1. Introduction	11
1.1. <i>Background</i>	11
1.1.1. General objectives and guiding principles of a Network Programme	11
1.1.2. Subject of the evaluation	15
1.1.3. Objectives and evaluation questions of the evaluation	15
1.2. <i>Evaluation methodology and process</i>	16
1.2.1. Evaluation framework	16
1.2.2. Methodology	17
1.2.3. Limitations	18
1.2.4. Quality assurance	19
1.3. <i>Structure of the evaluation report</i>	19
1.4. <i>Context</i>	20
1.4.1. Political and socio-economic contextual factors	20
1.4.2. Educational context	21
1.4.3. Partner universities involved	24
1.5. <i>Short description of the Network programme in Ethiopia</i>	26
1.5.1. Overview of the programme	26
1.5.2. General state of implementation	28
1.5.3. Quantitative indicators	29
2. Evaluation	31
2.1. <i>Evaluation of the programme level</i>	31
2.1.1. Relevance	31
2.1.2. Effectiveness	33
2.1.3. Efficiency	38
2.1.4. Ownership and Sustainability	42
2.1.5. Potential for impact	44
2.1.6. The way forward	44
2.2. <i>Evaluation per project</i>	48
2.2.1. Project 1 – Infectious diseases	48
2.2.2. Project 2 - nutrition	58

2.2.3. Project 3 – ICT/library	66
3. Conclusions and lessons learned	73
3.1. <i>Conclusions at programme level</i>	73
3.2. <i>Lessons learned for a network programme</i>	75
4. Recommendations	76
4.1. <i>Recommendations for programme and projects</i>	76
4.2. <i>Recommendations for VLIR-UOS</i>	78
ANNEXES	80
<i>Annex 1: Extract from ToR</i>	81
<i>Annex 3 : Evaluation framework</i>	90
<i>Annex 4 : Mission programme</i>	100
<i>Annex 5 : list of documents consulted and persons interviewed</i>	102
<i>Annex 6: levels and dimensions for capacity building</i>	104

ACRONYMS

AAU	Addis Ababa University
AU	Ambo University
AMU	Arba Minch University
BDU	Bahir Dar University
CD	Capacity Development
CSO	Civil Society Organisation
EU	European Union
FAO	Food and Agriculture Organisation
FSC	Flemish Steering Committee
HU	Hawassa University
HE	Higher Education
HERQA	Higher Education Relevance and Quality Agency
HESC	Higher Education Strategy Center
HU	Hawassa University
HPC	High Performance Computing
HRD	Human Resource Development
ICT	Information and Communication Technology
ICOS	Institutional Coordinator for Development Cooperation (English translation)
IR	Intermediate Result
IUC	Institutional University Cooperation
JC	Judgment Criteria
JSC	Joint Steering Committee
JU	Jimma University
LDC	Least Developed Countries
MoA	Ministry of Agriculture
MoH	Ministry of Health
MoSHE	Ministry of Science and Higher Education
MoU	Memorandum of Understanding
NASCERE	Network for Advancement of Sustainable Capacity in Education and Research in Ethiopia
NIH	National Institute of Health
NORHED	Norwegian Programme for Capacity Development in Higher Education
PU	Partner University
IR	Intermediate Result
OVI	Objective Verifiable Indicators
SO	Specific Objective
SOP	Standard Operating Procedure
ToC	Theory of Change
ToT	Training of Trainers
TPLF	Tigray People's Liberation Front
USAID	United States Agency for International Development
VLIR-UOS	Vlaamse Interuniversitaire Raad – Universitaire Ontwikkelingssamenwerking
WHO	World Health Organisation

PREFACE¹

The evaluators would like to thank all stakeholders involved in the network programme that have contributed to this evaluation. We have appreciated your openness and learning attitude, which made it possible to embark together in a reflection and learning process. In particular, we would like to thank the two programme coordinators and the programme manager for their support in planning the evaluation.

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

Subject, objectives and approach of the evaluation

This report presents the findings of the Mid-Term Evaluation (MTE) of the network programme that is being implemented between 2017 and 2021 by a network of four Ethiopian universities, under the lead of Jimma University and the University of Gent.

This Network programme is the first programme in the Ethiopian context that aims at pioneering an interuniversity collaboration through research and community interventions. It is envisaged that by the end of the second phase the interuniversity collaboration will be exemplary for higher education in Ethiopia and that the network serves as an essential advisory body for the Federal Government on interventions related to public and animal health. The Network is coordinated by Jimma University and involves three other partner universities: Hawassa University, Ambo University and the College of Veterinary Medicine and Agriculture of the Addis Ababa University.

At programme level two specific objectives have been formulated:

- (1) The network south and north partners collaborate to build and retain human capacity in the thematic areas (infectious diseases, nutrition and ICT) leading to a further expansion of the group of expert professionals capable of performing high quality research and providing excellent education (academic objective)
- (2) The output of the network research is combined and transformed in tangible interventions packages that are piloted in local communities and that aim at having a positive effect on the health of local communities.

The network programme is implemented through four projects. Two research projects, involving nine PhD research sub-projects, and two projects aimed at strengthening the networking, with project three focussing on strengthening ICT and library services and a fourth project that focuses on strengthening inter-university collaboration through establishing support for PhD doctoral schools, supporting the implementation of intervention packages and conducting lobbying and advocacy to obtain policies for higher education that promote inter-university collaboration.

The programme took off slowly and implementation was confronted by several challenges, such as the level of involvement of the partner universities, poor uptake of responsibilities, frequent staff changes (project leaders south and north and project coordinator north), poor adherence to reporting deadlines due to shifts of responsibilities, lack of guidance on how to complete the forms and poor alignment of steering committees with the reporting deadlines. Loose communication has impeded updating the network on decisions made by the steering committee, for example on changes in the management manual, events, grant opportunities, utilization of project funds, adherence to reporting deadlines, and progress made on project indicators. Furthermore, political unrest and conflict have affected the programme activities and since 2020 the Covid-19 pandemic further hampered traveling between regions and between Belgium and Ethiopia. In 2019, upon request of VLIR-UOS, a vision on the network and a new action plan were developed for the revitalisation of the network.

A mid-term evaluation was requested at the end of phase 1 in order to contribute to learning, steering and accountability. The evaluation is expected to formulate recommendations to support the decision-making process regarding the second phase of the Network but also to identify lessons learned that can be useful for the development of other VLIR-UOS Network programmes.

The evaluation was executed in the period between November 2020 and February 2021. Data-collection initially planned for early January 2021 has been postponed to February because of the latest conflict in the Tigray region. The evaluation was based on an assessment of the 5 OECD/DAC criteria and an additional criterion on scientific quality. The evaluation was implemented in three phases: an inception phase, a phase of data-collection (on and offline interviews) and a phase of analysis and reporting. The evaluators applied a mix of data-collection methods, such as document analysis, semi-structured interviews, focus group discussions and on-site project visits. All four universities in Ethiopia were visited by the national consultant.

Effectiveness

The level of effectiveness shows mixed results. Projects 1 and 2 are delivering upon the intended results, project 3 and 4 only partially realised the envisaged results. However, regardless of the slow start of the network programme and the difficult contextual factors that complicated the implementation of the network interventions (political unrest and conflict, Covid-19, unstable internet and long distances between the partner universities, highly competitive academic world and lack of experience in inter-university collaboration), important achievements have been realised, both at the level of the projects (mainly PhD research) and at the level of network building (shared understanding of the added value of inter-university collaboration, exchange of knowledge, lab facilities and emerging multi-disciplinary research). Progress in PhD research is obvious and it is expected that PhD research will be finalised within the respective time frames. Improvements have been made to ICT infrastructure. This has mainly happened through the installation of the HPC at JU (that is also made accessible for researchers from the PU of the network) and through improvements of the ICT infrastructure at AU. A significant break-through has been that trained ICT staff recognised the relevance of working with open-source software.

All parties developed and shared a relevant vision about the levels and dimensions for capacity building that explains how to leverage investments in individual training in order to obtain a broader impact on research teams, involving master students, lab technicians, in perspective of capacity retention. The vision clearly applies a holistic perspective on capacity building, by linking the individual level to the organisational, institutional and policy environmental level. Several achievements have already been realised to that end, including the strengthening of research skills of a broader group of researchers, the development of laboratory procedures and course material, the development of a new policy that promotes inter-university and multi-disciplinary publications. Other interventions are in the pipeline to further strengthen the network at organisational and institutional level. Examples include the planned support for setting-up a support centre for Doctoral schools, the development of a digital inventory of publications and theses, and ongoing reflections about how to contribute to the development of the country, for example through the implementation of outreach activities and interventions or through community-based education.

Relevance

The relevance of the network programme was assessed as good to excellent. Projects were responding to capacity needs and interests of the partner universities, in alignment with the VLIR-UOS country strategy and national policies and strategies in the sectors of infectious diseases and nutrition. The research projects were conceived as a continuation of the research that had been conducted during the IUC programme at JU. At the same time, it enabled graduated PhD students under IUC to further advance their academic career by now assuming the role of PhD supervisors (or even project leader). The programme further contributed to position JU, and also the other Network partners, as reliable partners and centres of excellence that are relevant for government actors. For example, infrastructure,

equipment and knowledge of JU was used to establish the SARS-COV-2 testing centre at Jimma medical centre. Where possible, synergies were sought for with other VLIR-UOS interventions in the country (though limited) and other development actors (several examples of new attracted projects with development actors).

The projects were very ambitious and intervention logics did not always include appropriate strategies to contribute to the realisation of ambitious objectives. This is mainly clear with regard to the science-society linkages. As the network chose to invest in new PhD research, outreach and interventions based on research results could not yet take off. However, external stakeholders have been involved in projects during project design, through participation in research and some communities have been involved in research activities. The intervention logic for the ICT/library project did not fully match with the varying capacity needs at the different Network partners, both in terms of infrastructure and knowledge, and to endogenous capacity building plans of the different ICT departments. This explained the lower level of commitment and ownership of the respective ICT directors.

Efficiency

Efficiency was highly affected at the start of the programme, resulting in a slow start of activities (less so for PhD research) and slow progress in the realisation of the intermediate results for each of the projects (including the project on network strengthening). In fact, PhD research has progressed well (despite delays in field research because of Covid-19), but many activities planned to strengthen the network have not yet been implemented. This initially happened because of the lack of ownership and shared understanding of the network purpose at the start. Later, these activities were affected by the restricted traveling due to Covid-19. Project designs for project 3 and 4 were also very ambitious, taking into account both the available resources and available time (and time span). Many of the envisaged outcomes demand long-term processes. The network already progressed in gaining a shared understanding among PU on inter-university networking and how to realise and strengthen academic networking. Ownership and commitment among the different PU for investing in networking has grown. The biweekly online 'Bunna sessions' facilitate exchange among researchers.

The push from VLIR-UOS to ask for a vision and action plan for the revitalisation of the Network programme, and the commitment of the programme coordinators (north and south) to look for solutions have been beneficial in accelerating network programme implementation. The measures taken with regard to the development of a new vision, the signing of a MoU, the further clarification of roles and responsibilities, the development of reporting guidelines (supported by tutorials), improvement in internal and external communication have properly addressed the identified challenges.

Sustainability

Sustainability of the network programme is assessed as good to excellent (with the exception of the ICT/library component). Ownership and commitment of the Network partners (and involved departments and colleges) for the network seems strong, though some focal points, PhD supervisors and trained ICT staff do not always receive sufficient time and space to implement their assigned tasks and invest in network activities. The collaborative process was assessed as strong, despite a difficult context that is not always in favour of inter-university collaboration (competition, rivalry, collaborative attitudes or culture not guaranteed, lack of incentives for academic collaboration) and the collaborative structure. With regard to contextual factors, opportunities are emerging that can have a positive influence on inter-university collaboration, such as the formal recognition of the MoSHE of the added value of the VLIR network (and its potential for drawing lessons) and the home-grown PhD programmes that also foster

networking. With regard to the collaborative structure, programme management structures are fully functional to date, but organised according to the VLIR-UOS guidelines (its main purpose being to properly manage the programme). A structure to manage the network at institutional level is not yet existing. For example, there is no formal structure to frequently meet top-level university management and leadership.

Recommendations at programme level

Despite the difficult start of the Network programme, the initiatives to revitalize the network have paid off. Promising progress has been made. Inter-university collaboration and research collaboration are emerging. Due to the Covid-19 pandemic, several activities to further strengthen the network could not take place. For the next phase, it will be important to put these activities as a priority in the programme.

Five groups of recommendations have been formulated to inspire the development of a second phase of the programme. The evaluators are of the opinion that there is potential for a second phase, under condition that clear strategies will be developed for strengthening inter-university collaboration and that investments will be made continuously to further strengthen institutional ownership and commitment of top and medium level leadership of the universities involved.

- 1) *Strategies for strengthening academic networking:* they relate to (i) investing time and resources in soft diplomacy and the establishment of a formal structure for meeting university leadership; (ii) embracing diversity, by making more use of complementary expertise and capacity, (iii) explore the possibility for moving from the centralised (financial) management to decentralised (financial) management, (iv) explore incentives for partner universities to participate in a network that does not come with much funding. These incentives can relate to outputs that are beneficial for enhancing the quality of research and education at all PU. Incentives can relate to linking Network partners to existing PhD scholarship programmes, establishing a shared digital office and library, establishing a support centre for Doctoral schools, divide the trainings over different PU. Furthermore, a decision is needed whether or not to continue involving Debre Zeit veterinary institute in the network.
- 2) *Strategies for the levels and dimensions for capacity building:* An interesting vision on capacity building has been developed by the network partners. Several of the interventions that were planned did not yet take place but are relevant and need to be implemented by priority. Appropriate capacity development strategies (including capacity assessment, and monitoring of contribution to capacity changes) need to be developed, including a gender strategy. When needed and relevant, specific external expertise can be attracted to support these capacity development processes.
- 3) *Strategies for enhancing science-society linkages:* Strategies to strengthen research groups are included in the previous set of recommendations. Strengthening research dissemination, communication and exploitation deserves stronger attention in the second phase of the network. To that end, specific recommendations are formulated with regard to evolving towards more integrated research lines, developing an uptake strategy of research results, and to consider community-based education and possibly also short courses that are accessible for practitioners.
- 4) *Continue lobbying for a favourable environment for inter-university and inter-disciplinary research:* Lobbying should continue to create a more favourable environment for inter-university collaboration, both at institutional and at government level. A resource-based lobbying strategy

needs to be developed. As already mentioned, soft diplomacy is needed to strengthen relations with partner universities involved and discuss a common lobby agenda. Furthermore, a reward system can be explored to promote inter-university research among researchers and supervisors.

- 5) *Strengthen result-based planning and monitoring:* The current network programme was characterised by ambitious objectives and targets that did not fully align with available human and financial resources. Monitoring of the progress was hampered by the lack of SMART indicators and a good monitoring system. As a consequence, monitoring mainly served accountability purposes instead of supporting project management and learning. The next programme should be based on realistic planning, adequate budget and monitored by a limited set of relevant indicators.

Recommendations for VLIR-UOS

- 1) *At the long term, develop a clear framework for VLIR-UOS Network programmes:* A VLIR-UOS network programme has potential to contribute to inter-university collaboration, a collaboration that creates opportunities for sharing knowledge, lab infrastructure and laboratory practices, enables joint lobbying and as such can have a wider impact on higher education in a country. A clear framework, however, has been lacking and has complicated the development of the network programme in Ethiopia. Following suggestions are aimed at contributing to the reflection at VLIR-UOS level about the future of the network programmes:
 - a. Develop an appropriate ToC for the network programmes. The current ToC is similar to the IUC ToC, however a network follows an entirely different dynamic, with different kind of outputs and outcomes.
 - b. As a network programme departs from southern leadership, appropriate management modalities should be put in place that end. In the current set-up, there still is a big involvement from northern partners and final (financial) responsibility is in the north. It is recommended to transfer final responsibility to the south.
 - c. A clear strategy needs to be developed on how to embrace diversity, in particularly with regard to varying levels of capacity between partner universities involved. A clear strategy (part of the ToC) should explain how 'weaker' universities can benefit from a collaboration with stronger universities, and under what conditions.
 - d. It might be interesting to explore how inter-university networking can be stimulated already during the second phase of IUC programmes.
- 2) *At short term – suggestion for the second phase of the current network programme:* Although there has been built a shared understanding about the concept of a network programme between the partner universities involved, there is a need for further clarification and discussions between VLIR-UOS and the Network partners involved on what can be expected from a network programme. Furthermore, (i) roles and responsibilities of the northern partners need to be included also in the management manual. (ii) As the second phase of the network programme will coincide with the next multi-annual DGD programme, there is the possibility to explore how southern leadership can be strengthened in this network. (iii) Accountability mechanisms should be put in place that regulate what measures will be taken in case of non-compliance with agreed roles and responsibilities.

1. Introduction

1.1. Background

1.1.1. General objectives and guiding principles of a Network Programme

The VLIR Network University Cooperation (Network) aims at national level impact in a specific thematic domain by the provision of substantial support to a limited number of carefully selected partner universities located in a VLIR-UOS partner country. It builds upon the experiences of a former Institutional University Cooperation (IUC) partner which serves as the coordinating university.

A Network focuses less on capacity building and more on harvesting and multiplication of opportunities addressing nation-wide needs in the educational and research area. It focuses on cross-institutional interactions, such as in inter-university curriculum development, joint degrees at Master and PhD levels, links with other networks and with Flemish universities. Some guiding principles for a Network programme are:

- Spirit of partnership, dialogue and mutual respect;
- Participation of high-level academic leadership is crucial (decision making structures in all involved universities);
- Incorporation into local structures and systems (university, regional/national);
- Development relevance => focus on changing lives (university and society=> interaction with government, local development actors, society in general), link with other ongoing projects implemented by Belgian development actors.

The primary impact envisaged by a post-IUC Network is to contribute to changes through the results of the different projects. A second intended impact is (a) the contribution to an improved performance of the higher education institutions and (b) a changed role of the involved local partner universities as development actors (strongly related to development changes). The inter-institutional national cooperation within a Network strengthens this developmental change even more and brings about a higher proposed level of impact as compared to an IUC.

The coordination of a Network programme is delegated to a local academic person (Network Programme Coordinator) affiliated to the local coordinating university and a Flemish academic coordinator who have the responsibility to manage the implementation of the Network programme and the constituent activity programmes. In the non-hub local partner institutions, the Network programme receives follow-up through a focal point.

The specific objectives of a Network partnership between various partner institutions in a specific country in the south and Flemish universities and university colleges are outlined in a partner programme composed of successive activity programmes² covering an earmarked phase of cooperation.

² An activity programme (AP) gives an outline of the planned activities and budget that will be implemented in a given activity period within the framework of NETWORK cooperation between the Flemish universities (and university colleges) and a given partner university. Typically an AP covers a one year period (12 months; before 2016 these activity years covered 1 April Year 'x' to 31 March Year 'x+1', but as of 2016-2017 a switch to calendar years was made. The activity programme is composed of the activities of the different projects.

In principle the Network cooperation covers a period of 10 years with 2 main project phases.

Country level Network University Cooperation													
Pro-gramme Cycle	Phase In Pre-Partner Pro-gramme	Phase I Partner Programme Capacity Building						Phase II Partner Programme Consolidation and valorisation				Closing/round-up	
		Phase 1						Phase 2					
Year	0	1	2	3	4	5	6	7	8	9	10	11	

Following an extensive identification and formulation process in year “0”, a funding decision is made regarding the start-up of a first phase multiannual network partner programme consisting of a coherent proposal for network cooperation in a given country with the support of Flemish teams.

Theory of Change of a NETWORK programme

In the context of scaling up capacity building to the national level (or regional in some cases) and building on previous long-term institutional university cooperation, former IUC partners can propose a Network University Cooperation. A Network University Cooperation programme is a national level institutional network and thereby fits very well with the generic Theory of Change for VLIR-UOS in a given country. The intervention aims at contributing to a national level change through higher education cooperation around strategic themes of national priority (cfr. Link with the VLIR-UOS country strategy).

The generic Theory of Change is quite similar to the one of IUC programmes (see below). The most important differences are:

1. Improved research and education practices are envisaged at different HEI through inter-institutional learning and exchange.
2. The former IUC takes the lead in the implementation of the programme (even more South-driven than IUC).
3. A Network has the potential to empower the universities to unite themselves and together – in synergy - contribute to national goals in higher education and development.
4. Stronger focus on harvest and multiplication

A Network programme is subdivided in a limited number of synergetic/complementary project lines contributing to the overarching theme of the Network programme, rather to be interpreted as project-based intervention logics contributing to the same national level institutional and societal impact.

These different projects all have their individual results framework and underlying Theory of Change along the same period of execution of the partner programme phase. A Network programme is more than the sum of its projects: through programme level management, the scale of the total programme, the interlinkages between the different projects and higher education institutes (HEI), and the critical mass of capacity created, a Network has the potential to empower the local universities to unite themselves and together – in synergy - contribute to national goals in higher education and development.

The primary impact envisaged by a post-IUC Network is to contribute to development changes through the development results of the different projects. A second intended impact is (a) the contribution to an improved performance of the HEI and (b) a changed role of the involved local partner universities as development actors (strongly related to development changes). The inter-institutional national

cooperation within a Network strengthens this developmental change and even more brings about a higher proposed level of impact as compared to an IUC.

The below presented generic and simplified programme level ToC for an Institutional University Cooperation programme in fact also applies for the post-IUC Networks. However, the transversal support domain will not be necessarily implemented through transversal projects. In some cases, this transversal support is embedded in the administrative Programme Support Unit or as transversal domains cross-cutting the 'classic' projects presented below.

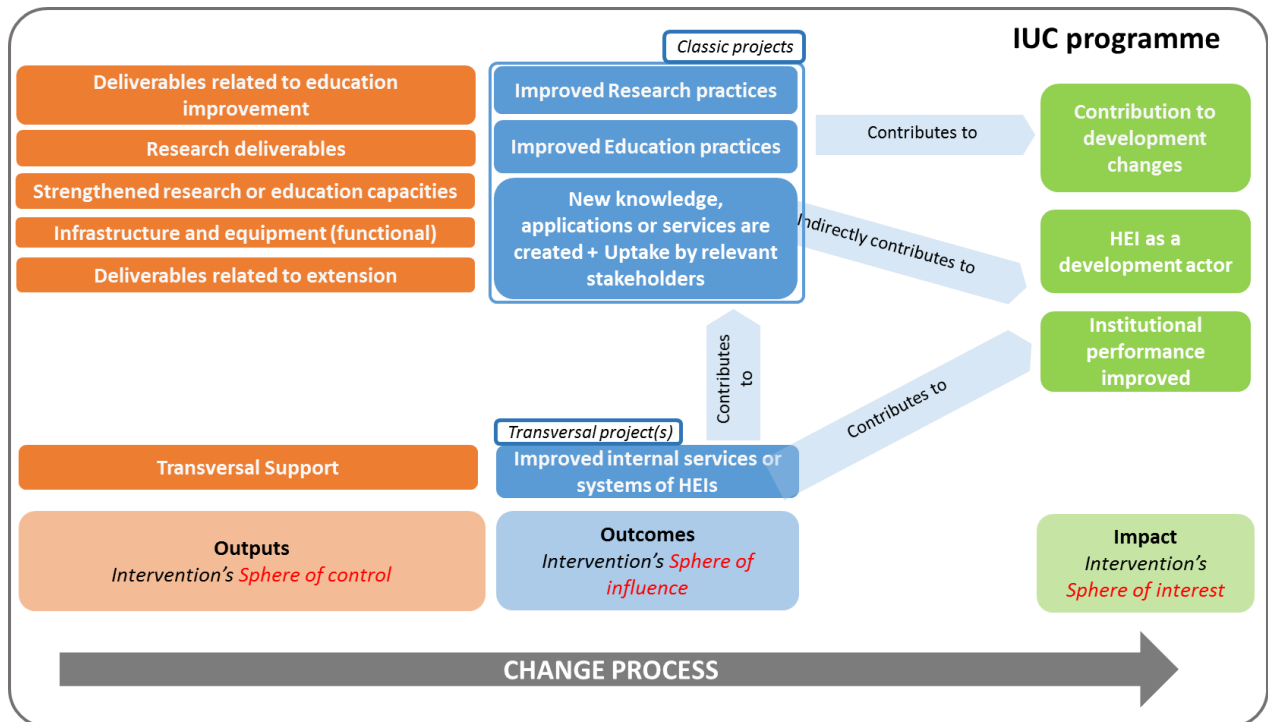


Figure 1 - Theory of Change IUC and post-IUC NETWORK programme

The Network projects primarily contribute to development changes at impact level, and indirectly also contribute to the institutional performance of the involved Higher Education Institutes and their role as development actor(s). Some of these projects or the administrative support project (programme support unit - PSU) might also include the strengthening of transversal domains of importance for all involved HEI. However, no separate ToC for these kinds of projects were foreseen, but it was integrated in the programme level ToC.

At the **output level** VLIR-UOS supports interventions producing different types of deliverables as visualised in the ToC figure. All these deliverables are achieved in partnership with HEI in Flanders and a partner country.

At **outcome level** (specific objective) VLIR-UOS identified 3 typical outcomes (max. number of outcomes per project = 2). These outcomes are *identified as specific objectives* and can be considered as “use of outputs”: They imply changes in performance, behaviour, etc. These outcomes are no longer within the sphere of control but are within the sphere of influence of the project and refer to improved research practices, improved education practices and the creation of new knowledge, application of knowledge or services provided to and taken up by external stakeholders.

At **impact level** the main change envisaged is always a developmental objective (long term). Implicitly it is also about a changed role of the local partner as an actor of change (medium-term). Through a successful achievement at the outcome level, the local actor will inherently become an agent of change for the society. With this change, and the achievements at the outcome level, there will be a sound contribution to development changes. This “change” will relate to the (external) effects of increased research performance/practices (internal) and/or the (external) effects of improved education practices/performance (internal) and/or the effect of uptake of new knowledge/applications/services (i.e., the effective (external) use).

NETWORK management system: tasks and structure

The NETWORK management system is based on the following division of roles and tasks:

- VLIR-UOS is responsible for the programming - including the selection of Network partner universities, monitoring and evaluation of the overall programme. VLIR-UOS is accountable to the Belgian government;
- The approved programme is jointly implemented by the Flemish institutions, coordinated by a **Flemish coordinating university**, and a **network of local partner universities** in a specific partner country, coordinated by a ‘network coordinating’ university (hereinafter referred to as the ‘partner institution’). The partner institution functions as the ‘coordinator’, the ‘hub’ so to speak of the Network.
- The partner programme, as updated by the different annual programmes, will be carried out jointly by the partner institution and the Flemish institution, in accordance with the approved partner programme documents and a signed tripartite agreement between the partner institution, the Flemish coordinating university and VLIR-UOS.
- At the Flemish level, VLIR-UOS has nominated a **Flemish coordinator** of the Network cooperation with the local partner universities. The Flemish institution to which he is affiliated will function as coordinating university, meaning assuming, together with the partner institution, full responsibility for the management and implementation of the Phase I partner programme with the partner institution on behalf of the participating Flemish institutions.
- The Flemish coordinator is supported by the ICOS of his/her university in the various management (administrative/financial) duties associated with the implementation of a complex programme;
- The partner institution proposes a **local coordinator** who functions as the key responsible person from local side and is the end-responsible for the day-to-day management of the programme in the partner country;
- At the level of the **partner university** a full-time programme manager is appointed in order to support the local coordinator in the various management duties associated with the implementation of a complex programme;
- An annual **Joint Steering Committee Meeting (JSCM)** is to be foreseen. This JSCM brings together the steering committees that are composed on both sides, local and Flemish, and together monitor the implementation of the implementation of a partner programme. The local steering committee will be chaired by the local coordinator who has been appointed by the partner institution. The Flemish steering committee will be chaired by the Flemish coordinator who has been appointed by VLIR-UOS. The two steering committees will be composed of the project leaders who are responsible for supervising the implementation of the respective projects at the Flemish and at the partner institution side, and of any other person who is nominated by the partner institution or the

Flemish institution or VLIR-UOS as member of this committee. On the local side not only project leaders but also representatives/focal points per network partner university will take part.

- How the roles between project leaders and focal points per partner university are put into practice will be elaborated in the context of the **Network management manual**.

1.1.2. Subject of the evaluation

The Network programme (2017-2021) is the first programme in the Ethiopian context that aims at pioneering an inter-university collaboration through research and community interventions (short term objective). It is envisaged that by the end of the second phase the inter-university collaboration will be exemplary for higher education in Ethiopia and that the network serves as an essential advisory body for the Federal Government on interventions related to public and animal health (vision and action plan, September 2019). The Network is coordinated by Jimma University and involved three other partner universities: Hawassa University, Ambo University and the College of Veterinary Medicine and Agriculture of the Addis Ababa University.

At programme level two specific objectives have been formulated:

- (1) The network south and north partners collaborate to build and retain human capacity in the thematic areas (infectious diseases, nutrition and ICT) leading to a further expansion of the group of expert professionals capable of performing high quality research and providing excellent education (academic objective)
- (2) The output of the network research is combined and transformed in tangible interventions packages that are piloted in local communities and that aim at having a positive effect on the health of local communities.

1.1.3. Objectives and evaluation questions of the evaluation

The MTE needs to contribute to Learning, Steering and Accountability.

- **Learning:** on the basis of the analyses made by the evaluation team, lessons can be learned about what worked well, what didn't and why. The formulation of these lessons learned will contribute to the quality of on-going and future Network programmes in terms of the content and management of the programme, including the overall policy framework.
- **Steering:** on the basis of the analyses made by the evaluation team, recommendations will be formulated to support decision making processes of the programmes (at different levels). The mid-term evaluation will be used to decide about - and as an input for - the formulation of the second phase of programmes.
- **Accountability:** by independently assessing the performance of the Network programmes (and validating or complementing the monitoring), different actors can fulfil their accountability requirements.

The MTE evaluates the performance of the Network Cooperation at programme and project level based upon the 5 OECD criteria + an additional criterion on scientific quality. As this is a mid-term evaluation, particular focus needs to be given to the evaluation of the effectiveness and efficiency. Also, the follow-up plan of the programme for the second phase needs to be evaluated.

Next to these standard objectives, the ToR (see annex 1) also presented specific evaluation questions relevant for assessing the network programme:

- Did the newly elaborated vision and MoU succeed in igniting the ‘network spirit’ and improving the support and ownership for the Network programme at the level of the partner universities?
- Is the realization of the action plan for the implementation of the network vision on track?
- How well did the foundation of IUC programme feed into the Network?
- How can the functioning of the Network be improved?

1.2. Evaluation methodology and process

This evaluation was executed by a team with an evaluator from Belgium (Geert Phlix from ACE Europe) and a consultant from Ethiopia (Eshetu Demissie). Methodological support was provided by Eva Wuyts. The consultants have not been involved in any way in the formulation or execution of the VLIR Network programme, nor did they have any contractual relationship, now or in the past, with any of the partners involved with the project/programme under review.

The evaluation was implemented in three phases: an inception phase in which an evaluation framework and the methodologies were developed and described in an inception report (available upon request at VLIR-UOS), a phase of data-collection and a phase of analysis and reporting. In the following, the report highlights the evaluation framework used by the evaluators, the activities undertaken, the limitations of this evaluation and quality assurance.

1.2.1. Evaluation framework

During inception phase, an evaluation framework was developed (see annex 3). The evaluation framework is composed of 6 evaluation questions (of which 4 at project level) related to the five OECD/DAC evaluation criteria. An evaluation framework clarifies how the evaluators will look at the programme and the individual projects and how they will structure their data collection and analysis.

The evaluation questions are elaborated based on the evaluation questions formulated in the ToR and the assessment criteria used in the self-assessment reports and were further oriented by the interviews with the programme coordinators and the context of the COVID-19 pandemic.

The evaluation questions consist of different judgment criteria and guiding questions or indicators. These indicators and guiding questions indicate what information would be looked for and as such guided the data-collection and development of interview guidelines. For each of the judgment criteria, a four-point qualitative scale was used. This scale is above all helpful in formulating a balanced judgement in a transparent manner. Evaluators used information collected on the guiding questions and indicators to argue the score. Following scoring scale is used in this report.

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

Table 1: Overview of the programme and project level evaluation questions linked to the five OEC /DAC evaluation criteria

Evaluation questions	Judgment criteria programme level
EQ 1 – How does the Network programme supports inter-university cooperation, and what are the first results?	1.1 The relevance of the Network programme can be confirmed from various perspectives
	1.2 The programme has made progress in achieving its specific objectives (effectiveness)
	1.3 Ownership and sustainability of the Network programme is guaranteed
	1.4 The programme has the potential to contribute to impact
EQ 2. To what extent governance and management of the Network programme are conducive for effective and efficient programme implementation?	2.1 Governance structure and role division are clear and sense of responsibility ensured
	2.2 Programme management is conducive for efficient and effective programme implementation
	2.3 Gender
Evaluation questions	Judgment criteria project level
EQ 3 – To what extent is the project relevant?	3.1. The objectives of the projects are consistent with the country/local needs, the needs of the university, the VLIR-UOS strategy and donor's policies
	3.2. The projects show sufficient coherence, enabling collaboration and multi-disciplinary research, strengthening research capacity of PU
	3.3. There have been efforts made to ensure complementarity and synergy with other (externally funded) projects/ other (Belgian) development actors
	3.4. The intervention logic of the project is coherent
EQ 4 – To what extent have the project's specific objectives been achieved (effectiveness)?	4.1. The specific objectives have been realised
	4.2. Extent to which the strategy for intervention packages has been developed and is being implemented
	4.3. The project has ground-breaking nature and ambition (scientific quality)
EQ 5 – What is the level of efficiency in the project?	5.1. Intermediate results have been delivered
	5.2. Relationship between means and results achieved and objectives (qualitative assessment)
	5.3. Project management is conducive for efficient and effective project implementation
EQ 6 – To what extent will the project results continue after the Network programme is completed (sustainability)?	6.1. Level of academic and institutional sustainability
	6.2. Level of financial sustainability

1.2.2. Methodology

Exploratory interviews with the programme coordinators North and South and with the programme manager South were conducted during the inception phase and have informed the evaluation framework and the planning. The evaluators made also optimal use of existing documentation and in particular of the self-assessment reports. The self-assessment reports were studied and analysed before effective data-collection through interviews took place.

Data collection was further done through: semi-structured interviews (individual and group, combination of face-to-face and online interviews) and study of relevant documents. Individual interviews took +/- 1 hour, group interviews 1 to 1,5 hours. Because of COVID, we kept group interviews limited to a small number of participants (5-7 persons) and certainly not exceeding 10 persons/group.

The national consultant has visited all four universities involved in the Network programme and also conducted a number of interviews with key external stakeholders in Addis Ababa (mission plan added in annex 4). A one-day visit was foreseen for every university, except for Jimma University where a two-day visit took place. At each university, (group) interviews with following stakeholders have taken place:

- Interview with leadership of the university (president, and/or vice-president) and person responsible for doctoral programmes
- Interview with focal point for the Network programme
- Interview with ICT department
- Face-to-face interviews or group interview with research teams involved in Network projects (lab staff, MSc students, other PhD students and head of department)

During the visit at Jimma university, a number of online group interviews were planned enabling participation of northern project leaders and the international consultant (through zoom connections):

- Three (group) interviews with project leaders north and south, for each project (for project 2 two individual interviews were held because of traveling of PL project 2)
- Two online group interviews with PhD students involved in the research projects: one group of 7 PhD students for project 1 and one group interview with 3 PhD students for project 2. Due to conflicting agenda, the international consultant has not participated in these group interviews.

At Jimma university, interviews were planned as well with the programme coordinator and programme manager, and with representatives of finance department, ICT support services. It has not been possible to interview supporting departments, such as the gender office, and community service department.

In Belgium, the international consultant has also conducted interviews with the former and current programme coordinator, and with ICOS at U Gent.

At the end of the data-collection in Ethiopia, a sense-making workshop was organised in Addis Ababa, involving all Ethiopian stakeholders and an online restitution workshop involving all members of the joint steering committee.

1.2.3. Limitations

The MTE was very well organised by the programme coordinators and programme manager who showed a lot of commitment in making this evaluation possible. The main limitation was the fact that the international consultant could not travel to Ethiopia, which restricted opportunities for (in)formal exchange with programme stakeholders and day-to-day discussion, reflection and joint analysis between the international and national evaluator. Online meetings have been organised, both with the programme coordinators and project leaders, but evidently these are limited in time. The international evaluator has monitored the work of the national consultant and frequent online exchange was organised, but evidently at a lesser intensity than what would have happened during joint data-collection.

Because of the conflict in the Tigray region, the initial planning of the data-collection had been postponed, which left less time between the end of the inception phase, the phase of data-collection and reporting. Because of the flexibility and rapid response of the stakeholders involved, it has been possible to conduct data-collection and to interview almost all stakeholders as planned. Not all stakeholders could be interviewed. With regard to internal stakeholders, there have been several staff changes and some of the respondents who recently had joined the programme were not fully aware of the programme, projects strengths and challenges and were not able to give detailed information. Some stakeholders did not show interest to participate in the evaluation (e.g., ICT director of AAU). There was furthermore some reluctance among programme stakeholders to ask for an interview with departments that had not been involved in the programme. As such no interviews could be conducted with the community departments and gender office. It has furthermore not been possible to meet the MoSHE, high level government officials with limited time and not available at short notice. Nonetheless some perspectives of external stakeholders are lacking, the evaluators are of the opinion that they could collect sufficient information to enable profound assessment of the Network programme.

1.2.4. Quality assurance

ACE Europe developed a COVID-19 proof approach for its evaluations and shared this with colleagues and with the Network stakeholders. The combination of different sources (more in particular: interviews, focus group discussions, self-assessments, programme documents, sense-making workshops) allowed for sufficient triangulation of information.

Quality was assured by the evaluation team and its careful preparation in consultation with the stakeholders in Ethiopia: the feasibility of the programme for the evaluation visit was checked; the evaluators took into account constraints and adapted the programme accordingly. Briefing and debriefing allowed for comments and concerns to be addressed in updated versions (for example, adaptations in the inception report). The inception report was shared with the network stakeholders (coordinators and project leaders north and south) prior to the field mission to allow them to assess the approach, which is thought to contribute to relevance and to buy-in of the stakeholders in the evaluation.

1.3. Structure of the evaluation report

This introduction chapter is concluded by a brief summary of the context and a description of the network programme. Chapter two describes the evaluation findings on the evaluation questions at programme level (2.1), followed by the assessments for each project separately (2.2). The final chapters highlight the overall conclusions and recommendations.

1.4. Context



1.4.1. Political and socio-economic contextual factors

Ethiopia is located in North-East Africa, bordering Sudan and South Sudan in the west, Somalia and Djibouti in the east, Eritrea in the north, and Somalia and Kenya in the south. It covers an area of 1.1 million km² of land. Ethiopia is a landlocked country. With estimated population of more than 112 million (2019), it is the second most populous nation in Africa after Nigeria.

Ethiopia is divided into two city administrations: Addis Ababa (the capital city) and Dire Dawa, and ten regional states namely Tigray, Afar, Amhara, Oromia, Somali, Benishangul-Gumuz, the Southern Nations, Nationalities and Peoples Region (S.N.N.P.R.), Gambella, Harar and Sidama (newly established region). Three of the Network programme participating universities i.e Jimma, Ambo and Bishoftu/Debre Zeit campus (AAU) universities are located in Oromia region whereas Hawassa is located in Sidama regional State. Ethiopia has diverse cultures, ethnic groups, and religious faiths. Amharic is the *lingua franca* of the country.

Ethiopia is one of the fastest growing economies. Nonetheless, it is also one of the poorest countries. Ethiopia aims to reach lower-middle-income status by 2025. For the last decade, Ethiopia's economy experienced an average growth of 9.8% annually. Main drivers of the growth include agricultural production and services, sustained by foreign development aid. Higher economic growth made affirmative contribution in poverty reduction in both urban and rural areas. Growth and Transformation Plan (GTP II), which was implemented between 2014/15 and 2019/2020, aimed at expanding physical infrastructure through public investments and making the country a centre of manufacturing.

Ethiopia's main challenges include sustaining its positive economic growth and accelerating poverty reduction. Currently, like the rest of the world, it has been experiencing the unprecedented social and

economic impact of the COVID-19 pandemic. Additionally, the country is facing other key challenges like limited competitiveness and underdeveloped private sector.

Politically, after almost two years of unrest in the country, a new prime minister, Abiy Ahmed, was elected following the resignation of the then Prime Minister in April 2018. Abiy has taken major steps bringing new changes and paving the way for a better future. However, during his stay in power for the last two years, the country has seen political instabilities and internal displacements.

He also dissolved the age-old Ethiopian Peoples' Democratic Revolutionary Front (EPDRF) ruling political party and replaced it with the Prosperity Party, which is a coalition party including all former members of EPDRF, excluding Tigrayan People Liberation Front (TPLF). This led to the tension between the government and the TPLF, which ended up in armed conflict in Tigray region in November, 2020.

In 2021, the government is preparing to undertake general elections, which were supposed to be held last year but were delayed due to the COVID-19 pandemic risks. At the same time, regional and municipal council elections are also expected to be held around the country.

As from March 2020, Ethiopia was under a state of emergency as a result of COVID-19. All educational activities including Universities were suspended throughout the country. Since November, 2020, universities, using various schedules, have gradually started reopening. By now almost all universities including the Partner Universities have resumed teaching-learning, though it was interrupted for one month in December 2020 when the government waged what it called 'law enforcement war' against the TPLF in the Tigray region.

1.4.2. Educational context

In Ethiopia, modern and secular higher education (HE) was initiated only in 1950 with the establishment of the university college of Addis Ababa. Like many African countries, modern higher education in Ethiopia was shaped by the western higher education systems. Since 1991, there were various institutional and educational policy changes. For the last three decades, the government has given an increasing attention to the role of higher education as an engine to the economic and social transformation of the country.

Institutional change

Until 2018, the overall education system (primary, secondary and higher education) in Ethiopia was under the Ministry of Education. However, following the coming of a new prime ministry to power, a new ministry named Ministry of Science and Higher Education (MoSHE) was established (proclamation number 1097/2018). The powers and duties formerly given by provisions of other laws to the Ministry of Education in relation to matters pertaining to higher education and technical and vocational education; and to Ministry of Science and Technology pertaining to science are vested in the Ministry of Science and Higher Education.

According to this proclamation, the powers and duties of MoSHE include:

- ensuring the expansion of higher education; oversee the sector;
- undertaking and implementing strategies that seek to synchronize higher education with the country's overall developmental policies and sectoral specific developments;
- designing strategy and upon approval following up the implementation of the country's technical and vocational education and training;

- designing and implementing strategies to augment higher education and technical and vocational education institutions' capacity in basic scientific studies and research; devising opportunities for operationalization of scientific studies and research results;
- creating conducive environment for technology development and operations by facilitating linkages and coordinated working procedures between higher education institutions and the industry sector;
- preparing higher education curricula framework;
- setting standards required for higher education and technical and vocational education institutions; following up the delivery of appropriate education and training in these institutions
- following up the performance of state-owned higher education institutions;
- ensuring that the implementation of student admissions and placements in higher education institutions are equitable

This Ministry is also responsible for the supervision of other executive organs like the Higher Education Strategic Centre, the Addis Ababa Science and Technology University, the Adama Science and Technology University, Government Universities, the Higher Education Relevance and Quality Agency, the Federal Technical and Vocational Education and Training Agency, and the Federal Technical and Vocational Education and Training Institute.

Educational System changes

As of 1994, the educational system has been restructured into an 8-2-2-3 pattern, i.e., eight years primary, two years general secondary education (grades 9-10), two years preparatory secondary (grades 11- 12), and 3-5 years university education (TGE, 1994). However, recently in 2019/2020, the ministry of education has revised the structure of the education system and took it back to the structure which has been implemented in the country since 1962. The "6-2-4" structure (i.e., six years of primary schooling, two years of junior secondary education, followed by four years of senior secondary education) was put in place. Moreover, MoSHE has revised the higher education system introducing freshman courses which will change the three-year to four-year programme.

Legal and Regulatory Framework of Higher Education in Ethiopia

The enactment of the higher education proclamation by the government in 2003 (No. 351/2003) was a landmark in the history of higher education in Ethiopia. It provided a comprehensive legal basis for the establishment and development of higher education institutions. Being the first national higher education regulation in Ethiopian history, it offered autonomy of administration, academic freedom and accountability to universities. This proclamation clearly states the objectives and expected outcomes, powers and duties, and criteria for the establishment of higher education institutions, educational programs and curriculum, and mechanisms of evaluating the quality and relevance of programs. Following this proclamation, two agencies, namely the Higher Education Relevance and Quality Agency (HERQA) and Higher Education Strategy Centre (HESC) were established. The former one ensures the relevance and quality of higher education while the latter is aimed at enabling the system to remain compatible with the country's needs and international developments. The proclamation grants the agencies considerable power to direct and supervise the Higher Education Institutions.

This proclamation was revised in 2009 (No 650/2009). Almost all the provisions contained in the 2003 proclamation were incorporated in the new proclamation though there are major additions or modifications. These include:

- granting academic freedom and autonomy to every institution in pursuit of its mission;
- every higher education institution shall have a reliable internal system for quality enhancement;
- allows universities to perform consultancy or other supplementary activities in areas that are related to their core mission and competencies;
- every university shall ensure adequate supply of academic staff in quality as well as in quantity based on staff-to-student ratio and additional research requirements;
- admission to undergraduate programmes of any higher education institution shall be based on completion of the preparatory programme and on obtaining the necessary pass mark in the university entrance examination.

In addition to the proclamations, using the Education and Training Policy of 1994 as a framework, the government of Ethiopia has developed in 1996/97 a rolling plan focusing on the comprehensive development of the education sector over a 25-years period. Until 2019/2020, five successive five-year Education Sector Development Programs (ESDP I-V) were implemented. ESDP-I covered the first five years, 1997/98–2001/02 while ESDP II and ESDP III covered the periods of 2002/03–2004/05 and 2005/06–2009/10 respectively. ESDP IV began in 2010/11 and extended through 2014/15. The last programme, which was recently completed, run from 2015/16 to 2019/20.

In the education sector development programmes and the proclamation of 2009, it is stated that the government of Ethiopia considers knowledge production and technology transfer capacity as a backbone for the poverty reduction goals of the nation. As a reflection of the broad national policy discourse on knowledge economy and human capital formation, both of the last programs (ESDP IV and V) emphasized the central role of the HE system in ‘turning Ethiopia into a middle-income country by the year 2025’.

Expansion Policy

In Ethiopia, the access to education has improved significantly. Particularly, there has been huge expansion of higher education in terms of student enrolment, fields of study, and graduate programmes in the existing and new universities by constructing infrastructures and buildings that provide various services. Currently, there are 44 public universities, four private universities and around 94 university colleges compared to only two by the end of the 1990s.

Regarding the total number of students joining universities at undergraduate level, the policy document clearly articulated the 70:30 professional mixes in favour of science and technology. But recently revision is underway to balance the composition of science and technology students with the social sciences.

The government spends more than 1.5% of the national gross domestic product (GDP) on Higher Education, the highest expenditure in Sub-Saharan Africa (UIS, 2010), making Ethiopia one of the top spenders on the HE sector in the world. Following this, Ethiopia became the third country with the highest average annual growth rate of HE enrolment in the world, next to Lao People’s Democratic Republic and Cuba. Despite the spending and the recent expansion of its HE system, Ethiopia still has the lowest HE enrolment rates in the world (UNESCO, 2010). Ethiopia’s tertiary gross enrolment ratio was 8.1 percent (2014), which is below the LDC average.

Even though there are achievements due to the reforms and expansions, the Ethiopian higher education is facing many challenges. These include, inter alia, the issue of ‘equity, quality, autonomy,

accountability, brain drain, academic freedom, lack of adequate resources and facilities, teachers' working condition, salary and incentives' etc. Cognizant of this fact, recently, a draft of Ethiopian Education Development Roadmap (2018-30) is prepared which is expected to provide solutions to the problems that the education system is encountering and contribute to the overall development of the country. Moreover, to strengthen the quality of higher education, on February 16, 2021, MoSHE officially launched a Home-Grown Collaborative PhD programmes that aims at graduating 5.000 third degree students in five years. The programmes will be implemented in Arba Minch, Addis Ababa, Bahir Dar, Haramaya, Hawassa, Jimma, Mekele and Gondar universities in a collaborative manner. Three of the collaborating universities (Jimma, Hawassa and Addis Ababa) are part of the current VLIR-UOS funded Network Programme.

1.4.3. Partner universities involved

Four universities, Jimma, Hawassa, Addis Ababa University and Ambo, are participating in the Network Programme. Among these universities, three of them (AAU, Jimma, Hawassa) are considered as the first generation and categorized as research universities whereas Ambo is the second generation and classified as applied University. These universities were selected based on the recommendation of the VLIR-UOS country strategy for Ethiopia.

Jimma University

Jimma University was founded in 1999 (Regulations No. 63/1999) with the merging of Jimma Institute of Health Science and Jimma College of Agriculture. Since then, it has rapidly expanded its infrastructures, students' enrolment capacity and programmes. Currently, the university hosts more than 40.000 students in 62 undergraduate, 132 MA/MSc and 35 PhD programmes. Its academic units are organised in 7 colleges and one institute. It has also established research centres and reference laboratories. Currently, JU has three institutes and eight centres dedicated to research activities. Jimma University benefitted from a VLIR-UOS IUC programme from 2007 to 2018.

With its motto "we are in the community", the university is engaged in various research and technology transfer works supporting the community and contributing to the national development of the country. The university was repeatedly named the top ranked public institution in the nation, which reflects the quality of its academic programs.

With regard to partnership, Jimma University is collaborating with various African, eastern and western European, Middle Eastern, Southeast Asian, East Asian, Latin American, and North American partners. Among the many partnership works with European countries, Jimma University is currently coordinating the VLIR-UOS supported Network programme. Doctoral schools involved in this programme are Tropical and Infectious, Environmental Health and Ecology, Department of Microbiology & Parasitology, School of Pharmacy Diseases, and Human Nutrition and Department of Agronomy.

At this time, the University is in a very high and rapid development stage, and with the physical and programmatic development of the institution, it is striving to achieve the goal of becoming a globally collaborative and competitive university that produces the best quality academic and research output annually.

Addis Ababa University (Bishoftu/Debre Zeit veterinary campus)

As University college of Addis Ababa, Addis Ababa University (AAU) was first established in 1950. The opening of the university marked the beginning of modern higher education in Ethiopia. It is the oldest and the biggest higher education and research institution in the country. AAU now has more than 45.000 students in undergraduate, Master's and PhD level as compared to only 33 students in 1950. In its 14 campuses, the University runs 70 undergraduate, 221 Masters and 72 PhD programmes including different specialisations in Health Sciences.

Among the colleges of AAU, the College of Veterinary Medicine and Agriculture of the Addis Ababa University, was founded in 1963 with the establishment of the School of Animal Health Assistants to train manpower under the Diploma programme. Since its establishment as the Faculty of Veterinary Medicine in 1979, it trains mainly Veterinary Doctors and MSc students in various programmes. Moreover, in 2009 the faculty launched 4 PhD programmes.

The College is currently accomplishing three core missions. These include teaching, various problem-solving research and community services. Two UK-based animal welfare organisations, The Donkey Sanctuary and SPINA, were also established and hosted in the College. Since 1979, the college graduated 1.890 animal health assistants at diploma level, 1.199 DVM professionals, 349 specialists and six PhD students. Most of these graduates are working at different positions in Universities, Research Centres, Regional laboratories, Ministry of Agriculture, NGOs, private sectors in the country and abroad.

Concerning research grants and partnerships, the college has secured a number of competitive research grants including from AAU thematic Research, Ministry of Science and Technology, VLIR-UOS TEAM & South Initiative projects, DGD-ITM Belgium, to mention few. Since 2017, the school of Veterinary Parasitology (COVMA) is participating in the VLIR-UOS network programme. The College aimed at enhancing inter-disciplinary and problem-oriented research, thus, a number of cross-departmental, local and international collaborative research activities have been carried out in the college.

Hawassa University

Hawassa University (HU) was first established as 'Awassa College of Agriculture' in 1976. In 1999, Debu University (Regulations No. 62/1999) was established as autonomous higher education institution comprising three colleges: Awassa College of Agriculture, 'Wondo Genet College of Forestry' and 'Dilla College of Teacher Education & Health Sciences'. HU has gained the present name in 2000.

Currently, HU has two institutes: the Institute of Technology & the Institute of Policy and Development Research, and eight Colleges scattered in seven campuses, namely: College of Agriculture, Wondo Genet College of Forestry and Natural Resources, College of Medicine and Health Sciences, Main Campus, Awada Campus, and Daye Campus. HU is running more than 90 undergraduate and around 120 graduate (masters, specialty and doctoral) programmes. The student population of HU has now exceeded 43.000 in the regular, continuing and distance education programmes at different levels.

The university has long years of collaboration and partnership with many universities and institutions nationally and internationally. HU has 61 active collaborative projects. These projects have significantly contributed to capacity building as well as to improving the quality of education, research, the production and dissemination of knowledge and community service.

Since 2017, HU is a partner university in VLIR-UOS Network programme. The schools which are involved in the programme are School of public and environmental health, Department of Mathematical and Statistical Sciences, and Department of Nutrition, Food Sciences and Technology.

Ambo University

Ambo University was established in Ambo town in 1939 as school of Agriculture, which was the first Agricultural school in Ethiopia. Afterwards it has passed different stages, namely as Ambo Institute of Agriculture in 1967, Ambo Junior College of Agriculture in 1974, affiliated under Jimma University in 2003 as “Jimma University, Ambo College of Agriculture”, Ambo University college in 2009, it is now a full-fledged University since 2011 (Reg. No. 212/2011). Currently, there are four campuses (Woliso, Awaro, Guder and Main campus) and a total of 10 colleges / institutes / schools at these four campuses. The University runs 48 graduate and 70 undergraduate programmes. AU has nine colleges/institutes/schools and academic departments. The University also runs three research centres of which the two are working on indigenous trees while the other works on overall agricultural research and development.

As one of the leading higher education institutions, Ambo University is contributing to overall socio-economic development of the country producing skilled human resources, conducting research and providing community outreach programmes. The university is also collaborating with many national and international institutions. Like the other partner universities, Ambo University has been participating in the network program since 2017. The two schools involved in the programme are School of Veterinary Sciences and Department of Public Health.

1.5. Short description of the Network programme in Ethiopia

1.5.1. Overview of the programme

The network programme is a collaboration of four public universities in Ethiopia, namely Jimma, Hawassa, Ambo and Addis Ababa University coordinated. The programme is coordinated by Jimma University. In the North, five Flemish universities coordinated by Gent University (U Gent) are involved in the programme. The programme leverages the organizational, human and infrastructural capacities that have been created by the IUC programme in Jimma University.

This programme, which is sectoral and national in scope, aimed at scaling up the capacity built and experience obtained from IUC implementation towards the partner universities. It has also planned to contribute for national development through scientific evidence, formulation of effective development interventions and development of tools and technologies to address health problems (infectious diseases and malnutrition) targeted by the programme. For this, the programme used the local Doctoral schools and collaborative research in the partner universities of the south as entry points.

The short-term vision of the Network programme is to pioneer an interuniversity collaboration for better health through research and community interventions. The medium-term vision is to have an interuniversity collaboration that is exemplary for Higher Education in Ethiopia and that serves as an essential advisory body for the Federal Government on interventions related to both public and animal health. At the long-term, the programme envisions an interuniversity collaboration that, independently from the North, further expands and that becomes a key international academic partner to improve the public and animal health of the African continent at large.

The programme has two thematic and one transversal project. These are infectious diseases, human

nutrition, and ICT and library services development. There is also a network strengthening project to ensure that projects generate research output that can be turned into interventions. During implementation different departments and units were involved. PhD schools involved in the projects are Tropical and Infectious Diseases (JU), Veterinary Parasitology (COVMA), Nutrition (JU), Public Health (HwU), Environmental Health and Ecology (JU) and Mathematical and Statistical Sciences (HwU).

PROGRAMME: Network University Cooperation in Ethiopia (Phase 1): University collaboration for better health in Ethiopia			
IATI identifier:	BE-BCE_KBO-0418.766.123-NETWORK_Ethiopia_Phase1		
Type:	Network	Contract ID:	ET2017NET039A103
Country:	ETHIOPIA	Location	Oromia
Start:	1/01/2017	End:	31/12/2021
Partner (South)	Jimma University	Partner (North)	Universiteit Gent
Promoter (South)	Kora Tushune	Promoter (North)	Bruno Levecke
Contact (South)	Kora.Tushune@ju.edu.et	Contact (North)	Bruno.Levecke@UGent.be
Budget:	€ 1.200.000	Sector:	Research/scientific institutions (43082)
Summary			
<p>The network program is a collaboration of four public universities in Ethiopia (Ambo University, Hawassa University, Jimma University and Debre Zeit College of Veterinary Medicine and Agriculture (COVMA)) coordinated by Jimma University (JU) and five Flemish universities coordinated by Ghent University (UGent). The coordinating universities in north and south work closely together with partner universities in planning and implementation of the program. The program uses the local Doctoral schools and collaborative research as entry points to capacity building of partner universities in the south and as routes to contribute to higher education and the health sector development in Ethiopia. The program leverages the organizational, human and infrastructural capacities that have been created by the IUC program in Jimma University and taps into institutional and professional networks that have been developed over the last 10 years. The network will allow the partner universities to better fulfil their role in terms of research, education and service to society.</p> <p>The central theme of the network programme is health, which is in line with the VLIR-UOS country strategy. Project 1 focuses on infectious diseases, which remain an important public health problem in Ethiopia. Although the cause of this ongoing disease burden is multifactorial, there is a fundamental lack of human capacity and research culture in the academic institutions that impedes the identification of potential control interventions. Project 2 will deliver better child health and growth through nutrition sensitive agriculture. The third project is more transversal in nature and aims at enhancing institutional performance through improved ICT infrastructure and services through capacity building of ICT professionals of the partner universities. The fourth and last project on network strengthening will tackle common problems shared by the partner universities and as such strengthening their capacity to play an important role in society. The problems addressed will be: (i) brain drain will be tackled by setting up a postdoctoral framework, (ii) the research being too often too fundamental and academic will be translated into interventions ready to be applied to the field and (iii) research results which often collect dust on shelves will be brought to the attention of a larger audience through communication and information channels.</p>			
Overall Objective			
The network south and north partners collaborate to build and retain human capacity in the thematic areas (infectious diseases, nutrition and ICT) leading to a further expansion of the group of expert professionals capable of performing high quality research and providing excellent education; The output of the network research is combined and transformed in tangible interventions packages and piloted in local communities and that have a positive effect on the health of local communities			
PROJECT 1: Infectious Diseases			
Sector:	Medical research (12182)		
Partner (South)	Jimma University	Partner (North)	UGent
Promoter (South)	Zelege Mekonnen	Promoter (North)	Sarah Gabriël
Specific Objective			
The development and the evaluation of interventions aimed at reducing the burden of infectious diseases at the community level; Strengthening human capacity and improving education and research culture on infectious diseases at the partner universities within the network			
Indicator	Baseline	Target	
The number of successful interventions identified	0	6	
The number of PhDs completed	0	7	
The number of publications in international peer reviewed journals	0	28	
PROJECT 2: Nutrition			
Sector:	Agricultural research (31182)		
Partner (South)	Jimma University	Partner (North)	Universiteit Gent
Promoter (South)	Teklu Gemechu	Promoter (North)	Carl Lachat
Specific Objective			
Improved research capacity in nutrition sensitive agriculture in all partner universities; Increased uptake of proteins by children through improving fish productivity (aquaculture) and dietary quality of legumes			
PROJECT 3: ICT/Library			

Sector:	Information and communication technology (ICT) (22040)		
Partner (South)	Jimma University	Partner (North)	Universiteit Gent
Promoter (South)	Girum Ketema	Promoter (North)	Dieter Roefs
Specific Objective			
Improved Human Capacity for provision of Academic and Institutional ICT Services of partner universities; Availability of ICT Services for Institutional functioning, Research, Resource Sharing and e-learning in partner universities			
PROJECT 4: Network Strengthening			
Sector:	Education policy and administrative management (11110)		
Partner (South)	Jimma University	Partner (North)	Universiteit Gent
Promoter (South)	Kora Tushune	Promoter (North)	Bruno Levecke
Specific Objective			
Human capacity at the partner universities and beyond is retained; Research results are flowing back to society through the development of an efficient intervention package			

1.5.2. General state of implementation

The first year of the Network program (2017) overlapped with the closing year of the JU IUC programme, which caused a sometimes dispersed attention for the Network programme. The launch of the Network programme, which was planned to take place in Hawassa a few days after the closing event for the IUC programme in Jimma, was cancelled due to the fact that several members of the management of the partner universities were called to Addis by the Ministry of Education for training.

During the first year, an effort was done to understand the context of the programme and its implementation better. Different periods with state of emergency, however, made the access to and movement between partner universities impossible for weeks and sometimes for months. Moreover, the perception of partner universities at the beginning that partner universities would receive budget directly was not helpful in the process network consolidation. Collaborative efforts were not well developed among universities in Ethiopia particularly when it does not involve direct flow of money. The programme coordinators put a lot of effort to explain the nature of the programme to officials of partner universities, especially through the focal persons. In 2017, 8 out of the planned total of 10 PhD students got selected and started their sandwich PhD programme.

In 2018, the PhD students started their respective fieldwork and ICT trainings were organised. At the end of the second year, however, it became clear that apart from the PhD trajectories and the ICT trainings, nothing was happening (no activities in the framework of the important project 4), and it was noted that a real 'network vision' and broad support and ownership at the partner universities were lacking. This triggered discussions and set the wheel in motion, which eventually led to the replacement of the Flemish coordinator and of several project leaders (both north and south, for various reasons). The Bureau UOS intervened and requested the elaboration of a network vision and action plan to revitalize the Network programme in 2019. Subsequently, much effort was put in place to bring the programme back on track. The Vision Note was developed. In this document, the overall vision of the Network was re-formulated, the most important obstacles were identified and an action plan to overcome these obstacles was outlined. Following the endorsement of this Vision Note by both the Joint Steering Committee and VLIR-UOS (September 2019), the first steps of the action plan were put in place. Ambo University took the initiative to both organise and host the first public event in December 2019. During this event, the vision of the Network and the progress made so far were presented to a wider audience, including higher officials of both the Partner Universities and Ministry of Science and Higher Education. In addition, all Ethiopian Partner Universities signed a Memorandum of Understanding designed to further strengthen collaborations towards the endorsed Network vision.

1.5.3. Quantitative indicators

Following tables provide an overview of the results achieved, according to the key indicators at programme level. The numbers show that very ambitious targets have been set that were difficult to attain, taking into account also the difficult circumstances (political unrest, Covid-19 pandemic) and the time that was needed to build a common understanding for the network and create ownership among all PU involved for inter-university collaboration.

Table 2: Overview of targets realised on key indicators (first three years).

	Project	Value '17	Value '18	Value '19	Target value ³	Results, two remaining years
Research						
Number of articles published in international peer reviewed journals	P1	0	1	5	21	29%
	P2	0	0	4	10	40%
Number of articles published in national peer reviewed journals	P1	0	0	0	5	0%
	P2	0	0	0	3	0%
Extension						
Number of (non-academic) extension/outreach activities realised	P1	0	1	1	6	33%
	P2	0	0	0	4	0%
	P3	0	0	0	4	0%
	P4	0	0	0	4	0%
Number of persons reached through (non-academic) extension/outreach activities	P1	0	0	0	300	0%
	P2	0	0	0	200	0%
	P3	0	0	0	100	0%
	P4	0	0	0	120	0%
Number of training module packages developed	P1	0	0	0	6	0%
	P2	0	0	0	4	0%
	P3	1	2	3	8	75%
	P4	0	0	1	4	25%
Human Resource Development						
	P1	6 (all male)			7	86%

³ According to the project plan for project 1 (2017), 28 publications were set as a target. For the KRI set in 2018, this was changed to 26. The project plan for project 2 envisioned 12 publications, the KTI 2018 set the ambition at 13. Further the KRI at programme level 2018 set also targets for the development of master programmes and new courses, but these are interventions are not integrated in the project activities.

PhD students directly supported by the programme	P2	3 (1 female)	3	100%
--	----	--------------	---	------

None of the targets set have been obtained. Targets have been set based on the experience with the former IUC programme and deemed to be not realistic. From the annual reports it was learned that priority was given to publicize in international peer reviewed journals. Targets seem to have been set also for extension activities for project 3 and 4 but no extension activities were included in the intervention logic of these projects.

Table 3: Overview of results realised with one remaining year, compared to the indicators set at the level of the overall objectives

Overall objectives	OVI	Target value	Result, one remaining year
The Network south and north partners collaborate to build and retain human capacity in the thematic areas leading to a further expansion of the group of experts, professionals capable of performing high quality research and providing excellent education	Number of PhD staff holders	+ 10	9 (PhD not yet graduated)
	Number of ICT staff training ⁴	+ 6	?
	Number of joint publications with at least 2 Ethiopian co-authors	+100 ⁵	7 (7%)
The output of the Network is combined and transformed in tangible intervention packages that are piloted in local communities and that aim at having a positive effect on the health of local communities	Number of interventions piloted	6 ⁶	1 ⁷
	Number of health indicators followed up in communities around Gilgel Gibe	5 health indicators ⁸	

Data and targets on the indicators in the different excel sheets (plans and reports) vary and lack consistency. There is also a problem with the definition of indicators. It is not made clear how to interpret some of the indicators and the higher-level indicators are difficult to measure.

⁴ Confusion whether the indicator refers to number of ICT members trained, number of new ICT staff engaged or number of ICT trainings provided. In the annual report reference is made to ICT training but no data are provided.

⁵ This target is not coherent to the targets set in the project plans (P1 = 28 and p2=12)

⁶ Target not coherent to target set in project plans (P1 = 6 ; P2 = 4)

⁷ Monitoring of drug efficacy against soil-transmitted heminths in the national deworming programme

⁸ The project plans refer to following health indicators: reduced rate of stunting, average diet diversity of Ethiopian infants, Reduced notification rates of infectious diseases, Decreased disability adjusted life years. The monitoring programme level annex for year 2019 refers to following health indicators: (i) prevalence of TB in Xpert-negative presumed cases at Jimma University Medical Centre; (ii) prevalence of soil-transmitted helminth infections in 600 children and 600 adults and environmental contamination in 10 schools, 50 households and 9 markets in Jimma Town; (iii) incidence of malaria in Hawassa.

2. Evaluation

2.1. Evaluation of the programme level

In this chapter, the assessment of the VLIR-UOS Network at programme level is presented, based on the evaluation questions 1 and 2 developed in the evaluation framework (see annex 3). The assessment of the revised action plan, and in particular of the results of the revised project 4 (aimed at strengthening the Network and part of the revised action plan), is included in this section. Furthermore, a cross-project assessment was undertaken to support the assessment at programme level. Following table provides an overview of the scoring on the judgment criteria at programme level.

Table 4: Overview of assessment at programme level

EQ 1 How does the Network programme supports inter-university cooperation, and what are the first results	EQ2 To what extent governance and management of the Network programme are conducive for effective and efficient programme implementation?
JC 1.1. Relevance	JC 2.1. Governance
JC 1.2. Effectiveness	JC 2.2. Programme management
JC 1.3. Sustainability	JC 2.3. Gender
JC 1.4. Indications of impact	

2.1.1. Relevance

The Network programme aims at contributing to addressing key societal challenges in higher education and the health sector of Ethiopia. The Network programme is expected to contribute to the second Growth and Transformation plan (2016-2020) for higher education in Ethiopia by way of establishing joint PhD programmes, strengthening research skills and infrastructure and establishing a network of universities to share capacity and resources. These activities are assumed to translate into more graduate intake, better quality research and better dissemination for national impact. All partners universities are delegated by MoSHE as research universities, i.e., to coordinate national research programmes, which makes investing in enhancing research capacity even more relevant.

University leadership, leadership of the departments and research teams involved confirmed the relevance of the Network approach and the relevance of the thematic focus on human health for their respective institutions. There is a keen interest in sharing skills and experiences, research practices and lab facilities. Network partners involved acknowledge the added value of sharing limited resources to obtain more impact. Partner universities share a number of challenges related to human resources to perform state-of-the-art research, supervise PhD students, retain staff, apply for competitive funding beyond the government, laboratory and ICT infrastructure and financial resources. It was assumed that several of these challenges could be addressed through a network approach. Furthermore, being part of a university network boosts PR of each of the universities and strengthens its positioning within the country and abroad.

The Network programme has the potential to support the home-grown PhD scholarship programme in nutrition and the NASCERE programme (with Ghent University) that will be led by Jimma University.

MoSHE made clusters of universities, each assigned with the task to coordinate the national PhD programme, of which Jimma was given the coordination of the cluster involving the nearby universities (Metu University, Mezan Tepi University, Wellega University). Experiences gained through the VLIR-UOS Network programme will be relevant for managing this cluster. During the public event for the launch of the network in 2019, MoSHE expressed its appreciation of the network programme, as it promotes collaborative research and initiates partnerships among public universities, and has shown interest to collaborate with the network.

The Network programme builds on the results of the IUC programme with Jimma University that enabled JU to take the lead and coordination in the Network programme. The network allowed JU to apply the knowledge, technology and experiences gained through the IUC and also created opportunities to retain PhD students that graduated under the IUC programme, since several among them have been assigned with the task of PhD supervision (as such continuing their training and enhancing professional skills in managing and supervising research). The network has been relevant in further strengthening JU leadership skills and its position as a key higher educational institute in Ethiopia.

The choice of the Network partners was based on a variety of factors, including but not limited to the complementary expertise and geographical location (yet not covering the entire country but some regions). Other selection criteria were the presence of former Jimma IUC PhD students at Ambo and Addis Ababa Universities⁹ and their individual readiness and willingness to participate in the Network. All universities have been involved in the design of the Network programme (proposal writing, matchmaking, programme formulation). The Network programme aligns with the different institutional strategic plans and research agendas.

Although project 1 focused on human health, this included also important infectious diseases that can only be addressed through a One health approach, justifying the choice to involve Debre Zeit, specialized in animal health, in the network. However, it was observed by the evaluators that the research could not be fully embedded in the local research team and programmes of Debre Zeit. For P3, the relevance of the ICT project was certainly high but the intervention strategies did not fully align with existing capacities at the different PU, nor was sufficient ownership established at the ICT departments of the different Network partners.

Inter-university collaboration is not common in Ethiopia and not much supported by prevailing policies and academic culture. This hampered the start of the programme. In the beginning, there was also no shared understanding or definition of what a network programme could be about. As the design was very much based on the experience with the IUC at Jimma University, a focus was put on enhancing human capacity by means of providing PhD scholarships. As not all Network partners were entitled to deliver a PhD title or were lacking appropriate lab infrastructure, PhD students (even when based at the different PU) needed to be registered at Jimma University. This created the perception that the network programme was above all benefiting Jimma University. Strategies and activities to support network development were loosely developed or absent. The revitalization process in 2019 contributed to developing a shared understanding and action plan to strengthen inter-university collaboration. However, the partners in Ethiopia still feel that further clarification of the Network concept is needed. Especially with regard to the fact that southern leadership is pursued but that is has not been translated in appropriate operational modalities to manage the programme from a southern perspective (e.g., strong involvement

⁹ The PhD supervisors at HU was not a former IUC PhD student.

of northern partners, decision making power mainly situated in the north, lack of clarity on roles and responsibilities between northern and southern partners).

Research topics were selected on the basis of the universities' research agenda, which is aligned to national top priority policies. The topics of infectious diseases and nutrition are high on the national agenda (policies, plans and strategies). For example, the country national nutrition programme has been focusing on reducing stunting, which has been the focus of project 2. It was confirmed by interviewees that external stakeholders had been involved in the planning phase. During implementation, PhD students also consulted targeted communities and conducted rapid assessments to validate the research topics and its relevance for community felt needs. The research results, products, tools and technologies have the potential to be used by policy makers, CSO, other donors and service providers to improve life and livelihood of targeted communities and the country at large. Collaboration has already started with some of these stakeholders (see details at project level).

2.1.2. Effectiveness

To evaluate the level of effectiveness, an assessment was undertaken of the level of progress achieved in realizing the specific objectives formulated in the programme: *“The network south and north partners collaborate to build and retain human capacity in the thematic areas (infectious diseases, nutrition and ICT) leading to a further expansion of the group of expert professionals, capable of performing high quality research and providing excellent education. The output of the network research is combined and transformed in tangible interventions packages and piloted in local communities and having a positive effect on the health of local communities.”*

As described under 1.5.3., four indicators were identified, with rather ambitious targets that have not been reached. However, the Network programme contributed in a meaningful way to increasing human capacity in the thematic areas, not just by investing and accompanying PhD research but also through the spill-over effect of PhD research towards master students and lab assistants at all PU (PhD students have been equally divided over the three Network partners, except Debre Zeit). PhD research was confronted with a delay because of the political unrest in the country and the outbreak of the Corona pandemic, making it difficult to conduct field work and to travel to Belgium. The Network actors responded in a flexible way to these context factors by providing more online training, support and exchange sessions, including the biweekly Bunna-session where each PhD students was asked to present progress and results from research. At the moment of the evaluation, seven publications have been published in international peer reviewed journals, of which four with at least 2 Ethiopian co-authors (e.g., Diversity in Micromineral Distribution Within the Body of Ornamental Fish Species, and Environmental and biotic factors affecting freshwater snail intermediate hosts in the Ethiopian Rift Valley region). This is far below the target of 100, which was too ambitious (and was based on the experience under the IUC programme).

The number of interventions piloted was limited to one (target was 6), according to the indicator sheets, and 11 according to the data from the working group on interventions. From the interviews, it is understood that several interventions have been piloted during ongoing research, for example health education in schools have been involved in research and have benefited from information provided (P1), fish food preparation and use in targeted communities, sensitizing butchers on hygiene measurements (P2), (there is no consolidated info on interventions in the monitoring sheets). It was acknowledged that there was no overview of what interventions had been piloted by whom.

As there had been unclarity about what should be understood by ‘interventions packages’ (and how to set a target), a working group, involving the northern programme coordinator and several project leaders from the north and south, was established in May 2020 to further reflect on a definition of interventions and the way forward regarding the objectives related to interventions. The following definition was presented: *“Interventions are sets of relevant activities/projects that unlock systemic bottlenecks within health and agricultural sectors to catalyze transformation from low output agriculture and technically inefficient health sectors to a high performing sector well integrated to the national economy –and to do so in environmentally sustainable and inclusive manner. Interventions must be relevant, measured on the extent to which the intervention activity is suited to the priorities and policies of the target group, recipient and donor.”* The working group has developed an overview of interventions that have been implemented during the Network programme and that had taken place during the IUC programme to inform the development of a proposal of intervention packages.¹⁰ The recommendations of the working group were presented to the latest JSCM. The working group has been replaced by the working group that is preparing phase II. s. Several challenges surrounding the implementation of interventions were identified by the working group, such as: (i) the limited budget available for that purpose, (ii) poor follow-up of the current interventions (who is doing what), (iii) the lack of integrated research lines complicating the combination of different interventions into one package, targeting the same community, (iv) lack of a shared understanding on the role of universities in implementing interventions (source: minutes working group and interviews conducted). The working group has developed a proposal not to limit the scope of interventions packages to the dissemination, exploitation and communication of research results, but also to envisage the broadening and strengthening of the capacity of research groups through widening the support provided (not only focusing on PhD students but also targeting MSc students, lab and ICT staff) and investing in soft skills training (leadership/mentorship, research dissemination, data management, ...).

An interesting vision on enhancing research capacity was developed during the Network programme, identifying different levels and dimensions for capacity building (see annex 6). The vision shows that investing in PhD students has an effect on creating opportunities for master students and lab technicians to also further build their research capacity. Spill-over of knowledge and competencies within the network could be observed during the evaluation (visits to labs, interviews with research teams at PU). Several master students and lab technicians have benefited from research and training that is being conducted. At organizational level, the research teams have benefited from elaborated Standard Operating Procedures (SOP) for lab practices that are currently being implemented. Some improvements have taken place of the lab facilities at JU and with regard to lab practices at the different Network partners. The revised project 4 intended to set up a support center for Doctoral schools and the implementation of a training impact assessment strategy, which fully aligns with this vision (and the needs of the different PU). There has not yet been progress to that end during the first phase of the programme (see further). At institutional and policy level, the Network partners succeeded in advocating the government (MoSHE) to adapt their policy so as to enable and promote inter-university and multi-disciplinary publications. A draft policy called “Fostering Inter University Publication” was drafted in December 2019. The revised project 4 also included interventions aiming at strengthening institutional policies (e.g., with

¹⁰ According to the initial Network proposal, the intention had been to valorize results from the former IUC programme at IUC through the development of intervention packages.

regard to grant proposal writing, publication policies, policies on community-based education, digital inventory of publication and theses, etc.), which have not been implemented yet (see further).

While the PhD research (P1 and P2) was proceeding well, the Network programme faced several challenges in building and strengthening inter-university collaboration and developing a real network approach. Strategies to address the identified challenges were discussed through a participatory process involving all partner universities, and a new vision and action plan for the revitalisation of the Network programme were developed in September 2019. These strategies address following challenges: (i) lack of institutional experience at the different PU to offer maximal support; (ii) loose communication within and beyond the Network, (iii) poor adherence to reporting deadlines, (iv) occasionally poor uptake of responsibilities, (v) no optimal implementation of a shared vision for the Network. Project 4, which supported network development in contributing to the realisation of the specific objectives at programme level, was also revised. The following table provides an overview of the initial and revised Intermediate Results (IR) and the progress made.

Table 5: Overview of the initial and revised Intermediate Results and the progress made for project 4

Initial project 4 intermediate results		Revised project 4 intermediate results	
IR	Progress till 2019	IR	Progress since 2019
Post-doctoral training programme established	The supervision of the Joint (Network) PhD students by former IUC PhDs can be seen as part of post doc training	Interuniversity grant opportunities developed	Starting, some results yet like one successful joint grant proposal (JU and HU to NORHED) and one initiative under P1
		Network of training on research, leadership and coaching skills expanded	Moved to phase 2
Interventions piloted	1	Interventions for phase 2 identified	11 interventions inventoried
Dissemination of research results			WG established to prepare for phase 2 Three newsletters published to inform public and stakeholders on the Network 1 public event at AU (December 2019) Bunna sessions to disseminate research results organised
Policy change in inter-university publication advocated	ongoing	Policy change in inter-university publication advocated	Ongoing, draft policy proposal developed
		System for training impact assessment developed	Starting, guidelines for identifying participants to trainings, training description and evaluation have been developed, incl. follow-up of trainings.
		Digital inventory of publications and theses	Not started yet

Project 4 has been revised and reformulated in a relevant way. The set of IR and planned activities align well with the vision on the Network and the vision on levels and dimensions for capacity building. Unfortunately, the start of implementation of the revised action plan (2020) coincided with the outbreak of the Covid-19 pandemic. This explains why not all activities have been implemented. Several of the planned IR and activities have been postponed to phase 2 of the Network. The following table provides a more detailed overview of the activities that have (not yet) been implemented at the moment of the evaluation.

Table 6: Overview of activities for the revised project 4 that have been implemented or not.

Implemented	Not yet implemented
<ul style="list-style-type: none"> - Grant proposal writing workshops - Grant opportunities are announced in the bi-weekly mailings from north to south, referring to grant opportunities for research, training, scholarships, international seminars, free webinars, ... - Policy change for stimulating inter-university and multi-disciplinary publications advocated - Working group on interventions established and definition of interventions elaborated (but not accompanied by strategy yet) - System for training impact assessment developed 	<ul style="list-style-type: none"> - Report on grant opportunities (replaced by mailings) - Report on identifying complementary expertise across PU (but has been discussed in JSC) - Development of shared platform of grants - Document with institutional profiles - Digital inventory of publication and theses - Implementation of federated search option and link to MoSHE - Establishment of support centre for Doctoral schools - Soft skills training for supervisors and PhD students

Progress with regard to project 4 shows mixed results. In fact, only the working group on interventions was a new initiative, the other activities had already started earlier. The Network partners, programme coordinators and project leaders however show strong commitment to achieve these IR in phase 2 of the programme. Time has been taken to thoroughly discuss these new activities and come to a shared understanding of the strategy forward. Due to the Covid-19 situation, implementation has seriously been delayed, given that only online trainings can take place and traveling between regions in Ethiopia and between Belgium and Ethiopia is restricted. Furthermore, to build ownership, frequent traveling and meetings with all stakeholders involved (including top level management) are needed to realise the identified interventions.

The level of effectiveness of the different projects determines the level of effectiveness at programme level. Following table provides an overview of the scoring for the different projects, that are further elaborated in the following chapter (analysis at project level).

Table 7: Overview of the scoring on the different judgement criteria for assessing effectiveness at project level

Judgement criteria	P1 - Infectious diseases	P2 – Nutrition	P3 - ICT/library	P4 – Network strengthening
Specific objective realized	excellent	good	insufficient	Insufficient – but acceleration noticed
Interventions realized	Good	Good	n.a.	Insufficient – but acceleration noticed
Scientific quality	Excellent	good	n.a.	n.a.

Also, at project level specific objectives have been identified. The level of effectiveness is assessed as good to excellent for projects 1 and 2, and as insufficient for projects 3 and 4. Factors that contributed to the level of effectiveness are: (i) commitment of project leaders and PhD students, (ii) improved lab facilities, (iii) sharing of lab facilities at JU and at the Flemish universities involved, (iv) development of SOP for lab research, (v) support provided to national supervisors (though limited) and (vi) the advocacy conducted at every Network partner by the programme coordinator and focal points to promote inter-university publications.

Expertise of the health and nutrition research teams has become widely acknowledged by external stakeholders and the government, resulting in new collaborations with external donors (e.g., EC-DEVCO, USAID, Wageningen University, NORHED, ...) and with national centers of excellence. And at Jimma, pooling necessary equipment and materials enabled the establishment of a new SARS-COV-2 testing centre at the Jimma medical centre.

Scientific quality is guaranteed through the support from highly skilled and experienced project leaders and PhD promoters in Belgium, in collaboration with the national PhD promoters, the quality standards for lab research and the ability to publish in internationally peer reviewed journals. There are still challenges in the quality of the support provided by national promoters/supervisors, who are often burdened with many other (administrative or educational) tasks, which leaves little time for supervision of research. Three of the national promoters are graduated PhD students from the IUC programme and have not yet gained much experience in managing research independently and in supervising PhD research. To that end, the idea of investing in soft-skills training and setting-up a support center for Doctoral schools is very relevant.

Progress in project 3 has been assessed as insufficient, because the majority of the IR have not been realized. Improvement of ICT capacity (increased knowledge, infrastructure and services) at the Network partners is not sufficiently visible yet. P3 is clearly of a different nature as projects 1 and 2. P3 aims at improving ICT capacity but a comprehensive capacity development strategy, based on existing capacity needs and endogenous capacity building plans, has not been developed. The main strategy is limited to the provision of trainings, and investment in the installation of a HPC at JU (to support large data-analyses). Ambo University AU was able to implement a hardware virtualisation platform based on free software and implemented a local video conferencing system. Challenges with regard to knowledge transfer and knowledge implementation at the different Network partners have been reported, combined with staff turn-over of trained people. The application of acquired knowledge and skills at the Network partners was not always possible because of (i) lack of appropriate infrastructure or software, (ii) lack of support by (or involvement of) the ICT director, (iii) not enough time and resources to implement acquired knowledge and skills. Finally, the library component has not received due attention yet. The main results relate to the HPC that was installed at JU and that is functional and the installation of a server and training in data management at Ambo University.

An assessment of the level of effectiveness shows mixed results but progress towards achieving the specific objectives can be evaluated as sufficient to good. Projects 3 and 4 need acceleration but there are promising results and strategies that will enable the realization of the specific objectives throughout a second phase.

2.1.3. Efficiency

To assess efficiency at programme level, an assessment was undertaken of the governance structure, programme management and relation between means and results.

Efficiency of the programme was negatively affected by the slow start of the programme, and the lack of a shared understanding of the network concept by all parties involved. Although the selected network concept note (approved in 2016) had been assessed as of good quality by the VLIR-UOS selection commission, the translation of the concept note into the Network programme did not fully comply with the VLIR-UOS expectations of a Network programme. Several adaptations to the programme formulation were demanded by VLIR-UOS, a process that has taken time. Up until the start of the programme in 2017, the programme plan had not been sufficiently adapted. As progress in implementation was slow and the programme not sufficiently adapted to strengthen inter-university collaboration and networking, the decision was taken by the Bureau UOS early 2019 to ask the Network partners to develop a vision for the network programme and an action plan for the revitalisation of the network programme. This vision and action plan was presented and approved in September 2019.

The first year of implementation (2017) coincided with the last year of the IUC at JU, which appeared to be a difficult combination. The official launch of the network programme was rescheduled several times and took only place in December 2019 during a public event at Ambo University. At that moment a Memorandum of Understanding (MoU) between all PU involved was officially signed.

Several challenges with regard to programme implementation were linked to the governance and management of the Network programme, such as the level of involvement of the partner universities, poor uptake of responsibilities, frequent staff changes (project leaders and project coordinator), poor adherence to reporting deadlines due to shifts of responsibilities, lack of guidance on how to complete the forms and poor alignment of steering committees with the reporting deadlines.

Loose communication has impeded updating the Network on decisions made by the steering committee, for example on changes in the management manual, events, grant opportunities, utilization of project funds, adherence to reporting deadlines, and progress made on project indicators. All these factors have had an influence on efficiency. The action plan for the revitalisation of the Network has properly addressed these challenges and improved programme governance and management, as described in the following section.

Governance structure

The network initially operated based on trust and understanding. It was gradually understood that this was not sufficient for a successful network. During the first years, no frequent meetings were organised (more so at the Ethiopian side than at the Flemish side) and the communication flow between all parties was not fluent. Frequent staff turn-over of project leaders, supervisors and focal points have further complicated the overall management and communication of the programme. PU (both north and south) did not fully take up their assigned responsibilities. In the JSC of August 2019, it was decided to explicitly describe tasks and responsibilities of the key roles and actors in the network, which were incorporated in the revised management manual in 2019. This, together with improved stability in the different functions and the appointment of the current programme coordinator in the north, considerably improved the management of the programme. From the interviews, it was learned that roles and responsibilities of the northern stakeholders (especially with regard to financial management) were less explicitly developed and described in the management manual.

Focal points were appointed but not officially installed at each of the PU at the start of the Network and there has been frequent turn-over of focal points (till this date at Debre Zeit). Since 2020, all focal points (except at Debre Zeit) have been installed with an official letter. At Ambo university, the focal point is part of university's leadership. The action plan for the revitalisation of the Network refers to the establishment of network offices at each PU. This included the official appointment of Focal Points who have access to top-level university management and who keep university leadership up-to-date about the Network. This is working well at all PU, as could be observed during the evaluation, except at Debre Zeit, where the focal point has not yet received an official appointment and access to university leadership is less evident. With the exception of Debre Zeit, there have been no more turn-overs of focal points.

In 2019 it was also decided to add the focal points to the Joint Steering Committees. The communication lines have also been made more explicit, as shown in following graphic.



From bottom to top, the supervisors and PhD students forward enquiries / opportunities to the Project Leaders and Focal Persons, who can either resolve the issue / exploit the opportunity or communicate them to Local or Flemish Steering Committees (LSCM/FSCM). Both Committees independently meet twice a year on strategically chosen points in time, and update each other through the minutes of the meeting. Both committees jointly meet once a year (Joint Steering Committee (JSCM)). The outcome of the Joint Steering Committee is communicated through the Project Leaders and through newsletters. These newsletters were a new instrument to improve internal (and external) communication. In 2020 three newsletters were disseminated. The Partner University Committee (PUSCM), which was foreseen to update the Partner Universities about the Network and to further incorporate the Network at the Partner Universities was never officially endorsed. (The Network partners informed the evaluators that they are considering to improve the governance of the Network, for example by installing a Network team, a consultative Network body at each partner university, and by creating a Programme Advisory Council, constituted by all network partners, the MoSHE, MoH and MoA. This are few of the suggestions formulated by the working group who is preparing phase II. Partner universities confirm equal participation in the decision-making process. The programme coordinators look for consensus and provide sufficient

space for discussing decisions to be taken. Decisions are taken jointly (north and south) and there is transparency in communication and the decision-making process.

Programme coordinator and manager have shown leadership in managing the programme (clear agenda of meetings, uptake of decisions, support to project leaders) and have invested (and still are) in interacting (advocating) PU's leadership. This was complicated by the political conflict and the Covid-19 pandemic that restricted traveling.

The revised governance structure and communication agreements appear to function well. All interviewees report about improved communication. Not only the newsletter but also the website and the shared drop-box folder (in the action plan called a central digital office) have contributed to improved internal and external communication. The reporting process was clarified and according to interviewees, planning and quality of the reporting process have improved since 2020.

After the outbreak of Covid-19 in 2020, the network has started to organise the so-called 'Bunna sessions', in which PhD students, PhD supervisors, focal points and project leaders participate. Through these sessions, all stakeholders are kept up-to-date about the progress in the different research projects and as such have an improved understanding of all activities that are taking place in the network. These sessions and the improved internal communication and governance structure have been conducive for improving cooperation, exchange between the different projects and within the projects and between the different universities. There is good communication and collaboration between the projects, for example staff involved in projects 1 and 2 have produced progress reports together, realised joint monitoring, and are organising meetings together. Researchers share data, lab facilities, collect data jointly and plan training together.

Conducive programme management

A programme support unit (PSU) was created at JU, which built relevant experience in managing VLIR-UOS IUC programme. The objective of the PSU is to fully organise and operate the VLIR-UOS-Network in order to coordinate research and academic activities. Activities include (i) the management of the programme cars, (ii) efficient administration and financial support for the Network (including monitoring progress of activities and budget status, coordinate the annual reporting process, purchase, shipment and clearance of goods, coordinate the evaluation and self-assessments), (iii) coordinate programme wide activities and logistics (incl. coordination of missions, scholarships and related procedures and deadlines, enable synergy and cross—project collaboration) and (iv) ongoing quality control. All interviewees agreed on the high quality and professional standard of programme management by the PSU.

Following factors have contributed to the high quality of the programme management and coordination:

- Presence of appropriate management tools enabling adequate and transparent financial management (incl. financial management manual, reporting templates, operational plan);
- Continuity of the programme manager at JU. The same person was responsible for the entire programme duration phase one (except an interruption of one year) and demonstrated high quality of management capacity;
- Training provided by project leaders from the north about reporting formats and content of the programme and the development of tutorials on how to complete documents for both the annual planning and annual progress reports;
- The alignment of meetings of the steering committees with the reporting deadlines (since 2019);
- The effective and efficient organisation of the U Gent ICOS;

- Transparency in procedures and decision taking processes;
- Swift communication between PSU and ICOS and between PSU and focal points at the different universities;
- Clear definition of roles and responsibilities between programme coordinator, focal points, project leaders and programme manager (since end of 2019);
- Improved timeliness of focal points, project leaders at the different universities regarding narrative and financial reporting;
- The swift collaboration with the financial department at JU.

Following factors had a rather negative influence on programme management and coordination:

- The staff turn-over of programme coordinator north, project leaders and focal points, in particular during the first three years of the programme. Current changes at the level of leadership at universities and/or departments still demand continuous time and energy investments from programme coordinator and manager to inform the new people in place about the programme;
- Focal Points and supervisors reported that they are confronted with a packed agenda and too many tasks. Combined with the lack of financial incentives, there is at times less involvement and less support provided than what might be expected.
- Several challenges related to centralised financial management. This requires substantial time and resource investment from PhD students who have to travel to JU for financial management issues. PU have weak interactions with the JU financial department, which complicated financial management of the projects.
- The PSU has to follow the university procurement procedures, which are very lengthy. A solution was found to procure reagents and lab equipment in Belgium.
- Interviewees involved in sub-projects reported some challenges in gaining an up-to-date overview of the available funds and sometimes PhD students reported costs that were not eligible for funding. However, this has improved over the last two years as regular budget updates have been sent through mail.

ICOS and PSU perform well. They deliver proper financial monitoring and quality financial reports. Underspending was mainly visible in the case of project 4 (see explanation under effectiveness). The programme budget is allocated to the different projects based on the research activities, and agreed upon through discussions at the steering committees (this is similar for non-research related activities). There have been budget shifts but these have not exceeded 15% of the budget line. Programme mobility, field activities, procurement of goods and use of programme resources in general have been carefully planned and closely monitored to ensure accountability and value for money. (For example, project leaders explored to make use of available expertise in the Hawassa-Norwegian partnership to conduct training for supervisors, but this appeared to be too expensive. Consequently, reflections are ongoing on how to invest in enhancing quality of supervisors, through e-learning or via other means). Funds were not equally distributed between the PU, as this depended on research activities, of which many were conducted at JU. Available funding for non-research activities or the PhD scholarship were perceived as too limited and not in line with the high ambitions set in the different projects.

A result-based planning and monitoring system has been put in place, developed according to the VLIR-UOS formats. The programme results, however, are difficult to measure. Indicators are only partially helpful in monitoring the programme. Indicators have weaknesses in validity (what is being measured?), reliability (how to measure, inconsistency in some data between different reports) and are not sufficiently

SMART. Targets are set too ambitious or are lacking. There is no consistent reporting on all indicators. There are almost no qualitative data to capture programme learning and network strengthening.

Gender

No specific gender strategy has been developed and the gender office at Jimma University had not been involved in the programme. There are no female students in project one, and one in project two. Project leaders, programme manager and programme coordinator in the south are all men.

2.1.4. Ownership and Sustainability

Institutional sustainability

Institutional sustainability was rather weak at the start of the programme, in particular at the level of university leadership. The lack of a clear definition and shared understanding of a Network programme, the limited budget available, the centralised (financial) management positioned at JU, staff changes at the level of project leaders and focal points, initial unclarity of assigning PhD students are some of the factors that explain the varying commitment and interest between the Network partners. Due to the political unrest at the start of the network programme, it was also not possible to travel and visit the different Network partners and build relations of trust. The first years, the network programme was mainly driven by the commitment of the PhD students, their supervisors and project leaders. However, also at the level of project leaders (north and south) and focal points, there were challenges with regard to commitment and time that could be made available for the network activities. The inter-university collaboration nor the position of focal points at each of the Network partners had not been made official.

These challenges have been properly addressed in 2019 when actions were taken to revitalize the network programme. The elaboration of the *Network vision* contributed to realising a mutual understanding and mutual agreement between the different delegates of the Network partners. As a consequence of substantial investment by the programme coordinator and manager in building relations with the different Network partners, a *MoU* could be signed in December 2019 that made the mutual benefits of the network programme clear to all, and clarified expectations and responsibilities. A letter requesting formal assignment of the *focal points* at each Network partner was sent by the programme coordinator to the different Network partners, which resulted in the formal assignment of focal points at three of the four PU (not yet at Debre Zeit). At all Network partners, these focal points have direct access to top level management and leadership of the university. Moreover, the focal point of Ambo University is the vice-rector. Through the evaluation visits, the consultant could validate this enhanced interest and commitment from university leadership. The fact that the MoSHE formally acknowledged the added value of the network programme also contributed to strengthening ownership and commitment by all parties involved.

The level of ownership and commitment remains fragile, especially in situations of changes at the top-level management and leadership. Investing in relation building and keeping all the involved stakeholders up-to-date requires continuous time and resource investments. Frequent personal meetings between programme coordinator and leadership of Network partners are important but became difficult to organize due to the travel restrictions that came with the COVID-19 pandemic (and the unstable internet connections). There still are challenges regarding the time that can be made available for network activities by supervisors, focal points and also by ICT directors and ICT staff. It is not clear to the evaluators to what extent university departments that are not directly involved in the network but that are crucial for realizing the IR and objectives, such as the community departments and the gender offices, provided support.

Ownership and commitment by staff that is directly involved in the network activities, such as the programme coordinators, programme managers, project leaders and PhD students, is obvious and inter-university collaboration between these stakeholders takes place (which is already seen as a huge achievement in Ethiopia, taking into account the lack of a collaborative culture at academic level). The network is currently mainly driven by PhD research. Staff and students involved have already experienced the added value of networking, by benefiting from sharing resources, lab facilities, organising joint trainings, workshops and conference, sharing research findings and conducting joint advocacy and lobbying (e.g., publication policy).

Some stakeholders interviewed still feel that JU is benefiting more from the network programme compared to the other Network partners. This is mainly because all project leaders are positioned at JU, because all but one PhD students needed to register at JU in order to make use of the lab facilities and because of the greater support to laboratories and ICT infrastructure at JU.

Other activities that can have an influence at institutional level and that will further strengthen inter-university networking, such as the establishment of a PhD support centre, digital library, aligned policies (e.g., publication policies), have been identified in the revised action plan but are postponed to the second phase of the Network (see the section on effectiveness) and as such have not yet contributed to strengthening institutional sustainability of the network results.

Financial sustainability

The Network programme does not come with large budgets and was criticised for its insufficient budget for outreach activities and ICT improvements in function of the set ambitions. Universities have contributed to the programme with their own budgets; e.g., the PU covered the lab equipment import tax, contributed in the programme manager's salary, internet costs and costs related to trainings. Financial sustainability is guaranteed as the research is fully embedded in research programmes of the different departments involved and all PU involved are able to attract other funding. The research conducted during the network programme contributed to strengthening the universities' track record and its positioning at the national and international level. Several examples were given of other donors and the government that have started to fund research aligned to the ongoing research in the network programme (see project level assessments). In project 1 and 2, the network partners attracted other funding (NIH, USAID, CDC, EU, WHO funds) to implement research practices and findings. The network has also enabled collaboration with new partners in Belgium such as the Laboratory of Sciensano (Brussels), Janssen Diagnostics (Beerse), Laboratory of Plant Conservation and Population Biology (Leuven), Meise Botanic Garden (Meise) and with Thomas More College (Brussels). In Ethiopia, collaborations were established with the National Animal Health Diagnosis Investigation Centre, the Ethiopian Biodiversity Institute, Ethiopian Public Health Institute, the Ethiopian Biodiversity Institute, the Holeta Research Centre and the Ambo Plant Protection Research Centre. There have been efforts to leverage other collaborations with Belgian universities and ITM, the Ethiopian Institute of Public Health (EPIH), USAID, University of California, Imperial College of London, KEMRI, ICIPE and WHO/TDR.

Grant proposal writing skills training have taken place in order to enable post-doctoral research and grant opportunities (national and international) are being communicated within the network. This has resulted in two grants obtained by JU in collaboration with HU, and one grant proposal developed (but not obtained) between JU and AU. Furthermore, the home-grown PhD programme and the NASCERE PhD programme will provide funding for a large number of PhD researchers. It is not clear to the evaluators to what extent these programmes might be able to also financially contribute to the further

development of the support centre for Doctoral schools (but it is assumed that there might be potential to that end).

The network programme further creates the opportunities for continuous collaboration between the PU in Ethiopia and the Flemish universities. Additional research activities have started in collaboration with the universities of Gent, Antwerp and Hasselt. U Gent also provided additional support for ICT facilities.

2.1.5. Potential for impact

As this is a mid-term evaluation, only an evaluation of the potential/indications for impact have been analysed. Research is still ongoing and at the institutional level, the networking idea has only gained traction by 2020, at the same time as Covid-19 paralyzed the country. At the institutional level however, despite the difficult circumstances (both externally and internally) some important results have already been achieved. Through the network, it has become possible to advocate for a publication policy at inter-university level that promotes co-authorship and universities give more weight to international joint cooperation publication. A harmonized PhD student registration policy was developed that allowed students to register in Jimma and do research and training in their home university and at JU.

An inter-university collaboration spirit and attitude is emerging. From the interviews, it was also learned that Network partners have started to discuss a plan to develop new curricula and new educational programmes. New ways of doing research have been developed and are also being shared in master programmes. PhD students provided research-based training and support to master students in developing their theses. While a system of co-supervision and traveling between universities is only available for PhD students, it could also be beneficial for master students. The strategies for the way forward (as described in the self-assessments) include promising initiatives that have the potential to further strengthen the PhD programmes, including enhancing the quality of PhD supervision, the development of PhD support centre and possibly a post-doctoral programme.

Relevant stakeholders such as MoH, MoSHE and government research centres highly acknowledge the quality of research being delivered and the added value of a network programme. It was recognised that important lessons can be learned from the network programme that can inform inter-university collaboration as foreseen in the home-grown PhD programme that was recently launched by MoSHE.

2.1.6. The way forward

Both the self-assessments as the external evaluators are of the opinion that there is sufficient potential to develop a second phase for this network programme. Ideas and suggestions for the 'the way forward' have been shared in the self-assessments and relate mainly to the strengthening of ownership, the further clarification of the concept of interventions and the need to develop a clear framework for a network programme. Several questions regarding the future programme were also raised in the self-assessment forms.

Working groups have already been set-up to prepare the second phase of the network, including the working group on interventions and the working group for phase 2. The working groups build on the vision and levels of capacity building (see annex 6) and how to implement appropriate strategies to that end. Attention is also given to enhancing science-society linkages, intensifying grant seeking, diversifying resource bases at PU and enhancing institutional collaboration and collaborative research.

According to the evaluators the working groups are addressing relevant topics and developing good strategies for the next phase. To explore the potential of the network, a SWOT analysis was applied by the evaluators and the collaborative process assessed.

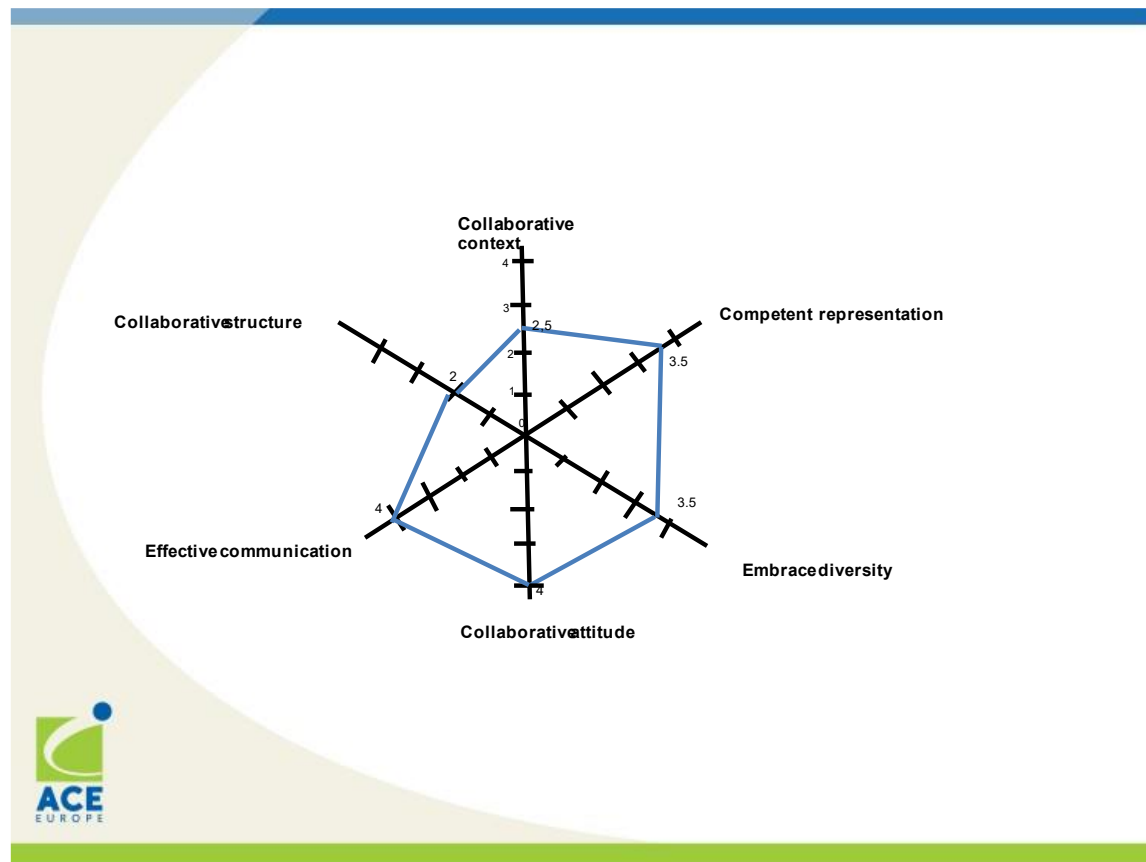
Table 8: SWOT analysis as done by the evaluators and validated during restitution

Strengths	Weaknesses
<ul style="list-style-type: none"> - Commitment of programme coordinators, programme manager, project leaders, focal points, PhD students - Shared vision on the Network programme and shared understanding of the added value of a network among the PU involved - Official support for the Network by top level management at PU - Functional operational structure (working groups, steering committees, reporting system, ...) - Increased institutional exchange and collaboration - Ongoing and new research initiatives 	<ul style="list-style-type: none"> - Sustainability of ownership at top level management (influenced by changes at management level) - Less involvement and ownership at Debre Zeit veterinary institute - Centralised financial management - Lack of availability of sufficient time and/or lack of time investment by local supervisors, ICT staff and ICT directors - VLIR-UOS Network modalities not sufficiently aligned to foster southern leadership - Not much progress yet in project 4 interventions that aim at strengthening networking (PhD support centre, digital library, impact training assessment system, etc.) - Weak involvement of other departments (ICT, community department, gender office) - Lack of strategy for intervention packages - Budget not aligned to ambition
Opportunities	Threats
<ul style="list-style-type: none"> - Presence of several Doctoral schools/programmes at the PU - Home grown PhD programme involving JU and HU - NASCERE PhD scholarship programme involved JU and UGent - JU, HU, AAU recognised by MoSHE as research universities, AU as applied science university - Growing interest in networking, both north-south and south-south - Presence of gender office and community departments at JU - Emerging academic network that can enhance resource mobilisation. 	<ul style="list-style-type: none"> - Political instability, long distances between Network partners and instable internet access that hamper smooth collaboration and communication - Dominance of JU (more capacity, centralised management) and varying capacities at Network partners - Staff turn-over at all universities involved - COVID -19 pandemic

Table 8 provides a summary of the strengths and weaknesses that were identified during the assessment of the relevance, effectiveness, efficiency and sustainability of the network programme. The strengths and opportunities can be further exploited so to manage the weaknesses. The evaluators assessed that a collaborative attitude is existing among the stakeholders involved, relations of trust have been built and an appropriate and functional management structure established. The main challenge is to keep and enhance the levels of ownership for inter-university collaboration among medium and top-level management at each of the PU involved. Getting PU involved in existing PhD scholarship programmes (funded by VLIR-UOS or other donors) might create incentives to strengthen inter-university cooperation.

Collaborative process

From the short time that we have spent with the network partners, and based on the interviews and discussions we had during this evaluation, we can conclude that the collaborative process within the network is promising, as visualised by following graphic.



Collaborative context: The context is conducive for research collaboration. The interests of internal and external stakeholders in research have been discussed and understood. The research topics are addressing clearly identified problems and are aligned to common objectives (in health and nutrition). The added value of inter-university collaboration has been recognised by stakeholders involved and the research topic benefit from inter-university collaboration. The institutional context is less favourable to inter-university collaboration. Such collaboration is not common in Ethiopia and several policies do not stimulate this kind of collaboration. The academic world is also characterised by competition and rivalry. However, the network programme has demonstrated the added value of collaborative research and the potential of inter-university collaboration at institutional level is increasingly acknowledged by the government. Although there is commitment from the university's leadership, the level of commitment and investments from top and/or medium level management are not always guaranteed.

Competent representation: Partner universities in the network were selected mainly because of personal relationships or linkages with JU and the first programme coordinator north. Research topics were also selected based on the former IUC experience at JU and personal interest, and to a lesser extent because of their potential to develop combined intervention packages. Nonetheless, collaboration between research projects was established and inter-university collaboration in research took place. All Network partners have engaged qualified staff for the network. All necessary parties have been engaged in the Network, though less engagement was visible from supporting departments such as the ICT departments, community departments and the gender office.

Since the revitalisation of the network, collaboration and engagement in the network have improved. There is adequate support from each stakeholder, people are well prepared and attend the meetings of the steering committees and other joint sessions that are being organised in the network. Direct stakeholders show similar commitment and motivation for the network (to a lesser extent visible at Debre Zeit).

Embrace diversity: Stakeholders effectively deal with the diversity and power asymmetries. Transparent communication has been conducive in further strengthening relations of trust. Programme coordinators and manager are sensitive to the views of all Network partners involved and ensure that all Network partners are given a voice. All Network partners understand the benefit from the network and recognise and valorise complementary strengths. It was intended to make an overview of complementary expertise that can be used for a training programme, yet this was put on hold after the outbreak of the corona virus (planned to be developed in the second phase).

Collaborative attitude: One of the strongest results of the network so far is the growing collaborative attitude among all parties involved. There is sufficient transparency, information is shared and explained. A shared google drive was initiated to enable access for all to programme documents. Leadership is shared rather than positional. Stakeholders demonstrate attitudes of respect and trust. There is a healthy balance among creativity, pragmatism and risks. All direct stakeholders are committed to completing the assigned tasks. After the further clarification of roles, responsibilities and the way of working in the network, all parties comply with their assigned responsibilities (including reporting).

Effective communication: communication problems that were experienced during the start of the programme have been gradually resolved. Communication improved considerably since 2019, when the current programme coordinator north took over and, together with the southern partners, an internal and external communication strategy was developed. This communication strategy is being implemented and perceived as good by all stakeholders interviewed. Furthermore, all parties engage in dialogue rather than in debate. People speak to explain, listen to understand and accept that one can learn from each other.

Collaborative structure: a programme management structure was set up according to the VLIR-UOS guidelines. Since 2019, the different steering committees are regularly being held and function well. Focal points have been officially assigned and perform in line with their tasks (less so in Debre Zeit). A structure to manage the network at institutional level does not yet exist. There is no formal structure to frequently meet top-level university management and leadership. Focal points, PhD supervisors and trained ICT staff do not always receive sufficient time and space to implement their assigned tasks or to invest in network activities.

2.2. Evaluation per project

2.2.1. Project 1 – Infectious diseases

Project 1 aims at increasing quality of life by using two strategies: firstly, through the strengthening of human capacity and improving education and research culture; secondly, through the provision of evidence for effective control interventions to reduce disease burden. The project adopted the one-health approach and focused on understanding the biological underpinnings of infectious diseases in the Ethiopian context and on the development of new tools to combat sources and consequences of these diseases.

The central goal of the project is to reduce the burden of infectious diseases and hence improve quality of life and health outcomes. To achieve this goal, the project defined two specific objectives (SOs) and seven Intermediate Results (IRs):

- SO1: Development and the evaluation of interventions aimed at reducing the burden of infectious diseases at the community level;
- SO2: Strengthening human capacity and improving education and research culture on infectious diseases by sharing experiences and strengths of the partner universities.
 - IR1: STI among pregnant women and congenital infection of new-borns determined/assessed at Hawassa University comprehensive and specialized Hospital, Ethiopia.
 - IR2: New diagnostic assays to improve management of hospitalized smear negative TB cases in Ethiopia evaluated
 - IR3: Impact of WASH, disease awareness, and co-administration of drugs on STI infections understood and surveillance system to monitor drug efficacy established
 - IR4: Antimicrobial use and resistance in chicken farms under different production systems in central Ethiopia assessed
 - IR5: Ecology of disease vectors of onchocerciasis, malaria and schistosomiasis understood and distribution of vectors mapped
 - IR6: The epidemiology of bovine cysticercosis understood and human *Taenia saginata* infection determined
 - IR7: Modeling infectious disease dynamics for malaria and TB for better understanding and prediction.

Each intermediate result is consisting of a number of activities and sub-activities which are detailed in the project logical framework. The project is divided into 7 research subprojects and involves the Doctoral schools in public health and in mathematical and statistical sciences of Hawassa University, the Doctoral schools in tropical and infectious diseases and in environmental health and ecology of Jimma University, the Doctoral school in veterinary parasitology of Debre Zeit Faculty of Veterinary Medicine of Addis Ababa University and Doctoral school in nutrition of Ambo University. The project involves 7 PhD students, that are subscribed at their universities but also registered at Jimma University (e.g., Ambo has not permission to offer PhD degrees for the courses related to the Network programme). Furthermore, the students are registered in Jimma to use the Jimma facilities, infrastructure and support developed during IUC period. Three PhD students are from Jimma, three from Hawassa, and one from Ambo universities. The PhD candidate at Debre Zeit did not manage to apply in time. PhD research under this project is being conducted at Debre Zeit but funded by another scholarship.

During implementation period, some changes were brought to the project. Some changes were done to the research topics (e.g., malaria drug quality research was replaced by STI research) when PhD supervisors changed. Research conducted for IR1, IR4 and IR 6 was delayed because of political instability and COVID-19, which hampered field work and traveling.

EQ 3 – To what extent is the project relevant?	
<p>3.1. The objectives of the project are consistent with the country/local needs, the needs of the university, the VLIR-UOS strategy and donor's policies</p> <p>Score: good</p>	<ul style="list-style-type: none"> - The project was developed based on IUC gained experiences and research findings. - Jimma university (IUC-PhD students) took the first initiative and lead in the development of the project design. - Before selecting partners universities, Jimma university made an assessment of partner university's capacity and of their commitment, resources, lab facilities. - Jimma university led and consulted partners university's research teams, the universities participated in the project design process and provided their inputs. - Matching the research thematic focus with the partners university's department research thematic focus was made. - During project design, VLIR-UOS context analysis and country strategy documents were reviewed. - The project shared lab facilities and improved lab practices of other university departments, for example the biology department and the chemistry department used the project lab facilities of Jimma university and gained skills and experiences from the PhD students and the project advisors; - The project has 7 sub-projects mainly focusing on human health. These sub-projects are interrelated and have common research practices, for example environment and health sub projects developed joint lab practices. - The skill-based training that the PhD researchers were getting is also being used for teaching MSc students in Jimma and PU and provided to other researchers that need high level of diagnostic skills. - With the development of a newsletter, giving a short overview of the achievements and activities, and the planned website, communication mechanisms were developed to inform also external stakeholders on the Network activities. - Face to face consultation/discussions and letters were the major communication mechanism with government sectors offices (health office, schools, etc) - Interaction and knowledge transfer took place during conferences and meetings, where stakeholders were invited. - Events of the project have been open to external stakeholders. - The project research topics were derived from the IUC research findings, working already on the identified problems. - Some research topics are a continuation of the IUC programme research recommendations. This gives opportunity to implement the IUC research findings which were validated as relevant to the external stakeholders during IUC external stakeholders workshop period; - Before the project research lines were identified, the country national strategic documents were reviewed, external stakeholders were consulted and have participated in the research process. - The research topics are coined based on the stakeholder's need. - The project research activities and approaches attracted relevant stakeholders, for example: - The animal health subproject has now linked up to the National Animal Health Diagnosis Investigation Centre (Ethiopia),

	<ul style="list-style-type: none"> - The soil-transmitted helminth subproject continues working closely together with the Ethiopian Public Health Institute to pilot a surveillance system to monitor drug efficacy and anthelmintic resistance at the national level as an intervention; - During selection of PhD candidates, the project used the university gender selection guideline, for example female candidates are selected if the selected male and female candidates scored the same results, female candidates get 5% additional score - The project missed a gender mainstream strategy document/system. Only male students were selected for the PhD research. - In fact, by design the project responded to gender issues; but the project did not develop a gender strategy or gender sensitive monitoring system. The project indicators are not disaggregated by gender. - It is reported that there was a limitation in the success of attracting female PhD students (no female candidates applied) but this will be considered in the future. One of the explanations given was the difficulty for women to travel abroad and stay for period in Belgium.
<p>3.2. The projects show sufficient coherence, enabling collaboration and multi-disciplinary research, strengthening research capacity of PU</p> <p>Score: excellent</p>	<ul style="list-style-type: none"> - This project is linked to nutrition project (project 2). - The different research projects developed a joint monitoring system, shared lab facilities and resources, used same vehicle during data collection. - Since the revitalisation of the Network, exchanges between the PhD research projects were stimulated, which created synergies where possible and enables the establishment of mutual support between PhD students. For example, “Bunna” sessions were organised where all the PhD researchers (all projects) reflect on their experience, progress and plan for joint actions. - By design, the project has interdisciplinary elements. The project has 7 sub-projects that have interdisciplinary research topics and practices. - The projects share lab facilities and lab research practices, for example malaria research practices were used for informing bio-statistics research modelling, similarly drug quality research practices were used to STI research activities. - Synergies have been created related to facilities, equipment, knowledge, research output, and specific knowledge, e.g., for data analyses. - Project supervision and mentorship and joint project applications have further strengthened the collaboration. - The Belgian partners have played a vital role in the solidification of the relationships, such as facilitating and leading the SC meetings, follow up the actions made for interaction and communication - Joint decision-making between PUs has been present within the project, as an output of a constructive meeting culture, a good team spirit and with a good balance between North and South inputs. - Every decision is made by discussion among team leaders and research team members in the North and South. With the improved communication and management procedures this process has further improved. - Synergies have been created related to facilities, equipment, knowledge, research output, and specific knowledge, e.g., for data analyses. - The soil-transmitted helminth team at JU has collaborated with the IUC at Arba Minch, in implementing an intervention study. - The project research topics were informed based on the previous IUC program research findings. This project is considered as a follow-up of the past IUC program, and can be labelled as an ‘intervention’ according to the interviewees, as this project involved “more applied research and more collaboration with communities - The different laboratories established during the previous IUC-JU-VLIR-UOS program and strengthened during the current Network programme,

	<p>have also become relevant beyond the university. For example, pooling necessary equipment and materials enabled the establishment of a new SARS-COV-2 testing centre at the Jimma medical centre.</p> <ul style="list-style-type: none"> - Jimma university is providing capacity building services to other Ethiopian universities, provide ICT technical support, for example to AMU (IUC), Tepi University, Welege University - PhD students analysed their samples in laboratories outside the Network, thereby exchanging knowledge on new techniques and creating opportunities for future collaborations (example at Hawassa University).
<p>3.3. There have been efforts made to ensure complementarity and synergy with other (externally funded) projects/ other (Belgian) development actors</p> <p>Score: Good</p>	<ul style="list-style-type: none"> - The project did not look pro-actively for synergy with other VLIR-UOS interventions in the country. But AMU and BDU IUC programmes visited Jimma Network programme and gained experience about VLIR-UOS rules and regulations about IUC and network programme - The project is closely working together with a variety of research and development partners (Janssen Diagnostics (Belgium); Devex (Sweden); Techion (New Zealand). - The STI subproject collaborated with the Laboratory of Sciensano at Brussels (Strategic Design Scenarios (SDS) is an innovation lab specialised in public innovation, strategic design, scenario building, policy design, co-design with users and community) - The project created synergy with the Johnson & Johnson Companies represented in Belgium. With this linkage the project is doing research on innovate health diagnostic methods. - The respondents suggested that the project needs to organize scientific presentation forum and present the preliminary findings. Need to attract stakeholders and engage in the research process. - The project research team need to develop communication strategies, like organizing events, sharing reports etc.
<p>3.4. The intervention logic of the project is coherent</p> <p>Score: Good</p>	<ul style="list-style-type: none"> - The intervention logic (project results chain) is coherent and interlinked. Only the strategy for sharing experiences and strengths of the PU (as formulated in the SO2) is less explicit in the formulation of this project (no IR formulated to that end and no specific activities identified). - Some changes have taken place in research topics. For example, malaria drug quality research was replaced by STI research. Corresponding to this, the IR activities are implemented and contributed to the project objectives. - The project consists of 7 research projects, with appropriate research activities. Mostly applied research is being conducted with involvement of affected communities and/or the opportunity to apply developed tools and methods in practice. - There is not a clear definition on what is understood by an 'intervention' (SO1) and a strategy on how to share research results, how to organize uptake or upscaling and what stakeholders need to be involved to that regard is not made explicit in the project logical framework and strategies. - The project lower-level indicators are SMART, but the higher-level indicators need improvement, for example the project specific objective indicator "the number of successful interventions identified" is not a good indicator as there is no clear definition of 'intervention' and because there is no full-scale intervention at the community level; - The project overall objective indicators are impact indicators and not relevant in this phase of the project as uptake or upscaling of the research results are not yet foreseen. There are no baseline data provided. - A more in-depth involvement of all partner Universities (besides Jimma University) from the very start would have been beneficial; - A longer first stay in Belgium would be beneficial for the PhD students, to enable a sufficient amount of training before the start of the sample collection, laboratory work and data management and analyses;

	– Currently, the project perfectly fits into the national home-grown PhD programme endorsed by MoSHE.
--	---

Final judgement

The relevance of the project is assessed as good to excellent.

The Network programme has selected the health theme of the VLIR-UOS Country strategy for Ethiopia. The research lines selected for projects 1 align on the one hand to priorities and targets of national plans, such as the disease control strategy of the Ministry of Health, and on the other hand to interests of PhD graduates from the former Jimma IUC programme who became involved as supervisors in the Network programme. The design of the programme was led by Jimma University, in close consultation with the three other partner universities. Relevance of research topics is also shown by the fact that external stakeholders and donors have shown interest in the research and have started collaborations.

The project shows sufficient coherence, although not by design but during implementation. Although the project consists of many sub-projects (seven specific research topics), there are some cross-linkages between the research topics that foster exchange and mutual strengthening, for example with regard to lab practices. With the start of the “Bunna sessions”, exchange between PhD students and researchers has been strengthened. Inter-disciplinary collaboration is taking place. Synergies have been created related to sharing facilities, equipment, knowledge, research output and specific knowledge and skills (e.g., data-analysis). However, the diversity of the research projects complicated the development of joint actions (intervention packages) targeting specific communities.

The Network programme has not actively engaged yet with other VLIR-UOS supported universities, though there have been some contacts with AMU and BDU. The programme is in this phase focusing on developing a network between four universities, which comes with specific challenges (see assessment at programme level).

The intervention logic of the project is coherent, with appropriate research activities, but shows some weaknesses with regard to strategies for uptake and/or upscaling of research results and strategies to strengthen sharing of experiences and strengths of the PU. Initiatives to that end have been taken since the revitalisation of the programme in 2019, steered by the two programme coordinators.

Relevance and internal synergy are somehow negatively affected by the fact that the project consists of many sub-projects that initially have not been selected for their potential of multi-disciplinary collaboration (though this has taken place to a certain extent). And for AAU Animal Health department at Debre Zeit AAU the selected research topics (human health) did not match with the thematic focus of the department involved (animal health).

EQ 4 – To what extent have the project’s specific objectives been achieved (effectiveness)?

<p>4.1. The specific objectives have been realised Score: Excellent</p>	<ul style="list-style-type: none"> – The PhD students received training; the research activities are going well. This resulted in the identification of successful interventions. 6 publications have been made in Bio-Med Centre, Spring Link, Early Review Journal and in the International Journal of Infectious Disease. – The project contributed majorly to institutional (universities, public health research institutes) and national capacity development (e.g., the research findings inform policy directions and actions), support received improved the lab facilities in Jimma. And all lab technicians involved at the different partner universities benefitted from improved techniques and procedures for lab practices, for example techniques of analysing Alfa-toxin.¹¹
---	--

¹¹ Aflatoxins contamination in stored grains/foods is common in rural Ethiopia. This exhibits a serious threat to human and animal health and nutrition. To protect the safety of grain/food commodities, the research assessed the level and impact of aflatoxins

	<ul style="list-style-type: none"> - The project will also improve the knowledge, skills, and analytical capacity of researchers/academicians who will contribute to teaching the next generation. Hence, the project has the highest relevance to contribute at (i) individual level i.e. adequate skills and knowledge were gained and applied; the project has reduced staff turnover because IUC staffs are currently engaged in the research practices, and project facilitates skills and knowledge transfer within institution, (ii) organization level i.e. the project improved the university infrastructures and new ways of doing research activities, introduced lab procedures and management including lab equipment and reagents, and (iii) institutional and policy environmental level i.e. the project has brought learning and experience related to joint publication procedures, interuniversity collaboration. This will inform the establishment of institutions policies for joint programme and actions - Pooling necessary equipment and materials enabled the establishment of a new SARS-COV-2 testing centre at the Jimma medical centre. <p>Positive contributing factors include:</p> <ul style="list-style-type: none"> - Sharing lab facilities, and university resources (IUC vehicles, IUC experiences, internet, reading room etc), were very helpful in realizing the project results. - Research staffs, programme coordinator, project leader, focal person individual commitments (especially in Jimma and Ambo) were significantly contributing to the project results. - Supervisors' commitment and North support was also vital <p>Negative contributing factors include:</p> <ul style="list-style-type: none"> - Frequent staff turnover at leadership level (example in Hawassa university); - Uptake of responsibility and lack of understanding the project network programme approach and system - Centralized financial system - Lengthy university procurement system - Location of partner universities, they are very far apart and hard to organize meetings and logistics - Political unrest and Covid-19 hampering progress in field research and traveling (within Ethiopia and to Belgium)
<p>4.2. Extent to which the strategy for intervention packages has been developed and is being implemented</p> <p>Score: good</p>	<ul style="list-style-type: none"> - The project has no clear definition about intervention but there are intervention activities and changes are observed at schools and health facilities. The logical framework does not provide monitoring information on the extent interventions have been implemented. The working group that was established to that end has made an inventory of interventions. - 5 interventions were reported being implemented since 2017, of which 2 interventions involved national stakeholders. For example, multi-drug resistance TB referral system developed and information shared with the Expanded Program on Immunization (EPI) and TB Ministry section. The project established referral linkage with health offices. - The project interacts effectively and works together with key actors (schools and health offices); - The key stakeholders engaged in the research activities, particularly providing and collecting data and information from the community; - The project supports and works with Jimma university excellence centres and continues to provide short- and long-term trainings to Jimma health students, the community; provide testing services; quality control services, dossier evaluation services (health file management system), referral systems (for instance TB-MDR services) not only to local communities but at national level including government stakeholders and policy makers like Ethiopian Food and Drug Authorities (EFDA) and the Ministry of Health.

<p>4.3. The project has ground-breaking nature and ambition (scientific quality)</p> <p>Score: excellent</p>	<ul style="list-style-type: none"> - There is no monitoring system to check the quality standard but the students attend PhD programme both in the North and South universities that meet international standards. - Initially, the project suffered having appropriate supervisors but now the PhD students receive adequate support and supervision. - PhD students received training and advice in conducting improved research practices. - The project plan to set up a support centre to provide better support for PhD students to conduct quality research practices, data collection, analysis and research writing skills but failed so far to set up a team of experts and centre. - Students received online certification training about PPE (Personal Protective Equipment) use, covid-19 related infectious perceptions, sample collection and transportation - One of the added value of the project was the use of standard laboratory procedures gained from Northern technical support. - Standard laboratory procedures were developed, for example for STH, TB, STI, that are being applied at by all network partners involved in the project. Furthermore, the PhD students developed their own procedures, which is unique in the Ethiopian university research practices. - More than 5 manuscripts were published and accepted for publication in international peer reviewed journals - The level of collaboration with external stakeholders was strong and effective, for example the project worked in close collaboration with Ministry of Health (MoH), MoSHE, Ethiopian Public Health Institute (EPHI)
Final judgement	
<p>The effectiveness of project one is assessed as good. PhD researches have started and are advancing well (expected to be finalized by 2020). Students have already publicised 6 publications in international journals. Target was set at 28, which was assessed by interviewees as ambitious (was based on the targets used during the IUC at JU). An important achievement is the realisation of joint publications, not a common practice in Ethiopia.</p> <p>Attention is given to scientific quality, through the collaboration and advisory support of the northern supervisors, the training of the Ethiopian supervisors, the development of standard operating procedures for lab practices. The establishment of a support centre for the Doctoral schools, included in the revised action plan, has not been realized yet.</p> <p>Several interventions have been implemented in targeted communities (schools and health offices, but mainly through involvement in research) and the Jimma University collaborate with the Jimma Centres of excellence to provide services to the communities and government stakeholders. However, a clear definition of “intervention” is lacking. A working group was established to develop a definition and prepare strategies for the second phase to that regard.</p> <p>The way forward is not yet outspoken. Reference is made to the working group that was established and that has started the preparations of the second phase. It is not possible yet to assess the strategy for the way forward. However, relevant points for reflection are put on the agenda of the working group, such as enhancing ownership, enhancing inter-university collaboration, developing strategies for knowledge transfer and reaching out to a wider group of academic staff and students (beyond the PhD students), enhancing the science-society linkages and need to elaborate a gender strategy.</p>	

EQ 5 – What is the level of efficiency in the project?

<p>5.1. Intermediate results have been delivered</p> <p>Score: Good</p>	<ul style="list-style-type: none"> - The project will realize most of the project IR results but there could be delay in realizing some of the project results within the project period, because Covid-19 affect the data collection, travel to North and ability to attend important courses and doing research activities - IUC-past experiences and resources helps the project - Little progress has been made towards the development and the evaluation of interventions aimed at reducing the burden of infectious diseases at the community level. - Each of these seven PhD candidates are on track to complete their PhD in due time, and this despite the recent changes in research topics - The project allocated enough budget for PhD students training and related costs, but budget allocated for research activities and expected results are not realistic, it is quite small. - Changes made in leadership (project leaders, PhD supervision), project topics and PhD topics affected the project result achievements by delaying the project activities - COVID-19 had an impact on the activities of 2020, and political instability (limit travel and internet access) also impacted on certain activities and on the communication. - The project realized the IRs but needs extra time (could be 6 months), for this the project has detail plan for the remaining period, - The budget allocated for realizing the IRs is enough but the remaining activities need strong interaction, communication, commitment and support from partner universities. This helps to use the limited resources efficiently.
<p>5.2. Relationship between means and results achieved and objectives (qualitative assessment)</p> <p>Score: excellent</p>	<ul style="list-style-type: none"> - Northern support was very crucial in realizing the IRs, specially designing and conducting the research activities. - Experts mobilized from North are highly experienced, relevant to the research activities, topics and they provided professional advices. - There was some underspending during the first year of the project due to the slow start-up of some of the research projects. In the first years, the research teams were not sufficiently aware about the financial status. But now project teams receive regular financial update. There is no over- or under spending. - The project effectively used the limited resources available, because IUC resources (vehicles, lab facilities and structures) were leveraged and used. - The project purchased reagents and lab equipment from North with reasonable cost as compared with the local price. - The project jointly used vehicles during data collection and related research activities. - Partner universities have also contributed budget from their internal budget, during local training, coordination and management of some activities, (e.g., provided internet facilities, reading rooms, organize public events and cover part of local transportation cost during travel for training) - The project attracted NIH, USAID, CDC, EU and WHO funds to disseminate and implement the research practices and findings at large scale - The project attracted interest and funds from the Ethiopia and Developing Countries Clinical Trials Partnership (EDCTP), and European Development Clinical Trials for TB research, Special Research Fund (BOF), Ghent University and Bill and Melinda Gates foundation for STH research and WHO fund for drug quality research activities
<p>5.3. Project management is conducive for efficient and effective project implementation</p>	<ul style="list-style-type: none"> - The project has a good working relationship with the programme coordinators, programme support unit and within the project teams - In general, there is good team spirit and good working relationship between project teams. - Internal collaboration still needs improvement and in fact affected the project activities during the start of the project, collaboration between the subprojects

Score: good	<p>and between the Network partners is still fragile and emerging. The lack of a culture of inter-university collaboration affected the start of the project. The long distances between the partner universities negatively impacts communication and collaboration and demanded substantial time investments from the PhD students</p> <ul style="list-style-type: none"> - The coordinators, project leaders, focal points, project members, PhD students and programme support unit are a lot of people working together, which makes it necessary to have clear communication flows to ensure everyone is involved and periodically updated about the project progress - The new communication strategy is very effective and improved the project communication mechanism but the strategy needs to define and elaborate details about communication mechanism with external stakeholders, during outreach activities, etc. - The project allocated budget for mobile credit card for PhD students for regular and smooth communication. - For better communication mechanism the university leadership needs to organize meetings frequently. The project needs to allocate budget for joint meetings for travel. - The project monitors the activities through progress reports, meetings, and field supervision; - The project used the management manual as a guideline monitoring the project implementation approach and activities, because roles and responsibilities are defined in this manuals and monitoring were made based on these responsibilities - There is no budget allocated for joint monitoring and internal evaluation for measuring the project higher level indicators - The project teams are flexible in the project execution, for instance the project improved the implementation approaches, change the project leader, research topics, and improved communication mechanism - The project team identified challenges and took on time decision, for example the research team assigned advisors on time after advisors left, facilitated purchase of reagents from Belgium that were not available in the country, allocate more budget for online communication system - The project applied the university procurement procedures, and it is beyond the project administrative authority. But the project purchased reagents and lab materials from Belgium and was efficient. - The project was effective in managing traveling because the programme used and adopted IUC experience and resources
--------------------	---

Final judgement

The efficiency of the project is assessed as good. It is expected that the IR will be achieved, though there could be some delays in the finalization of the PhD researches due to the unstable political situation and unrest and the Covid-19 pandemic that have affected traveling inside and outside the country. It is expected that PhD will be finalised by the end of phase 1, the latest by 2022. Another factor that caused some delays in implementation related to the changes at the level of project leaders and PhD supervisors.

The available budget was spent in a cost-effective manner by pooling resources and topping up with own resources. The budget was assessed by the Network partners as not sufficient to cover the expenses for outreach activities.

Collaboration between the subprojects and between the Network partners still is fragile and emerging. The lack of a culture of inter-university collaboration affected the start of the project. The long distances between the partner universities negatively impacted communication and collaboration and demanded substantial time investments from the PhD students.

For the administrative and financial management, the Network could rely on the expertise built at Jimma University during the IUC. At project level, there were some challenges in gaining a good overview of budget spent, which improved towards the end of phase I, when the ICOS and PSU

provided more regularly overviews and information on the state of affairs. Inefficiencies were related to the central project management, installed at Jimma University, which required PhD students to travel to Jimma for arranging payments and account for expenses. Communication and information exchange between the subprojects improved since the launch of the Bunna sessions.

EQ 6 – To what extent will the project results continue after the Network programme is completed (sustainability)?

6.1. Level of academic and institutional sustainability

Score: Excellent

- There is a strong sense of ownership of the Network (and support) by the local coordinating university, supported by its previous experience and commitment in the IUC programme.
- Inter-university collaboration on health has started because universities started sharing lab facilities, research practices and plan joint publications
- An increasing level of ownership of the partner universities has been observed with time, especially when the progress of the PhD student became visible.
- The PhD research is embedded in research teams at each Network partner, because the PhD students trained MSc students and share research practices with university research teams
- Network partners started developing joint proposals and attracted donors, for example Hawassa University attracted fund from WHO.
- PhD students, many of them being university staff before the start of the project, signed 8-year contract to serve the university after graduation. Furthermore, the PhD students are engaged more in research activities than teaching after the project ended.
- A large amount of capacity, both on the level of human resource and facilities, has been built at the partner universities, enabling them to apply for national and international funding, because they have received training in grant writing proposal techniques.
- The link between the Universities created by the Network has generated an opportunity to work collaboratively by sharing both human resources and infrastructures.
- The Network partners are now much more involved and internalized the benefit of the project, because they actively participate in the joint meetings, monitoring the project activities
- Both North and South developed and agreed on the research topics based on the university research domain area and excellence
- The project research topics are generated from IUC research findings and recommendations, but in the next phase developing research topics need more attention and time.

6.2. Level of financial sustainability
Score: excellent

- There is no monitoring system and data how many research teams are involved in proposal writing, but the project research team predominantly supervisors, project leaders, focal persons were involved in the proposal writing workshops.
- The project used university infrastructure and resources developed during IUC programme. Fund is available for future operation and maintenance cost in Jimma. The project research facilities are in Jimma and Jimma university will have operation and maintenance cost for these facilities. Furthermore, the partner universities are committed and have budget to cover the operation cost associated with their university
- The project has budget to continue a number of activities and realized the project results within the project period.
- The project has laid a number of fundaments needed for applying for additional funds to sustain their activities, especially through inter-&- intra university collaborative efforts.
- A variety of subprojects have solicited for other funds, including but not limited to sandwich scholarships of the Special Research Fund of Gent University

Final judgement

Institutional sustainability was weak at the start of the Network programme because of the limited involvement and ownership of the Network partners other than Jimma University, the unclarity of the arrangement regarding assigning PhD students to the PU and the organisation of the supervision. Ownership for the project has grown at each university (except Debre Zeit, because there is no PhD student) and there is a shared understanding of how to evolve from building individual capacities to organizational and institutional capacity and of the added value of multi-disciplinary research and inter-university collaboration. The challenges regarding the long distances between the Network partners and the difficulties in communication (interrupted internet) still prevail. Institutional sustainability has become stronger and can be currently assessed as good.

Financial sustainability is strong as the project contributed to strengthening the track record, legitimacy and capacity of the research teams at the PU so to be able to attract other funding. Grant project writing skills have been enhanced and some joint project proposals have been written. There is a continued interest from the northern universities to continue collaboration. PU have invested with proper funding in the project research and are committed to continue collaboration (if funding allows).

3.4.1. Project 2 - nutrition

This project is led by Jimma University and involves Ambo University and Hawassa University, with technical support from UGent, U Hasselt and PXL in Belgium, and aimed at developing and testing complementary foods to children to address malnutrition.

The central goal of the project is to contribute to the reduction of prevalence of stunting. To achieve this goal the project defined two specific objectives (SOs) and three Intermediate Results (IRs):

- SO-1: Improved research capacity in nutrition sensitive agriculture in all partner universities
- SO2: Increased uptake of proteins by children through improving fish productivity (aquaculture) and dietary (quality of legumes)
 - IR-1: Dietary diversity of traditional complementary foods improved through promotion of fish consumption
 - IR-2: Post harvest loss and mycotoxin contamination of agricultural product improved
 - IR-3: Improved role of legume bio stimulant for agricultural intensification and nutritional quality of complementary foods

The project applied a broader, innovative, and multi-sectoral approach of 'nutrition sensitive agriculture' and experimented with the optimization of indigenous food to improve access to essential nutrients by vulnerable groups.

Change in attitudes towards inter-university collaboration, and lessons on how to organize higher education, share resources and improve their capacity were the major changes as a result of the project interventions.

One of the successful institutional changes is strengthening of the Doctoral school in Jimma University and partner universities. Connection with Ghent University was established and new ways of doing nutrition research practices were introduced in the universities. The University network is lauded by ministers in Ethiopia, as they wish to scale up this way of collaborating. Jimma University has materialised a joint PhD programme with Gent University.

EQ 3 – To what extent is the project relevant?

3.1. The objectives of the projects are consistent with the country/local needs, the needs of the university, the VLIR-UOS strategy and donor's policies
Score: excellent

- The project planning process was very consultative and participatory, the research teams were involved in the redesign of the project approaches, key stakeholders like MoH were consulted and participated in the design process. The redesign was needed to engage the research community during the research process
- The procedures and planning were discussed openly and problems resolved where possible.
- The choice of project research topics was inspired by the Jimma IUC programme and university research strategic plan of the partner universities. These were validated through stakeholders' survey analysis
- The project significantly contributed to the improvement of the nutrition research practices, the lab facilities in Jimma, including new ways of doing research practices in all universities; the PhD students share their skills and research experience to MSc students in Jimma and partner universities,
- Recently, Jimma University delegated to host "coordinate", the national "nutrition programme for the 5000 PhD home grown programme. The Network programme support and contribute to this initiative
- The partner universities gained skills and improved lab facilities and learned from Jimma nutrition research practices. Partner universities and Jimma university Departments like environment and health are also benefiting from the experience gained at the nutrition department. Data and research practices are shared.
- The project interaction mechanism was effective, particularly during the research practices. The project interacts with external stakeholders through meetings, awareness creations sessions and workshops. The research staffs directly interact with the communities during the data collection.
- Regular 'bunna' sessions were organized, which supported the PhD students to progress well and keep the motivation.
- The project addresses important challenges to improve diets in Ethiopia from various angles.
- The project is highly relevant and the developmental link with the SDG's (e.g., SDG2) is apparent. It contributes to the overall objective of the national nutrition programme strategy that contributes to the Ethiopian government's target to reducing child stunting prevalence to 26% by 2020 (NNP) and to 0% by 2030 (Sekota declaration) through Nutrition-Specific Interventions, nutrition-Sensitive Intervention, Mainstreaming Nutrition into Agriculture, School Feeding Programme and Food Fortification.
- The project is relevant to the home-grown PhD programme, because Jimma University is now coordinating the Nutrition home grown PhD programme. The project forges more collaboration, use expertise from the North and intends at scaling up PhD research in the South, by sharing professors, not only in Jimma but also others, like Tepi University, Welege University.
- The project aligned with main actors working in food and nutrition related studies in Ethiopia i.e. nutrition programme funded by NUFFIC in Hawassa University, The ENGINE mega project funded by USAID and carried out by Tufts University, The Wollo famine and metabolic, anthropocentric and psycho social effects (1 PhD and 3 MSc students), The school Health and Nutrition project – 1 PhD, funded by the World Bank funded, the High Quality protein Maize, and improved Fertilizer (1 PhD) collaboration with Wageningen University and Research and the International Maize and Wheat Improvement Centre (CIMMYT).
- The project used the university gender guideline during the selection of PhD (women) candidate. To date however, only one of the 3 PhD's under this project is female and the leadership is male. Efforts were made to stimulate women to pursue a PhD in this project and also women were encouraged to take up co-ordination tasks.

	<ul style="list-style-type: none"> - The project research practices and topics targets women, but the project did not develop a gender mainstreaming and monitoring thereof. The project did not properly monitored gender in the project research process and its impact on women.
<p>3.2. The projects show sufficient coherence, enabling collaboration and multi-disciplinary research, strengthening research capacity of PU</p> <p>Score: good</p>	<ul style="list-style-type: none"> - The project effectively interacts with project 1, by sharing lab facilities, data and research practices. Child nutrition is an important aspect of public health (project 1); - The project did joint monitoring, joint data collection and training with project 1 - The project interaction with the ICT components (project 3) was weak; P3 is obviously a component that creates an enabling environment for the research in this project at large. - The sub-projects interact well by sharing research practices and data, but the interaction was not very strong. For example, the interaction did not lead to joint publications. - The evaluator learned that, many respondents suggest to allocate more budget for synergy and provide skills and training to research teams about communication, organising workshops and writing grant proposals,
<p>3.3. There have been efforts made to ensure complementarity and synergy with other (externally funded) projects/ other (Belgian) development actors</p> <p>Score: good</p>	<ul style="list-style-type: none"> - The project team is exchanging with a team in VLIRUOS-IUC project in Mekelle University (Ethiopia) and a project team at the university of La Paz (Bolivia). - The local and Belgian team members have active communication with the nutrition research project in Arba Minch and previous IUC students in Jimma. - There was an initiative to develop a joint proposal to be submitted to NORHED fund. - The project team plans to approach Belgian developmental partners in Ethiopia to explore how the findings and capacity can contribute to their efforts in the country.
<p>3.4. The intervention logic of the project is coherent</p> <p>Score: good</p>	<ul style="list-style-type: none"> - The intervention logic and project result chains are coherent and interlinked. The project has three IRs that are relevant in contributing to the project objectives. - Realizing the project objective (improved research capacity in nutrition sensitive agriculture in all partner universities and Increased uptake of proteins by children through improving fish productivity (aquaculture) and dietary quality of legumes), needs intervention plan and intervention activities at community level. - The project activities are relevant and validated through project survey, the activities are relevant for realizing the intermediate results. - The project indicators need improvement, some indicators measured the project results after the project period ended for example “average diet diversity of Ethiopian infants after the intervention (number of food groups consumed)”. This implies that, the project will not produce a result report. Moreover, impact indicators are not relevant yet as first research needs to be finalised.
<p>Final judgement</p>	
<p>The relevance of the project is assessed as excellent. The project planning process was participatory and involved the research team and key actors. The relevance of the research topics was validated through stakeholder survey analysis. The research topics are relevant at national level. The project contributes to the overall objective of the national nutrition programme strategy and actors working in food and nutrition</p>	

related studies. Besides, the project significantly contributed to the national “nutrition programme for the 5000 PhD home grown programme, where Jimma University is delegated as a national coordinator.

The project interaction mechanism within the project and with other projects and actors was good but need improvement. The project organized regular ‘bunna” sessions, which supported the PhD students to regularly interact and progress well. At the same time, the project needs to improve interaction with project 3 and need to interact more with other projects for joint publication. Similarly, the project plan to create synergy with other partners needs improvement. For this, the project needs to allocate more budgets and organize training about communication, organising workshops and writing grant proposals.

Though the project research topics targets women, it missed developing gender mainstreaming and monitoring plan. As a result, the project not monitored the project results on gender, as it was required.

The project intervention logic and project result chains are coherent. The project activities are relevant and the project intermediate results are contributing to the project objectives. The project objectives can be realized but needs intervention plan. The project high level indicators need improvement; the indicators are measured after the project ended. Meaning, the project will not produce a result report following the project indicators.

EQ 4 – To what extent have the project’s specific objectives been achieved (effectiveness)?

4.1. The specific objectives have been realised
Score: good

- The project has contributed to improved research capacity at the PU involved. The project is advancing well, the research activities are going well with some dalliance due to covid-19 that hampers the data collection, PhD students are attending trainings, tow publications are undergoing, but not finalized. The project contributed to capacity development by way of PhD training and provision of basic research practices. Also, master students benefited from the project. For example, three MSc students have graduated using research facility and part of PhD data from the project under the PhD student.
- Progress of the project towards the goals of IR1, IR2 and IR3 have been quite satisfactory given the challenges to carry out field work and travel.
- Jimma university lab facilities developed during IUC period significantly contributed to realize the project results, North support and commitment was also vital
- The project support unit and programme coordinator, North technical support, PhD students team work and commitment, partner university support and sharing resources and lab facilities were the major positive contributing factors
- University lengthy procurement procedures at Jimma was the major challenge
- The project team has developed relevant reflections and ideas for the next phase. The next phase of the project needs to foster an integrated approach toward institutional collaboration. The project team suggests that the various research lines and efforts to build capacity in higher education need closer integration to develop a more comprehensive intervention for better nutrition and child health. Although the present research has dealt with different aspects of health and safe food of women and children, a more combined approach is needed to ensure translation of the research findings to recommendation for healthy diets for rural consumers.
- Most of the energy of the Nutrition and Child health project has been dedicated to the implementation of the research components as planned. The benefits and challenges of institutional collaboration have become clear to the partners involved. This has led to an important reflection on the place of institutional and academic collaboration in Ethiopia. The project team suggests further that a reflection on institutional collaboration and added value of collaborative research is needed in the second phase.

<p>4.2. Extent to which the strategy for intervention packages has been developed and is being implemented</p> <p>Score: good</p>	<ul style="list-style-type: none"> - The logical framework does not provide monitoring information on the extent interventions have been implemented. The working group that was established to that end has made an inventory of interventions. 2 interventions were reported being implemented since 2017, of which 1 intervention involved national stakeholders. For example, the project implemented activities to contribute to mycotoxin reduction on child health, growth and nutrition and to demonstrate on Fish consumption and aquaculture practices in targeted communities. - A clear outreach strategy or up-scaling strategy was not developed, so effects in communities are limited to those involved in research. However, some research results have been taken up by other development actors like EU and DEVCO. - The Belgian team has mobilized expertise from Jimma University to respond to questions by DEVCO on the commitments to track the reduction of malnutrition. - The research has led to data to prepare the 3rd EU action plan on nutrition in Ethiopia. The approach to compute stunting reduction in low-and middle-income countries is now being used by DEVCO in their regular monitoring and evaluation system to track progress towards the EU commitments with regard to stunting. - Following this work, DEVCO decided to establish a 4-year Nutrition Research Facility to guide EU (i.e., DEVCO) investment in nutrition in the South with evidence. - External stakeholders involved in the project appreciated the project activities and engaged in the research process.
<p>4.3. The project has ground-breaking nature and ambition (scientific quality)</p> <p>Score: Good</p>	<ul style="list-style-type: none"> - The North support and the PhD training approaches followed international standards - Research practices, lab procedures, data collection and analysis methods are supported with North and South supervisors. The supervisors provided adequate support particularly in designing the research design and process, follow up the research process and providing timely feedback - SOP for lab research were introduced and applied by PhD students. New ways of doing research were introduced and adopted in the universities by PhD students. - Some research practices were also conducted in Belgium, following standard procedures - The research activities are undergoing, and 2 research papers are under publication - The level of collaboration with external stakeholders was effective. The project interacts with partners working in Nutrition programme the Ministry of Health, Ethiopia Public Health Institute (EPHI). - Ethiopian researchers also collaborated with Belgian researchers in a FAO study to develop guidance for diet diversity in women.
<p>Final judgement</p>	
<p>The effectiveness of the project is assessed as good. The project is progressing well to realize the goals of IR1, IR2 and IR3. The project has contributed to improved research capacity, the PhD students are attending trainings, the research activities are going well and publications are upcoming. Furthermore, the project contributed to capacity development of the universities by way of PhD training and provision of basic research practices.</p> <p>Jimma university lab facilities developed during IUC, support made by North support, project support unit, programme coordinator, and partner university were the major positive contributing factor for the project progress. Contrary to this, the University lengthy procurement procedure at Jimma was the major challenge.</p>	

Though, the project has implementation activities and some research results have been taken up by other development actors like EU and DEVCO, the project did not develop a clear strategy for intervention packages. In the next phase an intervention plan and a clear outreach strategy or up-scaling strategy is needed. For this, the project needs to improve the already established effective institutional collaboration with external stakeholders.

EQ 5 – What is the level of efficiency in the project?

<p>5.1. Intermediate results have been delivered</p> <p>Score: good</p>	<ul style="list-style-type: none"> - The project realised the IRs. All of the PhD research have started more or less as scheduled and the research activities are on-going - The project plan and resources allocated is realistic, but budget allocated for some research activities is limited. The time allocated to achieve the project results are realistic but covid-19 delayed project activities related to data collection - The VLIR-UOS project has helped the local research teams to carry out additional research and attract more collaborations and projects in several ways, for example Fish consumption and aquaculture practices research attracted the district agricultural office interest to scale up the research findings, 2 MSc students in Jimma made additional research related to this research. - Logistic issues (e.g., long travel, per diem compensation) are a common barrier to implement projects, because PhD students are limited to travel to Jimma university and different stakeholders placed in Addis Ababa - In addition to the knowledge gained on how to promote healthy diets in vulnerable populations in Ethiopia, there are important opportunities such as the National Nutrition Programme that intended to link nutrition research and implementation.
<p>5.2. Relationship between means and results achieved and objectives (qualitative assessment)</p> <p>Score: Good</p>	<ul style="list-style-type: none"> - The contribution of the Northern supervisors and project leaders has been important, without their support the research design and practices would not have been effective - The successful progress towards 3 PhD students can hence be considered an adequate value for money - The Network programme was conceived as an IUC programme with a strong PhD research component. However, within the network modality there are less funds available for PhD research, which explain the limited funds especially for field research and outreach activities. - The local and Belgian teams have active communication - In terms of efficiency of resources to manage the programme, a centralised financial and administrative management structure was chosen, installed at Jimma University. This however complicated the efficient use of operational resources as students had to travel to Jimma for administrative and financial purposes which consumed time and additional resources (travel cost and per diem). - Based on the annual financial reports, it seems that project funding has been used in an efficient manner. There is no under or over speeding at the moment, but there could be budget limitation to conduct some research practices. - PhD students stated that, it is unfortunate that, the project is not able to transfer unspent budget in a given year to the following year. - The network programme has used the experience from IUC financial management, which enabled efficient financial management of the project (e.g., the project used the mileage system that had been developed under IUC). - The project approaches to share resources such as lab facilities, transportation was effective, because in some cases the PhD students jointly used vehicle. - Most of the budget goes to PhD students (nearly Euro 18,000 per year), they effectively utilised the budget. But has also implication to finance activities related to “Network” such as organising meetings. - The Network programme opens up new areas of collaboration and training for the Universities in the network project, for example project 2 share lab facilities,

<p>5.3. Project management is conducive for efficient and effective project implementation</p> <p>Score: good</p>	<p>reagents, research practices with project 2, and School of Medical Laboratory Science, Jimma University,</p> <ul style="list-style-type: none"> - A clearly structured timeline with responsibilities was developed since 2019, agreed and used in the project to ensure effective implementation. - Bunna sessions are organised which allow junior and senior researchers to discuss progress of PhD research progress, the network activities - The online discussion means facilitate the networking and communication with non VLIR-UOS scholars and researchers in the teams. - The online discussions have really facilitated interaction between and across the different projects in the network programme - There has been an adequate level of trust and decision making within the project team (and with the programme coordination). - Due to good communication (further developed and improved since the end of 2019), the working relationship between project teams is smooth and good. The projects share reports, access project documents and financial report from drop box, participate in meetings and provided feedback - The revised communication strategy is effective, particularly the “Bunna Session” improved the project team to take action on time, monitor the project activities, engaged more and enhance ownership. - The project monitors the activities through meetings, reports and field observation; there is no monitoring and evaluation system in place. - The project monitors the activities and IRs but there is no mechanism to monitor qualitative results, change in culture of working together. - The project team is flexible in managing the project activities and budget, for example the project bought reagents and lab facilities from Belgium given the lengthy time required to purchase using the university procurement procedures - The university procurement bureaucracy is still a challenge.
<p>Final judgement</p>	
<p>The efficiency of the project is assessed as good. The project realised the results with some delay due to covid-19. The project allocated realistic budget to many of the project activities, except budget attached to some research and networking activities (meetings, workshops), which was very small. This limits the project to fully realize results linked to interventions and networking activities.</p> <p>The project used the already developed IUC lab facilities and logistics (vehicle and travel arrangement), these have enabled the project to effectively utilize the IUC resources and allocated the limited budget for other activities. The project approaches that support interaction and sharing of resources and skills improved the project efficiency as projects share lab facilities, reagents, research practices.</p> <p>Overall, the project financial management was efficient but there are concerns that needs due attention and actions for next phase. The project capitalized the already gained IUC financial management such as reporting system, financial procedures and systems (adopted from VLIR-UOS), these have improved the project efficiency. On the contrary, the project used a centralised financial and administrative management structure installed at Jimma University. This reduced efficient use of operational resources as this required per diem and time for students to travel to Jimma for administrative and financial purposes or needs additional cost for the casher to travel to partner universities to effect payment for PhD student’s research activities and related costs. This in fact incurred more cost.</p> <p>The project used clear communication mechanism and adopted role and responsibilities of research teams developed by the programme. This again has improved the project to take timely decision and make effective communication with other projects for efficient utilization of resources such as joint planning and sharing of lab facilities. This has improved the working relationship to take action on time, monitor the project activities, engaged more and enhance ownership.</p>	

EQ 6 – To what extent will the project results continue after the Network programme is completed (sustainability)?

6.1. Level of academic and institutional sustainability

Score: excellent

- The level of department's commitment at the three Network partners is good, the departments participated in the project designing and research activities.
- The research teams are committed, assist during the data collection activities, for example research teams assisted during monitoring Fish growth and research activities in fish pond research and during demonstration.
- Universities have a policy to retain PhD students.
- PhD students signed 8-year contract agreement, will engage more on research activities, they will become supervisors and are expected to publish more papers.
- Universities may provide some budget as well. Doctoral school developed "one PhD programme" in which all 3 faculties (Human Nutrition Unit, Faculty of Public Health, Faculty of Medical Sciences) at JU share their staff and focus on e.g., soft/ transferable skills. This is based on experience in Belgian universities. Internationalisation through joint publications is now part of the Jimma university promotion policy.
- In the Institute of Health in Jimma, there are 3 faculties involved (e.g., Human Nutrition Unit, Faculty of Public Health, Faculty of Medical Sciences), in all faculties different programmes are being implemented, but Jimma University developed a policy to stimulate working together e.g., on transferable skills/soft skills. This is due to impact from the project. Each faculty has its own Doctoral school but are now working more together in Jimma.
- Joint proposals were discussed. Other PhD students have established connections with other VLIR-UOS supported IUC programmes

6.2. Level of financial sustainability
Score: excellent

- During implementation of the project, the research teams (6 in number) received practical training about grant project proposal;
- The project is a continuation of IUC programme, JU has enough budget to continue the project operational and maintenance cost in Jimma;
- The opportunity given to Jimma university to coordinate the national nutrition programme will help funding and continuing the project operation activities
- The project has budget to cover the remaining project activities, but activities related to interventions after the project period will be a problem
- The contact between PhD student and the South Coordinator opens up new areas of collaboration and training for the Universities in the network project for example they plan to write a research proposal for funding
- The project has not yet developed a strategy to attract diversified sources, but the research team has plan to prepare project proposal for funding.

Final judgement

The sustainability of the project is assessed as good to excellent. The university has a PhD retention policy/mechanism, the departments are committed to the research activities and the knowledge and skills gained will scale up and remain in the university. Furthermore, the universities may provide some budget to scale up the research activities. But the project needs to develop a strategy to attract diversified sources. The opportunity given to Jimma university to coordinate the national nutrition programme will help funding and continuing the project operation activities

The lab facilities and capacity developed in Jimma will continue, because JU has enough budgets to continue the project operational and maintenance cost in Jimma. The partner universities are also committed to scale up the research practices gained from the project, because PhD students shared the research practices to MSc student.

Culture of working together is promoted, the university developed a policy to stimulate working together e.g., on transferable skills/soft skills. Universities start developing Joint proposals, this is also a good initiative.

3.4.1. Project 3 – ICT/library

Focusing on capacity building of ICT professionals of partner universities, this project as a transversal project aimed at enhancing institutional performance through improved ICT infrastructure and services. The central goal of the project is to improve institutional performance of partner universities through better ICT Services. To realise this goal the project defined two specific objectives (SOs) and five Intermediate Results (IRs):

- SO-1: Improved Human Capacity for provision of Academic and Institutional ICT Services of partner universities
- SO2: Availability of ICT Services for Institutional functioning, Research, Resource Sharing and e-learning in partner universities
 - IR-1: Affordable Technologies are integrated and efficiently managed to improve university services (Infrastructure)
 - IR-2: The ICT staff has the capacity to administer, develop and implement state-of-the-art ICT services, systems and applications using free software (Human Capacity Building)
 - IR3: Advanced technologies are introduced to support Scientific Research (HPC)
 - IR4: A platform that facilitates sharing of digital resources has been created (Library)
 - IR5: eLearning and affordable Digital Classrooms are created in partner universities (e-learning)

In this project, training sessions were organised to enhance the skills of professionals at the different Partner Universities. Furthermore, the concept of free and open-source software was introduced. Synergy with other IUC programmes was also further strengthened.

During execution, the project used Jimma ICT capacity to build capacity in other universities. The project ICT staff also received training in Belgium and through e-learning, but staff turnover was the major challenge. The Universities have different capacities, which was the major challenge during the execution of the project activities. In Jimma, the ICT office has 160+ staff, compared to Ambo, which has only 5 people in that office and Hawassa University, which has 37 ICT staff. At Debre Zeit there is no ICT team, they have to rely on the ICT experts of AAU. The needs/experiences are therefore very different. Available infrastructure is also different. This again affected universities to apply the training. They are fairly good data centres in Jimma, while in Ambo it is very basic.

EQ 3 – To what extent is the project relevant?

3.1. The objectives of the projects are consistent with the country/local needs, the needs of the university, the VLIR-UOS strategy and donor's policies

Score: Good

- The design and planning were done in the pre-phase and involved the ICT directors (of which most of them have left meanwhile).
- The strategies did not take sufficiently into account the differences in human capacity and ICT infrastructure between the Network partners.
- The need for high-quality ICT/Library services at the universities is very high, while at the same time the required human capacity is not yet at the required level to provide these services.
- This project's main reason of existence is to build the human capacity so that the universities can provide good ICT services.
- The ICT directors at the network partners did not always fully support the project, this combined with staff turn-over explains why the ICT project was not fully embedded in the different ICT departments or in their plans. Training has been the dominant strategy, but follow-up of training and knowledge transfer within the respective ICT departments was limited.
- All of ICT directors are very busy with daily routines. Very difficult to add network activities to the project daily routines. They have too many administrative tasks, they can only help with technical aspects and they want to see admin burden being taking off from ICT directors. The AAU ICT director is, for example, very difficult to meet.
- network partners' commitment and interpersonal relations are key in the network programme and were at times challenging.
- The idea behind the strategy was to support the Network partners to learn from and maybe copy the ICT model of Jimma University (incl. the set-up of ICT training centres at the Network partners. This was too ambitious taking into account the limited staff and available ICT infrastructure at the Network partners.
- The project was not fully aligned to the specific needs, interests and capacity at the different Network partners.
- Female staffs were selected to participate in the training. For example, for the cyber security training, a female instructor was sent and acted as a role model. Unfortunately, most of the partner university ICT staffs are male

3.2. The projects show sufficient coherence, enabling collaboration and multi-disciplinary research, strengthening research capacity of PU

Score: good

- Interaction between projects and universities was good (improved recently), Jimma university jointly with partner universities organised and provided training to ICT staffs. This joint action improved the interaction and contributed to enhanced capacity at individual level, partner university ICT staffs gained knowledge and skills about server database management, through online training ICT staffs are certified with UDEMY (Udemy is a platform that allows instructors to build online courses on their preferred topics),
- However, due to the slow implementation of acquired skills and knowledges at the PU and the lack of an adequate ICT capacity development strategy (dominant focus on training), the relevance of the ICT project to the other projects still is rather limited. With the Covid-19 pandemic, the need for working with online courses and through e-learning platforms became apparent and first initiatives to that end were taken by the project.
- The sharing of ideas between Network partners with regard to ICT policies and ICT implementation has had the effect that problems that deemed unsolvable were solved. For example, the set-up an in-house video streaming platform using open-source software during COVID19 pandemic.
- During the training in Belgium, the project also shared experiences and worked together with the trainees of the Cuban VLIR-UOS programmes.
- The network has offered training to and participated in trainings from the other IUC projects in Ethiopia (AMU, BDU)

<p>3.3. There have been efforts made to ensure complementarity and synergy with other (externally funded) projects/ other (Belgian) development actors</p> <p>Score: Good</p>	<ul style="list-style-type: none"> - The project had contact with and provided training to AMU and BDU (VLIR-UOS IUC programmes). - Due to this project, there was frequent communication between the ICT directors which let them already bring a common strategy to the national level for creating the necessary infrastructure and interconnectivity for and among institutions, and making available training and learning opportunities that include virtual learning. - Because of limited engagement of the ICT directors, it was difficult to look for synergies and complementarity with other actors.
<p>3.4. The intervention logic of the project is coherent</p> <p>Score: good</p>	<ul style="list-style-type: none"> - The intervention logic is coherent and mainly based on a combination of trainings (including a ToT approach) and the provision of technical advisory services (from Belgium and the ICT department at JU). The intervention is not fully aligned to the differences in capacity (human and infrastructure) and a strategy for knowledge transfer (through ToT or by trained ICT staff) has not been developed. The objectives are very ambitious. - The indicators at lower level are good but not at higher level results. Enhanced capacity cannot be measured alone by monitoring number of trainings. Trainings do not guarantee enhanced knowledge nor application of acquired knowledge in practice. Number of publications is not a valid indicator for measuring enhanced ICT capacity. - The respondents (specially Hawassa ICT staffs) stated that firstly there is a need to assess the level of ICT staff and ICT infrastructure on each Network partner and then plan training and donations accordingly. - - The COVID19 outbreak has proven that digital services are a must (including e-learning and video conferencing); - The project facilitated different online trainings, and ICT certification on UDEMY
<p>Final judgement</p>	
<p>Overall, the ICT/library project has been assessed as relevant. It clearly responds to urgent needs with regard to ICT challenges in infrastructure and knowledge. However, the intervention logic was mainly composed by the provision of training and advisory services, which were not fully aligned to existing capacity in terms of available infrastructure and knowledge, nor aligned to endogenous capacity development plans of each of the ICT departments involved. The idea to make use of the available ICT capacity at JU and to develop a ToT approach was a relevant strategy, but envisaged objectives were too ambitious taking into account the limited ICT staff available at the Network partners. Sharing ideas and experiences between the Network partners with regard to their ICT policies and strategies to improve ICT services had the effect that problems that deemed unsolvable were solved.</p> <p>To the extent possible the ICT projects looked for exchange and collaboration with other VLIR-UOS interventions in Ethiopia and abroad (e.g., with Cuba).</p>	

EQ 4 – To what extent have the project’s specific objectives been achieved (effectiveness)?

4.1. The specific objectives have been realised

Score: Insufficient

- The project is ambitious with little budget.
- Major progress has been made towards the specific objectives, for example, 3 major training sessions took place at Jimma University. The first one dealt with Linux Scripting, more specifically on how to automate some administration, following this training, ICT professionals were trained at Ambo University about Cybersecurity. The third training focused on High Performance Computing (HPC) and was given to participants in Belgium. Since the HPC devices are installed in Jimma University, all three participants were from Jimma University. Other trainings related to GNU/Linux fundamentals; documentation techniques; automatic installation; config management with Puppet; GIT, Continuous Integration and Development; and a training on data centre design.
- A HPC was installed at JU. And AU was able to implement a hardware virtualisation platform (proxmox) based on free software and implemented a local video conferencing system.
- Despite all these capacity building efforts, there are limitations in implementing the solutions covered by the training due to lack of follow-up in all Network partners (by the respective ICT directors or the project leaders) and lack of adequate ICT infrastructure in Ambo. Implementation of the project was further hampered by the political unrest and the COVID-19 pandemic.
- Because of staff turnover between the directors and focal points the overall strategy was sometimes lost.
- ICT staff at all network partners had different levels of knowledge, skills and experience. The ICT trainings provided have tried to take these variations into account. The topics of the different trainings ranged from fundamental to medium to advanced topics. However, not sufficient attention was given on how to apply the acquired knowledge in the respective ICT environments. Furthermore, once trainees returned to their job, they were often given other assignments.
- No proper ToT strategy was developed (mainly targeting ICT staff at JU). Only appropriate ICT staff, having already a certain level of knowledge, can qualify for a ToT to become a trainer. Also, at JU there were varying levels of capacity and not always the most relevant people were sent to training. Also, in JU over last 4/5 years there have been lots of fluctuations. People with advanced ICT level left the university.
- Infrastructure investments are not done in the Network programme because of the small budget. The budget shortage was compensated with hardware donations from Gent University.
- The library component in the project never took off. There was little interest from the library in Jimma to actively participate in the programme, which has resulted in a very low output on the library part of this project. When the project started, the idea was to work further with the ABCD software being used at JU at the other Network partners. However, this software is not used in the other universities. Yet person in charge of this project component in Belgium does not work with other software.
- Enough capacity is built at the partner universities to run open-source tools and services; the project has the plan to continue the project activities and change the approaches. The project identified the major challenges, discussed in detail and plan to implement the project activities in the next phase
- In the second phase the project will upgrade the e-learning platform. How to make effectively use of online tools still is challenging.

	<ul style="list-style-type: none"> - In the next phase the project intends to set up training offices at each Network partner, building local capacity. The question is whether this is a feasible approach, taking into account the limited capacity at the Network partners (except at JU). A precondition for further developing the ICT project, according to the evaluators, is to assess capacity, learning culture, motivation and willingness of the ICT departments and to integrate the ICT project in their own strategies and capacity building plans (if these are existing).
4.2. Extent to which the strategy for intervention packages has been developed and is being implemented	<ul style="list-style-type: none"> - Not applicable
4.3. The project has ground-breaking nature and ambition (scientific quality) Score: Good	<ul style="list-style-type: none"> - Not applicable -

Final judgement

The effectiveness of this project was assessed as insufficient. Some important interventions have been implemented, like training and investments in ICT infrastructure (at JU and AU mainly) and the installation of the HPC has been beneficial for data-analysis benefitting all researchers, but in general project interventions were not sufficient to realise the ambitious objectives with regard to improving human capacity for the provision of ICT services. This is mainly explained by the fact that application of acquired skills and knowledge was difficult due to lack of appropriate infrastructure, lack of time and space for people trained to implement or transfer knowledge to colleagues, and the fact that not all trainings were equally relevant for the Network partners. Changes of ICT directors and staff turn-over of trained staff further complicated the progress in the project. The most important result is the evolution among stakeholders involved in accepting and using open-source software.

The library component of the project did not receive full attention. There was little interest among the stakeholders involved. Furthermore, different software systems between the Network partners complicated implementation of the project strategies.

EQ 5 – What is the level of efficiency in the project?

5.1. Intermediate results have been delivered Score: Insufficient	<ul style="list-style-type: none"> - The project realised the project IRs associated with capacity building i.e., IR1, IR 2 and IR 3, but not fully realized the other results related to the digital platform and digital classrooms, because of the challenges describe under EQ4. Several IR require also investments in ICT infrastructure, which was not foreseen. - Partner university infrastructure is limited (particularly in Ambo), after the training the project staffs might not implement part of the skills gained. - The quality of trainings and support provided by North was assessed as high. - The country experienced a lot of unrest, which limited organising local training.
--	--

<p>5.2. Relationship between means and results achieved and objectives (qualitative assessment)</p> <p>Score: good</p>	<ul style="list-style-type: none"> - Each year several trainings were organised (by Jimma University staff along with Belgian experts) that introduced new technologies and practices to the staff. - North partners provided training that helped to contribute to realize the project results. - Not sufficient investments in ICT infrastructure were foreseen, which hampered the realisation of several IR. - The experts mobilised from North are highly experienced and professional. And after training, ICT materials were also donated. - Experts did not always have appropriate expertise, shown for example in the library component - There is no under- or overspending, rather the budget allocated to the project is very limited as compared to the expected results. The budget utilization was also cost effective because Jimma provided their trainer free to partner universities - The combination of making use of ICT experts from the north and from JU was a good choice and enhanced efficient use of resources. Furthermore, a ToT approach can be very cost-effective but was not yet fully materialised.
<p>5.3. Project management is conducive for efficient and effective project implementation</p> <p>Score: Good</p>	<ul style="list-style-type: none"> - The project communication has improved recently, staffs acceded documents from drop box. There are clear guidelines and reporting templates. - Project management suffered somehow because of changes at the level of project leaders. - The project leaders communicate well. But there was not much involvement of the focal points at each PU. They could have taken a role in pushing the ICT directors to take more ownership for the project. - The project monitoring the activities and results through report and meetings, there is no monitoring and evolution system in place. In the revised action plan (2019) it was foreseen to develop a training impact assessment system. This has not been developed yet. - There is no M&E data management system, but there are data related to those who received training, change in skills and knowledge is not captured - The project was flexible in adapting project activities. For example, trainings were conducted online since the break-out of Covid-19. - After identifying the ownership problem at the PU, a breakthrough was achieved when the ICT directors were trained in Belgium for two weeks. This created the necessary bonding and mutual understanding
<p>Final judgement</p>	
<p>Efficiency in terms of realisation of the intermediate results is insufficient, explained by similar factors as elaborated in the previous evaluation questions.</p> <p>The relationships between means and results however is seen as good. High quality trainings were provided, both by experts from the north and from JU. The choice of making use of available ICT expertise at JU was a relevant choice in optimising resources. Unfortunately, no optimal use could have been made from ICT staff trained under the former IUC programme as many had left the university.</p> <p>The means however were not coherent with the ambitions set. To be able to implement acquired knowledge and skills, investments should have been necessary in improving ICT infrastructure at the Network partners.</p> <p>Project management has suffered from changes at the level of project leaders. Furthermore, project management improved when communication and reporting systems improved at programme level. No appropriate monitoring system had been established to measure impact from trainings.</p>	

EQ 6 – To what extent will the project results continue after the Network programme is completed (sustainability)?

<p>6.1. Level of academic and institutional sustainability</p> <p>Score: insufficient</p>	<ul style="list-style-type: none"> – As described in the above, the level of commitment of the ICT directors at the Network partners was varying and not stable. The ICT training and technical support are not formal integrated in endogenous capacity building plans. Trained staff were not always supported to transfer/share knowledge or implement actions. Training did not go hand in hand with improvements in ICT infrastructure. It took quite some time to convince people involved of the added value of open-source software (now there is growing acceptance). – The involvement of the ICT team at Debre Zeit college proved to be challenging. The college has not dedicated ICT team for the college and depends on the ICT professionals from the central ICT office of AAU. Training these staff has no guarantee that the expertise gained would be used in support of the Debre Zeit College of Veterinary Medicine and Agriculture. – However, the Network partners invested to a certain extent in the project with proper funds (e.g., covering transportation costs) – Staffs are highly committed but there is frequent staff turnover at all network partners – The major project challenge to follow up staff turnover is having better contact with ICT directors. In the second year the project got directors together at Gent University. This has been an appropriate decision, contributing to strengthening ownership for the project among the ICT directors. However, it was not possible to organise multiple visits of the ICT directors to Belgium, given the allocated budget. Now the ICT directors have changed, and ownership needs to be built again.
<p>6.2. Level of financial sustainability</p> <p>Score: insufficient</p>	<ul style="list-style-type: none"> – There is no limitation of funding to cover operational and maintenance cost of ICT materials received from donations at JU. – In the next phase, the project will implement the planned activities based on the available budget, but there will be limited resources to finance ICT facilities that are important to realize the project results – The university leadership has to give priority. Some PU provide funding for ICT, for example Jimma, but this is not the case in all universities. ICT did not receive sufficient priority by the other PU (e.g., PU did not support and cover staff allowance to travel to Jimma).

Final judgement

Institutional and financial sustainability of this project is weak. The level of commitment of the ICT directors at the Network partners was varying and not stable. The ICT training and technical support were not sufficiently integrated in endogenous capacity development plans, hence follow-up of training and support for implementation were not always guaranteed. The ICT departments face challenges in providing sufficient means for bringing and keeping ICT up to date (except at JU).

3. Conclusions and lessons learned

3.1. Conclusions at programme level

Effectiveness

Regardless of the slow start of the network programme and the difficult contextual factors that complicated the implementation of the network interventions (political unrest and conflict, Covid-19, unstable internet and long distances between the partner universities, highly competitive academic world and lack of experience in inter-university collaboration), important achievements have been realised, both at the level of the projects (mainly PhD research) and at the level of network building (shared understanding of the added value of inter-university collaboration, exchange of knowledge, lab facilities and emerging multi-disciplinary research). Progress in PhD research is obvious and it is expected that PhD research will be finalised within the respective time frames. Improvements have been made to ICT infrastructure. This has mainly happened through the installation of the HPC at JU (that is also made accessible for researchers from the PU of the network) and through improvements of the ICT infrastructure at AU. A significant break-through has been that trained ICT staff recognised the relevance of working with open-source software.

All parties developed and shared a relevant vision about the levels and dimensions for capacity building that explains how to leverage investments in individual training in order to obtain a broader impact on research teams, involving master students, lab technicians, in perspective of capacity retention. The vision clearly applies a holistic perspective on capacity building, by linking the individual level to the organisational, institutional and policy environmental level. Several achievements have already been realised to that end, including the strengthening of research skills of a broader group of researchers, the development of laboratory procedures and course material, the development of a new policy that promotes inter-university and multi-disciplinary publications. Other interventions are in the pipeline to further strengthen the network at organisational and institutional level. Examples include the planned support for setting-up a support centre for Doctoral schools, the development of a digital inventory of publications and theses, and ongoing reflections about how to contribute to the development of the country, for example through the implementation of outreach activities and interventions or through community-based education.

Relevance

The relevance of the network programme was assessed as good to excellent. Projects were responding to capacity needs and interests of the partner universities, in alignment with the VLIR-UOS country strategy and national policies and strategies in the sectors of infectious diseases and nutrition. The research projects were conceived as a continuation of the research that had been conducted during the IUC programme at JU. At the same time, it enabled graduated PhD students under IUC to further advance their academic career by now assuming the role of PhD supervisors (or even project leader). The programme further contributed to position JU, and also the PU, as reliable partners and centers of excellence that are relevant for government actors. Infrastructure, equipment and knowledge of JU was used to establish the SARS-COV-2 testing center at Jimma medical center. Where possible, synergies were sought for with other VLIR-UOS interventions in the country (though limited) and other development actors (several examples of new attracted projects with development actors).

The projects were very ambitious and intervention logics did not always include appropriate strategies to contribute to the realisation of these ambitious objectives. This is mainly clear with regard to the science-society linkages. As the network chose to invest in new PhD research, outreach and interventions based on research results could not yet take off. However, external stakeholders have been involved in projects during project design, through participation in research and some communities have been involved in research activities. The intervention logic for the ICT/library project did not fully match with the varying capacity needs at the different PU, both in terms of infrastructure and knowledge, and to endogenous capacity building plans of the different ICT departments. This explained the lower level of commitment and ownership of the respective ICT directors.

Efficiency

Efficiency was highly affected at the start of the programme, resulting in a slow start of activities (less so for PhD research) and slow progress in the realisation of the intermediate results for each of the projects (including the project on network strengthening). In fact, PhD research has progressed well (despite delays in field research because of Covid-19), but many activities planned to strengthen the network have not yet been implemented. This initially happened because of the lack of ownership and shared understanding of the network purpose at the start. Later these activities were affected by the restricted traveling due to Covid-19. Project designs for project 3 and 4 were also very ambitious, taking into account both the available resources and available time (and time span). Many of the envisaged outcomes demand long-term processes. The network already progressed in gaining a shared understanding among PU on inter-university networking and how to realise and strengthen academic networking. Ownership and commitment among the different PU for investing in networking has grown. The biweekly online 'Bunna sessions' facilitate exchange among researchers.

Efficiency was at the start affected by the lack of institutional experience at the different PU to offer maximal support to the projects, the loose communication within and beyond the Network, the poor adherence to reporting deadlines, the occasionally poor uptake of responsibilities and the lack of a shared vision for the Network. The push from VLIR-UOS to ask for a vision and action plan for the revitalisation of the Network programme, and the commitment of the programme coordinators (north and south) to look for solutions have been beneficial in accelerating network programme implementation. The measures taken with regard to the development of a new vision, the signing of a MoU, the further clarification of roles and responsibilities, the development of reporting guidelines (supported by tutorials), improvement in internal and external communication have properly addressed the identified challenges.

Sustainability

Sustainability of the network programme is assessed as good to excellent (with the exception of the ICT/library component). Ownership and commitment of the PU (and involved departments and colleges) for the network seems strong, though some focal points, PhD supervisors and trained ICT staff do not always receive sufficient time and space to implement their assigned tasks and invest in network activities. The collaborative process was assessed as strong, despite the difficult institutional context in Ethiopia that is not always in favour of inter-university collaboration, such as competition, rivalry, collaborative attitudes or culture not guaranteed, lack of incentives for academic collaboration. With regard to contextual factors, opportunities are emerging that can have a positive influence on inter-university collaboration, such as the formal recognition of the MoSHE of the added value of the VLIR-UOS network (and its potential for drawing lessons) and the home-grown PhD programmes that also foster networking. With regard to the collaborative structure, programme management structures are fully functional

to date, but organised according to the VLIR-UOS guidelines (its main purpose being to properly manage the programme). A structure to manage the network at institutional level is not yet existing. For example, there is no formal structure to frequently meet top-level university management and leadership.

3.2. Lessons learned for a network programme

This network programme was mainly developed based on individual interests and personal relationships. The experience showed that this is fragile and risky, for example when staff changes and when conflicts emerge between persons. Even though personal relations can be a good start for networking, and good inter-personal relationships are a factor of success, sufficient attention needs to be paid to building institutional ownership and commitment from top level management level, right from the start.

Another lesson learned relates to the importance of having good operational management structures. Although the formal management structures were set-up at the start, they were not functional during the first years, due to a variety of reasons, such as lack of a clear description of roles and responsibilities, the fact that not all stakeholders took up their assigned responsibilities (e.g., organising steering committees, making and sharing minutes of meetings...), illness of people, staff changes, etc.

This network has shown the importance of internal and external communication within the network. Furthermore, formal communication can be complemented by soft diplomacy. The network illustrates the need for investing in relationship building, visiting all partner universities, having frequent meetings with top level leadership and management of different departments involved.

The online Bunna sessions where researchers and supervisors meet each other and exchange, seem to be an appropriate tool to improve communication and transparency within the network but also a tool to strengthen inter-university collaboration.

A clear definition and framework for VLIR-UOS Network programmes are lacking. Moreover, even the ToC of the network is similar to the IUC ToC. This has hampered the development of a good operational network programme.

The centralised (financial) management has its advantages and disadvantages. Among the advantages are the expertise built at JU with managing a VLIR-UOS programme, the available management tools and formats that were developed during IUC, centralised overview of state of affairs, the organization of the PSU with limited staff. The disadvantage is the high transaction cost due to the required traveling from PhD students to JU to arrange technical and financial affairs and the perception that JU is benefiting more from the network compared to the other PU.

This network programme also shows that the engagement and commitment of programme coordinators (north and south) is crucial for success.

4. Recommendations

4.1. Recommendations for programme and projects

I Strategies for strengthening academic networking

Despite the difficult start of the Network programme, the initiatives to revitalize the network have paid off. Promising progress has been made. Inter-university collaboration and research collaboration are emerging. Due to the Covid-19 pandemic, several activities to further strengthen the network could not take place. For the next phase, it will be important to put these activities as a priority in the programme. These relate to the following:

- 1) Keep on enhancing ownership of all partner universities involved, including top level university management and management of departments involved (also community departments, ICT departments and gender offices). The idea of setting-up a Network team at each Network partner is excellent. Apart from setting up a formal structure for meeting university leadership (the Network is considering the set-up a Programme Advisory Council, constituting of all Network partners, MoSHE, MoH and MoA), also **soft diplomacy** is important. Sufficient time and budget need to be foreseen to that end.
- 2) **Embrace diversity**. Different PU involved in the network have different levels of institutional evolution, different capacity needs and different priorities. Complementary expertise and capacity have been discussed already during the JSC. It will be important to further elaborate on this complementarity (lab facilities, research practices, functioning of doctoral schools, ICT, gender, ...). The differences in capacity with regard to specific topics need to be assessed, appropriate strategies need to be developed and the use of complementary expertise needs to be evaluated. Investment of human and financial resources needs to be guaranteed by both top-level management and lower-level management.
- 3) With regard to points 1 and 2, a specific discussion is needed on the **involvement of Debre Zeit veterinary institute** in the network. Preconditions for involvement are a formal commitment of AAU's leadership and leadership of the involved institute and ICT department and an exploration of relevant complementary expertise and added value of the institute in the network.
- 4) Explore the possibility for moving from the centralised (financial) management to **decentralised (financial) management**. All PU have experience in managing external donor funded programmes and projects. Managing a network programme will further strengthen this management capacity and contribute to the track record of each of the PU. It might enhance ownership of the network.
- 5) Explore **incentives** for partner universities to participate in a network that does not come with much funding. These incentives can relate to outputs that are beneficial for enhancing the quality of research and education at all PU, such as:
 - Opportunity to participate in the PhD programmes that are being coordinated by JU (home grown PhD programme and the NASCERE programme).

- Gaining access to a shared digital office and library that is accessible by all students and researchers of the partner universities.
- Being able to benefit from a support centre for Doctoral school in order to enhance quality of PhD research, supervision and management of research projects.
- Do not concentrate all trainings at JU but also organize practical trainings at partner universities.

II Strategies for the levels and dimensions for capacity building

An interesting vision on capacity building has been developed by the network partners. Several of the interventions that were planned but did not yet take place are relevant and need to be implemented with priority. They have huge potential to contribute to network strengthening but also to enhance capacity retention. These relate to:

- 6) Establishing the **support centre for Doctoral schools**
- 7) Investing in **digital inventory** of publications and theses
- 8) Develop **gender strategies** to support the increase of female PhD students at all PU and as such enhance collaboration with gender offices at PU
- 9) **Appropriate capacity development strategies** need to be developed. These strategies by preference start with an assessment of the current capacity at institutional or department level, of the university policies with regard to these topics at each of the PU, and an opportunity and risk analysis. Interventions need to align to existing (endogenous) capacity development plans at the different institutions and departments. Based on these capacity assessments, appropriate strategies can be developed that combine north and south expertise, north-south and south-south exchanges. A monitoring system needs to be developed to measure the extent capacity interventions are delivering the results, including the monitoring of factors that have a positive or negative influence on the results (an impact assessment training methodology can be part of such a monitoring system).
- 10) It can be explored whether it is relevant and feasible to **attract specific external expertise** (from north or south) to support these capacity development processes, e.g., experts in developing PhD schools, digital library, accompanying institutional change processes, ...

III Strategies for enhancing science-society linkages

A working group has reflected on the definition of interventions and formulated ideas for the next phase. Following definition was elaborated: “Interventions are sets of relevant activities /projects that unlock systemic bottlenecks within health and agricultural sectors to catalyze transformation from low output agriculture and technically inefficient health sectors to high performing sectors well integrated to the national economy –and to do so in environmentally sustainable and inclusive manner”. The minutes of the meeting formulate suggestions in different directions: (i) Shift from the classical/traditional interventions to those that prepare higher education for future challenges (strengthening research groups) and (ii) Strengthening research dissemination, communication and exploitation.

Strategies to strengthen research groups are included in the previous set of recommendations. Strengthening research dissemination, communication and exploitation deserves stronger attention in the second phase of the network. To that end, following recommendations are given:

- 11) A decision can be not to launch new PhD scholarships but to build further on the PhD research that was finalised and invest more in post-doc research and/or short courses. An evolution towards **more integrated research lines** will enable combined approaches towards society.

- 12) Develop an **uptake strategy** of research results, in close collaboration with the community departments. Include government stakeholders and development actors in research. Actively promote research that is being conducted and develop non-scientific material to inform external stakeholders.
- 13) Consider **community-based education** sessions or explore whether **short courses** can be organised that are accessible for practitioners.

IV Continue lobbying for a favourable environment for inter-university and inter-disciplinary research

The network has been successful in advocating the government to adapt publication policies that promote co-authorship. Lobbying should continue to create a more favourable environment for inter-university collaboration, both at institutional and at government level.

- 14) Develop **lobbying and advocacy** strategies that are also resource-based (staff, time and resources available)
- 15) Invest in **soft diplomacy** to strengthen relations with partner universities involved (see R1) and discuss a common lobby agenda.
- 16) Explore what **incentives or reward systems** can be put in place to promote inter-university research among researchers and supervisors.

V Strengthen result-based planning and monitoring

The current network programme was characterised by ambitious objectives and targets that did not fully align with available human and financial resources. Furthermore, monitoring of the progress was hampered by the lack of SMART indicators and a good monitoring system. As a consequence, monitoring mainly served accountability purposes instead of support for project management and learning.

- 17) Develop a programme that is based on a **realistic planning** (see also R9) and adequate budget.
- 18) Invest in identifying a limited set of relevant **indicators**.

4.2. Recommendations for VLIR-UOS

At the long term: develop a clear framework for VLIR-UOS Network programmes

A VLIR-UOS Network programme has potential to contribute to inter-university collaboration, a collaboration that creates opportunities for sharing knowledge, lab infrastructure and laboratory practices, enables joint lobbying and as such can have a wider impact on higher education in a country. A clear framework, however, has been lacking and has complicated the development of the network programme in Ethiopia, and the achievement of a shared understanding of a network among all parties involved. Following suggestions are aimed at contributing to the reflection at VLIR-UOS level about the future of the network programmes.

- 1) It is needed to develop **an appropriate ToC for a network programme**. The current ToC is similar to the IUC ToC, however a network follows an entirely different dynamic, with different kind of outputs and outcomes. The Network programme is unique in its set-up, and as such can be complementary to other PhD scholarship programmes (nationally or internationally funded). Focus should be much more on creating conditions at policy level to

promote inter-university collaboration (which demands lobbying and advocacy), establishing or strengthening inter-university structures at institutional level (institutional strengthening) and the development of capacity building strategies to enhance research and education, not only through PhD scholarships and/or curriculum development, but focusing more on soft skills training, strengthening Doctoral schools, ICT services, library strengthening, etc.

- 2) As a network programme departs from southern leadership, appropriate management modalities should be put in place to that end. In the current set-up, there still is a big involvement from northern partners and final (financial) responsibility is in the north. It is recommended to transfer final responsibility to the south.
- 3) A clear strategy needs to be developed on how to embrace diversity, in particularly with regard to varying levels of capacity between partner universities involved. Clear partner university criteria should be developed. A clear strategy (part of the ToC) should explain how 'weaker' universities can benefit from a collaboration with stronger universities, and under what conditions.
- 4) It might be interesting to explore how inter-university networking can be stimulated already during the second phase of IUC programmes.

At short term – suggestion for the second phase of the current network programme

Although there has been built a shared understanding about the concept of a network programme between the partner universities involved, there is a need for further clarification and discussions between VLIR-UOS and the PU involved on what can be expected from a network programme.

- 5) Roles and responsibilities of the northern partners need to be included also in the management manual. As the second phase of the network programme will coincide with the next multi-annual DGD programme, there is the possibility to explore how southern leadership can be strengthened in this network (see also R2)
- 6) The involvement of Debre Zeit veterinary college needs to be discussed
- 7) Accountability mechanisms should be put in place that regulate what measures will be taken in case of non-compliance with agreed roles and responsibilities.

ANNEXES

- Annex 1: Terms of Reference (available upon request at VLIR-UOS)
- Annex 2: Inception report (available upon request at VLIR-UOS)
- Annex 3 : Evaluation framework
- Annex 4 : Mission programme
- Annex 5 : List of documents and persons consulted
- Annex 6 : Levels and dimensions for capacity building

Annex 1: Extract from ToR

1. Purpose and objectives of the evaluation

1.1. Purposes of the evaluation

All mid-term evaluations have 3 standard purposes:

1. Learning: on the basis of the analyses made by the evaluation team, lessons can be learned about what worked well, what didn't and why. The formulation of these lessons learned will contribute to the quality of on-going and future IUC and NETWORK programmes in terms of the content and management of the programme, including the overall policy framework.
2. Steering: on the basis of the analyses made by the evaluation team, recommendations will be formulated to support decision making processes of the programmes (at different levels). These mid-term evaluations will be used to decide about - and as an input for - the formulation of the second phase of programmes.
3. Accountability: by independently assessing the performance of the IUC and NETWORK programmes (and validating or complementing the monitoring), different actors (HEI, VLIR-UOS, etc.) can fulfil their accountability requirements.

1.2. Evaluation objectives

The evaluation's primary objective is to evaluate the performance of the IUC (programme level and project level). This is the basis of every IUC evaluation.

- A. The performance of the IUC needs to be evaluated on the basis of the OECD-DAC criteria (pre-2020) for development evaluation (+ one additional criterion): **scientific quality, relevance, efficiency, effectiveness, impact, and sustainability**. A particular focus needs to be given to **efficiency and effectiveness**.
- B. The follow-up plan of the programme for the second phase (cf. self-assessments) is also evaluated. The follow-up plan needs to further guarantee capitalisation, exploitation and vulgarisation of achievements of the first phase, sustainability at institutional level (and research groups), and the impact of the university on development processes in the surrounding community, province and eventually in the country.

Next to these standard objectives, these mid-term evaluations also have the following, specific, evaluation question (s)/points of attention:

- Did the newly elaborated vision and MoU succeed in igniting the 'network spirit' and improving the support and ownership for the Network programme at the level of the partner universities?
- Is the realization of the action plan for the implementation of the network vision on track?
- How well did the foundation of IUC programme feed into the Network?
- How can the functioning of the Network be improved?

2. Evaluation criteria

As mentioned, the evaluation will use the OECD-DAC criteria (+ a criteria on scientific quality) as criteria to evaluate the IUC: **scientific quality, relevance, efficiency, effectiveness, impact, and sustainability**. Any priorities regarding criteria are mentioned in 5.2.

Below a brief definition of the criteria is provided and the interpretation of the different criteria (at programme level and at project level) is provided through the formulation of a number of questions/descriptors that specify the VLIR-UOS interpretation of the criteria. These descriptors are indicative. It is up to the evaluators to develop a more detailed set of sub-questions to assess the criteria.

The different criteria need to be analysed and assessed by the evaluators. They also need to provide a score for every criterion using a four-point evaluation scale. The scale is as follows:

1	=	(very) poor
2	=	insufficient/low
3	=	sufficient/good
4	=	very high/excellent

These scores - expressing in quantitative terms an overall and synthetic yet differentiated qualitative judgement - should facilitate the task of evaluation and should be applied for the IUC programme level and for each project within the IUC programme.

2.1. Programme level

Criterion	Descriptors
1. Relevance	<p><i>"The extent to which the objectives of a programme are consistent with beneficiaries' requirements, country needs, global priorities and partners' and donors' policies."</i></p> <ul style="list-style-type: none"> The extent to which the programme is addressing immediate and significant problems and needs of the concerned partners (institutional) as well as regional and national policy makers, with reference to the SDGs, PRSP and other multilateral policy documents. The extent to which the programme establishes synergy and complementarity with other (Belgian) actors outside the HEI Extent to which the programme effectively integrated gender equality and environmental sustainability? (transversal themes)
2. Efficiency	<p><i>"A measure of how economically resources/inputs (funds, expertise, time, etc.) are converted to results."</i></p> <ul style="list-style-type: none"> Sufficient "economy" considerations by the programme The use and application of the means earmarked for collaboration. The management of the programme both in Flanders and locally: <ul style="list-style-type: none"> results-orientation of management cooperation between all parties involved (between projects and programme level, between projects, within projects, between programme and local university) quality of communication between all parties involved (between projects and programme level, between projects, within projects, between programme and local university) External communication
3. Effectiveness	<p><i>"The extent to which the programme' s objectives are expected to be achieved, taking into account their relative importance."</i></p> <ul style="list-style-type: none"> Overall effectiveness of the programme, taking into account the attainment of specific objectives at project level changes in awareness, knowledge, skills at institutional level changes in organisational capacity (skills, structures, resources)
4. Impact	<p><i>"Potential positive and negative, primary and secondary long-term effects produced by the programme, directly or indirectly, intended or unintended."</i></p> <p>Not just actual but also (given time limitations) potential impact.</p> <ul style="list-style-type: none"> Added value of the programme for the institutional performance of the university/ies Policy changes at institutional level? Changes in behaviour at institutional level?

	<ul style="list-style-type: none"> ▪ Added value of the programme for the role of the university/ies as a development actor/s ▪ the extent to which the collaboration has sparked other departments to initiate inter-university collaboration, joint capacity building, fund raising etc. ▪ the extent to which the collaboration has led to joint developmental activities or similar collaborative models at the regional level ▪ the extent to which the collaboration has raised interest of policy makers and academics, and how the partner university is called upon or is pro-actively developing collaboration models that could be fed into policy advice
5. Sustainability	<p><i>"The continuation of benefits after the programme have been completed."</i></p> <p>Financial, institutional and academic sustainability:</p> <ul style="list-style-type: none"> • co-funding by the partner university (matching funds) • incorporation of costs into the budget of the partner university • the partner university sets aside funds for operations and maintenance of physical infrastructure • Ability to attract external funds • Ability for full financing or co-financing events, workshops, congresses, mobility, grants, investments, infrastructure • Strengths and weaknesses of the institution in terms of institutionalising the collaboration • Intensification and/or formalisation of interuniversity consultations (North-South and South-South) • Ability to produce joint proposals (fund raising, research) • Collaboration and exchanges outside of VLIR-UOS-programme • Curbing brain drain into sustainable brain circulation, installing incentives, "pull factors" against "push factors"

2.2. Project level

Criterion	Descriptors
1. Scientific quality	<p><i>"The extent to which a project has a ground-breaking nature and ambition (excellence)."</i></p> <ul style="list-style-type: none"> ▪ quality of research : the extent to which research - sufficiently involving stakeholders - is cutting edge; Extent to which the results have been incorporated in local or international refereed journals ▪ quality of education : the extent to which new education practices – developed while sufficiently involving stakeholders - are cutting edge; Extent to which alumni easily get a job which fits their education profile; the number of fellowships acquired from foundations
2. Relevance	<p><i>"The extent to which the objectives of a project are consistent with beneficiaries' requirements, country needs, global priorities and partners' and donors' policies."</i></p> <ul style="list-style-type: none"> • The extent to which the project addresses immediate and significant problems of the community, looking at the amount of self-finance, demand from state and private actors, the level of transfer of know-how and technology. • Coherence with other projects of the programme • The extent to which the programme establishes synergy and complementarity with other (Belgian) actors outside the HEI • Extent to which the programme effectively integrated
3. Efficiency	<p><i>"A measure of how economically resources/inputs (funds, expertise, time, etc.) are converted to results."</i></p> <ul style="list-style-type: none"> • The extent to which intermediate results (outputs) have been delivered • The relationship between the intermediate results and the means used to reach the intermediate results. • The relationship between the objectives and the means used to reach the objectives. • Efficiency of project management (e.g. the extent of flexibility during implementation)
4. Effectiveness	<p><i>"The extent to which the programme' s objectives are expected to be achieved, taking into account their relative importance."</i></p> <ul style="list-style-type: none"> • the degree to which the specific objectives have been achieved • the extent to which the programme has created the conditions for the uptake of results outside the partner university/ies • the "use of outputs" • changes in behaviour of direct beneficiaries

<p>5. Impact</p>	<p><i>“Potential positive and negative, primary and secondary long-term effects produced by the project, directly or indirectly, intended or unintended.”</i></p> <p>Not just actual but also (given time limitations) potential impact:</p> <ul style="list-style-type: none"> ▪ Upscaling of new knowledge/applications/services by communities/governments/organisations ▪ Impact on internal performance of involved academics/departments <ul style="list-style-type: none"> - renewed curriculum functions as example for other universities/departments - the new style of teaching has become a model for teaching (e.g. the systematic use of teaching in combination with laboratory work) - the library has experienced a clear increase in number of visitors ▪ impact at the level of the private sector : the amount of money earned on the market ▪ the extent to which academics, involved in the project, are called upon by the government for policy advice
<p>6. Sustainability</p>	<p><i>“The continuation of benefits after the programme have been completed.”</i></p> <p>Especially financial and institutional sustainability:</p> <ul style="list-style-type: none"> ▪ Measures for staff retention of trained staff ▪ (potential) synergy and complementarity with other actors (e.g. in extension), local and Belgian actors in particular ▪ do the Flemish universities (and university colleges) commit their own university funds to the programme, for instance by giving fellowships or by allowing academics to go to the field ? ▪ personal commitment of academia? ▪ availability funds for operations and maintenance of physical infrastructure ▪ are there joint research projects which are interesting both to the Northern and Southern academics involved ? ▪ do the partner universities also commit their own funds to the programme (matching funds)?

3. Methodology, data collection and actors involved

The evaluators are expected to detail an overall methodology for the evaluation in their inception report, taking into account the main elements mentioned in this chapter (and the methodologies already developed in the earlier offers). This methodology needs to be in accordance with the evaluation objectives, taking into account the context of the intervention and the budget of the evaluation.

Input into the evaluation will be provided through various information sources/methods. These are explained below.

3.1. Information sources

The selected evaluation team will receive from VLIR-UOS, apart from basic information on the IUC Programme, a number of documents relating to the respective IUC partnership, such as the university strategy paper, the IUC partner programme, annual progress reports, management manual, etc.

Additionally, the evaluation team will also receive **self-assessment reports**: the stakeholders in a given IUC partnership are invited, prior to the mission of the evaluation team, to make a self-assessment and to report on it to the evaluation team in the form of a number of self-assessment reports.

The objectives of the self-assessment are manifold :

- a. Analysis of progress made and achievements;

- b. **Reflection** about the sustainability, partnership, lessons learned, the follow-up of the programme,...

The following **3 formats** will be used in the context of the IUC evaluations. These formats have been refined and consolidated:

- format n° 1 : self-assessment per project
- format n° 2 : programme self-assessment North
- format n° 3 : programme self-assessment South

3.2. Data collection

Data collection will be done on the basis of available documentation and on the basis of interviews and visits (see below). Furthermore, the evaluators are invited to strive to triangulate data as much as possible (using methods described in the inception report). If data on crucial indicators is unavailable, evaluators are invited to collect that data to substantiate their findings.

3.2.1. Focus interviews with all stakeholders

The evaluation team (or part of the team) will interview the Flemish programme coordinator, the Flemish project leaders and the Institutional coordinator for University Development Cooperation of the Flemish coordinating university (ICOS) in Brussels (or online if needed). The evaluation team (or part of the team) will also visit the partner university/partner universities where they will have focused discussions with the stakeholders of the IUC/NETWORK partnership.

It is left at the discretion of the evaluation team to choose the right interviewing method and data analysis methods.

3.2.2. Visits

The evaluation team (or part of it) is encouraged to visit all relevant facilities of the university, with special attention to infrastructure, the central offices involved in the programme (Programme Support Office or PSU, possibly differentiated in the case of a NETWORK), the classrooms and laboratories involved, research sites, field stations, development projects with a link to the IUC programme,

In the context of the evaluation methodology for the evaluations a separate (online) meeting will be held in Brussels with the international expert in order (i) to brief on VLIR-UOS, its programmes on university development cooperation, and the respective IUC/NETWORK partnerships and (ii) to allow discussions with the respective Northern stakeholders.

3.3. Actors involved

The following actors will be involved in the evaluation. All of them have an important stake in the evaluation:

- the members of the evaluation team;
- the stakeholders (both in Flanders and in the partner country) involved in the ongoing IUC/NETWORK cooperation programme;
- the VLIR-UOS secretariat;
- the Directorate-general Development Cooperation and Humanitarian Aid (DGD), i.e. the Belgian government administration for international cooperation

- other relevant stakeholders;

3.3.1. The evaluation team

Every evaluation is to be undertaken by an evaluation team of 2 experts.

One expert will act as team leader. In this capacity he/she will lead the meetings that have been programmed and will coordinate the report drafting. He/she will be invited to use his/her experience with international cooperation in the field of higher education and research as reference for the evaluation, especially when formulating recommendations for improvement of the global set-up and management

The following expertise need to be represented in the evaluation team:

- International development expertise: knowledge of and experience with processes of development cooperation, capacity building and methodological issues in general and in higher education in particular;
- A solid experience with and expertise in evaluation
- Country expertise: knowledge of and experience in the local context and the higher education and research system (this also includes proficiency on French (Morocco), Spanish (Bolivia) or English (other countries)).

The following attribute is considered an advantage:

- Academic expertise regarding the core theme(s) of the partner programme such that the academic quality may be assessed

The above fields should be accommodated by the joined and complementary expertise of two external evaluators. These experts should be neutral. This means that evaluators (1) have not been involved in the implementation of the intervention being evaluated (2) and have no contractual relationship, now or in the past, with any of the partners involved with the project/programme under review.

3.3.2. The Flemish stakeholders involved in the ongoing IUC/NETWORK cooperation programmes

What is meant by the Northern stakeholders is : all persons from the Flemish universities or university colleges who are involved in one of the ongoing IUC/NETWORK cooperation programme. This means: the top management of the Flemish coordinating university, the Flemish coordinator, the Flemish project leaders and team members, Ph.D. student promoters, the Institutional coordinator for University Development Cooperation of the Flemish coordinating university (the so-called ICOS), the financial officer(s) of the Flemish coordinating university, VLIR-UOS programme officer, students, Belgian development actors, etc. In case of the NETWORK further stakeholders at level of the non-coordinating Flemish university can be added if found relevant

3.3.3. The partner stakeholders involved in the ongoing IUC/NETWORK cooperation programmes

What is meant by the partner stakeholders is: all persons from the partner university and the local government(s) and community who are involved in the respective IUC/NETWORK partnership. This means:

- The top management of the partner university, the authorities at faculty level, the local coordinator, the programme manager, the local project leaders, their deputies (if applicable) and team members, the staff of the local coordinating unit of the IUC/NETWORK programme (secretaries,

accountants, ...), the students funded by the programme, the student supervisors and/or promoters, technicians, staff from other donor-sponsored cooperation programmes being implemented at the partner university, etc. Specific for the NETWORK the partner stakeholders at level of the non-coordinating south partner institutions need to be included (focal points and university authorities per partner institution in the South;

- Representatives from central, regional and local government agencies and from civil society (e.g. local chambers of industry, employers' association, ...), officials of the Ministry of Education and of Foreign Affairs, and of the Belgian Embassy, ...

3.3.4. The VLIR-UOS-secretariat

The VLIR-UOS-secretariat will function as organiser of the evaluation, as well as resource centre for the evaluation team. The evaluation team will be closely assisted by the programme officer of the respective IUC programme within VLIR-UOS (cfr. M&E Policy and VLIR-UOS Evaluation guidelines).

3.3.5. DGD

The Directorate General for Development Cooperation will be invited to be interviewed by the evaluation team and, if so desired, to participate in a debriefing meeting with the evaluation team. For every evaluation it will be considered whether the desk officers and/or the embassy are the best resource persons.

4. Dealing with the Covid-19 crisis

At the time of writing this ToR, the Covid-19 crisis poses the world with an unprecedented challenge. Universities throughout the world are being temporarily closed, and international travel has almost come to a standstill. Although the next months will probably see a further easing of the Covid-19 measures, it is rather uncertain whether the IUC/NETWORK evaluations can be organised in a standard way, including a site visit. Therefore, the evaluations that are part of this ToR will be organised differently. It is assumed universities will reopen in the second half of 2020, but that international travel may still have restrictions. Therefore, the evaluation will not include intercontinental travel. The interviewees (and site observations) with stakeholders in the partner country will be done by the local expert (with remote support of the international expert) and interviews with stakeholders in Belgium will be done by the international expert (with remote support from the local expert). This is a pragmatic solution to the Covid-19 crisis, but is also an opportunity to give “local” evaluators a more important role in VLIR-UOS evaluations.

5. Organisation of the evaluation

5.1. Management of the evaluation

Every evaluation is managed as a project, including a governance structure that is set-up for a given evaluation. This structure – the **evaluation reference group** – has three roles¹², representing three different perspectives. These roles are assumed by the head of programme, the respective programme managers and the strategy & quality advisor. Their task is to facilitate the evaluation process. The reference group can be expanded at any time in order to ensure one or more of the three perspectives.

¹² Draws on “Managing successful projects with PRINCE2”

The evaluation team will be closely assisted by the programme manager of the respective IUC programme within VLIR-UOS (cfr. M&E Policy and VLIR-UOS Evaluation guidelines). The reference group reports to the executive board of VLIR-UOS called Bureau UOS (BUOS) which makes the final decisions (approval report, management response).

- Every evaluation team will be composed by 2 evaluation experts who will be guided by the evaluation reference group
- The partner universities will be invited to draft the programme of the evaluation missions, in consultation with – and taking into account the possible requests formulated by - the evaluation team.
- The indicative timings of the field missions (to be confirmed in consultation with the main stakeholders are as follows:
 1. Mid-term evaluation of the NETWORK university cooperation in Ethiopia, coordinated by Jimma University (JU): November 2020, under the condition of a normalization of the international corona situation.

5.2. Deliverables, quality assurance & use of the evaluation

5.2.1. Deliverables

The evaluation team will deliver an inception report before the start of the field mission (at the end of the inception phase). The evaluation team provides VLIR-UOS with a concise, simple inception report including:

- the approach towards the evaluation
- methods for data collection + detailed mission planning
- Activities already undertaken
- evaluation grid or questionnaires developed
- any change requests to the ToR

The inception report is expected before the evaluation mission in the partner country and is a prerequisite for the payment of a first instalment. The inception report needs to be concise and to the point (its content being part of the preparation of any evaluation). VLIR-UOS validates the inception report.

The evaluation team needs to deliver an evaluation report (for each evaluation) and a PowerPoint presentation including the most important elements of the evaluation report. The evaluation team needs to use the template provided by VLIR-UOS for the evaluation report (cfr. “Planning of the evaluation”).

5.2.2. Quality Assurance

VLIR-UOS will do everything to assure an independent, transparent, and impartial evaluation process. If there would be any element that could jeopardize the quality (or integrity) of the evaluation or the principles of independence, transparency or impartiality, the evaluation team must bring this to the attention of the reference group during the evaluation process in order to be able to pro-actively remedy it and limit its impact on the evaluation’s quality. Critical elements that negatively affect the quality of the evaluation need to be mentioned in the report. If an issue cannot be resolved through the reference group, the problem will be escalated to the Bureau UOS level. It is also the responsibility of the evaluation team to assure quality during all steps of the evaluation.

5.2.3. Use of the evaluation

The use of the evaluation is already described in the chapter on the purposes of the evaluation. For steering purposes, VLIR-UOS will formulate a management response to the evaluation (for recommendations directed at the VLIR-UOS secretariat) and will invite the intervention(s) under evaluation to formulate a management response to the evaluation (for recommendations directed to the intervention(s)). Implementation of the management responses will be followed-up. For accountability and learning purposes, VLIR-UOS will publish the Evaluation Report on its website as soon as possible after receiving the report (after some lay-out work, if needed). As soon as the management responses become available, VLIR-UOS will also digitally add it to the online version of the evaluation report. The report will also be printed for further dissemination. VLIR-UOS will actively disseminate the evaluation reports to its stakeholders: to other VLIR-UOS projects/programmes active in the country/ies, to other development actors active in the same country/ies or field(s) and to DGD. VLIR-UOS will also disseminate information about the evaluation through other channels (e.g. storytelling on website).

Annex 3 : Evaluation framework

EQ 1 – How does the Network programme supports inter-university cooperation, and what are the first results ?	
<p><u>Rationale</u></p> <p>The Network programmes aims at contributing in addressing key societal challenges in higher education and the health sector of the country. The Network programme is expected to contribute to the second growth and Transformation plan 2016-2020 for higher education in Ethiopia by way of establishing joint PhD programmes, strengthening research skills and infrastructure, and establishing a network of universities to share capacity and resources, all of which will translate into more graduate intake, better quality research and better dissemination for national impact (Network Partner program, February 2017).</p> <p>The new vision and action plan (2019) presents a clear vision on capacity building and retention, and makes an explicit link between individual capacity development, organisational and institutional capacity development, capacity creation, utilization and retention (see annex 3.3). The evaluators acknowledge that these different levels are interlinked, that capacity development is complex, often unpredictable and non-linear. The evaluators will look at the extent the vision on capacity building is shared by the partner universities and what strategies are being developed to that end.</p> <p>As this is a Mid-Term evaluation, the evaluators will look at the level of implementation of the Vision and Action Plan, so to assess whether or not conditions are in place to develop a second phase. In this evaluation question, we will address the questions from the ToR at programme level, with regard to effectiveness, relevance and sustainability. A separate question will look at efficiency at programme level. At programme level focus will be given to the evolutions and quality of the inter-university collaboration. The evaluation questions at project level will focus more on the thematic projects.</p>	
Judgment criteria	Guiding questions/indicators
<p>1.1 The relevance of the Network programme can be confirmed from various perspectives</p>	<ul style="list-style-type: none"> - University leadership, leadership of departments and research teams involved confirm the relevance of a network approach and the relevance of the thematic focus for their respective institutions - Strengthening interuniversity cooperation is relevant within the framework of educational reform processes and higher education policies in Ethiopia - There is a shared understanding of the Network approach - The Network programme is helpful in strengthening the research capacity of each of the partner universities - Research topics are relevant for informing national policies - Research topics are perceived as relevant by the targeted communities - ...
<p>1.1. The programme has made progress in achieving its specific objectives (effectiveness)</p>	<ul style="list-style-type: none"> - Overall effectiveness of the programme, taking into account the attainment of the specific objectives at project level - Evolutions emerging at individual, organisational and institutional level (see framework used by the programme in annex) - Policy change in interuniversity/multidisciplinary publication being advocated - Digital platform set-up at PU and functional - Progress with regard to the development of a Support Centre for Doctoral schools at the different PU (incl. training of local supervisors, statistical data analysis, scientific writing and research quality) - Good definition of “interventions” shared by all PU and inventory of all possible interventions done - Number of communities involved in PhD projects - Research results are being translated into policy advice - ...
<p>1.2. Ownership and</p>	<ul style="list-style-type: none"> - Distribution of PhD students benefiting from the Network programme

<p>sustainability of the Network programme is guaranteed</p>	<p>(and other funding opportunities) over the different PU</p> <ul style="list-style-type: none"> - Focal persons and Network offices are formally installed at each PU and focal persons provide regular feedback to their management on the Network progress - Focal persons feel supported by university leadership - Number of staff and researchers at PU involved in the Network programme (other than focal points, project leaders and PhD students) - There is progress in branding the network as a potential resource for policy makers, programme managers and practitioners at local, regional and federal level - Involvement of community engagement directorates of the PU in the Network programme - Evidence of reflections at PU on how to institutionalise the Support Centre for PhD schools after the programme has finished - Academic research staff and students recognise the added value of the approach of working together in a joint and synergetic way - Contribution of universities' own budgets or other donor funded projects to Network interventions (research, e-platforms, ICT infrastructure, ...) - Enhanced ability to attract external funding, like enhanced credibility, track record, strengthened institutional profiles, ability to develop joint proposals to attract external funds, development of a shared platform of grants - The Network programme creates opportunities for further collaboration with the Flemish partner universities - ...
<p>1.3. The programme has the potential to contribute to impact</p>	<p>Academic and institutional impact:</p> <ul style="list-style-type: none"> - Mechanisms for programme influence on university policies have been identified/defined (e.g. policy on publications) - Emerging effect of the programme on the dynamic of researchers involved (development of new joint research proposals developed, attraction of new funds, interest of other universities) - The network experience is being used to lobby for a conducive environment for inter-university cooperation - Evolutions towards research-based education in the master programmes - Evolutions in the establishment of a post-doctoral school - ... <p>Development impact:</p> <ul style="list-style-type: none"> - Emerging effects of the programme on the application of new knowledge through research by different stakeholders - Quality and frequency of interaction with important development actors at programme/dept./institutional level - External stakeholders acknowledge the potential of a development-oriented component - ...
<p><i>Sources of verification:</i></p> <ul style="list-style-type: none"> - Self-assessment reports - Annual progress reports 2017-2018-2019 - Programme and project documents, design and annual plans - Interviews with programme coordinators, focal points and project leaders - Interviews with university management and head of departments - Interviews with external stakeholders 	

EQ 2. To what extent governance and management of the Network programme are conducive for effective and efficient programme implementation?

Rationale

Several challenges with regard to programme implementation were also linked to the governance and management of the Network programme, such as the level of involvement of the partner universities, poor uptake of responsibilities, frequent staff changes (project leaders and project coordinator), poor adherence to reporting deadlines due to shifts of responsibilities, lack of guidance on how to complete the forms and poor alignment of steering committees with the reporting deadlines.

Loose communication has impeded updating the Network on decisions made by the steering committee, for example on changes in the management manual, events, grant opportunities, utilization of project funds, adherence to reporting deadlines, and progress made on project indicators. All these factors have had an influence on efficiency.

Under this evaluation question, specific attention will also be given to some cross-cutting topics. The Partner Programme describes that the management manual contains a section on how to implement and monitor cross cutting issues such as gender, ICT and management capacity. This will also receive specific attention during the evaluation (ICT project will be assessed by the evaluation questions at project level).

Judgment criteria	Guiding questions/indicators
<p>2.1 Governance structure and role division is clear and sense of responsibility ensured</p>	<ul style="list-style-type: none"> - The revised organogram to manage the Network programme is functional - Network offices established at each PU, and operational. Focal points keep university management up to date. - The improved communication strategy is being implemented and keeping all stakeholders up-to-date - A central digital office set up through which network members can access documents - Programme management (coordinators and manager) has shown leadership in managing the programme (clear agenda, uptake of decisions, support to project leaders and interaction with university leadership) - Responsibilities clearly described in the management manual - The extent to which different stakeholders involved in management have taken up their respective roles and mandates (steering committee members, PSU, programme coordinators, focal points, project leaders, etc). - Sufficient commitment by different stakeholders to the Network - Good cooperation between projects, within projects and between the different universities, team spirit - Decision making process guarantees equal participation among the different PU - ...
<p>2.2 Programme management is conducive for efficient and effective programme implementation</p>	<ul style="list-style-type: none"> - Quality of working relation with PSU with regard to the projects (clear guidelines, transparency, timeliness, etc.) - Sufficient guidance of responsible persons, for example with regard to reporting, coaching, supervising PhD students - Meetings of steering committees aligned with reporting deadlines - Appropriateness of result-based planning, execution (management of timelines) and monitoring in place - Monitoring and evaluation system for training implemented allowing better follow-up on progress towards indicators - Factors hampering efficient management have been identified timely and managed well - Financial management system that enables adequate and transparent financial management of the network programme - Smooth collaboration with financial departments at all PU

	<ul style="list-style-type: none"> - Appropriate management of changes in the budget/over- and underspending - PSUs ability to offer support in managing procurement - ...
2.3 Gender	<ul style="list-style-type: none"> - Gender strategy implemented in the project to address gender gaps - Support provided by the gender office at Jimma to the Network - Level of gender awareness and actions taken at PU - ...
Sources of verification:	
<ul style="list-style-type: none"> - Self-assessment reports - Interviews with Steering committee members, PSU, programme manager and programme coordinators, project leaders in North and South - Interviews with university top management - Annual financial plans and reports - Annual narrative plans and reports - Management manual - Sample of reports: quarterly reports, mission reports, minutes of the steering committee meetings, ... 	

EQ 3 – To what extent is the project relevant?

Rationale

The ToR define relevance as *'the extent to which the objectives of a project are consistent with beneficiaries' requirements, country needs, global priorities and partners' and donors' policies.*

The Network programme has selected the health theme of the VLIR-UOS Country strategy for Ethiopia. From the document study, it becomes clear that research lines selected for projects 1 (infectious diseases) and 2 (nutrition) align to priorities and targets of national plans, such as Growth and Transformation Plan II, Agricultural transformation and food security strategies, and the disease control strategy of the Ministry of Health. Ethiopia is one of the Scaling Up Nutrition (SUN) countries identified by the WHO. The projects seem to have the potential to strengthen the Ethiopian health extension and agriculture extension platforms. Project 3 (ICT and library services) and the revised project 4 (network strengthening) address key challenges in higher education and align to the higher education development plan of the Minister of Education. During the evaluation, it will be assessed how strategic choices have been taken (e.g. identification of specific research lines, level of participation of partner universities and research teams, quality of problem and context analyses and involvement of external stakeholders, ...) and to what extent alignment with these policies and stakeholders is conducive for obtaining results.

During implementation several adaptations were done at the level of the Intermediate Results (e.g. P1), and project 4 was entirely reformulated when the new vision on the network programme was elaborated. The evaluation will look at the quality of this process of adaptation and reformulation, more particularly to assess to what extent all stakeholders (partner universities, project leaders, local research teams) have been involved in formulating the adaptations and the extent to which the (new) IR also respond to needs of communities and/or institutional stakeholders.

The ToR also ask specific questions related to coherence between the projects (within projects and between projects, so to foster multi-disciplinary research and collaboration) and the level of synergy and complementarity with other actors outside the higher education system. In particular, the evaluators will look at what has been done to improve coherence and synergies, and what can be done better in the second phase to further improve internal and external synergies. The evaluators will also look at the level of synergy/complementarity with other former or current VLIR supported projects at the different partner universities.

The evaluators will look at the design of each project and the coherence between activities, outputs (or intermediate results), results at the level of specific objectives and the link with the overall objective for each project (intervention logic). This is not explicitly asked in the ToR, but from the document study it appears that, during programme implementation and redesign of the network programme, some questions have been raised regarding the choice of interventions, their relevance for addressing the identified

challenges and potential to contribute to the realisation of specific objectives. The evaluators will also further elaborate on the question in the self-evaluations related to ‘What would the stakeholders do different if they had the chance to redesign the project?’

Another point of attention in this evaluation is gender. From the documents and interviews, it appears that there was no explicit gender strategy, but some collaboration was established with the gender office at Jimma university. It seems that universities are struggling to attract female PhD students (e.g. no female PhD students in P1, involving 7 PhD students). The evaluation will look at the strategies that have been developed to address this gender gap.

Judgment criteria	Guiding questions/indicators
<p>4.3. The objectives of the projects are consistent with the country/local needs, the needs of the university, the VLIR-UOS strategy and donor’s policies</p>	<ul style="list-style-type: none"> – Level of participation of PU and research teams in the (re)design of the project, quality of problem and context analysis, stakeholder analysis – The positioning of the project within the respective departments/institutes: what are the needs at this level and how are these answered? What is the common ground in the research projects? What have been the dynamics in the departments so far? – The mechanisms of interaction and knowledge transfer with external stakeholders and communities – Relevance of research for external stakeholders at the local/regional and/or national level – The project topics and approaches are sufficiently relevant for other development actors – Gender strategy implemented in the project to address gender gaps – ...
<p>4.4. The projects show sufficient coherence, enabling collaboration and multi-disciplinary research, strengthening research capacity of PU</p>	<ul style="list-style-type: none"> – The extent to which crosscutting coordination/joint action/collaboration exists between projects (particularly between the thematic projects) and within projects (between the different research lines/sub-projects) – The extent to which interdisciplinary research practices and inherent synergy takes place – The level of synergy with other, former or current, VLIR supported projects at the different partner universities – What has been done to improve and consolidate coherence or internal synergies? –
<p>4.5. There have been efforts made to ensure complementarity and synergy with other (externally funded) projects/ other (Belgian) development actors</p>	<ul style="list-style-type: none"> – The extent to which the project is looking for synergy with other VLIR-UOS interventions in the country or at regional level – The extent to which the project is looking for synergy with projects supported by other donors, more in particular Belgian development actors – What has been done to improve external synergies? – ...
<p>4.6. The intervention logic of the project is coherent</p>	<ul style="list-style-type: none"> – There is coherence between expected results, specific objectives and the overall objective – The choice of activities is relevant to address the relevant challenges, obtain results and realise objectives – The indicators are well chosen to monitor progress and to support learning. – What would the stakeholders do different if they had the chance to redesign the project – 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><i>Sources of verification:</i></p> <ul style="list-style-type: none"> - Self-assessment reports - Annual progress reports 2017-2018-2019 - Programme and project documents, design and annual plans - Interviews with programme coordinators, project leaders and PhD students - Interviews with other research staff involved in the projects - Interviews with university management and head of departments - Interviews with external stakeholders 	

EQ 4 – To what extent have the project’s specific objectives been achieved (effectiveness)?

Rationale

The ToR defines effectiveness as *‘the extent to which the project’s objectives are expected to be achieved, taking into account their relative importance’*.

Each project has two specific objectives and one general objective. The first specific objective aims at improving research capacity at the PU, the second specific objective aims at contributing to solutions for identified challenges in society (P1: reducing the burden of infectious diseases at community level; P2: increased uptake of proteins by children). P3 and P4¹³ are more of a transversal nature and aim at providing services and conditions to improve the quality of (multi-disciplinary) research at the partner universities. Key indicators are related to number of PhDs completed, number of publications and number of successful interventions in communities, number of people trained, number of services in partner universities, number of records in digital libraries. The evaluators understand that for both objectives, indicators are partly shared by project and programme level.

Since this is a mid-term evaluation, the evaluators will look at the extent to which the specific objectives have been realized so far, as well at the expectations for the remaining year and the extent the targets are realistic. More attention will be given to the first specific objective as, from the document study, it resonates that not much intervention packages have been developed or implemented yet to contribute to the developmental objective. The revised action plan (September 2019) describes under P4 that a working group will be established to redefine “intervention” and to follow-up on the progress towards the implementation of interventions. The evaluation will assess the potential of the two research projects in contributing to the developmental objectives (mechanisms for engagement with external stakeholders, dissemination and communication strategies, etc.)

Project 4 is a crucial transversal project to support inter-university cooperation and network strengthening, and has been redesigned in 2019. The assessment of the (potential) effectiveness of the redesigned project 4 is included in the evaluation question formulated at programme level (see EQ 1).

The self-assessment part on ‘the way forward’ will be looked at in detail to assess the chances of realising the specific objectives. As part of this question, the evaluators will judge to what extent projects are ready for Phase II and which evidence shows this.

We will also look at factors explaining eventual delays (e.g. restrictions because of Covid) and how the projects plan to mitigate these in the future. The evaluation criteria referring to scientific quality is included in this evaluation question.

Judgment criteria	Guiding questions/indicators
--------------------------	-------------------------------------

¹³ In the revised project 4 (2019), the intermediate results have been adapted but the new action plan does not provide information on changes at the level of the specific objectives.

<p>4.1. The specific objectives have been realised</p>	<ul style="list-style-type: none"> - Progress in indicators developed for the specific objective at project level related to research capacity have been achieved (staff trained, publication, services provided) - Non-expected effects that have emerged (not specified by indicators) - Factors contributing to the level of achievements at project level (both positive and negative) - 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>4.2. Extent to which the strategy for intervention packages has been developed and is being implemented</p>	<ul style="list-style-type: none"> - Progress with regard to interventions implemented - Level of current engagement/interactions with communities and institutional stakeholders and the (potential for) uptake of research results - Non-expected effects that have emerged (not specified by indicators) - Factors contributing to the level of achievements (both positive and negative), e.g. the influence of Covid - Appreciation of external stakeholders - 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>4.3. The project has ground-breaking nature and ambition (scientific quality)</p>	<ul style="list-style-type: none"> - Clear quality standards for PhD training and supervision are available and respected - International certification of online trainings obtained - Standard operating procedures for laboratories available - Number of publications in local or international refereed journals (with at least 2 co-authors) - Level of collaboration with external stakeholders - ...
<p><i>Sources of verification:</i></p> <ul style="list-style-type: none"> - Self-assessment reports - Annual progress reports 2017-2018-2019 - Programme and project documents, design and annual plans - Interviews with programme coordinators, project leaders, PhD students and research teams at PU - Interviews with university management - Interviews with external stakeholders 	

EQ 5 – What is the level of efficiency in the project?

Rationale

Efficiency looks at how economically resources/inputs (funds, expertise, time, etc.) are converted to results. More specifically as defined by the ToR, the evaluators will look at:

- The extent to which intermediate results (outputs) have been delivered and the relationship between the intermediate results and the means used to reach the intermediate results.
- The relationship between the objectives and the means used to reach the objectives.
- Efficiency of project management (e.g. the extent of flexibility during implementation)

In relation to the first point, the ToR do not request a quantifiable cost-effectiveness assessment but rather a qualitative appreciation of the relation between inputs and outputs. This also includes an analysis of the factors that have strengthened or hampered efficient project implementation. The evaluators will also look at the quality of the risk management as applied in the different projects.

The self-assessments on efficiency attribute scores between 3 and 4 (highest score) to the different sections in the self-assessment format, but these do not include an assessment of the progress of the

intermediate results (but limited to project management). From the documents review and interviews, it is learned that projects 1 and 2 are reasonably on track, for project 3 progress is noted regarding the delivery of trainings but less on the application of acquired knowledge and skills, due to limited ICT infrastructure at the partner universities and challenges in the train the trainer approach. Project 4 knew slow progress, due to various context and institutional factors, and needed to be redesigned so to identify more appropriate interventions to strengthen inter-university networking. The mid-term evaluation will look at the level of realisation of the intermediate results of the different projects (P1 to P3) and will pay specific attention to the level of implementation of project 4. The evaluators will take into account the eventual delays caused by the COVID-19 pandemic and other effects of this crisis on the implementation of the programme (e.g. restricted international travel) and on progress made so far.

Furthermore, specific attention will be paid to the action plan that was developed together with the vision for the revitalisation of the Network programme in 2019. The evaluators will assess to what extent the measures taken are being implemented and contributing to the envisaged objective of network strengthening with regard to, (i) the institutional support provided by the different universities, (ii) the new communication strategy, (iii) the extent the improved reporting process is being implemented.

The level of efficiency is also influenced by the presence and application of systems and procedures for programme management, which were positively valued in the self-assessments. This is captured in the third judgment criterion. At project level, the evaluators will primarily look at the management of each of the projects.

Judgment criteria	Guiding questions/indicators
<p>5.1. Intermediate results have been delivered</p>	<ul style="list-style-type: none"> - Level of realisation of intermediate results according to indicators formulated in the logical framework and the KRA, and their contribution to the specific objectives - 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; internal and external collaborations, staff turn-overs, ...? - Outlook towards full achievement of IR in remaining year - ...
<p>5.2. Relationship between means and results achieved and objectives (qualitative assessment)</p>	<ul style="list-style-type: none"> - 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 - Relevance of the expertise that was mobilised from Flemish universities and other partners - Management of spending and rate of over- and/or underspending (and explanatory factors) - Choice of activities: cost-effectiveness is being pursued in project design and management (e.g. align project interventions for efficient use of resources, ...) - Network programme used as a leverage to attract other funding that contributes to network objectives - ...
<p>5.3. Project management is conducive for efficient and effective project implementation</p>	<ul style="list-style-type: none"> - Good working relation within the project team (clear guidelines, transparency, communication flows, timeliness of planning and execution of activities, etc.) - Good working relations between project teams, project leaders and focal points - New communication strategy is conducive for swift communication, ownership and transparency - Appropriate monitoring and reporting system in place - M&E data are used to inform and review intervention strategies - 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) - Factors hampering efficiency have been identified timely and managed well, appropriate risk management done

	<ul style="list-style-type: none"> - Bureaucracy related to procurement (equipment purchases, travel approval, ...) has been managed well by the project team - ...
<p><i>Sources of verification:</i></p> <ul style="list-style-type: none"> - Self-assessment reports - Annual progress reports 2017-2018-2019 - Programme and project documents, design and annual plans - Interviews with programme coordinators, programme manager, project leaders and PhD students - Interviews with university management and leadership of research departments - Interviews with external stakeholders 	

EQ 6 – To what extent will the project results continue after the Network programme is completed (sustainability)?

Rationale

The ToR defines sustainability as ‘*the continuation of benefits after the project has been completed*’.

As this is a mid-term evaluation, the evaluators will take into account that a lot of results and approaches need to be consolidated first, and that project 3 and project 4 have only become up to speed by the end of 2019. The discussions on the revitalisation of the network programme have addressed several factors that have an influence on the level of ownership of the network programme and institutional sustainability. The Network programme also aimed at increasing and diversifying funding so to retain PhD staff, mainly by strengthening project proposal grant writing skills (P4). The focus here is on the sustainability of the project results, which evidently are also affected by sustainability challenges at programme level.

A distinction is made between institutional and financial sustainability. When looking at the self-assessments, the scores related to sustainability reveal a very good performance, but the evaluators found little evidence in the self-assessment reports, so far, for these scores. More evidence will be collected during the evaluation.

Judgment criteria	Guiding questions/indicators
6.1. Level of academic and institutional sustainability	<ul style="list-style-type: none"> - Level of (personal) commitment of stakeholders within the departments and research teams concerned - Policy and human resources development at PU and applied in departments involved in projects, include measures for retention of PhDs and trained staff - joint research interests for both the Northern and Southern academics involved, are identified and pursued - Evolution in networking with the other PU on the thematic research topics - ...
6.2. Level of financial sustainability	<ul style="list-style-type: none"> - Number of research teams within the different projects involved in grant proposal writing - Availability of funds for operations and maintenance of physical infrastructure at university/department level - Availability of proper funds (at university or department level) to continue all or a number of activities that are important/relevant - Allocation of other funds by Flemish universities (e.g. giving fellowships or by allowing academics to go to the field, matching funds) - Development of strategy to attract diversified resources (for example also from private sector) - ...

Sources of verification:

- Self-assessment reports

- Annual progress reports 2017-2018-2019
- Programme and project documents, design and annual plans
- Interviews with programme managers, project leaders and students
- Interviews with university management
- Interviews with external stakeholders

Annex 4 : Mission programme

Date	Travel/places	Consulted/visited
1/19/2021	Travel to Jimma	Prof. Zeleke Mekonnen
1/20/2021	Jimma University	Mr. Kora Tushune
		Dr. Jemal Abafita
		Kassahun Eba
		Prof. Tefera Belachew
		Visited Fish experiment, Molecular lab
1/21/2021	Jimma University	Mintamir Mekasha
		Fasika Mengestu
		Amanuel Challe,
		Negusse Mehari
	Visited ICT facilities	
	Belgium - online project 3	Rudy Gevaert Ismael Kedir
Belgium - online project 1	Sarah Gabriel	
Belgium - online project 2	Carl Lachat Teklu Gemechu	
1/22/2021	Back to Addis	
1/24/2021	Travel to Hawassa	
1/25/2021	Hawassa University	Dr. Taye Gari
		Mulugeta Tesefaye
		Dr. Antenehu Gaddisa
		Visited ICT-facilities
1/25/2021	Belgium - online	Bruno Levecké
		Luc Duchateau
1/26/2021	Back to Addis	
1/27/2021	Travel to Ambo/Ambo University	Dr. Bizunesh Mideksa
		Dr. Tadesse Kenea
		Yonas Teshome
		Dr. Kebede Abdisa
		Visited ICT facilities, veterinary lab, plant lab
2/1/2021	Travel to Debere-Ziet/ AAU	Takele Beyene
		Dr. Hika Waktole
2/4/2021	Addis Ababa (online with PhD students)	Frehiwot Sileshi
		Kokeb Tesfamariam
		Tokuma Negishu
		Mengistu Hailemaria
		Wakjira Kebede
		Edilu Jorga
		Beekam Kebede
		Geremew Muleta
	Belgium - online	Lien Demeulemeester Wannes Verbeeck
	2/16/2021	Addis Ababa (restitution meeting)

		Prof. Zeleke Mekonnen Kassahun Eba Dr. Teklu Gemechu Dr. Bizunesh Mideksa Dr. Taye Gari
--	--	---

Annex 5 : list of documents consulted and persons interviewed

List of documents consulted

- All self-assessments at programme and project level (received in September 2020)
- Network Partner Program (PP): phase 1 (NETWORK_UCBHE_PP_PhaseI_final)
- AP2019: Annual Progress Report 2019 (APR_NETWORK Ethiopia_Y3_final)
- AFR_AP2019: Financial report (AFR_AP2019_Netwerk_Jimma_Y3_final)
- PMM: Programme Monitoring Matrix (PROGR_Annex 1_Monitoring Matrix_2019)
- for each project: LFM_Px: Logical Framework Matrix, Operational plan, Risk Management (Annex 1 PROJ x_LFM_OP_RM_2019_final)
- Vision and Action Plan for the revitalisation of the VLIR-OUS Ethiopia Network programme. September 2019
- Newsletters 2019 and 2020
- Letter of VLIR-UOS to Professor Kora Tushune of 17 April 2019 on the revitalisation of the VLIR-UOS Network programme
- PPP of the steering committees: JSCM of 27 August 2019, JSCM 14 December 2020, FSCM of 7 May 2020 and august 2020.
- PPP of the working group on phase II

List of people interviewed

1.	Mr. Kora Tushune	VP for business and Development & Local coordinator of the program	Jimma University
2.	Dr Jemal Abafita	President	Jimma University
3.	Kassahun Eba	Programme Manager	Jimma University
4.	Prof. Tefera Belachew	Post graduate coordinator	Jimma University
5.	Mintamir Mekasha	Project Finance, head	Jimma University
6.	Fasika Mengestu	General accounts, team leader	Jimma University
7.	Esmael Kedir	ICT project leader	Jimma University
8.	Amanuel Challe	ICT staff	Jimma University
9.	Negusse Mehari	ICT staff	Jimma University
10.	Prof. Zeleke Mekonnen	Project 1 leader	Jimma University
11.	Dr. Teklu Gemechu	Project 2 leader	Jimma University
12.	Frehiwot Sileshi	PhD students project 2	Ambo University
13.	Kokeb Tesfamariam	PhD students project 2	Ambo University
14.	Tokuma Negishu	PhD students project 2	Jimma University
15.	Mengistu Hailemaria	PhD students project 1	Awassa University
16.	Wakjira Kebede	PhD students project 1	Jimma University
17.	Edilu Jorga	PhD students project 1	Ambo University
18.	Beekam Kebede	PhD students project 1	Awassa University
19.	Geremew Muleta	PhD students project 1	Jimma University
20.	Dr. Taye Gari	Focal person	Awassa University
21.	Mulugeta Tesefaye	System and Network Administrator	Awassa University
22.	Dr.Antenehu Gaddisa	Chief Executive Director	Awassa University

23.	Dr. Bizunesh Mideksa	Focal person	Ambo University
24.	Dr. Tadesse Kenea	President	Ambo University
25.	Yonas Teshome	ICT director	Ambo University
26.	Dr. Kebede Abdisa	Veterinary Medicine Dean	Ambo University
27.	Takele Beyene	Veterinary Researcher	Addis Ababa University
28.	Dr. Hika Waktole	Focal person/Dean of Veterinary College	Addis Ababa University
29.	Rudy Gevaert	Project leader project 3	U Gent
30.	Carl Lachat	Project leader project 1	U GentUGent
31.	Sarah Gabriel	Project leader project 2	UGentU Gent
32.	Lien Demeulemeester	ICOS	UGentU Gent
33.	Wannes Vebreeck	Project officer VLIR-UOS	VLIR-UOS
34.	Bruno Leveck	Programme coordinator	UGentU Gent
35.	Luc Duchateau	Former programme coordinator	UGentU Gent
36.	Peter De Lannoy	Head of projects VLIR-UOS	VLIR-UOS
37.	Kristien Verbruggen	Director VLIR-UOS	VLIR-UOS

Annex 6: levels and dimensions for capacity building

	Capacity creation	Capacity utilization	Capacity retention
Individual level	Trained Laboratory Staff, MSc and PhD	Knowledge and skills are used in MSc, PhD theses and other projects	Staff, MSc and PhD remain: Laboratory Staff → MSc; MSc → PhD; PhD → transfer knowledge across network
Organizational level	Optimization / introduction of <ul style="list-style-type: none"> • research skills • laboratory procedures • course material 	<ul style="list-style-type: none"> • Improved research output / successful grant applications • Well-functioning laboratory • Improved knowledge retention • Training incorporated into PhD schools 	<ul style="list-style-type: none"> • Regular revision of laboratory procedures, research skills and course material • Implementation of M & E of training
Institutional and policy environmental level	<ul style="list-style-type: none"> • New policy advocating for inter-university/ multidisciplinary publications • New interventions improving health of communities • Digital inventory of publications and theses 	<ul style="list-style-type: none"> • Publication policy incorporated in promotion criteria • Implementation of interventions through Community Based Education • Improved evaluation of institutions / avoid duplication of research and plagiarism 	

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.

VLIR-UOS is part of the Flemish Interuniversity Council and receives funding from the Belgian Development Cooperation.

More information: www.vliruos.be

Publisher: Kristien Verbrugghen, VLIR-UOS, Julien Dillensplein 1, bus 1A, 1060 Brussels
D/2021/10.960/12

