



**KINGDOM OF BELGIUM**  
Federal Public Service  
**Foreign Affairs,  
Foreign Trade and  
Development Cooperation**

July 2018

# **IMPACT EVALUATION OF THE BELGIAN UNIVERSITY DEVELOPMENT COOPERATION**

## **LESSONS ON THE EVALUABILITY OF INSTITUTIONAL PARTNERSHIPS AND SCHOLARSHIPS**



Federal Public Service Foreign Affairs, Foreign Trade and Development  
Cooperation

**Special Evaluation Office of the Belgian Development Cooperation**

# **Impact Evaluation of the Belgian University Development Cooperation**

***Lessons on the Evaluability of Institutional  
Partnerships and Scholarships***



**Lennart Raetzell, Olga Almqvist, Franziska Lammers, Matias  
Krämer and Jolie Franke**

**Final report**

**July 2018**

The evaluation has been conducted by Syspons GmbH and Nuffic and has benefited from the support of a reference group in Brussels. The Special Evaluation Office ensured that the evaluation complied with the terms of reference.

The opinions expressed in this document represent the authors' points of view and do not necessarily reflect the position of the PFS Foreign Affairs, Foreign Trade and Development Cooperation.



## Preface

In 2012, the Special Evaluation Office started an experimental cycle on impact evaluations. This cycle, focussing on separate channels of Belgian development cooperation, aims at answering the question of how the effects of a development intervention can be measured as rigorously as possible.

After previous impact evaluations of governmental development cooperation and cooperation via non-governmental organisations, the Belgian university development cooperation was chosen as a third evaluand. This choice was based on the fact that the Special Evaluation Office had not yet undertaken an external evaluation of this specific channel up till now. Furthermore, it embodies an extensively financed form of development cooperation, representing more than one quarter of the means yearly allocated to non-governmental actors.

The main objective of this impact evaluation was to examine to what extent and on the basis of which methodological approaches the Belgian university development cooperation is evaluable. The second objective was to analyse and interpret the impact of the Belgian university development cooperation on the basis of a sample of interventions. The main questions in this respect are the following. What impact does university development cooperation have? And how and under which conditions does university development cooperation lead to this impact? The scope included long-term partnerships between academic institutions for the period between 2000 and 2014, as well as individual, non-project related scholarships that were granted between 2008 and 2016 by the two umbrella organisations VLIR-UOS and ARES.

This evaluation, entrusted to the German consultancy firm Syspons in collaboration with the Dutch organisation Nuffic, applied a slightly different methodological approach compared to the two previous impact evaluations. The previous impact evaluations used a mixed methods approach with a mainly quantitative focus looking into impact attribution. Due to the unique, heterogeneous and often complex character of university cooperation, this evaluation, in contrast, applied a broader modular approach that rather, but not exclusively, focussed on impact contribution.

Special gratitude goes to various actors of the Belgian university development cooperation as well as to the reference group of the evaluation.

Cécilia De Decker

*Special Evaluator*



# Table of contents

<b>Preface</b> .....	<b>3</b>
<b>Table of contents</b> .....	<b>5</b>
<b>Abbreviations and acronyms</b> .....	<b>7</b>
<b>List of tables and figures</b> .....	<b>9</b>
<b>Executive summary</b> .....	<b>11</b>
<b>1. Introduction</b> .....	<b>19</b>
<b>2. The umbrella organisations at a glance</b> .....	<b>21</b>
2.1 Theories of change of ARES and VLIR-UOS .....	22
2.1.1 Theory of change of ARES .....	23
2.1.2 Theory of change of VLIR-UOS .....	27
2.2 Instruments of ARES and VLIR-UOS subject to evaluation .....	29
2.2.1 Interventions of ARES and VLIR-UOS .....	29
2.2.2 Scholarships of ARES and VLIR-UOS .....	34
2.3 Target groups of ARES and VLIR-UOS .....	36
<b>3. Evaluability of the Belgian university cooperation</b> .....	<b>39</b>
3.1 Evaluation design and methodology .....	39
3.2 Results of the evaluability assessment .....	41
3.2.1 Definition of impact .....	41
3.2.2 Theoretical and practical evaluability of impact .....	45
3.3 Rationale for the chosen evaluation design .....	54
3.4 Assessment of the evaluability .....	57
<b>4. Impact of the Belgian university cooperation</b> .....	<b>59</b>
4.1 Evaluation design and methodology .....	60
4.1.1 Evaluation design and methodology for interventions .....	60
4.1.2 Evaluation design and methodology for individual scholarships .....	64
4.2 Evaluation results for interventions .....	68
4.2.1 Relevance of the Belgian university cooperation .....	68
4.2.2 Effectiveness and impact of the Belgian university cooperation – ARES .....	72
4.2.3 Effectiveness and impact of the Belgian university cooperation – VLIR-UOS .....	84
4.2.4 Sustainability of the Belgian university cooperation .....	93
4.3 Evaluation results for individual scholarships .....	96
4.3.1 Effectiveness and impact of the individual scholarship schemes .....	97
4.3.2 Assessment of the effectiveness and impact of the individual scholarship schemes .....	117
4.4 Analysis of synergies and complementarity between different instruments .....	118

4.4.1 Assessment of synergies and complementarity between different instruments .....	119
<b>5. Conclusions and recommendations .....</b>	<b>121</b>
5.1 Conclusions .....	121
5.1.1 Conclusions about the evaluability of the Belgian university development cooperation .....	121
5.1.2 Conclusions about the Belgian university development cooperation's interventions.....	122
5.1.3 Conclusions about the Belgian university development cooperation's individual scholarships.....	124
5.2 Recommendations .....	125
5.2.1 Recommendations to VLIR-UOS and ARES.....	125
5.2.2 Recommendations to DGD.....	129
5.2.3 Recommendations to SEO .....	130
<b>List of annexes .....</b>	<b>133</b>

## Abbreviations and acronyms

ARES	Académie de Recherche et d'Enseignement Supérieur
CDI	Capacity Development Index
CAMES	Conseil Africain et Malagache pour l'enseignement supérieur
CI	Cours Internationaux
CIUF	Conseil interuniversitaire de la Communauté française de Belgique
CREAM	Clear, relevant, economic, adequate, and monitorable
CSI	Cours et Stages Internationaux
CSO	Civil Society Organisation
CUI	Coopération Universitaire Institutionnelle
DAAD	Deutscher Akademischer Austauschdienst
DFID	Department for International Development
DGD	Directorate-general Development Cooperation and Humanitarian Aid
EPOS	Entwicklungspolitische Aufbaustudiengänge
GIS	Geographical Information System
GPS	Global Positioning System
HCMC	Ho Chi Minh City
HPET	Health Professionals Education and Training for Health System Reforms
HEI	Higher Education Institution
IA	Institutional Actor
ICP	International Courses Programme
ICT	Information and communication technologies
IT	Information technology
ITP	International Training Programme
IUC	Institutional University Cooperation
M&E	Monitoring and Evaluation
MHO	Medefinancieringsprogramma voor Hoger Onderwijssamenwerking
MsC	Master of Science
NFP	Netherlands Fellowship Programmes

NGOs	Non-Governmental Organisation
NSS	North-South-South project
OECD-DAC	Organisation for Economic Co-operation and Development's Development Assistance Committee
OI	Own Initiatives
PFS	Projet de Formation sud
PhD	Doctor of Philosophy
PIC	Projet interuniversitaire ciblé
PIP	Projets d'Initiative Propre
PRD	Projet de Recherche pour le Développement
RTT	Rapid Technology Transition
SDGs	Sustainable Development Goals
SEO	Special Evaluation Office
SDGs	Sustainable Development Goals
SI	Stages Internationaux
SOFT	Soutien à la finalisation de thèse
STI	Short Training Initiatives
ToC	Theory of Change
UPNT	Pham Ngoc Thach University of Medicine
VLIR-UOS	Vlaamse Interuniversitaire Raad Universitaire Ontwikkelingssamenwerking

## List of tables and figures

Figure 1: Theory of change of ARES.....	26
Figure 2: Theory of change of VLIR-UOS .....	29
Figure 3: Overview of VLIR-UOS intervention types subject to evaluation.....	31
Figure 4: Overview of ARES interventions subject to evaluation .....	32
Figure 5: Interventions subject to evaluation, by start year, VLIR-UOS and ARES, from 2000 to 2014 in selected countries .....	33
Figure 6: Interventions subject to evaluation, by country, VLIR-UOS and ARES, from 2000 to 2014.....	33
Figure 7: Individual scholarships subject to evaluation from all countries, by intake year, VLIR-UOS and ARES, from 2008 to 2016.....	36
Figure 8: Temporal definition of impact.....	42
Figure 9: Spatial definition of impact .....	42
Figure 10: Impact definition on subject level .....	43
Figure 11: General definition of impact .....	44
Figure 12: Structure and contents of the evaluability assessment.....	46
Figure 13: Assessed interventions by type and umbrella organisation .....	47
Figure 14: Development of evaluability of IUC and projects over time, 1998 - 2014 ....	48
Figure 15: Average score overall and for analytical dimensions in the theoretical assessment .....	49
Figure 16: Structure and contents of the practical evaluability assessment .....	51
Figure 17: Average score overall and for analytical dimensions in the practical assessment .....	52
Figure 18: Design triangle .....	62
Figure 19: Measuring confidence with probabilities .....	64
Figure 20: Comparison groups for the quasi-experimental evaluation design for individual scholarships .....	65
Figure 21: Concept of a stratified cohort .....	66
Figure 22: Approximation of a longitudinal design (stratified cohort).....	66
Figure 23: Response rate survey individual scholarships.....	67
Figure 24: Changes in the educational capacity .....	73
Figure 25: Changes in the research capacity .....	75
Figure 26: Changes in the organisational capacity .....	77
Figure 27: Overview of assessed impact hypotheses – educational capacity.....	81
Figure 28: Overview of assessed impact hypotheses – research capacity.....	82
Figure 29: Overview of assessed impact hypotheses – structural strengthening .....	83
Figure 30: Overview of assessed impact hypotheses – development impacts .....	84
Figure 31: Changes in the research capacity.....	85
Figure 32: Changes in the educational capacity .....	88
Figure 33: Overview of assessed impact hypothesis – research capacity.....	91
Figure 34: Overview of assessed impact hypothesis – educational capacity.....	92
Figure 35: Overview of assessed impact hypothesis – organisational capacity .....	93
Figure 36: Drop-out rates of Belgian scholarship recipients (N = 1799) and other scholarship recipients in comparison (N = 98).....	98
Figure 37: Satisfaction of Belgian scholarship holders with different aspects of their stay abroad. Average agreement on a 6-point scale. ....	99
Figure 38: Gains in competency and skills of Belgian scholarship holders during their scholarship stay. Average agreement on a 6-point scale.....	101
Figure 39: Gains in competency and skills of Belgian scholarship holders during their scholarship stay that would have not been available in their home country. Average agreement on a 6-point scale. ....	103

Figure 40: New contacts made by Belgian scholarship holders during their time abroad. Multiple answers were possible (N = 1694). .....	104
Figure 41: Self-assessed impact of their participation in the scholarship onto their career by former Belgian scholarship holders. Average agreement on a 6-point scale. ....	106
Figure 42: Duration of job search after finishing education for Belgian scholarship recipients as well as the comparison groups. Displaying both the average duration (first bar) as well as the 5% trimmed mean (second bar). .....	107
Figure 43: Current workplace of former Belgian scholarship holders with regard to type of organisation, size of organisation, and sector (N = 1069, 1068, 1075). ....	108
Figure 44: Application of new skills gained during stay abroad in the everyday work of Belgian scholarship recipients. Average agreement on 6-point scale. ....	110
Figure 45: Decision-making responsibilities' development over the stratified cohort and differentiated by intervention and comparison groups. Index value ranging from 0 to 36. ....	112
Figure 46: Contributions of former Belgian scholarship recipients in professionalising their organisation/institution. Average agreement on a 6-point scale. ....	114
Figure 47: Share of former Belgian scholarship holders actively working towards the SDGs according to their own assessment (N = 1053). ....	116

# Executive summary

## Background

Since the mid-1990s the Belgian government has financed the activities of Flemish and French-speaking universities in the area of development cooperation. Financing by the federal government in this sector thereby represents more than a quarter of the resources allocated to the non-governmental actors of Belgian development cooperation. Despite the significance of this sector, the Special Evaluation Office had not commissioned any external evaluation to be carried out focusing exclusively on university cooperation. As a result, in comparison to other channels of development cooperation, less useful evidence was available to demonstrate the effectiveness and impact of university cooperation in a rigorous and credible manner.

This was further reinforced by the fact that other evaluations in this sector in the past were restricted to qualitative approaches, which were seldom supplemented with quantitative or rigorous qualitative methods. One reason for this was and is that university cooperation often aims for changes at the organisational level through capacity development measures. In addition, often different definitions of impact are used within university development cooperation.

## Purpose of the Evaluation

As a consequence, SEO commissioned Syspons and Nuffic to conduct the Impact Evaluation of the Belgian University Development Cooperation with a formative and summative objective. With regard to the former, the evaluation examined the evaluability of the impact of Belgian university cooperation. More specifically, the evaluation analysed to what extent and on the basis of what methodological approach the impact of the Belgian university cooperation is evaluable. Concerning the latter, the impact of the Belgian university cooperation was evaluated on the basis of a sample of selected interventions. Hereby it was assessed whether, to what extent and under what conditions impacts were achieved.

The evaluation took place between January 2017 and April 2018 and covered long-term partnerships connected with interventions between January 2000 and December 2014 and scholarships that were granted for the period between January 2008 and December 2016. In this period Syspons and Nuffic conducted an analysis of all relevant documents and data, in-depth interviews, a comprehensive evaluability assessment, online, household and Delphi surveys as well as four field missions in Benin, Ethiopia and Vietnam. Based on the evaluation's findings, the evaluation team developed recommendations for the improvement of the evaluability and impact in this sector.

## Key Findings and Conclusions

### **Evaluability of the Belgian university development cooperation**

The **strength** of the Belgian university development cooperation sector is that it has continuously improved its evaluability over time. Moreover, impact evaluations in this sector are facilitated if (1) the project proposal is clear enough for an outsider to understand what an intervention intended to achieve, (2) a Theory of Change and

indicators that fulfil quality criteria can be reconstructed with the relevant stakeholders and (3) stakeholders involved on the Belgian side and in the partner countries are still available and are committed to the evaluation process.

At the same time this sector is marked by diverse types of interventions as well as a highly heterogeneous programme architecture. This demands a flexible response in terms of evaluation designs to come to robust conclusions regarding impact. In this regard, it could be demonstrated by this evaluation that for the development of an appropriate and robust evaluation design measuring impact, the different institutional set-up of an intervention, the types of impact to be analysed as well as the existing framework conditions have to be taken into account.

As a result this evaluation – following the approach of Stern et al. (2012) – conceptualised a modular evaluation design for the measurement of impact which could be flexibly adapted to the above mentioned conditions. The advantage of the combination of different evaluation designs was that different evaluation questions related to impact could be answered. In addition to increasing the robustness of evaluation results, the combination of different approaches to causal inferences made it possible to not only analyse whether impacts were achieved, but also to understand the specific mechanisms that enable (or prevent) impacts to unfold. Thus, the modular approach built further upon the mixed methods approach which underpinned the previous impact evaluations commissioned by SEO, while in comparison to “classical” evaluation designs it has an added value not only in terms of providing accountability, but also in terms of learning. Furthermore, this approach made it possible to adapt the respective evaluation designs with regard to cost-benefit considerations.

Moreover, the developed theoretical concept in form of the Capacity Development Index (CDI), to measure the interventions’ impact on the capacity of the partner universities or departments in this evaluation, proved to be a valid approach to measure changes in the capacity of the partner universities. In combination with qualitative data methods it was possible to understand how impacts on the level of the partner universities unfolded, while the used quantitative methods for data collection at the level of final beneficiaries enabled a nuanced analysis of the impacts of university development cooperation. Furthermore, it could be proven that this approach is – despite some inherent weaknesses regarding recall bias, analysis of different perspectives and the depiction of results – particularly valuable for showcasing whether an intervention led to sustainable change that lasted after the end of the intervention, or whether it primarily reinforced partner institutions for the duration of the intervention.

However, at the same time there are also some **weaknesses** in the evaluability of the Belgian university development cooperation that had to be overcome by this evaluation.

In the framework of this evaluation impact measurement refers either to the measurement of effects

- on outcome level, defined as the short-term and medium-term effect of an intervention by ARES or VLIR-UOS on the level of the indirect or direct beneficiary through the intervention objectives;
- on impact level, defined as the positive and negative, primary and secondary long-term effects produced by an intervention by ARES or VLIR-UOS, directly or indirectly, intended or unintended on the level of the final beneficiary.

When using these impact definitions, however, it is essential that they are interpreted in the context of the analysed interventions and their specific objectives. This also entails that impact can neither be restricted to the individual or institutional level nor a certain form of capacity, such as education or research.

First of all, there was no official consensus on how to define impact in this field prior to this evaluation. Even to come up with an all-encompassing definition for this evaluation proved to be challenging, as it had to include impacts at the individual and institutional level both within and outside academia by taking into account different types of beneficiaries. Moreover, this definition had to be interpreted in the context of the analysed interventions in this evaluation in order to come to meaningful results regarding the impact of these interventions.

Furthermore, on the level of the individual interventions – despite in some cases existing project cycle management approaches – a lack of impact-orientation in the planning documents as well as a missing use of the Theory of Change approach constituted a challenge to the evaluability of the selected interventions. Furthermore, the interventions' proposals often did not adequately distinguish between outputs, outcomes and impacts. In addition, for many interventions, indicators formulated in the proposals did not go beyond output level and/or do not fulfil quality criteria for indicators. Further, intervention proposals seldom included baseline data, and annual and final reports often did not provide information beyond output level.

Despite these weaknesses and the inherent selection bias in the provided Terms of Reference, it was however possible through this evaluation's chosen methodological approach to come to conclusions about the impact and causal mechanisms in Belgian university development cooperation. Moreover, the steps already undertaken to improve the evaluability in this sector by ARES and VLIR-UOS – as seen by the improvement over time – might make it easier to evaluate interventions in this sector in the future.

### **Impact of the Belgian university development cooperation interventions**

The **strength** of the Belgian university development cooperation is that its analysed interventions are effective and are contributing to the intended impact. VLIR-UOS' and ARES' intervention were thereby particularly strong in strengthening the research and educational capacities of its partner universities, and weakest in strengthening organisational capacities. It however has to be taken into account that a bias was given in the selection of interventions for the evaluation and that therefore these results cannot be generalised for the whole portfolio. In contrast hereto the chosen evaluation design for the individual scholarships guarantees robust conclusions which possess a high external validity.

The evaluation could thereby demonstrate that a key factor for the success of the interventions in strengthening the research and education capacities of the partner institutions was their temporal and strategic relevance. All of the analysed interventions took place at a time in which the partner universities experienced a massive increase in their student population and thus were ill-equipped to face this demographic development without external support. In addition they were all aligned with the relevant national strategies and strategies of their partner universities and thus focused on relevant areas of interventions such as post-graduate training. This fostered ownership among the involved partner universities and enhanced the impact of the interventions.

In this regard also the combined support of human resource development in form of the integrated scholarships, the upgrading of infrastructure and the implementation of transdisciplinary research projects facilitated the strengthening of research and educational structures in the partner universities. Through this approach integrated scholarship holders could over time acquire positions of influence in the respective partner universities, which positively affected contributions to impact and the sustainability of the observed impacts. Furthermore, research, outreach and educational functions could be strengthened in the partner universities through this approach. Also the introduction of new or the improvement of existing processes and procedures, such as the introduction of e-learning or the revision of curricula, also strengthened the partner universities in their core capacities.

A further success factor that contributed to the contributions to the intended impacts and sustainability of the interventions was the portfolio approach of the umbrella organisations and the possibility for partner universities and individuals to receive funding more than once. In this regard, VLIR-UOS specifically foresees particular types of projects as seed money for longer-term cooperation between two institutions. In addition, ARES and VLIR-UOS have conceived scholarship modalities specifically for past beneficiaries of embedded scholarships who did not manage to finalise their PhD within an intervention to do so subsequently.

Furthermore, the interventions were also successful in increasing the institution's standing by developing them into centres of research and technology – particularly in the cases of Institutional University Cooperation (IUC). This also enabled one of the analysed partner universities, Pham Ngoc Thach University of Medicine in Vietnam, in its role as change agent to influence public policy on national level.

As a result, many of the evaluated interventions also made positive contributions to impacts outside of academia. In the sample evaluated, interventions could substantially increase the income of farmers or improve the medical care given to the general population through the better qualification of medical personnel. Hereby it proved to be essential that the projects possessed or developed dissemination mechanisms to transform knowledge into applications and thus impacts outside their institution. These dissemination mechanisms could take the form of long-standing partnerships between the partner university and government bodies, the involvement of the final beneficiaries and relevant local authorities throughout the whole research process, a strategy of dissemination that included practical trainings or recognition agreements of diplomas in the field of education.

Looking at the contributions to impacts of the interventions outside of academia, however **weaknesses** could be identified as well. Most analysed interventions subjected to the practical evaluability assessment did not aim to achieve or did not achieve any impact outside of academia. In the latter case, these interventions did not involve final beneficiaries or other important intermediate institutions throughout the research process or developed the research questions solely among academics. In both cases, the underlying rationale of the project also often assumed that results would be disseminated outside academia without any planned activities by the project.

Moreover, sometimes the sustainability of the impact achieved in the field of upgraded equipment was hampered by the limited budgets of partner institutions to maintain financed infrastructure and equipment. In this regard, interventions that invested in locally sourced infrastructure were good practice, because the use of local materials in combination with appropriate training in maintenance increased the likelihood of partners to properly maintain equipment.

### **Impact of the Belgian university development cooperation individual scholarships**

The **strength** of the individual scholarship schemes of ARES and VLIR-UOS is that they are effective in contributing to the development of their home country or region as the former scholarship holders act as change agents in their respective organisations to solve challenges relevant to development. Former scholarship holders are thereby working in relevant fields of Belgian development cooperation and the Sustainable Development Goals (SDG).

Moreover, the former scholarship holders gain influential positions in their respective organisations due to the skills and competencies they have gained in the individual scholarship schemes of ARES and VLIR-UOS. In this regard, former scholarship holders who return to their old employer outperform their peers in terms of influence within their organisations in the long run. In the short term, however, former scholarship holders who change their employers upon their return experience a faster rise in influence than those who return to their old employers. Nevertheless, the former have – due to their position of higher influence – a larger impact on the performance of their organisation.

To achieve this impact, the Belgian scholarship programmes provide the necessary preconditions for an effective scholarship scheme: They award scholarships to the relevant target group and provide highly satisfying programmes, which guarantees very low drop-out rates. Due to this, they are effective in transmitting both thematic knowledge, methodological competencies, as well as soft skills.

As a result, scholarship recipients took significantly less time to find employment after graduation in comparison to students who did not receive a scholarship from Belgian university development cooperation. One explanatory factor for this is that applicants for a scholarship from VLIR-UOS and ARES have to submit a letter from their employer that provides a guarantee for re-employment upon graduation. In this regard the Belgian individual scholarships also experience a much higher return rate of participants to their home countries or regions than comparable scholarship schemes.

However, in comparison to the integrated scholarships, the proportion of individuals who stay with the same organisation upon graduation is higher among recipients of integrated scholarships than among recipients of individual scholarships. Since individuals who stay with the same employer outperform their peers in terms of influence within their organisation in the long run, embedded scholarships achieve more impacts at the institutional level. Nevertheless, integrated scholarship schemes are only targeted at academia and not at sectors outside of academia. As a consequence, individual scholarship holders are more prone to achieve impact outside academia than integrated scholarship holders and thus complement the portfolio of ARES and VLIR-UOS by broadening the impact of their instruments.

Despite this overall very positive picture, some **weaknesses** could also be identified through the evaluation. Although the individual scholarship schemes support the establishment of stable networks, this could be further improved by supporting more practical elements such as independent research projects and internships within the individual scholarship schemes.

In this regard the professional advancement of women through the individual scholarship could also be strengthened, as women still hold lower positions of power than men despite the positive effect of the received scholarship. Hereby, it must be pointed out that over the last few years, generally significantly more scholarships are awarded to male applicants than female, which effectively hinders the transformation of gender relations in the partner countries.

## Recommendations

Based on the findings of the evaluation the following 18 recommendations for the future implementation of the Belgian university development cooperation are put forward. They are grouped according to addressee and distinguish in the case of ARES and VLIR-UOS between strategic and operational recommendations.

### Recommendations to VLIR-UOS and ARES

#### Strategic recommendations

- 1. VLIR-UOS and ARES should reassess their approach to increase organisational capacities at the partner institutions as this is an essential success factor for changes in the research and educational capacities of the partner institutions.*
- 2. To strengthen the dissemination of research results and development impacts outside of academia, VLIR-UOS and ARES should prioritise the selection of interventions that have a sound dissemination strategy.*
- 3. ARES should obtain a mandate from their leadership to overhaul requirements regarding impact-oriented planning towards the universities in the proposal process, and to provide adequate support to universities to adhere to these requirements as*

*weaknesses in planning and M&E lead to challenges regarding the evaluability of Belgian university development cooperation.*

- 4. To strengthen the development of networks for scholarship holders, the scholarship schemes should be adapted to include more practical exercises, independent research projects and internships.*
- 5. VLIR-UOS and ARES should maintain the requirement for applicants to scholarship schemes to provide a letter from their employer that guarantees reemployment upon graduation and consider strengthening it as it has proven to be a valuable tool for the professional reintegration of scholarship recipients.*
- 6. VLIR-UOS and ARES should establish specific mechanisms to exert influence on existing gender relations and equality of opportunity to further strengthen the contribution of Belgian university development cooperation to the advancement of women.*
- 7. VLIR-UOS and ARES should continue to focus university development cooperation on relevant subjects and align it timely and strategically with priorities of the partners, as this has proven to be a major success factor for achieving impacts.*

#### Operational recommendations

- 1. A specific weakness in terms of evaluability is the lack of a Theory of Change and of quality indicators in intervention proposals. The format for intervention proposals should therefore be revised to make these elements mandatory.*
- 2. As the cooperation of stakeholders involved in the interventions is key for evaluability, ARES should ensure that universities understand why it is necessary to improve impact-orientation at the planning stage. They should also ensure universities are equipped to meet increased standards.*
- 3. Since the cooperation of stakeholders involved in the implementation of interventions is key for evaluability, ARES should take measures to ensure partner universities are committed to supporting evaluation efforts.*
- 4. VLIR-UOS and ARES should consider introducing the Capacity Development Index as an element to be included in the intervention proposals to establish a baseline at the beginning of each intervention, and use this baseline for M&E as it has proven to be a valuable tool to measure changes at the level of the partner institutions.*

#### **Recommendations to DGD**

- 1. DGD should continue to fund both integrated and individual scholarships as they are complementary and lead to impacts within and outside academia.*
- 2. DGD should continue to fund IUCs and projects as the existing portfolio of VLIR-UOS and ARES interventions has proven to be well-suited to achieve impacts at the individual and institutional level.*
- 3. Belgian university development cooperation is strong in strengthening research and educational capacities of the partner institutions, but weaker in strengthening their organisational capacities. DGD should therefore engage in a strategic dialogue with VLIR-UOS and ARES to decide how organisational capacities could be strengthened more effectively in future interventions and determine the resources to be allocated in this field. (See also strategic recommendation one to VLIR-UOS and ARES).*
- 4. DGD should continue to allow the possibility for institutions and individuals to receive funding from Belgian university development cooperation more than once as this has proven to be a success factors in terms of sustainability of impacts.*

### **Recommendations to SEO**

1. *SEO should adopt the impact definition developed for this evaluation as it has proven to be a sound basis for evaluating the interventions of Belgian university development cooperation.*
2. *SEO should use the approach of Stern et al. (2012) to choose the most appropriate evaluation design in a given context for future evaluations as it could be proven in this evaluation that this approach makes it possible to answer more than one impact questions and at the same time is sensitive to cost-benefit considerations.*



# 1. Introduction

The Special Evaluation Office of the Belgian Development Cooperation (SEO) commissioned Syspons and Nuffic to conduct the "Impact evaluation of the Belgian university development cooperation". The objectives of the evaluation are formative and summative. With regard to the former, the evaluation should examine the evaluability of the impact of Belgian university cooperation. More specifically, the evaluation should analyse "to what extent and on the basis of which methodological approach the impact of the Belgian university cooperation is evaluable (SEO, 2016, p.24)." Concerning the latter, the impact of the Belgian university cooperation should be evaluated on the basis of a sample of selected interventions. Hereby it should be analysed whether, to what extent and under what conditions impacts were achieved.

Key users of the evaluation results are SEO, the Belgian Foreign Ministry, the Belgian parliament, ARES, VLIR-UOS as well as Belgian universities and universities in partner countries. Moreover, the interested general public and the evaluation expert community were identified as potential users of this evaluation.

The evaluation took place between January 2017 and April 2018 and covered long-term partnerships connected with interventions between January 2000 and December 2014 and scholarships that were granted for the period between January 2008 and December 2016. In this period Syspons and Nuffic conducted an analysis of all relevant documents and data, in-depth interviews, a comprehensive evaluability assessment, online, household and Delphi surveys as well as four field missions in Benin, Ethiopia and Vietnam. A detailed description of the methods applied in the overall evaluation can be found in annex B while a detailed methodology for each field mission can be found in the country reports in annex C.

The report is structured as follows:

- **Chapter 2** offers an overview of the umbrella organisations, their Theory of Change, instruments and target groups.
- **Chapter 3** analyses the evaluability of the Belgian university cooperation.
- **Chapter 4** assesses the impact of the Belgian university cooperation.
- **Chapter 5** outlines the conclusions as well as recommendations of the evaluation team.
- The **annex** includes the Terms of Reference, the bibliography, the developed assessment grids, the inception report as well as the individual country report.



## 2. The umbrella organisations at a glance

The university cooperation between Belgium and its southern partner countries is managed by VLIR-UOS and ARES (formerly CIUF)<sup>1</sup>. VLIR-UOS is the Flemish umbrella organisation for development for university cooperation and university colleges. ARES, the Academy of Research and Higher Education (Académie de Recherche et d'Enseignement Supérieur) is the umbrella organisation of francophone Belgian universities, university colleges, graduate schools of arts, and higher education institutions for social advancement.

The cooperation undertaken by Belgian higher education institutions (HEI) under the umbrella of VLIR-UOS and ARES<sup>2</sup> is regulated by the General Agreements of 1998 between the Belgian federal government and the universities represented by VLIR, the Flemish Inter-university Council (Vlaamse Interuniversitaire Raad) and by ARES' predecessor organisation (CIUF). These agreements created two permanent Committees (one per umbrella organisation) organising, evaluating, and advising on cooperation activities.

Until 1998, university cooperation between Flemish and francophone Belgian HEI and Southern HEI took place exclusively between the institutions. In 1998, responsibility for the federal funds for university cooperation for development was transferred to VLIR and ARES' predecessor organisation. Against this background, VLIR founded the secretariat for university cooperation for development (VLIR-UOS) and ARES the commission for development cooperation (ARES-CCD)<sup>3</sup>. Since then, both VLIR-UOS and ARES-CCD have been in charge of coordinating university development cooperation between their member HEI and Southern HEI. In their function as institutional actors (IA) that do not implement interventions themselves, but ensure a framework for university development cooperation of Flemish and francophone Belgian higher education institutions, they work as brokers between the Belgian federal government and the Belgian higher education institutions. Furthermore, as non-governmental actors that receive funding from the federal budget for development cooperation, VLIR-UOS and ARES-CCD are part of the Belgian indirect development cooperation.

According to its defined missions, VLIR-UOS supports partnerships between universities and university colleges in Flanders and the Global South, does research on innovative responses to global and local challenges and strengthens higher education in the Global South as well as globalisation of higher education in Flanders. The Bureau University Development Cooperation (Bureau UOS) thereby represents the administrative authority for university development cooperation<sup>4</sup>.

---

<sup>1</sup> Until 2013, higher education cooperation funded by the French Community was coordinated by the French-speaking Inter-university Council (CIUF – Conseil Interuniversitaire de la Communauté française). Since January 2014, the Academy of Research and Higher Education (ARES – Académie de Recherche et d'Enseignement Supérieur) undertakes this task as the successor organisation of CIUF. Consequently, all agreements concerning CIUF apply equally to ARES. To avoid confusion, this evaluation will only use the term ARES when speaking about the umbrella organisation coordinating higher education cooperation between the francophone part of Belgium and the South.

<sup>2</sup> Within this evaluation, the respective organisations expressed the wish to be referred to in a specific way: VLIR-UOS wants to be called as such, but ARES-CCD prefers to be called "ARES" only.

<sup>3</sup> At this time, CIUF founded the university commission for development (CIUF-CUD), but with the change from CIUF to ARES in 2014, the commission changed as well.

<sup>4</sup> The members of the Bureau UOS consist of representatives of each Flemish university and a representative of the university colleges.

The three main tasks of ARES' work consist in ensuring general interest for higher education, supporting higher education institutions as well as ensuring their global coordination, and initiating collaborations between HEI. The administrative authority of ARES is incumbent upon the Administration Council<sup>5</sup>, which is supported by the executive bureau and the orientation council.

In recent years two reforms have affected the way VLIR-UOS and ARES work. The first reform, the 2010 agreement between the Minister for Development cooperation and the two umbrella organisations<sup>6</sup>, has introduced reforms to the modalities for higher education cooperation. It has changed the duration of the programming cycle to six years and introduced the principle of geographic concentration to a maximum of 20 partner countries per umbrella organisation. In addition, the agreement calls for results-based management and the realisation of complementarities and synergies within university development cooperation.

The second reform, the 2015 agreement between the vice prime minister and the actors of Belgian non-governmental cooperation<sup>7</sup>, strengthened the commitment to coordination between civil society organisations and institutional actors. It introduced an obligation for different Belgian non-governmental actors working in the same thematic or regional field to carry out a joint analysis and elaborate a joint strategy for that thematic area or region.

As a consequence, since then ARES and VLIR-UOS work with longer programming cycles and have to coordinate their activities more closely with other civil society organisations in the field.

## 2.1 Theories of change of ARES and VLIR-UOS

To achieve a common understanding of VLIR-UOS' and ARES' objectives in the field of university development cooperation and of how they intend to achieve these objectives, a Theory of Change (ToC) was developed for each umbrella organisation. The Theories of Change were presented, discussed and finalised in two separate workshops, one with ARES and one with VLIR-UOS. In each workshop, staff of the respective umbrella organisation and representatives of the DGD took part. Additionally, representatives of the francophone universities participated in the ARES workshop. The respective ToCs serve as a basis for this evaluation and consists of different inter-connected and independent components:

- **Inputs / activities:** "the financial, human, and material resources used for the development intervention" (defined according to the OECD-DAC, 2010)<sup>8</sup>
- **Outputs:** "the products, capital goods and services which result from a development intervention" (defined according to the OECD-DAC, 2010)
- **Outcomes:** the short-term and medium-term effect of an intervention by ARES or VLIR-UOS on the level of the indirect or direct beneficiary through the intervention objectives (see chapter 3.2.1.1)

---

<sup>5</sup> The Administration Council is made up of 29 members: one president, six university rectors, six representatives of colleges, two directors representing graduate schools of arts, two representatives of higher education for social advancement, six representatives of ARES staff, and six ARES students.

<sup>6</sup> Accord politique entre le Ministre Fédéral de la Coopération au Développement Monsieur Charles Michel, les Universités flamandes (VLIR) et les Universités francophones (CIUF) concernant la coopération universitaire au développement – partim Sud. Signed in Brussels April 22, 2010.

<sup>7</sup> Accord-cadre entre le vice-premier ministre Alexander De Croo et les représentants de la coopération non gouvernementale version 4. July 2015. Un partenariat renouvelé pour les acteurs de la coopération non gouvernementale au sein de la Coopération belge. This reform is however outside the scope of this evaluation.

<sup>8</sup> According to the Strategic Note on Results in Development Cooperation of the DG Ontwikkelingssamenwerking en Humanitaire Hulp, the DGD defines inputs, outputs and impacts in conformity with the OECD-DAC definition, but outcomes pursuant to the definition of the European Commission.

- **Impacts:** the positive and negative, primary and secondary long-term effects produced by an intervention by ARES or VLIR-UOS, directly or indirectly, intended or unintended on the level of the final beneficiary (see chapter 3.2.1.1)

In the following, the respective Theories of Change of VLIR-UOS and ARES in the field of university development cooperation are presented.

### 2.1.1 Theory of change of ARES

The ToC for university development cooperation of ARES is depicted in figure 1. It is structured following the three cooperation modalities of ARES subject to evaluation: institutional support (AI – Appui Institutionnel), projects, and scholarships. The lower section of the ToC visualisation concerns individual scholarships only. Scholarships granted within projects or IUC are part of the intervention logic depicted for these types of cooperation.

The overarching **impact** that ARES aims to contribute to is the sustainable human development of countries in the Global South. ARES' contribution lies in addressing major development challenges with its university partners, both through strengthening the institutions themselves (whole institutions or specific departments) and through strengthening the individuals studying, teaching and researching at these institutions.

The intended impacts to be achieved through cooperation with whole institutions and specific departments are that HEI are change agents within civil society, that they contribute to inducing public policy changes, and that different societal actors adopt new practices. In addition, it is intended that alumni of strengthened HEI contribute to solving development-related challenges.

The cooperation with whole institutions in the form of "**Appui Institutionnel**" is geared towards structural strengthening of the partner institutions. The desired **outcome** is improved governance of HEI in the fields of strategy, management, and interaction with civil society. To achieve this, intended intermediate outcomes are that administrative and financial processes are improved, infrastructure and human capacities in research, education and management are stronger, and training and research policies/ strategies are implemented. Furthermore, it is intended that a policy of transparency and a habit of networking are adopted. The intended outcomes in terms of structural strengthening of the partner institutions shall also contribute to strengthening their **research and educational capacities**.

The intended **outputs** of "**Appui Institutionnel**" are that a coordination platform as interlocutor for governance is established and that managing and administration teams are sensitised and/ or put into place. Further intended outputs are that trainings and research policies/ strategies have been elaborated, and that actions targeting the strengthening of research and training mechanisms have been implemented.

The starting point to achieve these outputs are the **inputs** provided and activities implemented by ARES. ARES' inputs consist of material and financial resources and human resources. With these, various activities are carried out by ARES to facilitate the different forms of university development cooperation. ARES develops policies for higher education cooperation. Within the realms of institutional cooperation (Appui Institutionnel), ARES matches Belgian and foreign HEI and accompanies a reflection on reforms of the educational systems. Once institutions are matched, ARES participates in the management of the programme cycle of a given institutional cooperation as a member of the steering committee.

Cooperation in the form of **projects** at the level of HEI departments targets the same type of impacts as institutional cooperation: that HEI are change agents within civil society, that they contribute to inducing public policy change, that new practices are adopted by different societal actors, and that alumni contribute to solving challenges related to development.

Projects are specifically geared towards the strengthening of research capacities and educational capacities of a department at a partner HEI. Intended **outcomes** of projects are that higher education institutions' capacity to fulfil their fundamental missions of education and research is strengthened. A further intended outcome is that the knowledge created through research is appropriated by early adopters from civil society, the private sector and/ or the public sector. As a precondition for all these changes, intended intermediary outcomes are that young doctoral students have acquired pedagogical tools, that a new generation of academics emerges, and that the competencies of former students correspond to employers' needs. In view of strengthening partner institutions' mission of education, the intermediary outcomes targeted are that new curricula are offered and doctoral schools are established. In addition, teaching practices are to be improved. In view of strengthening partner institutions' research missions and the appropriation of research results, intermediary outcomes targeted are that conditions for research are improved and competencies of local personnel are strengthened. It is further intended that innovative solutions emerge and that research results are disseminated.

The **outputs** required to achieve the desired outcomes at the departmental level are that curricula are created, reviewed and adapted to local needs, that technical and methodological guides are elaborated, that infrastructure and equipment are improved (e.g., faculties, laboratories, libraries, software) and that conferences and seminars are organised. Besides that, scholarships for studies and research on development topics are granted and trainings on methodological and technological specialisation are offered. Educational capacities are strengthened through having new pedagogic approaches validated, whereas research capacities are strengthened through the production and publication of (joint) interdisciplinary research.

To create the conditions for the implementation of projects, ARES' **activities** include the calls for proposals and the selection of interventions. Once projects are approved, ARES is involved in the coordination, follow-up and harmonisation of approaches.

At the individual level, where ARES grants individual **scholarships** for nationals from the Global South, the desired **impact** is the contribution of former scholars to face developmental challenges.

To achieve this impact, the intended **outcome** of scholarships is that former scholars apply their knowledge in relevant sectors. For this to happen, the competencies of human resources in the south on development issues first need to be strengthened, and the competencies acquired by former scholarship holders need to correspond to employer's needs.

For all types of scholarships, whether they are for professional trainings or for Masters (CSI programme), PhDs (SOFT programme) or Post-Docs (ELAN programme)<sup>9</sup>, intended **outputs** are that scholarship holders have completed their studies and have acquired knowledge related to development. For the Post-Doc scholarships, two additional outputs are targeted: that post-doctoral students have acquired pedagogical tools and/ or equipment, and that they have initiated post-doctoral research. For the Master and training scholarships, the establishment of a high-quality offer of study programmes related to development is considered an output in itself. This is because the Master and training programmes to which prospective scholarship recipients can reply is curated by ARES.

**Activities** undertaken by ARES with regard to scholarships encompass the call for applications and the selection of candidates. For the CSI programme, ARES is also involved in welcoming scholarship holders upon their arrival in Belgium and in providing them with academic support.

ARES' ToC involves **synergies between the different types of cooperation**. For example, strengthened individual capacities in the field of teaching and research may be

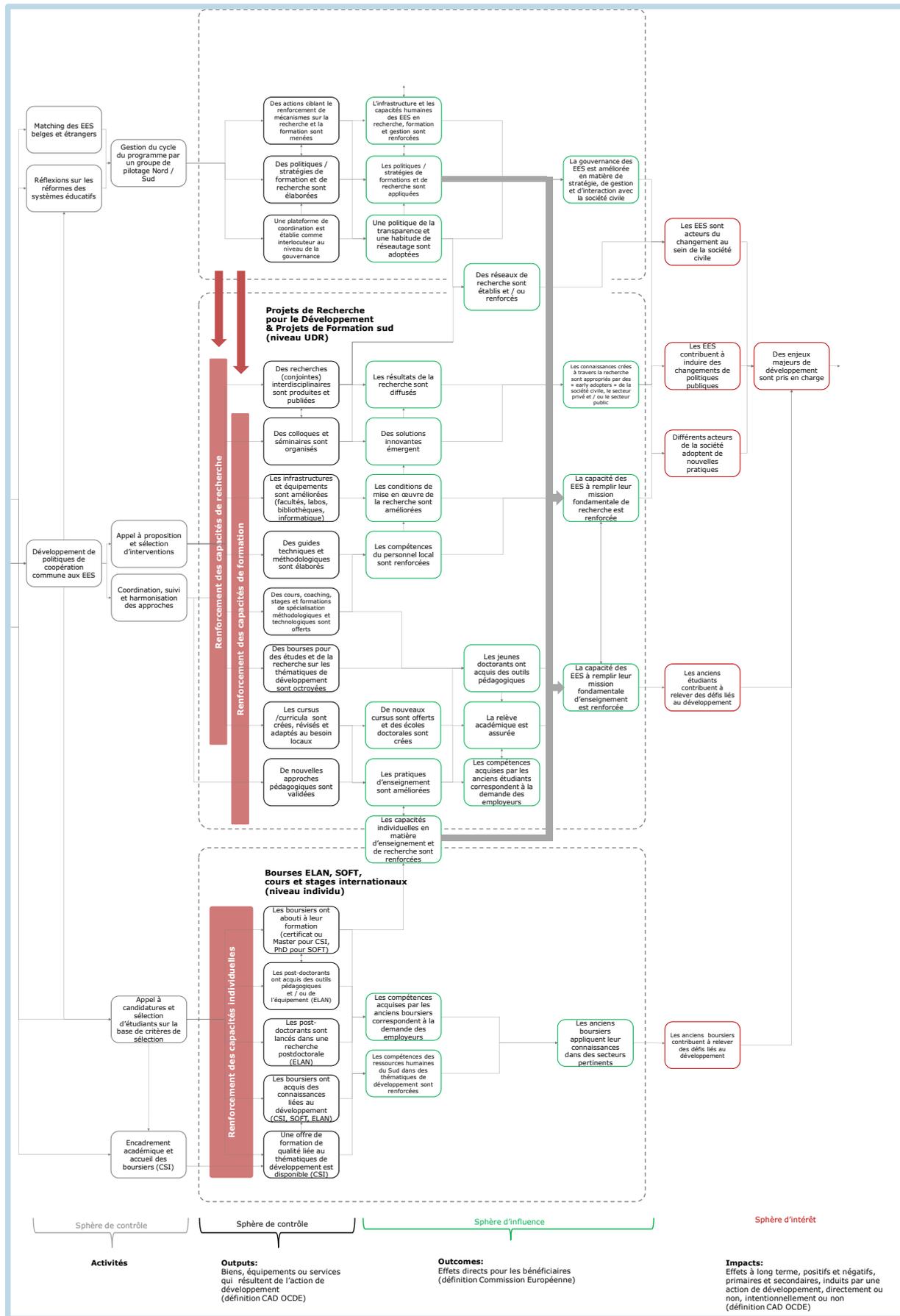
---

<sup>9</sup> The SOFT and ELAN scholarships will not be examined in this evaluation. (see chapter 2.2).

acquired through a scholarship (individual level) and contribute to improved teaching practices (at the level of HEI institutions and their departments). This synergy is encouraged by the fact that in granting scholarships for PhDs and Post-Docs, priority is given to individuals who were previously involved in a project financed by ARES, and who pledge to return to their home university upon completion of their scholarship.

Another example for a synergy between different types of cooperation is that both institutional cooperation and projects contribute to the establishment or strengthening of research networks. Institutional cooperation does this on the strategic level by developing research policies, whereas projects do this on the operational level by producing and disseminating research.

**Figure 1: Theory of change of ARES**



Source: Syspons and Nuffic 2017

### 2.1.2 Theory of change of VLIR-UOS

University development cooperation under VLIR-UOS consists of two portfolios, the Southern and the Belgium portfolio (see figure 2). The Southern portfolio encompasses the financing of IUC, projects and scholarships in the Global South. The Belgium portfolio – subject to this evaluation – comprises scholarships for nationals from the Global South coming to (the Flemish part of) Belgium.<sup>10</sup> Both portfolios intend to achieve an overarching impact, which is the improvement of living conditions. In the following, first the intervention logic of the southern portfolio is described, then the Belgium portfolio's intervention logic is presented.

In the southern portfolio, intended **impacts** are:

- the adoption of new knowledge, services and technologies by a wider population,
- the active use of better qualified human resources in relevant sectors, and
- the empowerment of the partner institutions in their role as drivers of change regarding their threefold mission of research, education and extension.

These impacts are intended to arise out of three fields in which VLIR-UOS is supporting interventions and scholarships in the Global South. The first field aims at strengthened research capacities, the second at strengthened educational capacities, and the third at strengthened organisational capacities.

To achieve the targeted impacts, the ToC depicts that the following outcomes – and the outputs leading to these outcomes – are intended to be realised:

In the first field aiming at **strengthened research capacities**, the intended **outcomes** are that new knowledge and technologies are developed and then adopted by early adopters. For this purpose, the conditions for uptake by early adopters and by the wider population should be created and high quality research publications and training manuals should be produced. The latter also leads in turn to the creation of new knowledge and technologies that are adopted by early adopters. Furthermore, these publications and training manuals as well as research funds raised should lead to strengthened research practices on the one hand and to improved research processes and structures possessed by the partner institutions as well as to improved human capacities on the other hand.

To achieve these intended outcomes, the following **outputs** are financed. The implementation of extension activities, the collection of data sets, the conducting of experiments as well as scholarships for Masters and PhD are funded to develop new knowledge and technologies as well as high quality research publications and training manuals. For the latter, activities to strengthen research capacities in the area of research methods are also offered. In addition research capacities in the areas of proposal writing, research management, and laboratory maintenance through trainings are implemented to enable the institutions to raise research funds.

In the second field targeting **strengthened educational capacities**, the intended **outcomes** consist of better qualified human resources that are available for relevant sectors and an improved employability of the partner institution's students. For this purpose, it is deemed necessary that (accredited) study programmes targeted to the needs of relevant sectors and students are implemented and that partner institutions possess improved educational processes and structures as well as improved human capacities. These achievements should be based on three pillars: the implementation of new trainings, courses or Master Programmes, the introduction, adaptation and implementation of new didactical, pedagogical and teaching methodologies, and the development and implementation of research-based education programmes. In this

---

<sup>10</sup> The complete Belgium portfolio of VLIR-UOS furthermore includes the Global Minds programme, a PhD programme and a policy supporting research programme (Acropolis). However, these programmes were not selected as a unit of analysis for this evaluation.

setting, the implementation of new trainings, courses or Master Programmes and the introduction, adaptation and implementation of new didactical, pedagogical and teaching methodologies are mutually dependent.

The **outputs** aimed at in this field are that sector-relevant curricula for trainings, courses or Master programmes are developed or renewed, that didactical, pedagogical and teaching methodologies are improved, Master and PhD scholarships are offered and that short-term trainings for students or staff in research and education are conducted. Moreover, the improved research processes from the first field shall feed into the development of sector relevant curricula and Master programmes.

In the third field aiming at **strengthened organisational capacities**, the intended outcome is that the partner institutions possess improved organisational processes and structures as well as improved human capacities. This in turn should contribute to the improvement of educational and research capacities of the partner institutions (field one and field two). The improvement of the organisational processes and structures however, should be reached through efforts within five areas: first, support systems such as management systems, quality assurance, accounting, etc. need to be implemented and used; second, governance or management structures of the partner institutions have to be strengthened; third, processes and structures of the partner institutions have to be supported by ICT (e.g., E-Learning, Big Data, etc.); fourth, libraries and laboratories should be equipped with state-of-the-art technology; fifth, technology transfer and innovation policies need to be implemented.

The strengthened organisational capacities should be reached through the following **outputs** in this field, which are that quality management systems and project management capacities are enhanced, partner institutions' infrastructure (laboratories, libraries etc.) are upgraded, and Rapid Technology Transition (RTT) offices are improved.

The **inputs** provided for the performance of the southern portfolio are financial and material means as well as human resources. The **activities** implemented are that VLIR-UOS creates the conditions for synergies and complementarity, conducts the call procedure and selection of projects, and implements monitoring and evaluation. For this purpose, opportunities in partner countries are identified and frameworks for university cooperation are developed and introduced.

In contrast to the southern portfolio, the intended **impacts** of the Belgium portfolio are the following:

- that graduated scholarship holders act as change agents and contribute to solving development challenges, as well as
- that organisations in relevant sectors perform better.

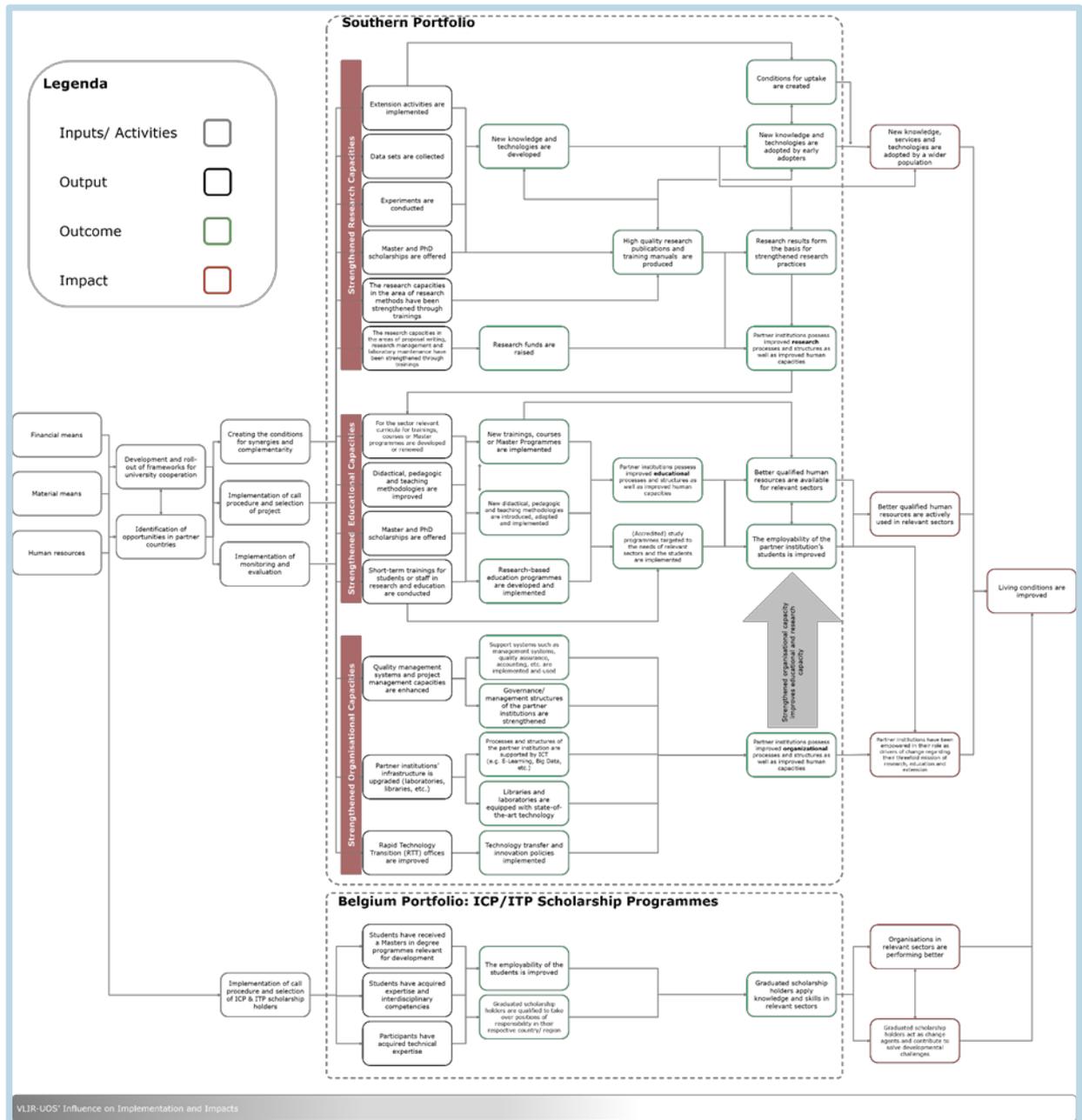
Both impacts influence each other: On the one hand, the action of graduated scholarship holders leads to an improvement of the performance of organisations in relevant sectors. On the other hand, better performing organisations help graduated scholarship holders to act as change agents and solve developmental challenges.

On the **outcome** level, the Belgium portfolio aims at graduated scholarship holders applying knowledge and skills in relevant sectors. This requires a qualification of these graduated scholarship holders to take over positions of responsibility in their respective country or region, and an improved employability of the students.

To achieve this, the desired **outputs** are that students should have received a Master (ICP) or a certificate in programmes relevant for development, and should have acquired expertise and interdisciplinary competencies as well as technical expertise.

For the Belgium portfolio, the required **inputs** provided are the provision of financial and material means as well as human resources. The **activities** conducted are the implementation of the call procedure and the selection of ICP and ITP scholarship holders.

Figure 2: Theory of change of VLIR-UOS



Source: Syspons and Nuffic 2017

## 2.2 Instruments of ARES and VLIR-UOS subject to evaluation

### 2.2.1 Interventions of ARES and VLIR-UOS

According to the General Agreements of 1998, VLIR-UOS and ARES can conduct Own Initiatives (OI) in cooperation with departments of higher education institutions in partner countries, and Institutional University Cooperation (IUC) with whole institutions. While the modalities of IUC have remained nearly unchanged, the names and modalities of the interventions formerly known as Own Initiatives have evolved over the years. This is reflected in different types of interventions that have been implemented by ARES and VLIR-UOS and are described in detail in the following section.

As a result of the deliberations in the inception phase the following types of interventions of **VLIR-UOS** are subject to this evaluation. These were chosen as they offer the most learning potential for the future and are most promising concerning the evaluation of impact, according to the interviewed stakeholders. As a consequence the unit of analysis described in the Terms of Reference – which consisted solely of IUC and Own Initiatives – was enlarged.

- An **Institutional University Cooperation (IUC)** is a long-term cooperation between multiple Flemish universities or university colleges and one partner HEI in a southern country, which takes place at the institutional level. The aim of an IUC is contributing to a changed role of the HEI in the south as a development actor, thereby supporting development changes and an improved performance of the HEI itself. An IUC usually consists of a pre-partner programme, two phases of five years and a phase-out of two years, while the second phase will be formulated during the first phase. During the two five year phases, the intervention is subdivided into a number of projects complementary to each other realising interlinked activities. The selection process for an IUC is a two-round procedure: first, the selection commission selects eligible IUC institutions by assessing and comparing the South Concept notes and by asking regional commissions to provide binding advice. This selection is taken to the Bureau UOS, which moves forward to the matchmaking of Flemish and Southern HEI and to the IUC programme formulation; second, joint teams in the south and the north elaborate partner programme proposals that are used as the basis for the final selection by Bureau UOS and DGD.
- A **North-South-South project (NSS)** typically involves at least two IUC partner HEI from different countries, but could also involve additional partners in the country or the region. It also takes place at the institutional level. NSS are initiated by an IUC partnership and its duration of one or two years needs to be within an ongoing IUC. The objectives of a NSS are to stimulate and to support joint initiatives from IUC partner HEI, to deepen South-South cooperation between them and with the Flemish counterparts as well as to encourage regional and global exchange and capacity building. During the selection procedure, project proposals submitted by current or former IUC project leaders, team members, and coordinators from Flanders are reviewed by regional commissions.
- **TEAM projects** – formerly called Own Initiatives (OI) – have a maximum duration of five years and take place at the departmental level. They often follow an earlier exploration or contact between departments of Flemish and Southern HEI. TEAM projects arise by a common initiative of one or more academics from a partner country together with one or more academics from Flanders. With their aim to address region-related challenges, they address specific developmental topics as well as needs in the field of research and education capacity. Project proposals must be submitted by professors from a Flemish university and are reviewed by regional commissions.
- **South Initiatives (SI)**<sup>11</sup> are the smallest intervention type funded by VLIR-UOS, with a duration of one to two years. They also take place at the departmental level. A SI can stand alone as well as grow into a TEAM project or an IUC afterwards. The objective of the interventions is to support current or past research, while the contents cover a variety of topics. The intervention is initiated by academics or lecturers in a developing country that is part of the VLIR-UOS country list. They submit a proposal in a competitive call together with a Flemish academic or lecturer. The project proposals are then reviewed by regional commissions.

Figure 3 gives an overview of the main characteristics of the above described VLIR-UOS interventions.

---

<sup>11</sup> As agreed upon with the relevant stakeholders, only South Initiatives will be evaluated in this evaluation when they generate(d) synergies with the other three types of interventions.

**Figure 3: Overview of VLIR-UOS intervention types subject to evaluation<sup>12</sup>**

	IUC	NSS	TEAM	SI
	Institutional level		Departmental level	
Conduct	1997 – today	2005 – 2015	1997 - today	1997 - today
Duration	10 years and 2-year phase-out	1 to 2 years during IUC activity	Max. 5 years	1 to 2 years
Selection procedure	Programme approach	Calls open to current/ former Flemish IUC project leaders, team members, and coordinators	Competitive calls	Competitive calls
Focus	Contribution to development changes, an improved performance of partner HEI and its changed role as development actor	Strengthening of regional and global exchange and capacity building, and joint initiatives from IUC partner universities	Strengthening of research and/or educational capacity, addressing region-related challenges and specific developmental themes	Support of current or past research, having the possibility of growing into TEAM/ IUC or standing alone

Source: ARES and VLIR-UOS database adopted by Syspons 2017

Possible intervention types for **ARES** were also discussed for this evaluation in the inception phase. As a result the following interventions were selected as they offer in the case of ARES the most learning potential for the future and are most promising concerning the evaluation of impact, according to the interviewed stakeholders.

- A **Coopération Universitaire Institutionnelle (CUI)**<sup>13</sup> is a cooperation between one partner HEI in the south and multiple francophone Belgian universities or university colleges that takes place at the institutional level. The objective of a CUI is to improve the role of the partner HEI as development actor. Besides that, the francophone Belgian HEI offers global support for academic careers, quality education and university management to the partner HEI while encouraging its institutional development. The intervention consists of various phases of five years combining a number of projects implemented in the partner HEI that already experienced a collaboration with francophone Belgian universities or university colleges. In 2014, CUI was renamed Appui Institutionnel (AI). In the transition from CUI to AI, interventions underwent a one-year transition period called finalisation. ARES named the CCD (Commission for Development Co-operation) responsible for preparation, implementation and follow-up of CUI.
- **Projets d’Initiative propre (PIP)** were short-term interventions at departmental level between a francophone HEI and a partner HEI in the south. PIP aimed at the strengthening of local capacities and resources of the HEI department, especially concerning (applied) research. The usual duration of PIP was three years, but it could be extended to four years in exceptional cases. Project proposals for PIP could be submitted by francophone Belgian universities and were chosen by a selection committee consisting of one representative of each francophone university. The selection followed strategic and political criteria and the advice of expert committees. ARES started managing PIP in 1998 and transformed them into PIC with changed conditions in 2004 (see below).
- The **Projet interuniversitaire ciblé (PIC)** was the successor of PIP and was also implemented at the departmental level. Within a PIC, one HEI in a southern country and one or several HEI in the francophone part of Belgium conducted a joint North-South initiative concerned with a challenge of the local society. In some cases, non-academic partners such as hospitals were also associated. Every

<sup>12</sup> The figure includes one IUC with Kenya that started its first phase in 1997 and two IUC with Vietnam that started in 1997 and 1998. These IUC were included in this evaluation as otherwise the number of possible IUC of VLIR-UOS to choose from would have been diminished by one third.

<sup>13</sup> ARES’ CUI is comparable VLIR-UOS’ IUC. Differences can be found on the level of desired impact contents, time setting and the framework the programmes are embedded in.

PIC lasted three to five years<sup>14</sup>. The call for PIC was launched on a yearly basis. All the project proposals were revised by an expert committee providing advice on their scientific relevance, before an internal committee of ARES selected the projects following political and strategic criteria and the expert's advice.

- The **Projet de Recherche pour le Développement (PRD)** and **Projet de Formation Sud (PFS)** interventions were introduced at ARES in 2013 and replaced PIPs and PICs. They also operate on the departmental level. They are joint North-South projects that last three to five years each. PRD and PFS have the same modalities but different foci: While PRD want to strengthen research capacities in the partner HEI in order to address key issues of local, national, or regional development, PFS support or establish educational capacities to answer local, national, or regional developmental needs. PRD and PFS interventions are tendered by competitive calls. Project proposals will be selected by a mixed committee of experts, consisting of four general and two thematic experts for each project, and by the internal committee of ARES in which each francophone Belgian university is represented.

Figure 4 gives an overview of the main characteristics of the above described ARES interventions.

**Figure 4: Overview of ARES interventions subject to evaluation**

	CUI /AI	PIP	PIC	PRD	PFS
	Institutional level	Departmental level			
Conduct	1997 – today	1998-2003	2004 - 2012	2013 - today	2013 - today
Duration	10 years and 1-year transition period to AI (finalisation)	Max. 3 years	3 to 5 years	3 to 5 years	3 to 5 years
Selection procedure	Programme approach	Competitive calls	Competitive calls	Competitive calls	Competitive calls
Focus	Improvement of the performance of partner HEI responding to limiting factors in their role as development actors and providing global support	Strengthening of research, local capacities and resources	Strengthening of educational/ research capacities and of the partner HEI's role as development actor, targeting an issue of the local society	Strengthening of research capacities and/or the spread of knowledge in a partner HEI, answering to a developmental issue	Strengthening of educational capacities by supporting or creating training in a partner HEI, answering to an educational need

Source: ARES and VLIR-UOS database adopted by Syspons 2017

Overall – for both ARES and VLIR-UOS – 178 interventions in the selected countries of the Terms of Reference have been implemented. This also includes three IUC of VLIR-UOS, which started their first phase before 2000.<sup>15</sup> In this period VLIR-UOS' member universities implemented or are still implementing 129 interventions, while ARES' member universities have implemented 49 interventions (see figure 5).

<sup>14</sup> Up to 2009, the maximum duration was four years (see ARES Orientations stratégiques 2010, p. 10)

<sup>15</sup> This concerns one IUC with Kenya that started its first phase in 1997 and two IUC with Vietnam that started in 1997 and 1998. This can also be seen in the tables. These IUC were included in this evaluation as otherwise the number of possible IUC of VLIR-UOS to choose would have been diminished by one third.

**Figure 5: Interventions subject to evaluation, by start year, VLIR-UOS and ARES, from 2000 to 2014 in selected countries**

Intake year  (countries subject to evaluation)	VLIR-UOS					ARES					Total
	IUC 10 years + 2-year phase-out	NSS 1 - 2 years during IUC	TEAM max. 5 years	SI 1 - 2 years	Total	CUI 10 years + 1-year finalisation	PIP max. 3 years	PIC 3 - 5 years	PRD 3 - 5 years	PFS 3 - 5 years	
1997	2				2						0
1998	1				1						0
1999					0						0
2000			5		5		2				2
2001			4		4		2				2
2002			3		3		1				1
2003	2		1	2	5	5	1				6
2004			3	2	5			4			4
2005		1	1	2	4			4			4
2006		1	2	4	7			3			3
2007	2	1	2	1	6			6			6
2008			5		5			2			2
2009		4	4	1	9			2			2
2010			3		3			4			4
2011		5	5	4	14			1			1
2012				10	10			5			5
2013	2		4	10	16				3	1	4
2014		9		21	30				1	2	3
Total number of interventions for all countries	9	21	42	57	129	5	6	31	4	3	49

Source: ARES and VLIR-UOS database adopted by Syspons 2017

These interventions are divided for VLIR-UOS and ARES among the selected countries as follows. In Cuba and Ethiopia, VLIR-UOS’ member universities implemented 35 and 38 interventions respectively. Moreover, 15 interventions have been implemented in Kenya. In Vietnam, VLIR-UOS’ member universities have concluded 41 interventions, while ARES’ member universities have implemented 19. In addition ARES’ member universities also implemented 21 and nine interventions in the DR Congo and Benin (see figure 6).

**Figure 6: Interventions subject to evaluation, by country, VLIR-UOS and ARES, from 2000 to 2014**

	VLIR-UOS					ARES					Total
	IUC 10 years + 2-year phase-out	NSS 1 - 2 years during IUC	TEAM max. 5 years	SI 1 - 2 years	Total	CUI 10 years + 1-year finalisation	PIP max. 3 years	PIC 3 - 5 years	PRD 3 - 5 years	PFS 3 - 5 years	
Benin						1	1	4	2	1	9
Cuba	2	2	15	16	35						
DRC						2	1	16	1	1	21
Ethiopia	2	13	12	11	38						
Kenya	2	2	6	5	15						
Vietnam	3	4	9	25	41	2	4	11	1	1	19
Total number of interventions for relevant countries	9	21	42	57	129	5	6	31	4	3	49

Source: ARES and VLIR-UOS database adopted by Syspons 2017

## 2.2.2 Scholarships of ARES and VLIR-UOS

One of the main instruments of VLIR-UOS and ARES is the award of individual scholarships granted for nationals from the south coming to Belgium for a Masters or a training programme. VLIR-UOS and ARES also grant other types of individual scholarships, which however will not be taken into account in this evaluation because they either would not contribute to the learning potential of the evaluation for future programming or are very closely linked to the financed projects.<sup>16</sup> Next to the individual scholarships, both umbrella organisations also grant scholarships within projects or within institutional cooperations. However, these scholarships are closely linked to the respective interventions' objectives and thus are evaluated within the selected sampled interventions (see chapter 4).

With regard to the individual scholarships, this evaluation takes into account scholarships granted from January 2008 up to December 2016. Initially, the Terms of Reference specified that scholarships granted from 2010 to 2014 should be subject to this evaluation. Based on preferences formulated during the inception phase by the stakeholders, it was however decided to expand the period covered by the evaluation to be able to collect more relevant data related to the impacts of these scholarships. Since the 2008 intake is the first year for which both umbrella organisations have contact data for all scholarship recipients on file, the evaluation will consider all scholarships from that year onwards.

Regarding **VLIR-UOS**, the following individual scholarship programmes will be analysed in this evaluation:

- The **International Courses Programme (ICP)** offers scholarships for Master students. Each year, VLIR-UOS grants scholarships for 150 to 250 nationals from the south, who have a choice between 15 different Master programmes.<sup>17</sup> The scholarships for the Master programmes are granted for one and two year Masters. The contents of the Master programmes cover a variety of issues, ranging from scientific issues like biostatistics, environmental sanitation and physical land resources to studies concerning development and its relation to governance and globalisation. The selection for the Master programmes is based upon selection criteria that take into account the applicant's nationality – which must be part of the country list for scholarships of VLIR-UOS<sup>18</sup> –, the age of applicants<sup>19</sup>, their professional background, whether they possess a graduate degree, as well as their compatibility with other VLIR-UOS funding. Furthermore, VLIR-UOS gives priority to candidates who are employed in organisations at the time of their application. The universities the Master students apply to establish a ranking of applicants on the basis of academic merit, the above mentioned criteria and their own criteria. This ranking is submitted to VLIR-UOS, which awards the scholarship.
- The **International Training Programme (ITP)** offers scholarships for short-term professional training for students from southern countries. Within the evaluation period, VLIR-UOS funded 70 ITP scholarships per year, which were distributed among four to seven different training programmes each year. The duration of the scholarships thereby varied between one to six months depending on the training. The topics of these trainings within the evaluation period covered

---

<sup>16</sup> For VLIR-UOS, this concerns the scholarships within the International Courses Programme for PhD students (ICP PhD), for ARES it concerns the Élan" Post-Doc programme (Bourses postdoctorales Élan) and the "SOFT" support to thesis finalisation programme (Soutien à la finalisation de thèse – SOFT).

<sup>17</sup> The number of scholarships for ICP is calculated taking into account the number of available Masters programmes (15) and the number of scholarships per Masters (10 to 16).

<sup>18</sup> Up to 2017, VLIR-UOS country list comprised 54 countries in Africa, Asia and Latin America. Now, the list comprises 31 countries and can be seen at <http://www.vliruos.be/en/scholarships/scholarships-to-study-in-flanders,-belgium/requisites-and-criteria-to-get-a-scholarship/>.

<sup>19</sup> For initial Masters, the maximum age of an applicant is 35, while for advanced Masters, the maximum age is 40.

a variety of subjects ranging from “Audio Visual Learning Materials” over “Beekeeping for Poverty Alleviation” to “Technology for Integrated Water Management”. With regard to the selection process the same criteria apply as in the case of ICP. The only difference is that the maximum age for applicants is 45 years and that they should have a professional background in the relevant field of the training.

- The **Short Training Initiatives (STI)** scholarships are scholarships for short-term trainings for lecturers and researchers<sup>20</sup>. Within the evaluation period VLIR-UOS has funded at least 48 scholarships each year. These are distributed among four different STI. VLIR-UOS grants the scholarships for the duration of the training, which usually lasts between seven and 14 days. The trainings address topics which are relevant for the development of one of VLIR-UOS’ partner countries; e.g., training on mycotoxin analysis, knowledge transfer in cocoa and chocolate processing or road safety in Asian and Latin American countries. Unlike ICP and ITP, the recipients of STI scholarships are selected solely by the organisation implementing the STI.

With regard to **ARES** the following individual scholarship programmes will be analysed in this evaluation:

- **International Masters (CI)** scholarships are provided for studies at francophone Belgian universities. Each year, ARES provides 150 scholarships which are distributed among 12 different Master programmes. The scholarships are awarded for one year Master programmes. The focus of this scholarship programme is on the specific development challenges in the partner countries and covers subjects ranging from public health over micro-finance to transport management. With regard to the selection criteria and process, applicants must be nationals of specific countries in Africa, Asia, and Latin America.<sup>21</sup> Furthermore, they must be less than 40 years old, have a graduate degree, have professional experience of at least two years and provide a document that states their employer’s intention to employ them again upon completion of their Masters.
- **International trainings (SI)** are practical short-term trainings also conducted by the francophone Belgian universities. Each year, ARES finances 70 scholarships that are divided among five trainings in total. Scholars are usually funded for the length of the trainings, which can last between two to four months. Like CI, the SI also focus on development challenges in the partner countries and cover a similar range of topics. The selection criteria are also similar to the selection criteria of CI. The only difference is that the applicants must be less than 45 years old in order to apply.

In the period of the evaluation 3111 persons in total received a scholarship from VLIR-UOS while 1885 were granted a scholarship by ARES (see figure 7).<sup>22</sup> In the same period, 1846 female applicants received a scholarship vis-à-vis 3140 men.<sup>23</sup>

---

<sup>20</sup> From 2017, VLIR-UOS subsumed STI and ITP under ITP, which now lasts from 14 days to three months.

<sup>21</sup> For the complete list see ARES’ website: <https://www.ares-ac.be/fr/cooperation-au-developpement/bourses/masters-et-stages-en-belgique#02-critères-de-recevabilité-rules-of-selection>.

<sup>22</sup> The numbers presented here vary slightly from those presented in the inception report as the intakes 2015 and 2016 were not included. Moreover, in the course of preparing the lists for the online-survey, duplicates and the one who refused to take the scholarship were filtered out.

<sup>23</sup> For ten recipients, gender was not specified in the A-list.

**Figure 7: Individual scholarships subject to evaluation from all countries, by intake year, VLIR-UOS and ARES, from 2008 to 2016**

Intake year	VLIR-UOS scholarships				ARES scholarships		
	International Courses Programme (ICP)	International Training Programme (ITP)	Short Training Initiatives (KOI/STI)	Total	Courses Internationaux (CI)	Stages Internationaux (SI)	Total
2008	170	64	100	334	143	70	213
2009	202	78	139	419	148	68	216
2010	168	80	78	326	135	68	203
2011	179	61	44	284	139	68	207
2012	179	72	80	331	137	64	201
2013	42	57	72	171	139	59	198
2014	195	89	73	357	146	65	211
2015	183	106	146	435	155	67	222
2016	178	113	163	454	151	63	214
Total number of scholarships	1496	720	895	3111	1293	592	1885

Source: ARES and VLIR-UOS database adopted by Syspons 2018

## 2.3 Target groups of ARES and VLIR-UOS

The interventions of ARES and VLIR-UOS are implemented by different stakeholders that assume distinct roles and responsibilities within the implementation process. The stakeholders are consequently distinguishable by their functions and are defined as follows for the purpose of this evaluation:

- The **responsible organisations** bear the institutional responsibility for the implementation of the respective intervention.
- **Intermediaries** are stakeholders or organisations that are not the target of an intervention but serve an important role to achieve the overall objectives and impacts of the intervention on the level of the beneficiaries.
- **Indirect beneficiaries** are persons within the responsible organisations that benefit from the respective intervention's activities, but serve as mediators to achieve the overall objectives and impacts of the intervention; e.g., they receive scholarships or trainings to improve capacities of direct beneficiaries or to achieve the intended impact on the level of the final beneficiaries.
- **Direct beneficiaries** are organisations or in the case of individual scholarships persons who should primarily benefit from the respective intervention.
- **Final beneficiaries** are persons outside the responsible organisations who should benefit from the respective intervention.

By using these definitions, the following responsible organisations, intermediaries and beneficiaries can be distinguished in the analysed interventions within this evaluation:

- The Belgian and partner universities are **responsible organisations** that implement the respective intervention together. They both share responsibility for the implementation of the intervention and are accountable vis-à-vis ARES or VLIR-UOS.
- **Intermediary** organisations or stakeholders can be for example hospitals or farmers organisations that provide a setting to reach the intended objectives and impacts of the respective intervention.
- The **indirect beneficiaries** are the employees of the partner universities who receive scholarships and trainings under the interventions in order to improve the capacities of their universities or to achieve impacts on the level of the final beneficiaries.

The umbrella organisations at a glance

- The **direct beneficiaries** are the partner universities, as their capacities should be increased through the intervention.
- The **final beneficiaries** are groups or persons outside the partner universities whose living conditions should be improved (e.g., in terms of income) by the intervention. In addition, the graduates of the partner universities can also be final beneficiaries, as they should benefit from the increased capacities of the respective partner university.



### 3. Evaluability of the Belgian university cooperation

In comparison with other channels of Belgian development cooperation, less useful evidence is available to demonstrate the effectiveness and impact of Belgian university cooperation in a rigorous and credible manner (SEO, 2016, p. 20). In the past most evaluations were restricted to qualitative approaches, which were seldom supplemented with quantitative or rigorous qualitative methods. One reason for this is that university cooperation often aims for changes at the organisational level through capacity development measures (Mawer, 2014). In addition, often different definitions of impact are used within university development cooperation (Hearn & Buffardi, 2016).

As a consequence, one of the main objectives of this evaluation was to assess the evaluability of the Belgian university cooperation to address these shortcomings in terms of both the methodological approach and the working definition of impact. In this regard the evaluation's task was to come up with relevant and feasible methodological approaches to evaluate the functioning of the underlying Theories of Change within Belgian university cooperation and the results that stem from them.

For this purpose an analysis of relevant documents and data, a literature review, an intervention mapping of all selected types of implemented interventions from 2000 to 2014 as well as an academic seminar on the evaluability of Belgian university cooperation with 28 participants from academia and practice were conducted. This was supplemented with a Delphi Survey among 16 experts and an online-survey on the definition of impact.

On the basis of these collected data and information valid conclusions regarding the evaluability of Belgian university cooperation in development cooperation can be drawn.

#### 3.1 Evaluation design and methodology

The evaluability assessment of the Belgian university cooperation was embedded in the four following phases of the evaluation:<sup>24</sup>



Source: Syspons and Nuffic 2018

<sup>24</sup> A detailed description of the evaluation design and methodology can be found in the inception report in annex B.

The starting point of the evaluability assessment of the Belgian development cooperation within the **inception phase** was a **desk research**, which included an analysis of documents regulating Belgian development cooperation and institutional actors, previous evaluations of Belgian development cooperation, strategy documents of the two umbrella organisations VLIR and ARES, as well as documentation on their interventions. This desk research gave the evaluation team an overall understanding of the functioning of VLIR-UOS and ARES and how it fits into the broader context of Belgian development cooperation. It was complemented by an **intervention mapping** that provided an overview of the projects and long-term partnerships subject to evaluation. In this intervention mapping all 121 of the selected interventions that were implemented in the period 2000 to 2014 were analysed.

Furthermore, we conducted a **literature review** on capacity development and impact evaluation of university development cooperation to take into account the specificities of these forms of cooperation in the evaluability assessment.

In parallel to the desk research, the evaluation team conducted **exploratory interviews** with the SEO, DGD, as well as with VLIR-UOS and ARES staff and representatives from Belgian universities with experience in implementing interventions with partners in the south. The exploratory interviews contributed to a better understanding of stakeholders' expectations towards the evaluation and highlighted aspects the evaluation and the evaluability assessment should pay specific attention to. In addition, they strengthened the evaluation team's understanding of what type of impacts the umbrella organisations and their members intend to achieve in the field of development cooperation. Finally, these interviews shed light on what role the different instruments (scholarships and interventions) play in achieving intended impacts.

On the basis of the desk research and the explorative interviews, the evaluation team elaborated **Theories of Change** for VLIR-UOS and ARES on an organisational level. A **workshop** was held with each organisation to present, discuss and finalise the respective Theory of Change. The final versions of the Theory of Change are explained in chapter 2.1.

Based upon the previous steps, Syspons and Nuffic developed and conducted a **survey on the definition of impact** among VLIR-UOS' and ARES' staff and member universities to structure the debate with key stakeholders on how impact is formally defined within the context of Belgian development cooperation in the field of university cooperation. In this survey 692 persons were contacted, of which 253 participated. This translates into a response rate of 38%. Due to the very different subgroup sizes<sup>25</sup>, all results were analysed by umbrella organisation and respondents' function.

Moreover, the evaluation process engaged the academic community and evaluation experts from Belgium and abroad in exploring the feasibility and adequacy of different evaluation designs and methodological approaches. The evaluability of both scholarships and institutional higher education cooperation was discussed in a **Delphi survey** among 16 experts in three rounds. Topics addressed included among others the feasibility of rigorous approaches, the development of institutional capacity in the context of higher education as well as considerations to take into account for the reconstruction of a baseline regarding the situation of universities in developing countries.

The reflection with the academic community and evaluation experts was taken further during an **academic seminar** on the evaluability of higher education cooperation with 28 participants held in Brussels on April 19th, 2017. This seminar included presentations by evaluation experts, discussions in working groups on the evaluability of scholarships,

---

<sup>25</sup> Groups invited to the survey included: ARES/VLIR-UOS staff members, members of the Groupe Technique/ ICOS, commission members, and associated university staff. In the case of VLIR-UOS, also members of BUOS and vice-rectors were included. In terms of absolute numbers, the pool of potential respondents as well as the group of actual respondents from associated university staff was much larger than all other groups combined (Potential respondents ARES: 348 vs. 31, VLIR-UOS: 259 vs. 53; actual respondents ARES: 116 vs. 18, VLIR-UOS: 91 vs. 37).

projects and long-term partnerships on the basis of cases, as well as plenary discussions.

The findings of the previous steps formed the basis for the development of the **theoretical and practical evaluability assessment**. The developed assessment framework for the theoretical evaluability assessment was based on a scoring system for each of the 121 interventions subject to evaluation, building on an earlier study commissioned by SEO (2016). The aggregation of the assessments of the individual interventions made it possible to analyse the theoretical evaluability at different levels.

Furthermore, based upon the results of the theoretical evaluability assessment the evaluation team developed the evaluation design and methodological approach for this evaluation and documented it in the **inception report** (see annex B).

Based upon the results of the theoretical evaluability assessment, 14 interventions were selected by the reference group to undergo a practical evaluability assessment in the **documentary study phase**. These interventions were then assessed in terms of their practical evaluability in the fact-finding missions. The results of the practical evaluability assessment were then used to select the final interventions for the **field mission phase**.<sup>26</sup>

In a next step the evaluation team developed **specific methodological designs for each selected intervention** for the field missions (see chapter 4.1.1 and annex C) and thus tested the feasibility of these designs in the field missions. The results of these feasibility tests were systematised and assessed in an **internal workshop** in which all experts from the evaluation team participated. Furthermore, the results were documented in the final report.

## 3.2 Results of the evaluability assessment

In the following, the evaluation results regarding the evaluability of ARES and VLIR-UOS' interventions are presented. First, an analysis of the used definitions of the concept of impact for the Belgian university cooperation in development cooperation is portrayed. Afterwards the results of the conducted theoretical and practical evaluability assessment are described, which was based on an intervention mapping encompassing all 121 selected interventions of ARES and VLIR-UOS in the timeframe from 2000 to 2014.

### 3.2.1 Definition of impact

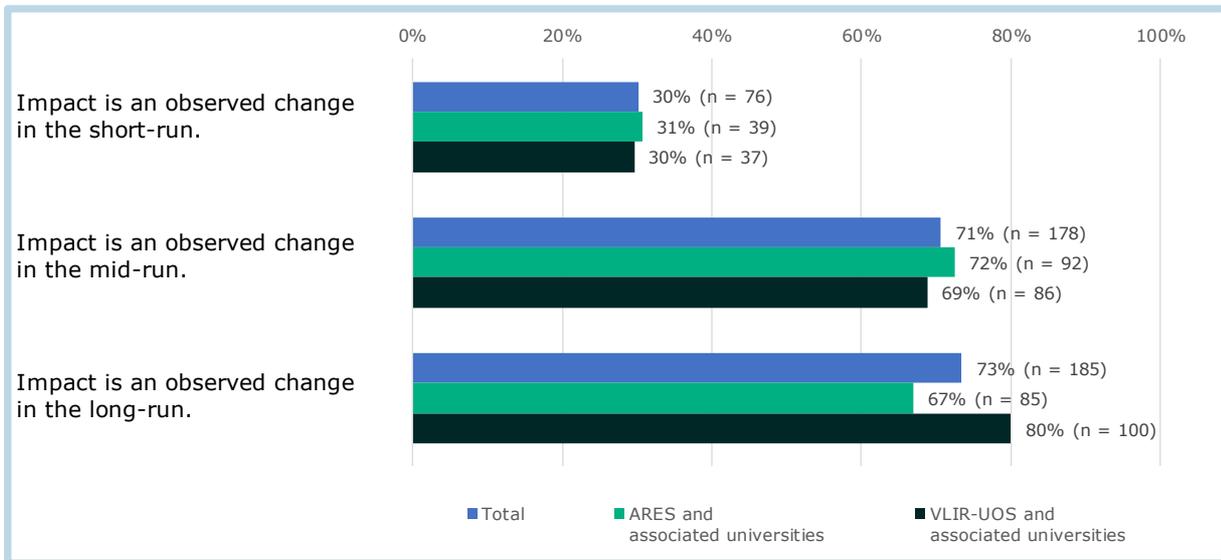
According to the Terms of Reference there has not been a structured debate about the concept of impact in the case of the Belgian university cooperation in development cooperation before this evaluation was conducted (SEO, 2016, p. 21). Furthermore, there appears to be a lack of consensus if impact e.g., should be defined in terms of research and/ or educational capacity or for example at the individual or institutional level (Ibid, p. 21).

Against this background Syspons and Nuffic implemented an impact survey among ARES, VLIR-UOS and their associated universities to find out what kind of impact definitions are currently used by practitioners in this sector. When looking at the results of this impact survey, it becomes obvious that impact in temporal terms in this sector is defined as an observed change occurring in the mid- or long-run. While 71% of the respondents view it as an observed change in the mid-run, 73% also see it as a change in the long-run (see figure 8).

---

<sup>26</sup> A detailed methodological approach for the evaluability assessment can be found in the study report.

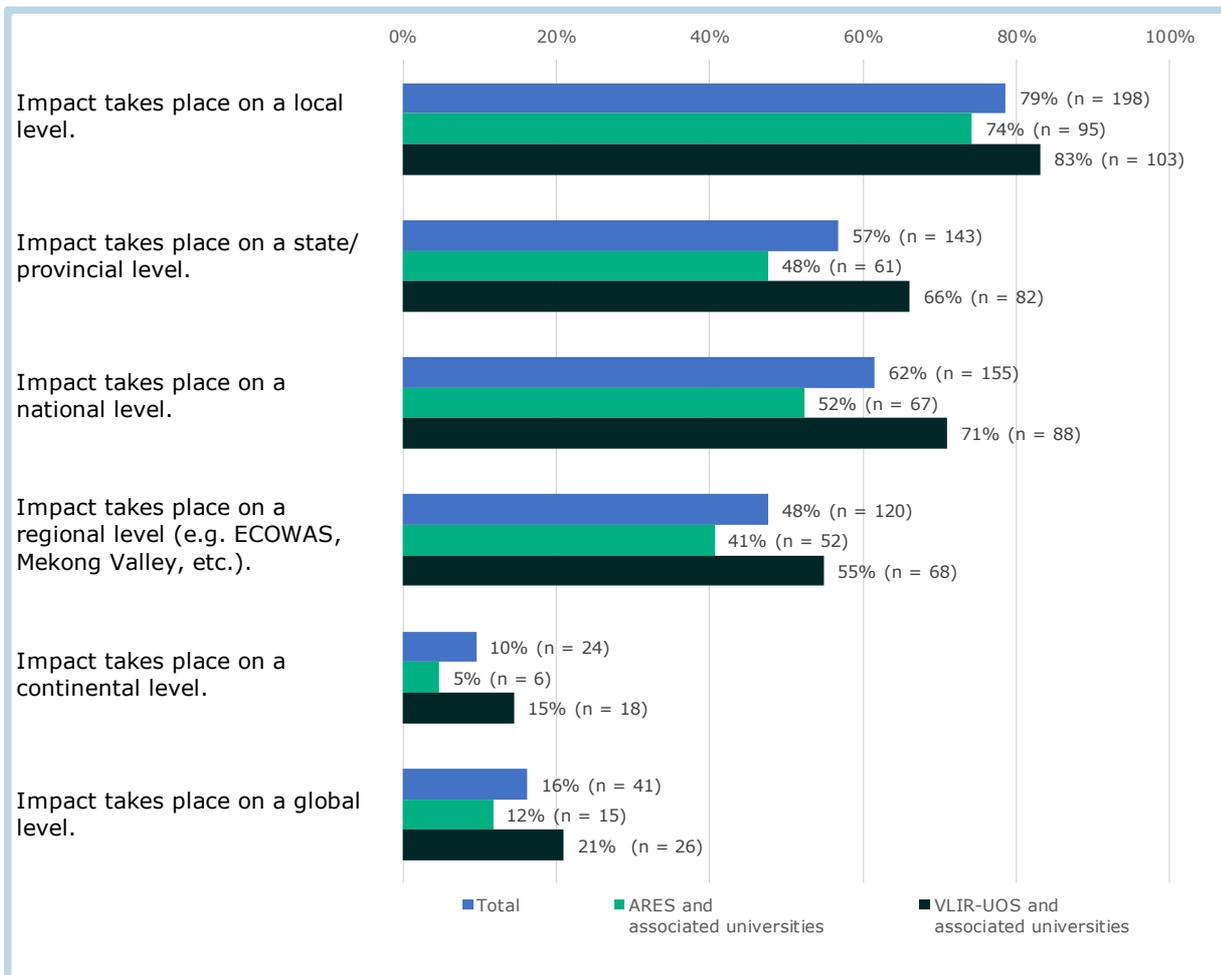
**Figure 8: Temporal definition of impact**



Source: Syspons and Nuffic 2017 (multiple answers were possible)

At the same time, impact is seen foremost as a local change, as stated by 79% of the respondents in the impact survey. However, a majority still sees impact also as a change on the state/provincial level as well as on the national or regional level (see figure 9).

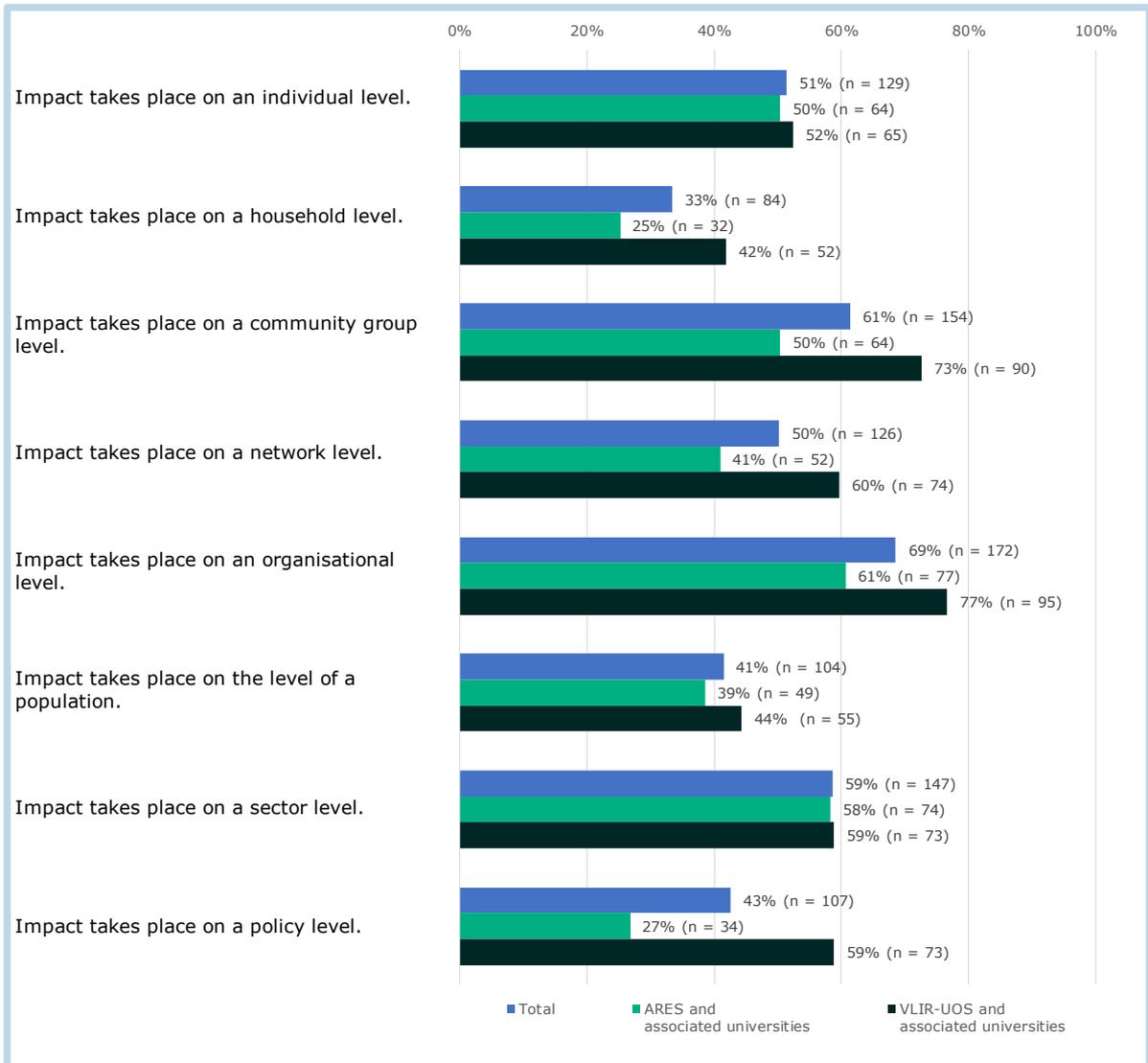
**Figure 9: Spatial definition of impact**



Source: Syspons and Nuffic 2017 (multiple answers were possible)

In contrast to the temporal and spatial definition of impact, the respondents do not show a clear tendency in their responses regarding the definition of impact on subject level (see figure 10). Here impact can occur on any level and is – according to the conducted in-depth interviews – highly dependent on the intervention implemented by ARES or VLIR-UOS.

**Figure 10: Impact definition on subject level**



Source: Syspons and Nuffic 2017 (multiple answers were possible)

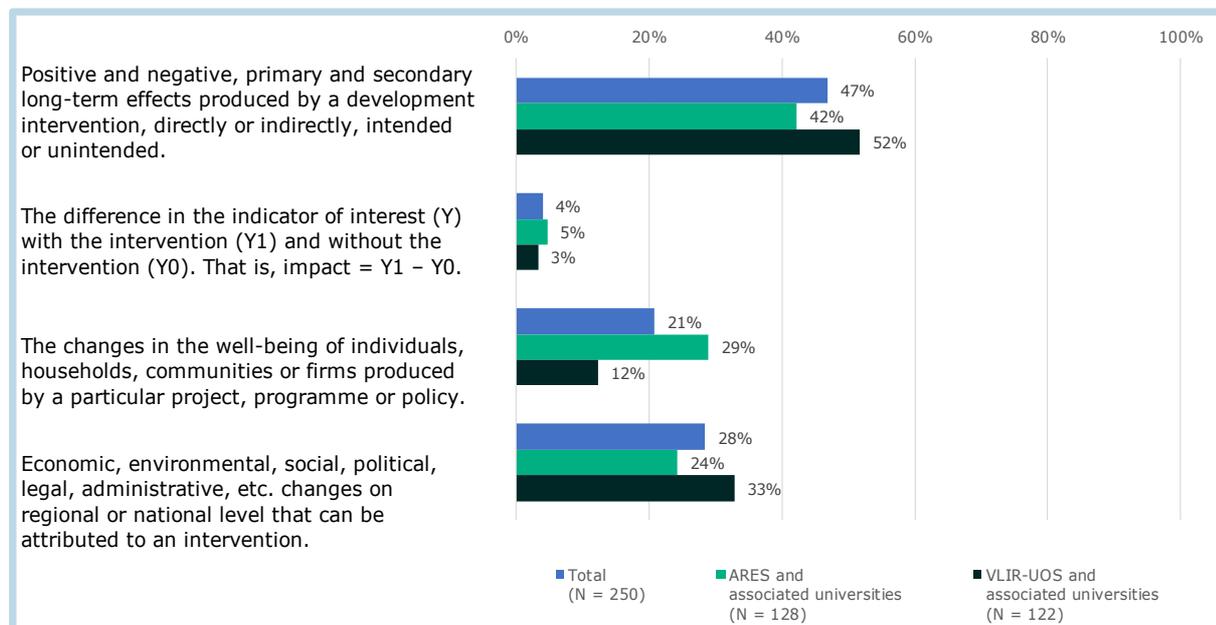
Nevertheless, differences can be highlighted in the understanding of impact on the subject level between ARES and VLIR-UOS. While the respondents of both organisations equally agree that impact takes place on the individual and sector level, they differ in all other aspects. In the latter, more of the respondents of VLIR-UOS see impact also on the other subject levels than the respondents of ARES (see figure 10).

These diverse views<sup>27</sup> are also reflected in the approval of commonly used definitions of impact in development cooperation. Although most respondents agree with the OECD-DAC definition of impact, other impact definitions emphasising spatial dimensions of impact or the beneficiary as the “receiver” of impact are also approved by 28% and 21% of the respondents. Only the World Bank definition as cited by White 2009, which entails

<sup>27</sup> An undertaken cluster analysis of the answers regarding the different impact dimensions did not produce conclusive results. As a consequence no significant correlations between the different dimensions could be identified.

a methodological definition of impact, does not receive much approval by the respondents (see figure 11).

**Figure 11: General definition of impact**



Source: Syspons and Nuffic 2017

Moreover, the Theories of Change described in chapter 2.1 also demonstrate that impact neither can be restricted to one level, such as the individual or the institutional level, nor to a certain area of capacity, such as research or education. Impact here always has to be viewed in light of the interventions and its specific objectives. In addition, in the field of Belgian university cooperation in development cooperation impact has to be seen as a multi-faceted concept, which encompasses different dimensions that occur at different levels.

### 3.2.1.1 Defining impact for this evaluation

Based on the results of the impact survey, the literature review and the discussions with the reference group, it can be concluded that there has so far been no structured debate regarding the concept of impact among the relevant stakeholders of Belgian university development cooperation prior to this evaluation, and that there was no official consensus on how to define impact; although organisations had individual definitions of impact in place. As a consequence the evaluation team adopted the following impact definition for this evaluation, which combined the predominately mid- and long-term view of impact with a broad view on the subject and spatial level. Furthermore, we based our definition of impact on the definition by the OECD-DAC, which was the most commonly accepted among the stakeholders in the sector.

Hence, in the framework of this evaluation impact measurement refers either to the measurement of effects

- on outcome level, defined as the short-term and medium-term effect of an intervention by ARES or VLIR-UOS on the level of the indirect or direct beneficiary through the intervention objectives (see also chapter 2.1);
- on impact level, defined as the positive and negative, primary and secondary long-term effects produced by an intervention by ARES or VLIR-UOS, directly or indirectly, intended or unintended on the level of the final beneficiary (see also chapter 2.1).

When using these impact definitions, however, it is essential that they are interpreted in the context of the analysed interventions and their specific objectives. This also entails that impact can neither be restricted to the individual or institutional level nor a certain form of capacity, such as education or research.

### 3.2.2 Theoretical and practical evaluability of impact

To gain a better understanding of the evaluability of the impacts of the Belgian university development cooperation, an evaluability assessment was carried out. This evaluability assessment consisted of two parts: a theoretical and a practical evaluability assessment. In the theoretical evaluability assessment, all interventions subject to evaluation were analysed on the basis of a desk review. This analysis informed the choice of interventions that were examined in the fact-finding missions in the countries selected for the summative part of the evaluation. The practical evaluability assessment conducted during the fact-finding missions examined the interventions in Vietnam, Benin and Ethiopia that scored high in the theoretical evaluability assessment.<sup>28</sup>

Both the theoretical and the practical evaluability assessment systematically analysed interventions along a given set of criteria. The methodological framework used builds on the framework of an earlier study commissioned by SEO:

Special Evaluation Office of the Belgian Development Cooperation/ SEO (2016), *To evaluate in a credible and meaningful way: between dream and reality, a study of the evaluability of (co)-financed interventions of the Belgian Cooperation*, FPS Foreign Affairs, Foreign Trade and Development Cooperation, Brussels.

This earlier study developed a list of criteria for the assessment of the practical and theoretical evaluability of interventions in terms of relevance, effectiveness, efficiency, impact and sustainability (OECD-DAC evaluation criteria). The starting point for the elaboration of the framework was the definition of evaluability of the OECD-DAC: “the extent to which an activity or programme can be evaluated in a reliable and credible fashion (OECD-DAC, 2010, p. 12)”. The evaluability assessments carried out in this evaluation follow this definition. They also draw upon the assessment criteria formulated in the earlier study. However, these criteria were adapted and restructured to take into account this evaluation’s focus on impact as well as the specificities of ARES and VLIR-UOS interventions. In addition, for this evaluation, the theoretical and the practical evaluability assessment were two separate exercises with different samples.

The assessment frameworks used for both the theoretical and the practical evaluability assessment were based on a scoring system for each of the interventions subject to evaluation. The aggregation of the assessments of the individual interventions makes it possible to analyse the evaluability at different levels. The assessment framework consists of three different levels.

- The first level is made up of **analytical dimensions**. For the theoretical evaluability assessment, these were: the underlying analysis of an intervention, its theory of change, the proposed M&E system, as well as data availability and quality. For the practical evaluability assessment, these were: data availability and quality in the field of organisational capacity, educational capacity and research capacity (where applicable – only the fields relevant for a given intervention were assessed), the M&E system in practice, and the evaluation context.
- Each analytical dimension is broken down into several **assessment criteria**.
- Each assessment criterion is subdivided into several **indicators**.

---

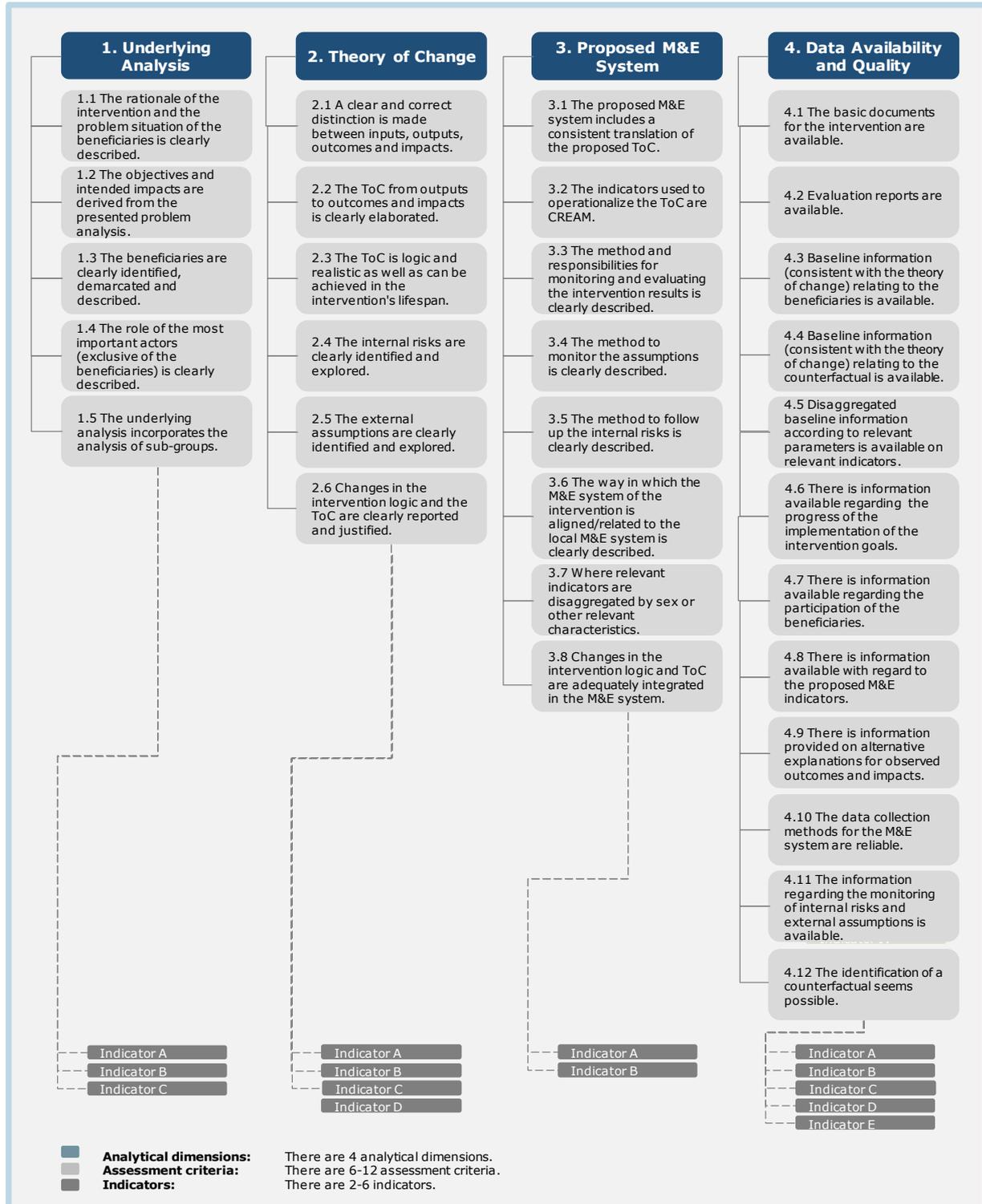
<sup>28</sup> In Vietnam, the evaluability assessments for VLIR-UOS and ARES included both IUCs and projects. On the basis of the results of the practical evaluability assessments in Vietnam, it was decided that the evaluation in Vietnam would examine IUCs. As a consequence, it was decided that the evaluations in Benin and Ethiopia would focus on projects. Therefore, the practical evaluability assessments in Benin and Ethiopia – which were carried out after those in Vietnam – included only projects.

In the following, we first present contents and findings of the theoretical assessment, followed by the content and findings of the practical assessment.

### 3.2.2.1 Unit of analysis for the theoretical evaluability assessment

Figure 12 visualises the structure and contents of the theoretical evaluability assessment along the aforementioned levels.

**Figure 12: Structure and contents of the evaluability assessment**



Source: Syspons and Nuffic 2017

The appraisal of each intervention was done at indicator level. For the theoretical evaluability assessment, the evaluators studied the documentation of an intervention, including the proposal, reports and, if available, further project planning and M&E documents. On the basis of the intervention’s documentation, a given indicator could either be assessed as fulfilled (score 1) or not fulfilled (score 0).<sup>29</sup> The assessment at the level of an assessment criterion corresponds to the average score of the indicators allocated to that criterion.<sup>30</sup> The assessment at the level of the analytical dimensions corresponds to the average score of the assessment criteria allocated to that analytical dimension.

Before presenting the results of the theoretical evaluability assessment, it is important to highlight that findings only provide insights on the basis of documentation available at the headquarters of the two umbrella organisations. For example, the score for the M&E system only refers to the quality of the documentation that was made available to the evaluators, which is not necessarily the whole M&E system developed for and used by an intervention. In addition, an assessment of the evaluability of an intervention is by no means an assessment of the development value of that intervention. As pointed out in the study cited previously, “it is perfectly possible that highly valuable interventions are hard to evaluate” (SEO 2016, p.5).

It should further be noted that the assessment framework measures the interventions against a set of standards that correspond to an ideal in terms of theoretical evaluability. These exigent standards were chosen in order to be able to provide a precise analysis of how evaluability can be optimised. A full score (score of 1) at the level of an analytical dimension and assessment criteria should therefore not be realistically expected. Finally, it should be taken into account that the evaluability assessment applied the same standards for very different types of interventions.

To account for the different types of interventions that were included in the theoretical evaluability assessment, results are presented by intervention type. In the presentation by intervention type, we distinguish between IUCs, projects and other intervention types. The category “projects” encompasses OI/Team (VLIR-UOS), as well as PIP, PIC, PFS and PFD interventions (ARES). The category “other” encompasses only the Cross-cutting / NSS projects from VLIR-UOS. When interpreting the results by intervention type, it should be noted that the number of interventions (n) analysed for each intervention type varies, and is quite small for IUC, especially for ARES. The smaller the number of analysed interventions per intervention type, the more strongly an outlier – a particularly high or low-score for one intervention – can affect the overall picture of an intervention type. The following table presents the number of interventions factored in the evaluability assessment for each type of intervention and each umbrella organisation. It shows that the sample size for IUCs (5 for ARES, 9 for VLIR-UOS) is smaller than the sample size for projects (44 for ARES, 42 for VLIR-UOS), and differs between the umbrella organisations. The sample represents the total number of IUCs and projects implemented by each umbrella organisation in the period and countries subject to evaluation (see figure 13).

**Figure 13: Assessed interventions by type and umbrella organisation**

Total	IUC		Total	Projects					Total	Other
	ARES	VLIR		ARES PIP	ARES PIC	ARES PFS	ARES PRD	VLIR OI/TEAM		VLIR NSS
14	5	9	86	6	31	3	4	42	21	

Source: Syspons and Nuffic 2017

<sup>29</sup> The option “not applicable” was also possible for some indicators. If an indicator was not applicable for a given intervention, it did not factor into the assessment.

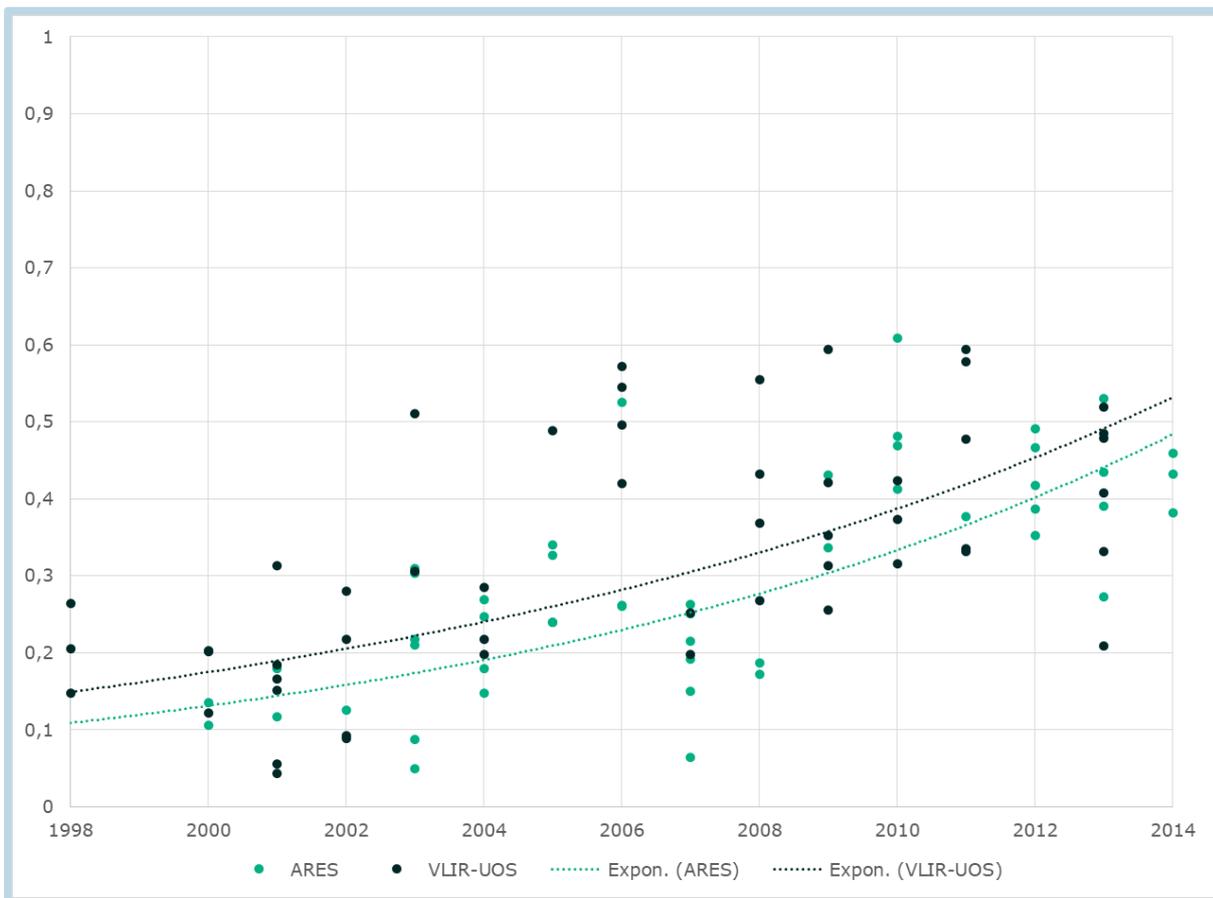
<sup>30</sup> Not all assessment criteria have the same number of indicators allocated to them. The score at assessment criteria level is calculated on the basis of the arithmetic average of the indicator score to account for this fact. The same principle is applied at the level of the analytical dimensions.

### 3.2.2.2 Overview of results of the theoretical evaluability assessment

The overall average score for all interventions analysed in the evaluability assessment, encompassing all analytical dimensions, is a score of 0.29 (on a scale where 1 is the maximum and 0 is the minimum). The overall average score for all ARES interventions analysed (IUCs and projects) is 0.30, the overall average score for all VLIR-UOS interventions analysed (IUC, projects and NSS) is 0.28. The overall average score of VLIR-UOS interventions without NSS (only IUC and projects) is 0.33.

Figure 14 depicts the development of evaluability of IUCs and projects over time. It shows that for both VLIR-UOS and ARES, evaluability has continuously and considerably improved over time, starting with overall average values in the ranges of 0.1 and 0.2 in 1998, and ending with overall average values in the 0.4 and 0.5 range in 2014.

**Figure 14: Development of evaluability of IUC and projects over time, 1998 - 2014**



Source: Syspons and Nuffic 2017

The results by intervention type, shown in figure 15, reveal that the intervention type that scores highest on evaluability are the projects (overall average score of 0.32), followed by IUC (overall average score of 0.27). The intervention type that scores lowest on evaluability are the NSS-crosscutting interventions (overall average score of 0.18). While VLIR-UOS and ARES projects have quite comparable average overall scores (0.31 for ARES and 0.33 for VLIR-UOS), a difference can be seen between the overall average scores for the IUC of the two umbrellas (0.19 for ARES and 0.31 for VLIR-UOS). In this regard, it should be remembered that the sample for projects was higher than the sample for IUCs.

**Figure 15: Average score overall and for analytical dimensions in the theoretical assessment**

		Average Score of						
		IUC			Projects			Other
		All	ARES	VLIR	All	ARES	VLIR	VLIR (NSS)
Analytical Dimensions	<b>Overall Score</b>	<b>0.27</b>	<b>0.19</b>	<b>0.31</b>	<b>0.32</b>	<b>0.31</b>	<b>0.33</b>	<b>0.18</b>
	1 Underlying Analysis	<b>0.37</b>	0.25	0.44	<b>0.46</b>	0.47	0.46	0.24
	2 Theory of Change	<b>0.28</b>	0.23	0.31	<b>0.36</b>	0.34	0.38	0.17
	3 Proposed M&E System	<b>0.20</b>	0.12	0.25	<b>0.21</b>	0.20	0.23	0.19
	4 Data Availability and Quality	<b>0.22</b>	0.17	0.25	<b>0.23</b>	0.22	0.25	0.13

Source: Syspons and Nuffic 2017

Looking at the average score for each analytical dimension, the relative order of which dimensions scores highest, second highest, third and fourth highest is the same for IUC and projects. The dimension with the highest average score is the underlying analysis (0.37 for IUC, 0.47 for projects), followed by the analytical dimension theory of change (0.28 for IUC, 0.36 for projects). The dimension with the third highest score is data availability and quality (0.22 for IUC and 0.23 for projects). The proposed M&E system is the dimension with the lowest average score (0.20 for IUC and 0.21 for projects).

In the following, select findings of particular relevance for evaluability are highlighted. A more detailed presentation of findings of the theoretical evaluability assessment can be found in the inception report and its annexes.

With regard to the analytical dimension “Theory of Change”, the assessment showed that the majority of interventions did not have an explicit Theory of Change (graphic representation or description of underlying hypothesis in text form), although some followed a project cycle management approach. In addition, weaknesses were identified with regard to a clear distinction between inputs, outputs, outcomes and impacts. In this regard, inputs, activities and outputs were mostly adequately identified in the proposals. However, intended outcomes and impacts were not always adequately described. It was not uncommon that what was described as the objective of an intervention in fact constituted an output. Moreover, in contrast hereto outcomes were also often overambitious for the scope of the foreseen interventions (e.g. “improve the health of the population of Ho Chi Minh City”).

Partly as a consequence of weaknesses with regard to the Theory of Change, the assessment also identified weaknesses in the proposed M&E systems. Since the proposals did not always clearly identify intended outcomes and impacts, in many cases they also did not formulate indicators beyond output level. In addition, indicators often did not fulfil the CREAM quality criteria: clear, relevant, economic, adequate, and monitorable. In this regard, however, the projects scored significantly better than the IUCs. A possible explanation for this is that the field of action of projects, which aim for changes at the level of university departments, is more restricted than the field of action of IUCs, which aim for changes at the level of a whole university. This may possibly make it easier to formulate indicators that measure the intended changes for projects than it is for IUCs.

Finally, with regard to data availability and quality, the theoretical assessment showed that basic documents such as the project proposal, the annual reports and the final reports were available for most interventions. However, in most cases, the project proposals lacked baseline information with regard to the situation of the beneficiaries. In addition, out of all interventions analysed, none had baseline information for a counterfactual. Moreover, while the annual and final reports typically reported on the

indicators at output level, most of them did not include information about outcomes or impacts. This can partly be attributed to the fact that for a considerable proportion of interventions, no indicators beyond output level were formulated in the first place.

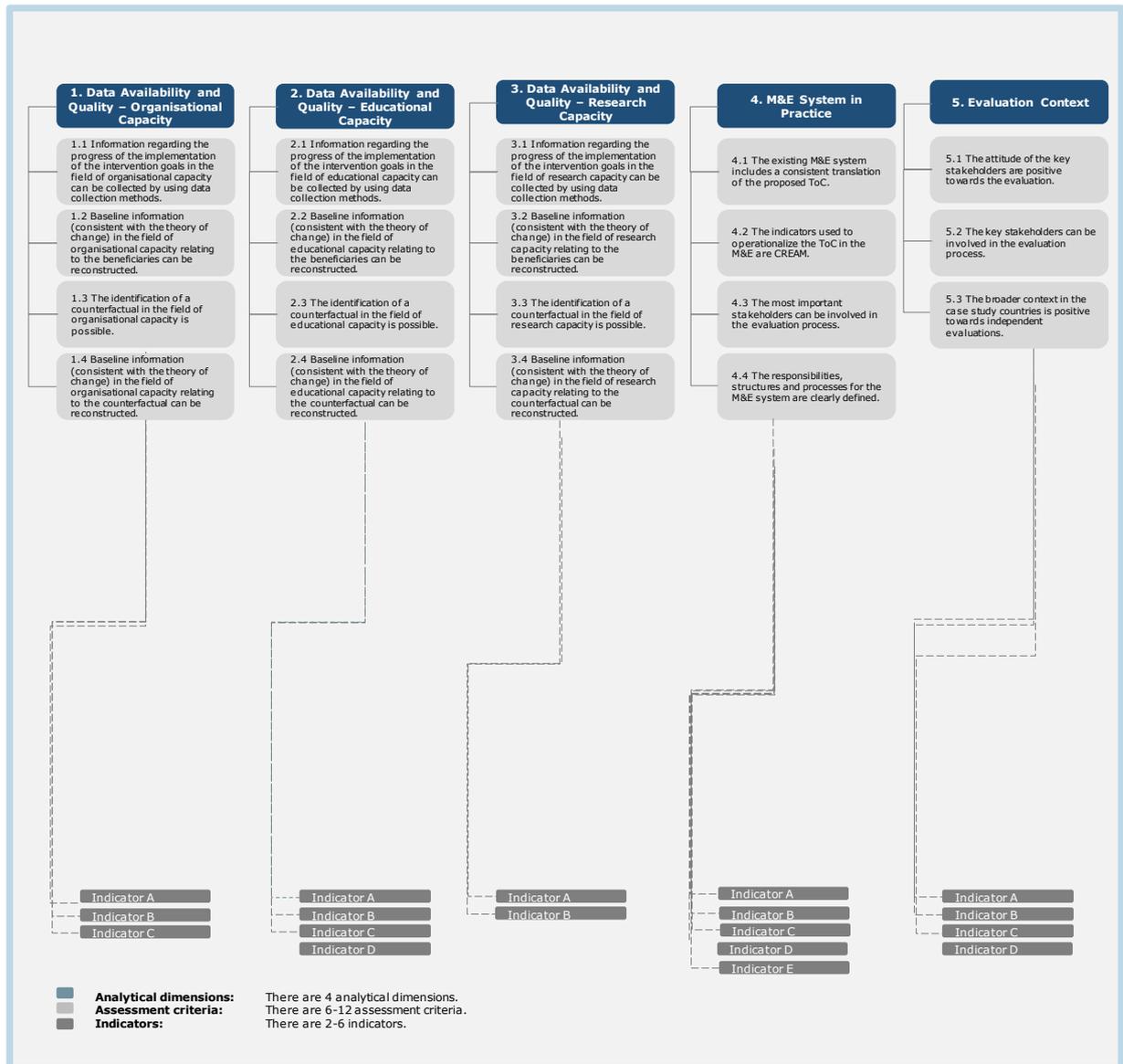
### ***3.2.2.3 Unit of analysis for the practical evaluability assessment***

As explained previously, the practical evaluability assessment was carried out through fact finding missions in the countries selected for the summative part of the evaluation. The first two fact finding missions were conducted for Vietnam (VLIR-UOS and ARES), and the practical evaluability assessment there included both IUCs and projects. As a result of these fact-finding missions, it was decided that the evaluations in Vietnam would focus on IUCs. Accordingly, it was decided that the evaluations in Benin (ARES) and Ethiopia (VLIR-UOS) would focus on projects. Therefore, the practical evaluability assessments conducted during the fact finding missions in these two countries only took projects into account.

The interventions included in the practical evaluability assessment were the interventions that had scored highest in the theoretical assessment, unless they had to be excluded for practical reasons. In some cases, interventions that scored high in the theoretical evaluability assessment were not included in the practical evaluability assessment because the stakeholders involved could not be reached. In other cases, interventions were not included because it already became clear during the preparation for the fact finding missions that a given intervention did not achieve impacts outside of academia, and was therefore only of limited interest for the summative aspect of the evaluation. The selection bias inherent in this approach was communicated to the stakeholders from the outset. In total, 2 IUCs and 12 projects were included in the practical evaluability assessment.

Figure 17 visualises the structure and contents of the practical evaluability assessment.

**Figure 16: Structure and contents of the practical evaluability assessment**



Source: Syspons and Nuffic 2017

As with the theoretical evaluability assessment, the appraisal of each intervention was also done at indicator level for the practical evaluability assessment following the same methodology for the theoretical evaluability assessment (see chapter 3.2.2.1). To come to their assessment, the international and local evaluators in the respective fact finding missions conducted interviews with key stakeholders in each intervention. They also assessed available secondary data sources.

### 3.2.2.4 Overview of results for the practical evaluability assessment

Figure 17 presents the overall results of the practical evaluability assessment as well as the results by analytical dimension and intervention type. It shows a higher overall score for IUCs (0.78) than for projects (0.52). In this regard, the results of the practical evaluability assessment differ from the results of the theoretical evaluability assessment. However, since the sample for the practical evaluability assessment was low (two IUCs and 12 projects) and there was a selection bias (see chapter 3.2.2.2), these results are not representative. A closer examination of the results by analytical dimensions can however yield insights into tendencies regarding factors that favour or hinder practical evaluability.

When looking at the average score for all interventions, the analytical dimension that fared highest overall was the evaluation context (0.87), whereas the analytical dimension that scored lowest is the M&E system in practice (0.48). The three analytical dimensions related to data availability on organisational capacity, educational capacity and research capacity, respectively, fall in between.

In this regard, it is noteworthy that the IUC scores lie quite close to each other for data availability on organisational capacity (0.84), on educational capacity (0.80), and on research capacity (0.73). Likewise, the scores for projects in these three analytical dimensions also lie quite close to each other (0.42, 0.49 and 0.43, respectively), but they differ quite substantially from the IUC scores in these dimensions. Moreover, the difference between the scores for IUCs and projects are much smaller regarding the analytical dimensions evaluation context (1.00 for IUCs and 0.84 for projects) and M&E system in practice (0.55 for IUCs and 0.43 for projects).

**Figure 17: Average score overall and for analytical dimensions in the practical assessment**

Analytical Dimensions		All	IUC		Overall	Projects		IUC &
			VLIR	ARES		VLIR	ARES	Projects
	Overall score	<b>0.78</b>	<b>0.77</b>	<b>0.79</b>	<b>0.52</b>	<b>0.47</b>	<b>0.48</b>	<b>0.59</b>
	1 Data Availability and Quality - Organisational Capacity	<b>0.84</b>	0.78	0.89	<b>0.42</b>	0.49	0.35	0.53
	2 Data Availability and Quality - Educational Capacity	<b>0.80</b>	0.80	0.79	<b>0.49</b>	N/A	0.49	0.61
	3 Data Availability and Quality - Research Capacity	<b>0.73</b>	0.73	0.73	<b>0.43</b>	0.49	0.37	0.49
	4 M&E System in Practice	<b>0.55</b>	0.55	0.55	<b>0.43</b>	0.54	0.32	0.48
	5 Evaluation Context	<b>1.00</b>	1.00	1.00	<b>0.84</b>	0.81	0.87	0.87

Source: Syspons and Nuffic 2017

The fact that data availability and data quality is overall higher for IUCs than for projects can be explained by the fact that IUCs aim for changes at the level of the whole partner university, whereas projects aim for changes at the level of a department within a faculty. In this regard, the fact finding missions showed that it was more common for partner universities to have data on hand at the level of the whole institution than at the level of a department. This was the case for both quantitative data, such as number of enrolled students, number of graduates and number of publications, as for qualitative data such as strategy documents. As a result, in the absence of baseline data in the proposals for the interventions, the reconstruction of a baseline from secondary data tended to be more feasible for IUCs than for projects. In the case of projects, the reconstruction of baseline data thus depended more on information provided by interview partners, which is more prone to bias. In addition, in some cases, stakeholders interviewed during the fact finding missions made assertions about the availability of data (e.g., statistics regarding the partner institutions) that they were later not able to provide. A lesson in this regard is therefore that declarations on data availability should only be factored into an evaluability assessment once actual data is provided by the stakeholders involved. To this effect, in the context of impact evaluations that analyse interventions that ended several years ago, one needs to foresee a certain amount of time for stakeholders to retrieve information that may not always be readily at hand.

Within the different analytical dimensions related to data availability, the evaluation team also examined whether it was possible to identify a counterfactual and, if applicable, reconstruct baseline data for the counterfactual. In this regard, a strong

heterogeneity between interventions could be observed. The identification of a counterfactual at the level of final beneficiaries outside of academia was only possible in very few cases for three main reasons. First, it already became clear in the practical evaluability assessment that several interventions did not achieve impacts outside of academia, because this was not foreseen in their Theory of Change in the first place. Second, some interventions had formulated objectives both at the level of the partner universities and outside of academia, but it already became apparent in the fact finding missions that very little emphasis had been placed on measures intended to bring about results outside of academia. Third, some interventions did work with final beneficiaries, but the number of final beneficiaries with whom they worked was too low to make a statistical comparison through a counterfactual viable. As a result, a counterfactual at beneficiary level could only be identified in few cases.

However, as a result of the inception phase, the evaluation team also assessed whether it was possible to identify a counterfactual at the institutional level. In this regard, the inception phase had already established that this could only be considered at the level of university departments, and not at the level of entire universities, which are unique by definition and not comparable to any other university (see annex B). Furthermore, the practical evaluability assessment could only identify an adequate counterfactual at the department level in very few cases. This required that two departments within the same university belong to similar disciplines and are similar in terms of key characteristics such as number of staff, research output, number of students, etc., before one of the departments participated in the ARES or VLIR-UOS intervention.

Looking beyond data availability, the scores for the analytical dimension "M&E system in practice" were higher than for the dimension "proposed M&E system" analysed in the theoretical evaluability assessment. In this regard, the practical evaluability assessment showed that even though the intervention proposals did for the most part not include a Theory of Change and indicators showed substantial weaknesses regarding the CREAM quality criteria, it was often possible to reconstruct a Theory of Change and appropriate indicators. For this, two factors proved crucial. First, for the interventions analysed in the fact finding missions, the underlying analysis and description in the proposal was clear enough for an outsider to understand what the interventions intended to achieve, even though no explicit causal hypotheses were formulated and the intervention proposals often mixed up outputs, outcomes and impacts. Second, for the reconstruction of the Theory of Change and the indicators, it was crucial that key stakeholders involved in the interventions both on the Belgian side and in the partner countries were available to participate in and/ or validate the reconstructed Theory of Change and indicators.

The aforementioned availability of stakeholders involved in the interventions to support the evaluation process is reflected in the high scores for the analytical dimension evaluation context. For the interventions examined in the fact-finding missions, stakeholders professed a strong willingness to provide necessary assistance to prepare the evaluations, e.g., with regard to locating contact data for beneficiaries of the interventions or identifying secondary data. However, in this context it has to be recalled once more that only the interventions for whom the evaluation team managed to establish contact with the promoters were taken into account in the practical evaluability assessment. Furthermore, the evaluation team also experienced some cases in which the stakeholders manifested a strong interest and willingness to support the evaluation during the fact finding missions, but who eventually proved rather busy with other priorities when the time came. In this regard, it must be pointed out that several of the interventions that were ultimately selected for the evaluation came to an end between five and ten years ago. Because of this, allocating time to deal with these interventions was often not on top of the agenda of the involved stakeholders, unless they were currently elaborating a proposal for a follow-up intervention for which they wanted to obtain funding from Belgian University Development Cooperation. As a result, the preparation and implementation of the field missions was in some cases rather cumbersome, even though stakeholders had been open to the evaluation and declared their willingness to support the process in the practical evaluability assessment conducted during the fact finding missions.

As explained earlier, the results of the practical evaluability assessment informed the selection of interventions that were ultimately evaluated in the four field missions. In this regard, the interventions that were eventually selected for evaluation were however not always those with the highest score in the practical evaluability assessment, but those who had an acceptable score and for which it was likely that it would be possible to observe impacts. For example, for the selection of the interventions to be evaluated, preference was given to interventions that had ended several years ago, as this made it more likely to be able to observe medium and long-term changes to which Belgian university development has contributed. The selection bias inherent in the choice of interventions was made clear from the outset and was accepted by the steering committee.

### **3.3 Rationale for the chosen evaluation design**

The evaluability assessment showed a high diversity regarding the evaluability of interventions of Belgian university development cooperation (see chapter 3.2). It also showed that the Theories of Change for different interventions were very heterogeneous. As a result, the evaluation was faced with the challenge to develop an evaluation design which takes into consideration the existing diversity and at the same time offers the most robust evaluation results.

For this purpose a Delphi survey among international and Belgium experts in university cooperation in development cooperation as well as an academic seminar was conducted to find what kind of design would be the most appropriate for the evaluation of university cooperation. Unlike in the SEO commissioned evaluation of NGO interventions, the interviewed and participating experts unanimously stated that a purely counterfactual approach is not feasible for the field of university cooperation as impacts are complex and occur over a long time period. Moreover, they stated that counterfactual designs possess low external validity because they only prove the occurrence of one singular impact in particular framework conditions and thus are not useful for complex university cooperation interventions which aim at multiple impacts on different levels. In addition they argued that research-based innovation is unpredictable and poses challenges for the evaluability of interventions in the field of university cooperation. As a consequence, they explained that an evaluation design is needed which identifies general successful causal mechanisms for university cooperation interventions. Thus, it was concluded by the involved experts that a "simple" counterfactual design would not be appropriate for the field of university cooperation as it only answers the question *if* impact occurred and not *how* and *why* impact occurred.

As a consequence, this evaluation developed a tailor-made evaluation design that took into account the specificities of the diverse interventions in the field, the recommendations of the experts and the formative (learning) and summative (robustness of evaluation results) demands of the Terms of Reference. Following the current academic debates, the evaluation followed the approach of Stern et al. (2012), according to which the most rigorous design is no longer equated with the experiment counterfactual approach, but with the quest to find the most appropriate design for a given context. This also means that it is possible to use more than one design – if possible – to compensate for the weaknesses of other designs. Finally, it also means to strive not only for a combination of designs, but also for a combination of methods (see chapter 4.1, annex B and C). This approach was validated during the mentioned academic seminar.

The application of this modular approach in this evaluation in the field missions Vietnam, Benin and Ethiopia constituted an added value regarding the quality and the robustness of evaluation results. The pitfall of evaluations that only include one evaluation design, is that they only provide answers to a limited set of evaluation questions. For example, an evaluation design solely based on a counterfactual approach only answers the question "How much of a difference did the intervention (or other factors) make in terms of the intended impact?", but it does not provide information on why a given intervention was

successful at yielding results. In contrast, in this evaluation, by combining different approaches to causal inference (see chapter 4.1.1), we were able to examine both the impacts to which the analysed interventions contributed, but also which mechanisms were successful (or not) in leading to impacts. The modular approach thus adds value not only in enabling accountability, but also in enabling learning from evaluation results. In this regard, the core module of a contribution analysis was key to understand the causal mechanisms behind the observed impacts. In addition, the application of a before-and-after design for all interventions provided findings on the degree to which capacities of the partner institutions have evolved between the start and the end of the interventions. Depending on the additional modules chosen for the evaluation of each intervention, the robustness of evaluation results could be increased even more. For some interventions, a quasi-experimental evaluation design could be implemented, making it possible to present findings on the net impact of an intervention, on the level of the final beneficiaries, compared to a situation without an intervention. Moreover, the application of different methods of data collection, depending on what was appropriate in a given context, made it possible to strengthen both the basis for analysis as well as data triangulation.

Against this background, it became apparent that in the field of university cooperation in development cooperation a modular design approach following Stern et al. is advantageous as it can be adjusted to the particularities of the different forms of interventions. Furthermore, it guarantees the most robust results possible under the given circumstances as in most cases a counterfactual design is not possible due to the nature of the interventions in the field of university cooperation in development cooperation. In this line the following combined designs proved to be most effective in answering robustly questions of impact with regard to project-based interventions.

- The combination of a contribution analysis, a before-and-after design and an experiments/counterfactual approach proved to be the most robust measurement of impact in this evaluation as it was not only possible to answer *if* impact but also *why* and *how* this impact occurred. Hence, it was possible to identify causal mechanisms via the contribution analysis – which could be generalised – and at the same time collect robust data on final beneficiary level through the counterfactual design. The before-and-after design thereby ensured an understanding how the impact developed over time and which amount of impact could be contributed/ attributed to the analysed intervention. However, this design also was the most costly design in comparison to the other implemented designs (see below).
- However, as an experiments/counterfactual approach cannot always be implemented in field of university cooperation due to the aforementioned reasons, a combination of a contribution analysis, a before-and-after design as well as the most significant change approach proved to be the second best choice to evaluate interventions in the field of university cooperation. Here the contribution analysis proved successful in mapping contributions of the analysed intervention to the observed impact and to identify relevant causal mechanisms. The before-and-after design helped to quantify the change of these contributions by reconstructing the baseline in these interventions. Furthermore, the most significant change approach proved very useful in identifying significant impact on the individual and organisational level, which then could be further analysed using the contribution analysis.
- The used designs of outcome mapping and the success case method however were in comparison least useful for this field. With regard to the former, it has to be concluded that the approach's strength relies in the strategic conceptualisation and planning of interventions. Only if interventions are planned using outcome mapping does it make sense to evaluate them according to the concepts used in outcome-mapping. If they are not planned using outcome-mapping, evaluations might adopt a standard which does not do justice to the analysed intervention. With regard to the success case method, it has to be concluded that this

approach is already part of a thorough contribution analysis and thus does not generate much added value.

Regarding the chosen evaluation design for individual scholarships, this evaluation demonstrated that scholarship schemes can be evaluated most robustly if an A and B-list as well as a large intervention and treatment group exist to build a stratified cohort. Then it is possible to use an experiment/ counterfactual and regulatory approach to measure impact. However, also in this case a contribution analysis as well as a before-and-after design proved to be valuable to identify causal mechanism for success (see chapter 4.1.1).

In addition to these general observations on the added value of a modular approach, the experiences made in this evaluation with different evaluation designs and methodologies also yielded some specific lessons learned for future impact evaluations of university development cooperation:

- First, the Capacity Development Index developed for this evaluation was a suitable instrument to operationalize a before-and-after design measuring changes regarding the capacities of partner universities. However, since the interventions were evaluated ex-post and no baseline had been established at the beginning of the respective interventions, the baseline had to be reconstructed. This proved possible, but a recall bias of respondents could not be excluded. This bias was counterbalanced by the triangulation of data by consulting as many stakeholders involved in the interventions as possible. However, establishing a baseline regarding institutional capacities at the outset of an intervention would still increase evaluability. A further weakness of the CDI was that there is currently no universally accepted approach on how to deal with different perspectives by the respondents and the evaluators. In addition when depicting the results of the CDI also minimum and maximum values were not displayed. By counteracting these weaknesses however, the Capacity Development Index used in this evaluation along the capabilities of the 5C model<sup>31</sup> or along the developed indices of research, educational, outreach and organisational/ governance capacity could be an added value for future evaluations of university development cooperation in terms of establishing a robust baseline from the outset.
- Second, the collection of secondary data at the level of the partner institutions was an important element for triangulating data gathered through interviews. However, because of the ex-post character of the evaluation and the lack of a baseline for the respective interventions, the evaluation team encountered some challenges to obtain data for the same time periods and at the same level of aggregation for the different analytical dimensions. This reiterates the added value of establishing a baseline at the outset of an intervention.
- Third, a quasi-experimental design with robust quantitative data at the level of final beneficiaries could only be implemented in one case. The primary reason for this is that the population should at least encompass more than 80 beneficiaries to guarantee a sufficiently large sample based upon the response rates experienced in this field mission. Since most interventions focus on capacity development at the level of the universities, this is only the case for a limited amount of interventions. This does not mean that interventions which cannot be evaluated with a quasi-experimental design do not lead to impacts (see above).

---

<sup>31</sup> The 5C model was developed by Peter Morgan and defines "five core capabilities" in organisations and systems: the capability to act, the capability to generate development results, the capability to relate, the capability to adapt and the capability to achieve coherence (Morgan, 2006, p. 8-19).

### 3.4 Assessment of the evaluability

Based upon these findings, the evaluation team comes to the conclusion that there are some challenges regarding the evaluability of the impact of Belgian university development cooperation, but that these can be overcome. First, there has so far been no structured debate regarding the concept of impact in the context of Belgian university development cooperation prior to this evaluation, and there was no official consensus on how to define impact. However, the impact survey conducted for this evaluation showed that most stakeholders can rally behind an impact definition that is based upon the OECD-DAC definition and at the same time adheres to a mid- and long-term view of impact with a broad view on the subject and spatial level. As a result this impact definition was adopted for this evaluation (see chapter 3.2.1.1).

In spite of the fact that consensus can be built around this definition, the evaluation also showed that very different types of impact can be subsumed under this definition. It can encompass both impacts at the individual and institutional level, and impacts regarding the both the capacities of universities as well as impacts outside of academia.

Looking beyond how impact is defined, weaknesses in the planning of interventions constitute a challenge for their evaluability, although in some cases a project cycle management approach was adopted. In particular, the evaluation has shown that the Theory of Change approach is not yet frequently used in planning interventions. In addition, intervention proposals often do not adequately distinguish between the different levels at which a given intervention intends to bring about change. It is not unusual that proposals confuse outputs, outcomes and impacts, have too ambitious outcomes, or do not formulate adequate indicators to measure changes beyond output level. In addition, only a very small proportion of intervention proposals include baseline data. As a result, the monitoring systems of the interventions do not provide meaningful data that impact evaluations can build on. However, the evaluation has shown that over the last few years there is a clear tendency towards improvement in the quality of the planning of interventions.

Moreover, the analysis has also shown that challenges to evaluability arising from weaknesses in planning can be overcome given certain conditions. Even if intervention proposals confuse outputs, outcomes and impacts and no impact hypotheses are formulated, a Theory of Change can be reconstructed if the proposal is clear enough to convey the changes an intervention intends to bring about. If this is the case, adequate indicators that fulfil quality criteria and describe changes beyond output level can also be reconstructed. To ensure that a reconstructed Theory of Change and reconstructed indicators adequately capture the intended changes, they should be elaborated with or validated by the stakeholders involved in the intervention. For this evaluation for instance, it was possible to identify a sufficient number of interventions for which this was possible.

Lastly, the analysis has shown that the content of the Theories of Change and the context in which the interventions are carried out vary greatly. In accordance with the findings regarding the impact definition, interventions have different foci. Some aspire to bring about changes at the level of the whole university, others at the level of a university department. Some focus on changes within academia, while others also works with final beneficiaries outside of academia. Given the focus of university development cooperation on capacity building at institutional level, the number of interventions for which a quasi-experimental design at beneficiary level can be implemented is limited. Because of the heterogeneity of interventions, no one-size-fits-all evaluation design can be identified for the evaluation of university development cooperation. To the contrary, for this evaluation design, a flexible approach had to be chosen that determines the most appropriate design for a given context. This approach builds on works from Stern et al. (2012) and seeks to combine evaluation designs to strengthen the robustness of evaluation results. This also means that for each intervention to be evaluated, it must be decided anew what kind of evaluation design is feasible under the current financial conditions. The advantage of the combination of different evaluation designs is that

different evaluation questions related to impact can be answered. In addition to increasing the robustness of evaluation results, the combination of different approaches to causal inferences made it possible to not only analyse whether impacts were achieved, but also to understand the specific mechanisms that enable (or prevent) impacts to unfold. Thereby, the modular approach has an added value not only in terms of providing accountability, but also to enable learning. Moreover, the Capacity Development Index developed for this evaluation made it possible to compare capacities of the partner institutions at the beginning and at the end of a given intervention. In combination with qualitative data methods it was possible to understand how impacts on the level of the partner universities unfolded, while the used quantitative methods for data collection at the level of final beneficiaries enabled a nuanced analysis of the impacts of university development cooperation. Furthermore, it could be proven that this approach is – despite some inherent weaknesses regarding recall bias, analysis of different perspectives and the depiction of results – particularly valuable for showcasing whether an intervention led to sustainable change that lasted after the end of the intervention, or whether it primarily reinforced partner institutions for the duration of the intervention.

## 4. Impact of the Belgian university cooperation

This chapter presents the evaluation results regarding the impact for the analysed interventions along the developed Theories of Change of ARES and VLIR-UOS (see chapter 2.1). Moreover, the relevance and sustainability of the interventions is assessed, as it was assumed that more relevant interventions achieve more impact and are more sustainable.

The evaluation results stem from the four implemented field missions in Benin, Ethiopia and Vietnam. All field missions were thereby implemented with different evaluation designs (see chapter 4.1 and annex C) to serve the formative dimension of this evaluation; to assess what kind of evaluation designs yield the best results regarding the assessment of impact in the field of university cooperation in development cooperation.

Within the field missions the following number and type of interventions of ARES and VLIR-UOS were analysed. These interventions were selected in close cooperation with the reference group on the basis of the theoretical and practical evaluability assessment conducted in the inception and documentary study phase (see chapter 3).

- IUC with Can Tho University in Vietnam (VLIR-UOS) (budget: 6,778,863 Euros; duration: 1998 to 2008)
- IUC with Pham Ngoc Thach University of Medicine in Vietnam (ARES) (budget: 2,514,484 Euros; duration: 2008 to 2016)
- OI/TEAM project "Control of equine trypanosomosis (*Trypanosoma equiperdum* and *T. evansi*) in the Arse and Bale highlands of Ethiopia" (VLIR-UOS) (budget: 309,458 Euros; duration: 2006 to 2010)
- OI/TEAM project "Land and water research for sustainable livelihood in the south Ethiopian Rift Valley" (VLIR-UOS) (budget: 299,863 Euros; duration: 2011 to 2016)
- PIC "Formation et création d'un réseau de futurs enseignants de l'anesthésie-réanimation pour l'ensemble des pays d'Afrique francophone au Sud du Sahara" (ARES) (budget: 354,868 Euros; duration: 2005 to 2009)
- PIC "Contribution au développement d'une filière du teck au départ des forêts privées du Sud-Bénin (Département Atlantique)" (ARES) (budget: 369,687 Euros; duration: 2007 to 2011)

However, this selection also means that this evaluation cannot report on all depicted impacts in the Theories of Change as it is based on a limited sample. In addition, the mode of selection also resulted in a selection bias, as the practical evaluability assessment identified interventions which achieved impact (see also chapter 3.2.2).

Next to the above described interventions, this chapter also presents the evaluation results for the individual scholarships. The findings are based upon an online-survey, which included a comparison group, and 36 qualitative interviews with former scholarship holders.

The online survey was open to all 6130 current, former and rejected scholarship holders, of which 2168 participated. This translates into an overall response rate of 35.4%. The results of the online survey can be considered representative as the participants exhibit

the same distribution as the overall population in terms of target country, region, cohort and gender. The data allowed for the drawing of valid and specific conclusions on the overall impact of the individual scholarship schemes of ARES and VLIR-UOS.

## **4.1 Evaluation design and methodology**

### **4.1.1 Evaluation design and methodology for interventions**

Over the past ten to fifteen years development practitioners and agencies have considered it increasingly important to demonstrate the effectiveness and impact of their interventions. While in the past the assessment of development interventions was dominated by analysing the implementation of outputs, the following recent economic and political trends have shifted the attention of development evaluation – according to the literature – to the outcomes and impact of development interventions:

- In light of the global financial crisis there has been a reduction of the developmental budget in many European countries.
- There has been – especially in the Anglo-Saxon world – a drive among donors for greater demonstration of “value for money”.
- At the same time there is an increasing public perception in European states that five decades of development cooperation have not had the effects hoped for. This has put pressure on donors to demonstrate clear and tangible results that can be understood by the general public.
- The evidence-based policy movement, which has gained momentum over the past few years, has led to more systematic examination of some of the main assumptions underlying development work. This has led to much greater attention among development actors to measure and demonstrate what works more and less well, and to use this knowledge to leverage greater effectiveness from development programmes (Hearn & Buffardi, 2016, p. 6).

As a consequence of these trends there was a strong push to define the concept of impact and to evaluate the impact of development interventions with the most rigorous methods possible. The term “rigorous methods” was thereby equated with methods based on counterfactual analysis, which could attribute observed changes to the intervention under investigation. Other forms of methods were seen as inferior to counterfactual analysis and no distinctions were made between definitions of impact, the concept of causal inference and possible designs for impact evaluations (e.g. Stern et al., (2012); Befani & Mayne, 201; White & Philips, 2012).

This led to a debate in academic discourse in which the concept of attribution was viewed as the “gold standard” for impact evaluations while the concept of contribution was seen as a second best option. The concept of attribution involves a causal claim about the intervention as the cause of the impact and a measurement of how much of the impact can be linked to the intervention (e.g. White, 2010). Contribution, in contrast, only makes a claim about whether and how an intervention has contributed to an observed impact by using a Theory of Change that takes influencing factors into account; thus reducing uncertainty about the contribution the intervention is making (Mayne, 2001).

As a result there was an effort in academic literature on impact evaluations to use experimental designs (randomised control group trials (RCTs), quasi-experimental and natural experiments) to address the impact question. The main quest in this time period was to associate the intervention as a single cause to a measure of the net impact that could be attributed to the intervention in question. This also included answers to the counterfactual question: “What would have happened if the intervention had not taken place?” Confirmation to this question was sought to demonstrate that without the

intervention there would be no impact or a different impact, while focusing on the additional change induced by the intervention. Typically this is done by using control or comparison group designs which compare situations with and without the intervention in order to calculate the net impact between them (e.g. Angotti, 2007).

However, in recent years this discourse was broken up – most notably by the DFID Working Paper on Designs and Methods for Impact Evaluations authored by Stern et al. In this paper, as in others, it was firstly noted that the concept of impact is used in various forms and definitions across and within development agencies. Additionally, it was argued that the way impact is defined and understood has widespread implications on evaluation questions and possible evaluation designs to answer these questions (Hearn & Buffardi, 2016).

More importantly, however, the Stern paper raised the issue that there are different types of approaches to causal inference with different requirements, strengths and weaknesses, of which the experimental approach is one. According to their paper, there are at least four different approaches to causal inference, namely:

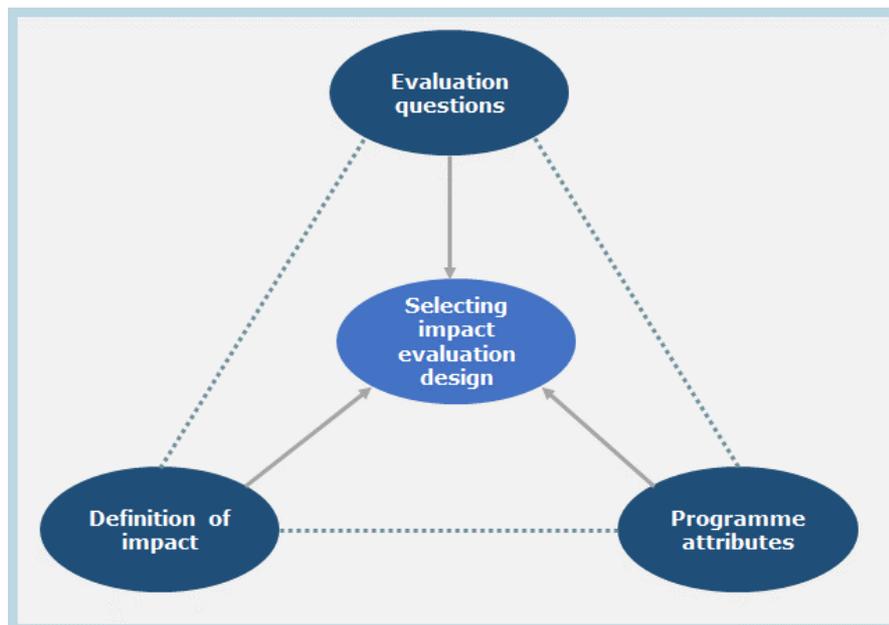
- The **regularity approach** assesses causality depending on the frequency of association between a given cause and an effect. This means that causality can be verified when several cases that were subjected to the same intervention have the same effects. Since several cases are analysed when using this approach, it will be possible to know with certainty whether the intervention works (namely, whether it has the desirable effects) or not. A requirement for this approach hence is to have a high number of diverse cases. Its strength lies in the fact that this approach can discover “laws” among the set of chosen cases, while its weakness is that it does not explain “how” or “why” observed effects occur (Stern et al., 2012).
  - This approach thus answers the following impact question: Which factor causes the observed intended impact of the intervention?
- The aforementioned **experiments / counterfactuals approach** requires an “intervened” and a “control/comparison” group, where the first one was subjected to the intervention while the second one was not. That means that causality is evaluated by analysing the differences between these two groups. This is a rigorous method that avoids several types of bias, since the groups are randomly selected or matched. Nevertheless, this approach does not focus on the “why” or “how” and it is weak at generalising the results of the experiment (external validity) since it excludes analysis of the context. Therefore, a pitfall of this approach is that an experiment that worked in a given context might not work in a different one (Ibid.).
  - This approach thus answers the following impact question: How much of a difference did the intervention (or other factors) make in terms of the intended impact?
- The **multiple causation approach** generates from the idea that an effect is caused by a combination of causes. In order to evaluate impact using this approach, the evaluators need to have access to a sufficient number of cases that have comparable characteristics. This approach is useful when dealing with cases that have a limited complexity in order to e.g., identify typologies. Vice versa, it is difficult with this approach to interpret highly complex combinations of causes within a selected case (Ibid.).
  - This approach thus answers the following impact question: Did the intervention (or other factors) make a difference in terms of its intended impact, for whom and under what circumstances?
- The **generative / mechanisms approach** relies on identifying the “causal mechanisms” that generate the desirable effects. In order to use this approach,

the existence of one case with good quality data sources is sufficient. The approach is based on an existing theory for the intervention in question, which allows the evaluator to understand the factors that cause the observed effect. As a result this approach permits an in-depth understanding of the case and its context, providing a detailed explanation of both of them. Nevertheless, this approach has a larger risk of bias on behalf of the researcher, since the estimation of the effect and its causality depends in a greater manner on qualitative appreciations, rather than quantitative data. This approach is mainly used in “theory-based” and “realist” evaluation designs (Ibid.)

- This approach thus answers the following impact question: How did the intervention achieve the intended observed impact? What is it in the intervention that made it (not) work to achieve the intended observed impact?

As a result of this and similar papers the academic discourse changed from thinking in hierarchies for evaluation designs (the experiment/ counterfactual approach as the “gold standard”) to a discussion of “local” best choices for evaluation designs. Since then, the main focus has been on aligning definitions of impact, evaluation questions and programme attributes with the best available evaluation designs to enable causal inference (see figure 18). As a consequence the most rigorous design is no longer equated with the experiment/ counterfactual approach but with the quest of finding the most appropriate design for a specific context. This also means that it is possible to use more than one design – if possible – to compensate for the weaknesses of the other designs. Moreover, it is also recommended to combine designs and methods – even within the same design approach – to strengthen causal claims (Befani & Mayne, 2014; Stern et al., 2012).

**Figure 18: Design triangle**



Source: Stern et al., 2012 adapted by Syspons 2017

Against this background Syspons and Nuffic conducted fact-finding missions to identify the most appropriate evaluation design for the selected interventions. The basis for this was a theoretical and practical evaluability assessment that was implemented prior to and during the fact-finding mission (see chapter 3.1).

Based upon these findings Syspons and Nuffic developed tailor-made evaluation designs for the measurement of impact for each selected intervention. These always included a contribution analysis and at least two of the following modules:

- Before-and-After Design

- Counterfactual Design
- Process Tracing
- Most Significant Change
- Outcome Mapping
- Success Case Method

A detailed description of the general approach can be found in annex B, while a comprehensive presentation of each tailor-made evaluation design for the selected interventions can be found in each country report in annex C.

After the data collection for each field mission, we verified and validated the quantitative data. Subsequently to this quality assurance, we started with the **quantitative data analysis**. From a methodological standpoint the data analysis was divided into two steps. In a first step we analysed the data using univariate statistical analysis such as frequencies, percentages or means. We edited the data and depicted the results in graphs and tables in order to get an overview of the findings and to identify relevant aspects and developments. Those were then analysed in-depth. In order to find causal relations between variables, we then used bi- and multivariate data analysis methods.

In parallel to the quantitative data analysis we also conducted the **qualitative data analysis**. For this purpose we analysed, triangulated and synthesised the collected qualitative data on the basis of the assessment grid. In a next step we assessed the data in order to identify explanatory frameworks (e.g., recurrent themes, patterns, respondent clusters, etc.) for each evaluation question and aspect. Then we deduced explanatory factors and patterns from the qualitative data. Furthermore, we also developed and used a scale to assess and transparently depict the confidence of a probability regarding the assessment of the causal inference of an analysed impact hypothesis by analogy with Bayesian updating (Befani & Mayne, 2014). The latter being a technique used within process tracing to assess the probability of a causal mechanism based upon the probability of finding relevant evidence (confirming/infirming the causal mechanism). The less probable (prior to observing the evidence), the higher the confidence (once the evidence yet observed) (see figure 19). The assessment of the causal inference for each impact hypothesis was conducted during the internal workshop (see below) and is used in this report accordingly.

**Figure 19: Measuring confidence with probabilities**

Qualitative assessment	Quantitative scale
Practically certain that () is true	0.99+
Reasonably certain that () is true	0.95 – 0.99
Highly confident that () is true	0.85 – 0.95
Cautiously confident that () is true	0.70 – 0.85
More confident than not confident that () is true	0.50 – 0.70
Neither confident nor not confident that () is true (or false) – no idea	0.5
More confident than not confident that () is false	0.30 – 0.50
Cautiously confident that () is false	0.15 – 0.30
Highly confident that () is false	0.05 – 0.15
Reasonably certain that () is false	0.01 – 0.05
Practically certain that () is false	Less than 0.01

Source: Syspons and Nuffic 2018

After the data analysis, we then conducted an **internal workshop** with all involved experts of the field mission team to synthesise and systematise the collected data. In this setting we once again assembled and assessed the ToC of the respective intervention by considering all different perspectives of the experts. The workshop added value by triangulating and validating the findings using data, method and researcher triangulations. In this light, the objective of the workshop was to synthesise the findings of the interviews and surveys as well as to identify key weaknesses and strengths of the developed ToC.

This synthesis and analysis process was then repeated to systematise and synthesise the findings of this evaluation on the level of ARES and VLIR-UOS by using the developed ToCs on organisational level for each organisation.

#### **4.1.2 Evaluation design and methodology for individual scholarships**

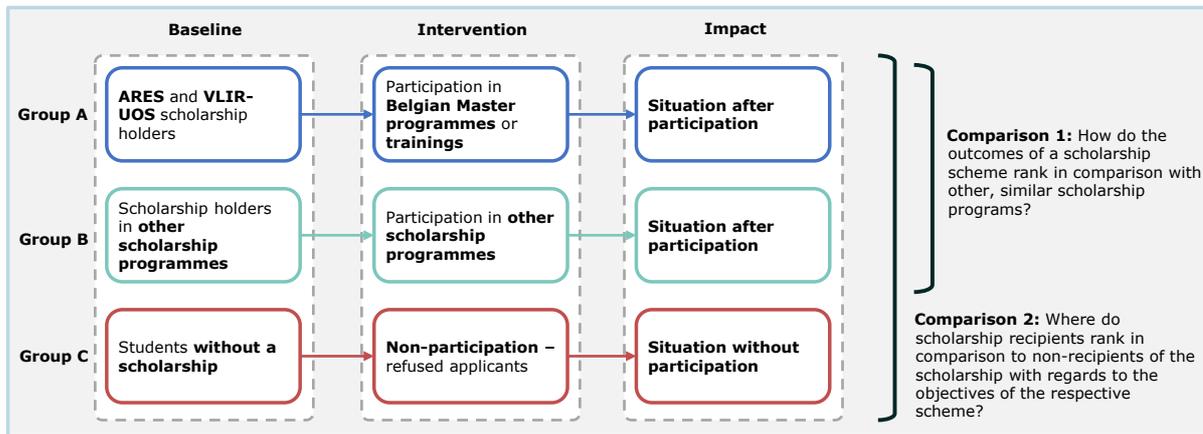
To measure the impact of the individual scholarships of ARES and VLIR-UOS we implemented an evaluation design that combined a regularity approach with an experiments / counterfactuals and a generative / mechanisms approach (see chapter 4.1.1).

For this purpose we developed a quasi-experimental evaluation design in order to capture the impacts of the different scholarship schemes on the individual level of the scholarship holder (e.g., improvement of the students' employability). To do this we used the existing A- and B-Lists of the scholarship schemes, in which the applicants and scholarship holders from January 2008 until December 2016 are listed with E-Mail addresses. The A-List contained all persons who received a scholarship for a Master programme or training either from ARES or VLIR-UOS. The B-List listed all persons who would have qualified for a scholarship, but did not receive one due to various reasons (e.g., limitation in financial budget). The distinction between the A- and B-List was thereby not solely made by the universities on the basis of a person's academic or occupational qualification, the universities also chose further selection criteria such as

country of origin or gender in order to guarantee an advantageous mixture in the future classes and courses. As a result of this practice, it was possible to not only compare the bottom 5% of the A-List with the top 5% of the B-List but to use the whole A- and B-Lists as intervention and comparison groups.

Therefore, we were able to form the following three groups from the A- and B-Lists<sup>32</sup> to implement the quasi-experimental evaluation design (see figure 20): Group A (intervention group: ARES and VLIR-UOS scholarship holders), Group B (comparison group: applicants from the reserve list without a ARES or VLIR-UOS scholarship, but who acquired a scholarship from a different organisation) and Group C (comparison group: applicants from the reserve list without a ARES or VLIR-UOS scholarship who did not obtain another scholarship and stayed in their home country instead).

**Figure 20: Comparison groups for the quasi-experimental evaluation design for individual scholarships**



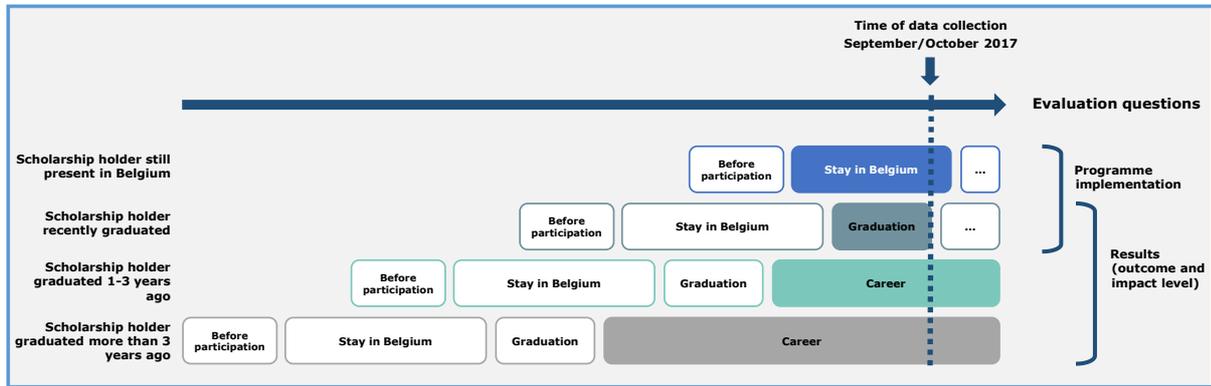
Source: Syspons 2017

In addition we complemented the above described quasi-experimental evaluation design with a regularity approach to causal inference. In our experience, one of the most important challenges in the evaluation of scholarship programmes' impacts is that most of the intended impacts do not materialise directly after the scholarship programme has ended but potentially only years later (e.g., when graduated scholarship holders have reached a managing position and contribute to solving developmental challenges in their respective country). These kinds of impact can usually best be captured with a panel survey, as the same group of scholarship holders can be evaluated along their career path at multiple points in time. The advantage of such a panel design is that bias can almost completely be avoided, as confounding variables can be controlled. However, the framework conditions of this evaluation did not permit a longitudinal design as the collection of data was only possible at one point in time; namely during the implementation of this evaluation. As a result, data collection at multiple points along the career path of the scholarship holders could not be implemented.

Against this background it was essential to develop a robust evaluation design based upon a regularity approach, which enabled us to capture the longitudinal development of the scholarship holders. The long duration of the Belgian scholarship programme and the comparatively high number of (graduated) scholarship holders made it possible to conceptualise a stratified cohort that emulates the strength of the longitudinal design of a panel survey to analyse the Belgian scholarship schemes' long-term impacts (see figure 21).

<sup>32</sup> The final groups were formed via filter questions in the online-survey (e.g., "Did you make use of the following scholarship?") in order to validate the lists and exclude the possibility that individuals were misallocated, e.g., if they were awarded the scholarship according to the lists but did not end up making use of it.

**Figure 21: Concept of a stratified cohort**



Source: Syspons 2017

The main objective of this evaluation design was to collect information about the scholarship holders' different stages of development e.g. with regard to their development as change agents. On the basis of this data we were then able – through a combined analysis – to produce an artificial approximated longitudinal design, which is similar to one from a panel survey.

The following figure illustrates the design for the data collection. At one point in time in the evaluation we conducted an online-survey of all applicants to the Belgian scholarship schemes in the time period from January 2008 to December 2016 who qualified for the programs' A- and B-lists. This point in time was chosen in such a way that the highest number of graduated scholarship holders shortly after their graduation and during the different stages of their career development were contacted (see figure 22).

**Figure 22: Approximation of a longitudinal design (stratified cohort)**



Source: Syspons 2017

With this methodological approach we reached the youngest cohort at the beginning of their stay in Belgium. Moreover, we reached the second youngest cohort shortly after their graduation. These cohorts were used to create a baseline in order to make informed judgements about the impacts reached by the other cohorts. If the number of respondents was insufficient to create a baseline for some questions, a retrospective assessment of all scholarship applicants was used instead.

Any other cohort was contacted during the course of their career and thus enabled us to collect data on their individual development. As there was statistically robust similarity between the different cohorts, we were able to construct an approximated longitudinal cut by comparing the status quo of the individual development paths of the different cohorts, starting before their participation until years after their graduation.

Furthermore, we also applied this approach to the above described comparison groups in the quasi-experimental evaluation design to compare long-term impacts between the intervention group and the comparison groups. This enabled us to also make statements about the counterfactual over time.

In addition, we analysed the scholarships schemes' causal mechanisms, which may or may not lead to their intended impact, by using a generative / mechanisms approach to causal inference. For this purpose we developed Theories of Change for each scholarship programme of ARES and VLIR-UOS under investigation to conduct a contribution analysis for the scholarship programmes. With this approach we were able to analyse the

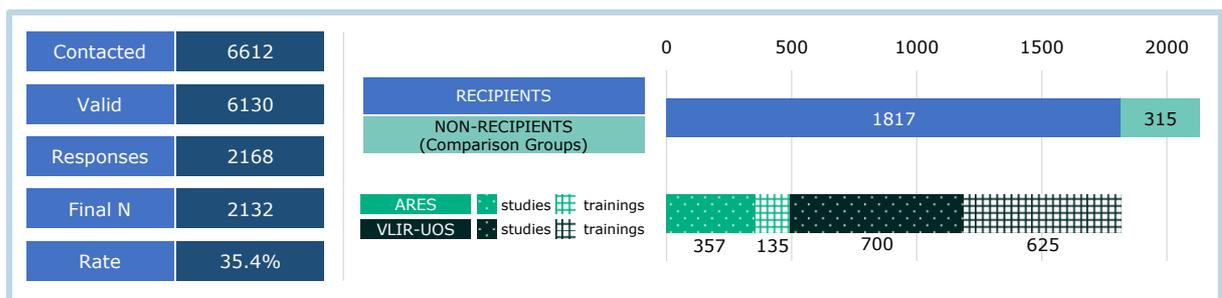
“how” and “why” the different scholarship schemes led or did not lead to the observed impacts.

A contribution analysis is an approach to assessing the performance of policies and programmes towards an outcome or outcomes. It focuses on the questions of “contribution”, specifically, to what extent observed results (whether positive or negative) are the consequence of the policy or in this case the Belgian scholarship schemes (Mayne, 2001). On the basis of the developed Theory of Change for each scholarship programme, which show the causal relationships between inputs, outputs, outcomes, impacts and possible framework conditions, we collected data to test its underlying causal mechanisms. Then, we constructed a credible “performance story” for each scholarship programme under investigation (see chapter 4.3).<sup>33</sup>

Consequently, the implemented evaluation design was based upon a worldwide online-survey of all scholarship holders in the programmes under investigation. The online survey was open to all 6612 current and former scholarship holders as well as rejected scholarship applicants of the years 2008 to 2016 who qualified for the programmes’ A- and B-Lists. Of 6130 valid contacts (excluding faulty email addresses etc.), 2168 people participated. This translates into an overall response rate of 35.4% (see figure 23).

The results of the online survey can generally be considered representative. With regard to their socio-economic indicators, the participants exhibit the same distribution as the overall population in terms of target country, region, and gender. In contrast, it must be kept in mind that the response rate is notably higher in more recent intakes: The intake years 2014-2016 are overrepresented, while the years 2008-2012 are underrepresented. The stratified cohort approach however counterbalances this difficulty by putting the results in relation to the respondents’ timeline. Also, the response rate for former VLIR-UOS scholarship applicants/holders was higher than for ARES (42.5% vs. 24.6%), resulting in a slight overrepresentation of the VLIR-UOS scholarship schemes. In order to counteract this, results were analysed by umbrella organisation in order to identify relevant differences.

**Figure 23: Response rate survey individual scholarships**



Source: Syspons 2017

Moreover, we conducted 36 narrative interviews with graduated scholarship holders in order to collect qualitative data, analyse the programmes’ causal mechanisms and substantiate the quantitative survey. These interviewees were chosen on the basis of the following criteria:

- Equal distribution between training and Master’s scholarships,
- Exemplary respondents for particularly high and low scores in satisfaction as well as those with very differentiated scores,
- Exemplary respondents for particularly high and low scores in skill development as well as those with very differentiated scores,

<sup>33</sup> A detailed description of the evaluation design for the individual scholarship programmes can be found in annex B.

- Exemplary respondents for particularly high and low scores in their application of skills in their everyday work as well as those with very differentiated scores,
- Exemplary respondents for particularly high and low scores in professionalising their organisation as well as those with very differentiated scores.

In addition, particularly striking cases were selected to understand extreme values, e.g., respondents with a particularly long job search.

First analyses showed high overall values in most categories and hence little variation in the data. To avoid respondents bias and validate the gathered data, validation interviews with non-responders to the survey were set-up. From 20 contacted non-responders, 15 interviews were held that confirmed the previous gathered results.

## 4.2 Evaluation results for interventions

In the following, the evaluation results for interventions are presented according to the OECD-DAC criteria relevance, effectiveness, impact and sustainability. Since this is an impact evaluation, the focus lies on impact, and the other criteria are addressed only to better understand to what extent and how impact was achieved. The results for relevance and sustainability are presented jointly for the two umbrella organisations. In contrast, for the criteria effectiveness and impact, results are presented separately for VLIR-UOS and ARES to put results in perspective to the respective Theory of Change of each organisation. As pointed out previously, findings are based on a small, non-representative sample of interventions and can therefore not be used to draw general conclusions about the whole portfolio of Belgian university development cooperation.

### 4.2.1 Relevance of the Belgian university cooperation

The criterion *relevance* refers to the *raison d'être* of a given intervention. Its analysis renders insights into whether an intervention is doing or will be doing the right thing. Therefore, the question of whether an intervention is relevant is not only important in its own right, but also has implications for the analysis of an intervention's impact. It is assumed that relevant interventions have a higher chance of delivering impact, as they address existing needs and thus generate ownership among the target group. In the context of this evaluation, the analysis of relevance encompassed several aspects. First, the evaluation team analysed to what extent the interventions were relevant from the perspective of the policy and strategies of the partner countries as well as the objectives and priorities of the partner institutions. Second, the evaluators examined the extent to which the interventions responded to gaps in developmentally relevant scientific knowledge and / or research capacity in the selected countries. Third, the evaluation team analysed how and to what extent the final beneficiaries of education/ and / or research have been involved during the different phases of the intervention cycle.

The evaluation team found that overall, the interventions were highly relevant with regard to the higher education policies and strategies of the partner countries. In this regard, all interventions were set in a context of massive expansion of higher education in the partner countries. For example in Ethiopia, the number of students enrolled in HEI increased more than tenfold between 1997 and 2010. Moreover, Benin experienced a more than tenfold increase in the number of students enrolled in public universities between 1994 and 2013, whereas in Vietnam the student population tripled between 2003 and 2014. Furthermore, in all three countries, new public and private universities were created to absorb the growing number of students.

As a consequence of this expansion, partner countries faced the need to increase the number of faculty staff, to upgrade infrastructure and to develop and adapt strategies to be able to deliver training and research for a growing student body. For instance, Vietnam's 2005 Government Resolution on the Renewal of Tertiary Education called for significant changes in education quality, efficiency and scale and linked higher education

with overall socio-economic development (Republic of Vietnam, 2005). In Benin, the government's official education strategy 2006 – 2015 recognised that the substantive growth of the student body had not been adequately matched with an increase in teaching personnel, and that the teaching conditions had thereby noticeably deteriorated (République du Bénin, 2006). In all three countries that were subject to this evaluation, official higher education strategies also addressed the need to promote research as one of the objectives of higher education strategies.

Thus, the interventions of Belgian higher education cooperation, which aimed at strengthening the partner institutions in their core functions of teaching, research and/or services to society, were aligned to the priorities formulated in the official higher education strategies of the partner countries. This holds true for both the IUCs and the projects, even though they have a different scope. While IUCs aim for the strengthening of an entire institution, projects aim for strengthening a specific department within a given faculty.

Furthermore, the interventions were also aligned to the objectives and priorities of the partner institutions. The strategies of the respective partner institutions often echoed strategies at national level, but also defined some more specific priorities. For example, the VLIR-UOS IUC was in line with the priorities of Can Tho University in Vietnam, which aimed at increasing MSC and PhD programmes, but also at developing international programmes, distance education and student-centred research. It had also defined priority thematic areas in which it wanted to strengthen research.

With regard to the analysis of the relevance of the projects, it was not always possible to identify written strategies at the department or faculty level. However, all projects were in line with broader institutional strategies to strengthen teaching or research and improvements of services to community. For example, the ARES research project on teak in Benin was initiated at a time when the partner university, the Université d'Abomey-Calavi, had only just started training PhDs, thereby making capacity development in research highly relevant.

In this regard, it is noteworthy that the capacity development for which the ARES projects in Benin aimed at had a very strong focus on strengthening individual capacities through integrated scholarships, whereas the VLIR-UOS projects in Ethiopia had a broader focus that also put emphasis on the upgrading of equipment and the introduction of new processes. This is noteworthy because according to secondary data gathered and interviews conducted, the partner institution in Benin also had needs in terms of infrastructure and the improvement of processes. However, in the field of agroforestry (research project) and anaesthesia (training project), the most immediate needs identified by the local project promoters were related to providing good training conditions to the researchers and doctors that were trained during the project, so that the university and the health sector could be provided with skilled professionals in the years to come.

A key factor for guaranteeing that projects were relevant to the partner institutions was that the proposals were developed jointly between the Belgian and the local partners. In many cases, the cooperation between these partners had already started long before the intervention subject to evaluation. For instance, some of the project promoters in the partner countries had gotten to know their Belgian counterparts because they had done their PhD studies in Belgium. In other cases, the project subject to evaluation was a follow-up project on an earlier project also financed with funds from Belgian university development cooperation. In this regard, several of the Belgian project promoters pointed to the fact that most highly committed Belgian professors were approaching retirement, and expressed concern as to whether a younger generation of Belgian academics could be expected to invest the same amount of time and energy into this type of cooperation with developing countries. From the point of view of these interview partners, incentives were lacking for younger academics to devote time to projects that are not rewarded in their career path.

In contrast hereto, the interventions are highly relevant for the younger generation of academics in the partner countries. The indirect beneficiaries who received Master or PhD scholarships stated that the projects enabled them to complete their studies under conditions that would otherwise not have been possible, which significantly impacted their career development. In this regard, the embedded scholarships not only provided a living allowance. They typically enabled the scholarship holders to spend some time in Belgium, where they had access to advanced equipment and more literature. At the same time, the interventions also typically subsidised data collection efforts for research. Finally, completing a degree within an intervention often entailed close supervision by the Belgian and local project promoters, who were invested in their progress as they were held accountable to deliver on the academic objectives of the interventions, especially with regard to the number and the quality of the publications. Finally, being part of an intervention meant being part of a team, which brought opportunities for networking and exposure. As a result, most of the scholarship recipients who were not yet faculty members were recruited as faculty members shortly after completing their degree. In many cases, they have a track record of publications that sets them apart from their peers who did not receive a scholarship.

Looking beyond the level of the partner institutions, the interventions were also relevant with regard to development needs of the partner countries or regions, as they addressed training and research gaps in sectors relevant to development. In the case of the ARES' IUC with UPNT, a medical higher education institution in Vietnam, a strong alignment between the health needs of Ho Chi Minh City, the strategic plan of the university and the IUC was given because of the close ties between UPNT and the health authorities. The university budget is provided by HCMC's People's Committee and the qualitative and quantitative needs identified by the city's health authorities were directly translated into the university's strategic plan, which in turn was supported by the IUC. To take another example, in Ethiopia, the VLIR-UOS project with the Faculty of Veterinary Medicine at Arba Minch University was aligned to national efforts in Ethiopia to sustain and protect its biodiversity resources. At the time of the project's inception, the government had endorsed a National Biodiversity Strategy and Action Plan which called for the conservation of ecosystems within protected areas, and for sustainable management of ecosystems outside of these areas. In line with this strategy, the project identified ecological and policy challenges affecting the protected areas of Nechisar Park.

Finally, the interventions were also highly relevant to the final beneficiaries, even though final beneficiaries were seldom involved throughout the whole project cycle. The two interventions focussed on training professionals for the health sector, the IUC with UPNT in Vietnam and the training project for anaesthesia in Benin, did not involve patients in the formulation. At the same time, the need for training health professionals was apparent from sector strategies. With regard to the research interventions, in all but one case final beneficiaries were not consulted before the implementation phase. The VLIR IUC with Can Tho University was the only project in which research projects identified respective research needs together with the relevant local authorities and farmers. Here, in six out of seven research projects under the IUC the specific research needs were identified together with local farmers and authorities during the identification, piloting and research of the new technology. Once the technology was developed and refined, annual learning workshops were conducted at the pilot sites to persuade other farmers to use the new technology. In contrast, in the VLIR-UOS research project on veterinary medicine in Ethiopia and the ARES research project on teak in Benin, horse owners and teak farmers were primarily approached for data collection efforts. Research results were also communicated to the final beneficiaries at the end of the project, but with a much less elaborate strategy than was the case in the IUC. In this regard, the evaluation showed that the development impacts were greater in the research interventions that had involved final beneficiaries in the identification of research needs and during the overall research process, and which placed an emphasis on the dissemination of results.

#### **4.2.1.1 Assessment of the relevance of the Belgian university cooperation**

Based upon these findings, the evaluation team comes to the conclusion that the interventions of Belgian higher education cooperation are highly relevant. They address pressing needs of partner countries to strengthen the capacities of higher education institution in a context of exponential growth of the student body. Depending on the partner country, the number of university students had increased between three- and tenfold in the decade preceding the interventions. This led to a strong need to increase faculty staff, upgrade infrastructure and develop and adapt strategies for education and research. Therefore, there was a significant potential for university development cooperation to provide added value and make an impact regarding the capacities of the partner institutions to fulfil their core missions of education, research and service to society.

Furthermore, the interventions were also relevant regarding the strategies and policies of the partner countries and partner institutions. First, fostering higher education institutions in their core function of education, research and service to society was in line with official strategies of the partner countries at that time. These priorities were often mirrored at the level of the partner institutions. In addition, the strategies of the partner institutions defined more specific priorities, e.g., research areas for educational fields to strengthen. The interventions of Belgian university development cooperation were also aligned to these. In particular, the interventions accompanied the partner institutions in a crucial transition period marked by the only recent establishment of PhD training programs.

In addition, the modes of cooperation, marked by a joint elaboration of proposals by Belgian promoters of the interventions and their counterparts in the partner countries, ensured that interventions catered to the specific needs of a given higher education institution or department therein. The fact that the priorities of the partners were taken into account in the formulation of the interventions ensured ownership, which in turn proved to be relevant for the impact and sustainability of support. In the sample of interventions evaluated, the ARES projects had a strong focus on individual capacity building through scholarships, whereas the VLIR-UOS projects were broader in scope and put more emphasis on introducing new or enhancing existing processes and on upgrading infrastructure. This is noteworthy because in general terms, the partner institution of the ARES projects also had needs in terms of infrastructure and the improvement of processes. However, in the specific departments with whom the ARES projects subject to evaluation cooperated, training the next generation of academics was seen as the absolute priority.

For the individuals who benefitted from scholarships within the interventions, the embedded scholarships were highly relevant for their individual career development. In particular, study trips to Europe gave students access to more literature and to better infrastructure. In addition, close supervisions of PhD students by Belgian and local professors improved their research and technical competencies and enabled them to produce publications, which in turn enhanced their academic advancement.

Finally, by providing training for health professionals and producing research in the areas of veterinary sciences as well as rural and sustainable development, the interventions also contributed to strengthening sectors highly relevant to the development of the partner countries, both at the policy level and at the level of final beneficiaries. In this regard, the research interventions that involved final beneficiaries early on, starting with the identification of research needs, were also those that were the strongest at disseminating research results at the level of beneficiaries, thereby leading to comparatively higher impacts outside of academia.

## 4.2.2 Effectiveness and impact of the Belgian university cooperation – ARES

In the following, the effectiveness and impact of the ARES interventions subject to evaluation is analysed along the organisation's Theory of Change. In this regard, the ARES Theory of Change distinguishes between the different types of intervention in the organisation's portfolio. At the same time, at the outcome level, all intervention types shall contribute to strengthening the partner institutions in their research and training capacities and shall contribute to research being taken up by early adopters. In this regard, the difference between IUCs and projects is that IUCs aim for change at the level of entire universities, whereas projects aim for change at the level of university departments. In addition, in contrast to projects, IUCs also aim at structural strengthening of the partner institutions in terms of governance. At impact level, both IUCs and projects intend to strengthen the partner institutions in their role as actors of change. Thereby, all interventions shall contribute to tackling challenges in the field of development, which shall ultimately contribute to sustainable human development in the partner countries.

### 4.2.2.1 Effects on educational capacity

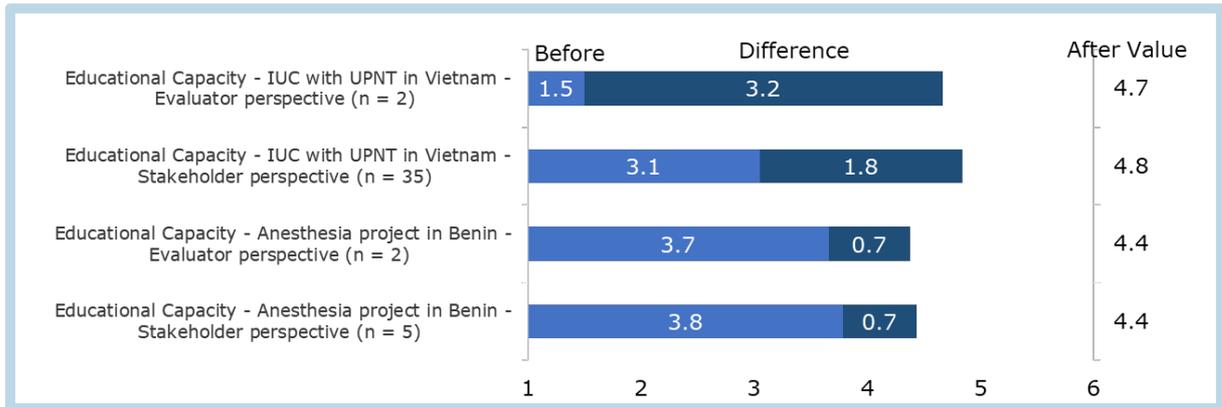
In the ARES Theory of Change, education projects aim at developing new curricula, at training the next generation of academics and equipping them with pedagogical tools, and at introducing new pedagogical approaches that improve teaching practices, thereby strengthening the educational capacities of a given department of a partner institution (*outcome*). Subprojects following the same logic can be carried out in the IUC. While a given subproject in an IUC may also target a specific department, the IUC as a whole always has a wider scope. Targeted measures strengthening educational capacities within an IUC are only one aspect of a wider support package that also encompasses support to a partner institution's research capacities (see chapter 4.2.2.2) and more structural strengthening of the processes and governance of a university as whole (see chapter 4.2.2.3).

The conducted pen-and-paper survey<sup>34</sup> shows a stronger improvement of educational capacities at the UPNT in Vietnam supported by an IUC (difference of + 3.2 in the perception of the evaluators, difference of +1.8 in the perception of the stakeholders involved) than at the department for anaesthesia and reanimation of the Faculty of Medicine of the University of Abomey Calavi supported by an education project (difference of + 0.7 in the perception of both evaluators and stakeholders involved) (see figure 24). When looking at these results, it should be taken into account that the baseline capacities of the partner institution supported via an IUC were lower, as it only became a full-fledged university in the period subject to evaluation. In addition, it should be taken into account that the education project subject to evaluation had a strong focus on individual capacity building of young academics and bringing about development results, and did not include many of the elements of the general Theory of Change, such as curricula development and the introduction of new pedagogical approaches.

---

<sup>34</sup> Syspons and Nuffic devised an index to measure the contribution of interventions of Belgian universities to the different capacities of the partner universities in order to capture changes in these capacities in quantitative terms. The index is composed of answers given in the survey by the interview partners in the partner countries and Belgium as well as the observations by the evaluators in the field mission. Within the survey all respondents were asked to rate the situation regarding the existing capacities of the respective partner university prior (baseline) to the intervention and after the intervention along a set of various items which were developed on the basis of the respective Theory of Change for each specific intervention. A detailed operationalisation of the capacity index can be found in annex C.

All assessments for each item in the index were made using a scale of 1 (capacity is lacking) to 6 (capacity is high). The index was calculated as the average of the different perspectives of the Belgian respondents and respondents from the partner country, which all had the same value, prior and after the intervention. The calculated mean of these different perspectives resulted in a value for the situation before and after the intervention. The calculated differential value between the calculated mean for the situation before and after the intervention thus indicates the changes within each capacity, which can be contributed to the analysed intervention by comparing the collected baseline data to the observed results after the implementation of the intervention.

**Figure 24: Changes in the educational capacity<sup>35</sup>**

Source: Syspons and Nuffic 2018

A factor that contributed to the increase of the educational capacities in both the project in Benin and the IUC and Vietnam was the training of a new generation of academics. This was done both through scholarships at the MsC level (in the IUC) and PhD level (both in the IUC and the project) as well as through short courses in pedagogy for faculty staff (in the IUC). In addition, the field mission to Benin showed that teaching missions of international professors at the partner institution also contributed to develop educational capacities through peer learning (in the project). In the case of the education project in Benin, the partner university's capacity to offer a specialised medical degree in anaesthesia was secured, as the intervention trained three new teachers to take over duties of faculty members who were approaching retirement. However, even though the capacities of the individuals who were trained were strengthened, this did not lead to a substantial difference in terms of the institution's educational capacity before and after the project. The reason for this is that the newly trained teachers replaced experienced teachers who had been very qualified, and the project did not formally introduce new or adapt existing processes or structures for the degree programme. However, outside of its capacity development for faculty staff, the project indirectly strengthened the educational capacities of the degree program because it also provided scholarships for doctors in training. Some of the doctors went on to work for the partner hospitals of the degree program, thereby improving the quality of supervision provided for the generation of students that followed them. In both the IUC and the project, scholarship recipients had the opportunity to do part of their training in Belgium. For scholarship recipients of the project in Benin in particular, this meant exposure to advanced medical equipment and drugs sometimes not available in their home country. This was an added value for the development of their skill-set.

In contrast to the education project's focus on individual capacity building, the IUC with UPNT, a medicine university<sup>36</sup> in Vietnam, also improved the teaching capacities of the partner institution through the introduction or improvement of processes or structures. Under the IUC, all undergraduate curricula were reviewed, overlaps eliminated and gaps filled. In addition, the revised curricula are now based on learning outcomes. In addition, new courses in several disciplines, including medical pedagogy, family medicine, research methodology and clinical reasoning were developed. Via a combined action of training staff and creating curricula, the IUC was successful at establishing new departments: the Department of Family Medicine, the Department of Family Medicine Nursing, and the Family Medicine Clinic. In addition, the education capacities of UPNT were structurally strengthened through the development of processes including, for example, methodologies for evaluating and testing students based on learning objectives

<sup>35</sup> The values displayed here are rounded numbers, but the calculations of the difference between the before and after value have been made on numbers that were not rounded. This is the reason why the difference between the before and after value regarding the stakeholder perspective on the anaesthesia project is 0.7 and not 0.6.

<sup>36</sup> UPNT only obtained the status of university during the period subject to evaluation.

and with the help of digital tools and multiple choice. Through these improvements, the IUC contributed to increasing the quality of teaching in a period during which the number of students at the partner institution increased threefold. However, one aspect concerning educational capacities on which the IUC was not successful was in obtaining national accreditation for UPNT's degree programmes. The reason for this was that the procedures for accreditation foreseen by the Ministry of Education changed during the course of the IUC.

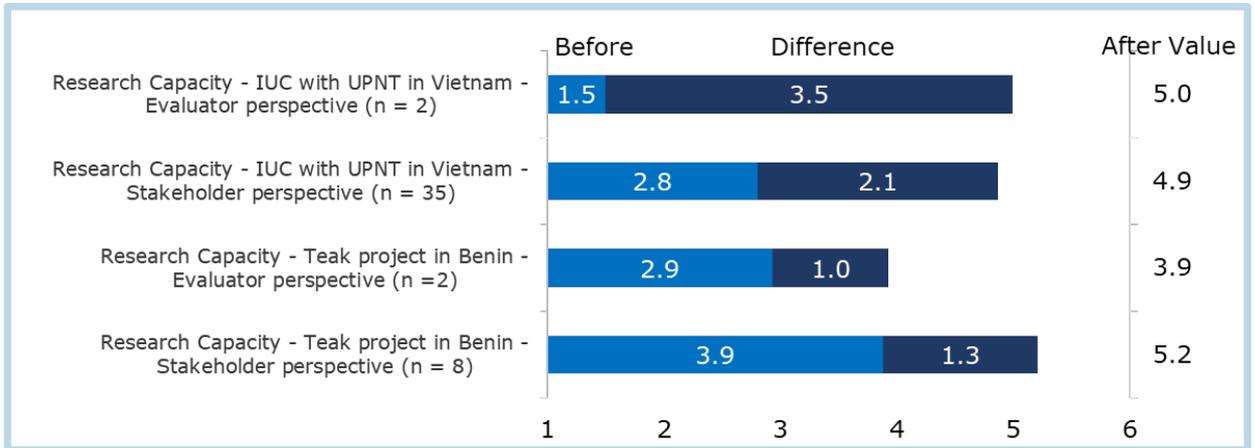
While the ARES portfolio distinguishes between research and education projects, the evaluation team found that the research project on teak in Benin also contributed to increase the partner institution's educational capacities. The project trained four PhDs, three of whom went on to work as faculty at the University of Abomey-Calavi. Since they are now teaching students at MsC level, the Faculty of Agriculture's capacities to train the next generation of students has been strengthened. Furthermore, a concept that formed the basis of one of the PhD theses, the concept of value chains, has subsequently been introduced in the teaching curriculum. In addition, the publications produced within this research project contributed to the promotion of one of the Beninese professors involved to a more senior position, in which he is now able to supervise PhDs. In a context in which the Beninese partner university had only recently started to offer doctoral training, increasing the capacities for supervision of students in research Masters and doctoral programmes has strengthened educational capacities.

#### **4.2.2.2 Effects on research capacity**

In the ARES Theory of Change, research projects aim at producing and publishing interdisciplinary research that is then disseminated (*outcome*) and at organising colloquia and seminars to produce innovative solutions (*outcome*). It is also foreseen that projects upgrade infrastructure and equipment to improve the conditions for conducting research (*outcome*). In addition, projects shall improve the competencies of local personnel through the elaboration of methodological and technical guides and shall train the next generation of academics, thereby strengthening the research capacities of a given department of a partner institution (*outcome*). A further intended outcome is that research networks are established or reinforced, and that knowledge created through research is taken up by early adopters, which shall in turn lead to development impacts (addressed in chapter 4.2.2.4). Subprojects following the same logic can be carried out in the IUC. While a given subproject in an IUC may also target a specific department, the IUC as a whole always has a wider scope. Targeted measures strengthening research capacities within an IUC are only one aspect of a wider support package that also encompasses support to a partner institution's education capacities (see chapter 4.2.2.1) and more structural strengthening of the processes and governance of a university as whole (see chapter 4.2.2.3).

The conducted pen-and-paper survey shows a stronger improvement of research capacities at the UPNT in Vietnam supported by an IUC (difference of + 3.5 in the perception of the evaluators, difference of + 2.1 in the perception of the stakeholders involved) than at the School of Environmental Development and Management of the Faculty of Agronomic Sciences of the University of Abomey-Calavi supported by a research project (difference of + 1.0 in the perception of the evaluators, difference of + 1.3 in the perception of the stakeholders involved) (see figure 25). When looking at these results, it should be taken into account that the baseline capacities of the partner institution supported via an IUC were lower, as it only became a full-fledged university in the period subject to evaluation. In addition, it should be taken into account that the research project subject to evaluation had a strong focus on individual capacity building of young academics and put much less emphasis on other aspects of the general theory of change, such as support to infrastructure and upgrading of equipment and the elaboration of methodological guidelines.

**Figure 25: Changes in the research capacity**



Source: Syspons and Nuffic 2018

According to the results of the field missions, the training of a new generation of academics proved to be a crucial factor regarding the strengthening of research capacities of partner institutions in both the project in Benin and the IUC in Vietnam. Foremost, PhD students who benefitted from a scholarship often subsequently went on to join the faculty of the partner institutions, thereby acting as a multiplier transmitting research competencies to the next generation of students. Increasing the number of faculty with PhD level training was furthermore a significant contribution in a context in which the partner institutions had only just begun to deliver postgraduate training. Regarding the development of competencies of the PhD students, several aspects played a role. First, students could concentrate on their studies because their living expenses were covered. Second, scholarship recipients benefitted from close co-supervision of their thesis by Belgian and local professors and from coaching during research stays in Belgium.

In the same vein, the scholarships provided to PhD students were also the main vehicle to produce innovative solutions and to increase the number and quality of publications of the partner institutions, as well as to disseminate research. In the case of the research project in Benin, the PhD students completed their degrees swiftly (in three years) while producing a considerable number of publications, some of them in international journals with an impact factor. They also participated in colloquia. Previously, students had typically taken five years to finish their degrees, and publications had foremost targeted francophone journals with no impact factor. Also, prior to the project, only faculty members participated in colloquia. The project thus raised the bar, and indirectly contributed to strengthening the research capacity of the partner institutions, because subsequently more research projects aimed for a similar quality and quantity of research outputs.

Looking at the extent to which the interventions contributed to improving conditions for conducting research, the field missions showed that while the IUC contributed to change that outlasted the intervention, the project only improved conditions for the duration of the intervention. In the project, the PhD students had very good conditions for producing research in the field of forestry, because they were equipped with laptops and GPS devices and received motorbikes and could also pay Master students to help them collect data in the field. As a result, they were able to conduct large scale primary data collection efforts and to produce novel research. The support however did not have a structural effect on the institution, as the equipment was either at the end of its life cycle or remained in the hands of the individuals at the end of the project. In contrast hereto, in the IUC, a more lasting change was achieved via the establishment of a Biomedical Research centre, which was equipped with a state-of-the-art microscope whose operation and maintenance was secured by the city.

The IUC also implemented several other measures that brought about structural change regarding research capacities. An Office for Scientific Affairs was created, and 230 (out of 356) lecturers were trained on basic research methodology. The training module, which had been developed for training UPNT staff, is now regularly offered to post-graduate students, and thereby continues to foster research capacities at the institution in the long term. In addition, the IUC contributed to the practice-orientation of research, because it worked on strengthening ties with several of Ho Chi Minh City's hospitals. The cooperation that was initiated included scientific research between UPNT and the hospitals. As a result, many articles have been published in reputable national journals and in some international publications. Finally, a number of research projects, e.g., on bone marrow transplantation originated from the IUC. Since the IUC was instrumental in getting some of the first research projects of UPNT off the ground, it helped forge a path establishing research as one of the university's core functions. While only four publications came out of UPNT in 2008, a total of 56 publications came out in 2012. In 2016, when the intervention ended, UPNT produced 61 publications, showing that the capacity to produce research was consolidated.

Since producing research is not a goal in itself, an intended outcome of the ARES Theory of Change is that research is taken up by early adopters from civil society, the public sector and/ or the private sector. In this regard, the research project in Benin had specifically foreseen disseminating the results of the research produced to the forestry authorities in order to enable them to take on a role as multipliers to accompany smallholder farmers in the production and sales of teak. The field mission however showed that this intended change did not occur. The authorities were invited to participate in two restitution sessions, and the PhD theses and a technical data sheet produced in the project were shared with them. However, they did not show interest in acting as multipliers for lack of incentives.

Nevertheless, the evaluation showed that the farmers on whose plots research had been conducted continued to apply the techniques recommended by the project. As a result, they increased the productivity of their teak trees as well as their revenue in the long term. However, since this only concerned 21 farmers, and these farmers did not actively engage as multipliers, this did not lead to a large-scale impact with a significant number of farmers taking up new practices. The farmers with whom the project had worked directly had anecdotal examples of neighbours showing interest in the techniques and sometimes copying them. Yet, data collection at the level of one comparison group of farmers who were not involved in the project but had heard about improved practices from other sources and had applied them showed no improved productivity for this group. Although the sample of farmers was too small to draw representative conclusions, this indicates that the transmission of new knowledge needs a certain amount of rigour and follow-up to lead to changes at the level of final beneficiaries. Since no strategy existed to disseminate research results in such a way to a wider group of farmers, the number of farmers successfully adopting new techniques remained very limited. In the IUC with UPNT in Vietnam, a contribution to research uptake by early adopters was not foreseen.

With regard to the dissemination of knowledge, in the interventions evaluated, the role of networks played out slightly differently than foreseen in the ARES Theory of Change. The Theory of Change foresees that research networks are established or strengthened as a result of joint research between universities in Belgium and universities in the partner countries, and that this would be one of the factors that would contribute to research being taken up. However, no formal partnerships at institutional level were established between the universities involved in the research project and the IUC.

Nevertheless, at an individual level, several of the academics from the partner countries established personal and academic ties with counterparts from Europe. This often led to further collaboration, which in turn proved useful in acquiring additional scholarships or research grants. For example, one PhD student in the research project in Benin maintained ties with her Belgian co-supervisor, who wrote a letter of recommendation that helped her secure a post-doc scholarship from ARES. Another PhD student from the same project established ties with a French research institution during his academic stay

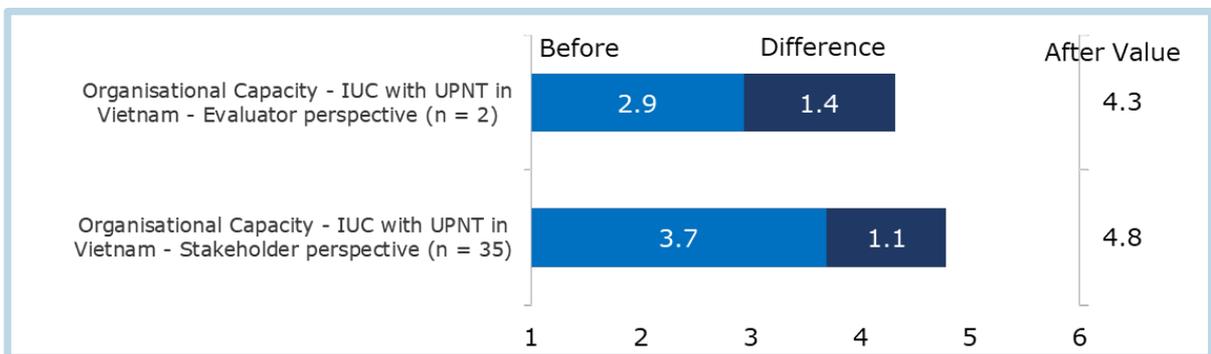
in Europe financed by the project, and still cooperates with that institution. Likewise, several alumni of UPNT also stated that the IUC cooperation had been a door-opener for obtaining further scholarships, including from non-Belgian sources.

#### 4.2.2.3 Effects on organisational capacity

Beyond changes regarding research and educational capacities, in the ARES Theory of change IUCs also aim at improving administrative and financial procedures as well as elaborating and putting into practice strategies related to education and research. Lastly, they are also meant to bring about transparency and networking. All of these aspects shall contribute to improving the governance of the partner institutions.

The pen-and-paper survey conducted shows an improvement of organisational capacities at UPNT of + 1.4 in the perception of the evaluators, and of + 1.1 in the perception of the stakeholders involved in the intervention (see figure 26). The IUC thereby had less impacts on organisational capacities than on research and educational capacities. This could be explained by the fact that the baseline situation before the intervention was significantly better for organisational capacities than it was for educational and research capacities. As mentioned earlier, UPNT only became a fully-fledged university offering postgraduate degree programmes at the very beginning of the period subject to evaluation. This created a particular need to enhance research and education.

**Figure 26: Changes in the organisational capacity**



Source: Syspons and Nuffic 2018

The field missions showed that in the IUC with UPNT in Vietnam, the introduction of evaluation and testing methodologies contributed significantly to improving the quality of teaching and learning, but also to efficiency (digital testing). In addition, the IUC also worked directly on improving administrative and financial processes. University Management Information Systems were procured for Human Resources, Student Affairs and Finances. However, this support cannot be considered successful, because the system was partly replaced by another system shortly after it was developed, and the heterogeneity of different software programmes in use but not interconnected constitutes a challenge for the management of the university to this day. This also happened with the e-learning platform when a system was selected that turned out not to be the best fit for UPNT.

Furthermore, the IUC did not elaborate research and training strategies, and room for manoeuvre to develop a culture of transparency is limited in the Vietnamese context. Thus, while the IUC contributed to improving strategies, processes and structures and rendered the management of educational processes more effective, its did not have a major impact on the governance in terms of strategy remained limited.

Finally, on a cross-cutting level, the evaluation team could not identify any mechanisms that exert influence on existing gender relations and equality of opportunity in any of the ARES interventions subject to evaluation. Scholarships within the interventions went to both men and women, but with no mechanism in place to increase the representation of women. In this regard, the baseline situation in the two partner universities was

different: at UPNT in Vietnam, female graduates have outnumbered male graduates in some years. In contrast, at the University of Abomey-Calavi in Benin, female students make up only slightly more than 25 % of the student population.

#### **4.2.2.4 Development impacts**

Beyond the changes within the partner universities described above, ARES interventions are ultimately intended to bring about development impacts outside of the university. This is to be achieved by turning higher education institutions into actors of change at the level of civil society and by having early adopters spread new practices to different stakeholders within society. In addition, development impacts are to be achieved by having universities contribute to public policy change. Finally, impacts are to be achieved via the graduates of the partner institutions who are to tackle issues relevant to development.

The field missions showed that all interventions evaluated contribute to development impacts in different ways. Overall, the IUC and the education project had more development impacts than the research project, which largely remained limited to academia.

Contributing to policy change was an explicit objective of two out of the three ARES interventions evaluated: the IUC with UPNT in Vietnam, and the research project on teak in Benin. While the former intervention was successful in this regard, the latter was not. In the research project on teak, as explained previously, the dissemination of research findings to the authorities was limited to two restitution sessions. Even though it had been foreseen to engage the authorities as multipliers to accompany teak farmers in production in sales, the project did not have any strategy, nor did it carry out any measures to engage authorities beyond the two restitution sessions. In addition, the evaluation showed that there is a high personnel fluctuation in the forestry authorities that were invited to attend the project's two restitution sessions. In sum, the field mission showed that while the project proposal put equal weight on academic and development objectives, in practice, strong precedence was given to achieving the academic objectives that were conducive to the career development of the individuals involved. Accordingly, no incidence of the project on policy changes could be identified in the evaluation.

In contrast hereto, with regard to the IUC in Vietnam the evaluation found that the partner institution UPNT did contribute to policy changes. Various stakeholders confirmed the university's contribution at the local and even national policy level and confirmed the importance of the IUC cooperation on these issues. For example, the Vietnamese Ministry of Health has promulgated a decision on the approval of the National Program of the development of Family medicine<sup>37</sup> with technical advice from UPNT and several other universities. At the local level, the approval of the Ho Chi Minh City Family Medicine program<sup>38</sup> was based on the experience and technical inputs from the pilot model of Family Medicine in three district hospitals that had benefitted from technical support from UPNT, funded under the IUC. In addition, as a result of its recognition as a key player in medical education, UPNT is also one of the Vietnamese universities receiving financial support from the World Bank for its national project HPET (Health Professionals Education and Training for Health System Reforms, launched in February 2016) and as such is playing a leading role in national policy development in medical education. While this cannot directly be attributed to the IUC, the IUC played a role in strengthening UPNT as a key player in medical education, which positioned the institution to receive financial support from third parties for working on health system reforms. Outside of the support from university development cooperation, an important set of external factors that made it possible for UPNT to have an influence at the policy level were the long-standing close ties between UPNT and Ho Chi Minh City' People's Committee. However, an incidence of

---

<sup>37</sup> Decision No 935/QD-BYT dated March 22nd, 2013

<sup>38</sup> Decision No 6327/QD-UBND dated November 30th, 2013

the partner institutions as actors of change within civil society could neither be identified in Vietnam (where civil society did not have the opportunity to develop) nor in Benin.

Next to the observed contributions to policy changes, the analysed interventions also contributed to address development challenges. In the case of the IUC, the partner university UPNT contributed a total number of more than 4.500 good quality health professionals to Ho Chi Minh City Health Services in the period subject to evaluation. While the university would also have trained health professionals without the IUC, the field mission found that the number of graduates and the quality of their training improved due to the IUC. Again, also here the close ties between UPNT and Ho Chi Minh City' People's Committee proved an important external factor, as UPNT students are explicitly trained to work for HCMC health services. As a result of this policy, in some of the city's hospitals, as many as 90% of doctors come from UPNT. As a consequence of this training, relevant health indicators in Ho Chi Minh City, such as infant and maternal mortality, have decreased in the period subject to evaluation. However, this cannot solely be attributed to UPNT and the IUC, and is also part of a positive trend of health indicators at national level. However, interviews conducted with health officials in the region suggested that UPNT has played an important role in improving the city's health situation.

Furthermore, the education project training doctors specialising in anaesthesia and reanimation for francophone countries has also made contributions to strengthening the health sector in the partner countries. First, the field mission showed that the training programme supported by ARES has doubled the number of doctors specialised in anaesthesia and reanimation in participating countries of the sub-region<sup>39</sup>, from less than 50 to over 100. While this increase occurred over a period of twenty years, since the creation of the program in 1999, and not only during the four year duration of the ARES project, the project still made a significant contribution. First, because the project trained the current generation of teachers, without whom upholding the program would not have been possible. Second, 43 out of a total of 127 doctors trained by the program graduated during the project and benefitted from the teaching missions of Belgian and non-Beninese African experts financed under the project, and several benefitted from scholarships for an internship in Belgium. Over 80% of graduates practice the specialisation in francophone countries of Sub-Saharan Africa today. An important external factor that made this possible is Benin's affiliation with the African and Malagasy Council for Higher Education (CAMES), which entails recognition of degrees delivered by the program in 19 countries. At the same time, in the case of the education project, the field mission identified an unintended negative impact: over 15 % of alumni have been lost to brain drain. Here, again, an external factor comes into play: those who have expatriated went to France, where a diploma equivalency for specialised doctors from non EU-countries constitutes a pull factor.

In spite of a certain brain drain, the program has managed to substantially strengthen anaesthesia and reanimation in several partner countries through a multiplier role of graduates of the program. Not only have alumni of the program doubled the number of doctors, more than 50% of alumni also have a multiplier role, either supervising doctors in training in hospitals, or formally teaching the discipline in training institutions for doctors or nurses. Alumni have also had a role in the creation of specialised training institutions for doctors or nurses in Niger, Burkina Faso, Mali, Guinea and Gabon, which further strengthens the discipline. It is however not possible to establish a link between the strengthening of the discipline and the improvement of national health indicators in the partner countries, as the number in the field still remains significantly below the threshold recommended by the World Health Organization. However, according to the interviews conducted in Beninese hospitals, in the hospitals where the number of staff

---

<sup>39</sup> The 127 doctors trained by the program since its inception are, by order of importance, from the following countries: Benin (33), Burkina Faso (18), Togo (13), Niger (12), Mali (10), Gabon (9), Cameroun (9), Republic of the Congo (Congo Brazzaville) (6), Guinea (5), Chad (3), Djibouti (2), Central African Republic (2), Madagascar (2), the Comoros (1), Republic of Guinea (Guinea-Conakry) (1), and Morocco (1).

specialised in anaesthesia has increased, mortality and complications related to surgical operations have gone down. Two main aspects account for this: first, pre-anaesthesia consultations are being administered more systematically, which helps to identify risk factors such as diabetes or heart attacks and adjust treatment accordingly. Second, specialised doctors have significantly reduced the number of general anaesthesia interventions and increasingly replaced them with local regional and epidural anaesthesia interventions, thereby saving many patients. In this regard, interviewees pointed to the fact that better anaesthetic care plays a significant role in reducing maternal mortality, as about a fifth of operations in Benin are caesarean sections.

While no immediate impact of the research project on teak could be observed outside of the university, except at the level of the 21 farmers involved, the research project indirectly contributes to address issues relevant for the development of Benin in the long run. Since all PhDs who were trained in the project have by now assumed teaching duties, they contribute to train young academics in forestry. Thereby, the partner university trains scientists who are able to produce knowledge in the field of rural and sustainable development, which is one of the priority sectors in the Beninese government's development strategy.

#### **4.2.2.5 Assessment of the effectiveness and impact of the Belgian university cooperation – ARES**

Based upon these findings the evaluation team is highly confident that the interventions improved the research and educational capacities of the partner institutions or specific departments therein. Furthermore, it is cautiously confident that organisational strengthening occurred, and highly confident that the interventions contributed to development impacts outside of the higher education institutions involved.

With regard to **educational capacity**, the evaluation team is cautiously confident that if new curricula and courses are introduced, then a new generation of academics emerges (*outcome hypothesis 1*) (see figure 19 and 27). From the perspective of the evaluation team, the success of the introduction of new curricula and courses is dependent on accompanying measures such as staff training. Particularly, the introduction of post-graduate training has met a need and provided an added value in a context in which the partner institutions had only very limited personnel with PhD level training. The evaluation team is also highly confident that if scholarships for studies relevant to development are granted, then a new generation of academics emerges (*outcome hypothesis 2*). However, the evaluators are neither confident nor not confident that scholarships, coaching and methodological and technical training contribute to young PhD students acquiring pedagogical skills (*outcome hypothesis 3*). While a course on pedagogy was offered to staff of UPNT in the IUC, the training of PhD students in the projects did not specifically reinforce pedagogical skills. Furthermore, the evaluation showed that PhD students sometimes acquired such skills through observation of their thesis supervisors or visiting scholars from abroad (*causal mechanism*), but not in a systematic way. Moreover, the evaluators are highly confident that if new pedagogical approaches are validated, as was the case with the introduction of learning outcomes in Vietnam, then teaching practices are improved (*outcome hypothesis 4*). In addition, the evaluators are more confident than not confident that if teaching practices are improved, the competencies acquired by students correspond to the needs of employers (*outcome hypothesis 5*). In this regard, the interviews conducted provided evidence that the practical skills training introduced as a result of the IUC was very much appreciated by the hospitals and HCMC health authorities. Lastly, the evaluation team is highly confident that if individual capacities are strengthened, teaching practices are improved and if a new generation of young academics emerges, then partner institutions are strengthened in their educational capacities (*outcome hypothesis 6*).

**Figure 27: Overview of assessed impact hypotheses – educational capacity**

	Hypothesis	Qualitative assessment	Quantitative scale	
<b>Educational capacity</b>				
<b>Outcome</b>	1	If new curricula and courses are introduced, then a new generation of academics emerges.	Cautiously confident that () is true	0.70 – 0.85
	2	If scholarships for studies relevant to development are granted, then a new generation of academics emerges.	Highly confident that () is true	0.85 – 0.95
	3	If scholarships for studies relevant to development are granted and courses, coaching, and methodological and technical training is offered, then young PhD students acquire pedagogical skills	Neither confident nor not confident that () is true (or false) – no idea	0.5
	4	If new pedagogical approaches are validated, teaching practices are improved.	Highly confident that () is true	0.85 – 0.95
	5	If teaching practices are improved, the competencies acquired by students correspond to the needs of employers.	More confident than not confident that () is true	0.50 – 0.70
	6	If individual capacities are strengthened, teaching practices are improved and a new generation of young academic emerges, then partner institutions are strengthened in their educational capacities.	Highly confident that () is true	0.85 – 0.95

Source: Syspons and Nuffic 2018

With regard to the **research capacity** of the partner institutions, the evaluation team is cautiously confident that if (joint) interdisciplinary research is conducted and published, then innovative solutions emerge (*outcome hypothesis 7*) (see figure 28). In this regard, the evaluation has shown that adequate financial means to conduct primary data collection are a key factor for producing innovative research (*causal mechanism*). Furthermore, the evaluation team is more confident than not that if (joint) interdisciplinary research is conducted and published, and if colloquia and seminars are organised, then research results are disseminated (*outcome hypothesis 8*). In this regard no colloquia or seminars were organised in the ARES interventions subject to evaluation, but research was published, and the stakeholders involved in the projects attended seminars and colloquia. For wide-spread dissemination of research results, a focus on Anglophone publications and publications with an impact factor proved to be a crucial *causal mechanism*. While the interventions were successful at disseminating research results within academia, dissemination outside of academia remained limited. In this regard, stakeholders involved in the interventions prioritised academic results over development results, because the number and quality of publications are crucial for individual career advancement within academia (*causal mechanism*).

Looking at the upgrading of infrastructure and equipment (faculties, labs, libraries, IT) the evaluators are more confident than not that this contributes to the improvement of conditions for conducting research at the partner institutions (*outcome hypothesis 9*). In the ARES interventions subject to evaluation, only a relatively small part of the budget was allocated to equipment. In the projects, most of this equipment was foremost for personal use of scholarship recipients or local project promoters. This equipment therefore only enhanced the conditions stakeholders directly involved in the intervention had for conducting research for the duration of the project. However, it did not improve the overall conditions of the partner institutions in the medium and long term. The evaluation team is also more confident than not that if technological and methodological guides are elaborated and courses, coaching, internships and trainings on methodological and technical aspects are offered, then the competencies of local staff are strengthened (*outcome hypothesis 10*). In the ARES interventions subject to evaluation, no formal guides were elaborated, and the competencies of local staff were mainly strengthened for recipients of PhD scholarships through co-supervision of their thesis by Belgian and local professors (*causal mechanism*), and through coaching during research stays in Belgium (*causal mechanism*). No laboratory technicians or other non-academic staff were trained in the interventions analysed. A strong focus of the interventions thus lay with the scholarships for PhD students.

Since all scholarship recipients of the sampled interventions obtained their degree and went on to teach at universities in the partner countries, the evaluators are reasonably certain that if scholarships for research relevant to development are granted, then a new generation of academics emerges (*outcome hypothesis 11*). Furthermore, the evaluation

team is highly confident that if a new generation of academics emerges, the capacities of the higher education institutions to fulfil their core mission in terms of research is strengthened (*outcome hypothesis 12*). As the chapter on relevance has shown, the number of university students in the partner countries has increased exponentially in the last years, meaning that partner institutions had a strong need to increase faculty staff, and the demand for PhD level training was particularly high, since doctoral training had only recently been introduced. Moreover, the evaluators are more confident than not that if the conditions for conducting research are improved, then the capacities of the higher education institutions to fulfil their core mission in terms of research is strengthened (*outcome hypothesis 13*). In this regard, the evaluation showed that if the partner institutions lack a budget for running costs to conduct research, they remain dependent on external sources of financing after the end of the interventions.

Looking at networking and the dissemination of research, the evaluators are more confident than not confident that if (joint) interdisciplinary research is conducted and published and if networking habits are developed, then research networks are established and/ or strengthened (*outcome hypothesis 14*). However, in the interventions analysed, no formal research networks were established. Nevertheless, individuals involved in the intervention strengthened their academic networks, especially through study trips to Europe, during which close cooperation with Belgian PhD supervisors was possible (*causal mechanism*). These academic ties developed at the individual level are still being used by scholarship recipients to pursue research or obtain further scholarships. Lastly, the evaluation team is more confident than not confident that if innovative solutions emerge and research results are disseminated, then knowledge is taken up by early adopters from civil society, the public sector and / or civil society (*outcome hypothesis 15*). In one of the interventions analysed, the fact that knowledge was taken up by the public sector was favoured by existing close relationships between the partner university UPNT and the HCMC health authorities (*causal mechanism*). In the other intervention, uptake of knowledge was restricted to farmers that had been directly involved in the research.

**Figure 28: Overview of assessed impact hypotheses – research capacity**

		Hypothesis	Qualitative assessment	Quantitative scale
<b>Research capacity</b>				
<b>Outcome</b>	7	If (joint) interdisciplinary research is conducted and published, then innovative solutions emerge.	Cautiously confident that () is true	0.70 – 0.85
	8	If (joint) interdisciplinary research is conducted and published, and colloquia and seminars are organized, then research results are disseminated.	More confident than not confident that () is true	0.50 – 0.70
	9	If infrastructure and equipment is upgraded (faculties, labs, libraries, IT), then the conditions for conducting research are improved	More confident than not confident that () is true	0.50 – 0.70
	10	If technological and methodological guides are elaborated and courses, coaching, internships and trainings on methodological and technical aspects are offered, then the competencies of local staff are strengthened.	More confident than not confident that () is true	0.50 – 0.70
	11	If scholarships for research relevant to development are granted, then a new generation of academics emerges.	Reasonably certain that () is true	0.95 – 0.99
	12	If a new generation of academics emerges, the capacities of the HEI to fulfil their core mission in terms of research is strengthened.	Highly confident that () is true	0.85 – 0.95
	13	If the conditions for conducting research are improved, then capacities of the HEI to fulfil their core mission in terms of research is strengthened.	More confident than not confident that () is true	0.50 – 0.70
	14	If (joint) interdisciplinary research is conducted and published and networking habits are developed, then research networks are established and / or strengthened.	More confident than not confident that () is true	0.50 – 0.70
	15	If innovative solutions emerge and research results are disseminated, then knowledge created is taken up by early adopters from civil society, the public sector and / or the private sector	More confident than not confident that () is true	0.50 – 0.70

Source: Syspons and Nuffic 2018

With regard to **organisational strengthening** at the level of the entire higher education institutions through IUCs, the evaluation team is more confident than not that if managing teams and administrative teams are trained and sensitised, then administrative and financial procedures and human capacities in terms of management of the partner institutions are improved (*outcome hypothesis 16*) (see figure 29). The IUC with UPNT in Vietnam involved university management as actors in design and

implementation, which induced ownership and commitment, and indirectly strengthened university management. However, the main means to support administrative and financial procedures was the development of a University Management Information System for Human Resources, Student Affairs, and Finances. This support however was of limited added value, because the financial part of the system was replaced by another mandatory system by the finance department shortly after it had been introduced and the other parts were not compatible with other university systems. Instead of facilitating university management, the great variety of different software programs that are not connected or compatible poses a considerable management problem for UPNT. From the perspective of the evaluation team, this relative failure does not disprove the underlying hypothesis that training and sensitisation can lead to improved processes, but it shows that buy-in from the management for new processes is key to establishing them successfully (*causal mechanism*).

Regarding the sub-projects related to education and research within the IUC, the evaluation team is highly confident that if such measures are carried out in an integrated and long-term approach and including the development of policies and strategies, then the infrastructure and human capacities of the higher education institutions are strengthened with regard to higher education and research and policies and strategies applied (*outcome hypotheses 17 and 18*). The IUC with UPNT was very successful in strengthening educational and research capacities in a sustainable and integrated way, including upgrading human resources, developing strategies, methodologies and curricula and institutionalising newly developed structures, accompanied by the necessary infrastructure (partly paid for by the IUC and by the HCMC's budget). In this regard, the same causal mechanisms that apply within projects apply for the IUC. The IUC however provides more large-scale support due to a higher budget and longer-term commitment and the ambition to strengthen the whole institution and not only specific departments. IUCs thereby achieve results via a holistic and integrated long-term approach.

The evaluators are more confident than not confident that if a coordination platform for the IUC is established, then transparency increases and a habit of networking is adopted (*outcome hypothesis 19*). Although the establishment of a coordination unit was part of the IUC, no direct relation could be found with transparency and networking. On the other hand, the evaluators found positive effects on partnerships and networking.

Finally, the evaluation team is also more confident than not confident that if administrative and financial procedures and human capacities in terms of management of the partner institutions are improved, policies and strategies related to education and research are applied, and if administrative and financial processes and human capacities are improved and transparency and networking are developed, then the governance of higher education institutions and their capacity to exert their fundamental mission in education and research are strengthened (*outcome hypothesis 20*).

**Figure 29: Overview of assessed impact hypotheses – structural strengthening**

	Hypothesis	Qualitative assessment	Quantitative scale	
<b>Structural strengthening</b>				
<b>Outcome</b>	16	If managing teams and administrative teams are trained and sensitized, then administrative and financial procedures and human capacities of the partner institutions in terms of management are improved.	More confident than not confident that () is true	0.50 – 0.70
	17	If measures aimed at strengthening research and educational mechanisms are carried out, then the infrastructure and the human capacities of the higher education institutions are strengthened with regard to research and education.	Highly confident that () is true	0.85 – 0.95
	18	If policies and strategies related to education and research are elaborated, then these policies are applied.	Highly confident that () is true	0.85 – 0.95
	19	If a coordination platform for the IUC is established as interlocutor regarding university governance, then transparency increases and a habit of networking is adopted.	More confident than not confident that () is true	0.50 – 0.70
	20	If policies and strategies related to education and research are applied, administrative and financial processes are improved and transparency and networking are developed, then the governance of the HEI is strengthened.	More confident than not confident that () is true	0.50 – 0.70

Source: Syspons and Nuffic 2018

Lastly, with regard to **development impacts** outside of the higher education institutions, the evaluation team is neither confident nor not confident that if the governance of the HEI is improved in terms of strategy, management and interaction with civil society, then HEI are actors of change within civil society (*impact hypothesis 21*) (see figure 30). Interaction between the partner institutions and civil society was not an intended impact of the analysed interventions. Specifically in Vietnam, being a centrally led communist country, civil society did not have the opportunity to develop as in other countries. This does not mean that the hypothesis may not hold up for other interventions that involve civil society. In contrast, the evaluation team is more confident than not that if HEI are strengthened with regard to their research capacities, and if research results are taken up by early adopters from the public sector, then HEI contribute to policy changes (*impact hypothesis 22*). In this regard, the IUC with UPNT in Vietnam was successful, whereas the research project on teak in Benin was not. *Causal mechanisms* that account for success or lack thereof are the existence of a strategy to disseminate research results beyond academia, and good access to the public sector. Again based on the successful example from Vietnam and the unsuccessful example from Benin, the evaluation team is also more confident than not confident that if research results are taken up by early adopters from civil society, the private sector and/or the public sector, then different stakeholders of society adopt new practices. However, the evaluation team is highly confident that if HEI are strengthened with regard to their educational capacities, then alumni contribute to tackling challenges relevant to development (*impact hypothesis 23*). In the interventions that were examined, the training of doctors reinforced the health sector in Vietnam and various francophone countries of Sub-Saharan Africa. Finally, the evaluation team is cautiously confident that if HEI contribute to public policy change and alumni contribute to tackling development challenges, then major development issues are addressed and a contribution to sustainable human development in the partner countries is made (*impact hypothesis 25*).

**Figure 30: Overview of assessed impact hypotheses – development impacts**

		Hypothesis	Qualitative assessment	Quantitative scale
<b>Development impacts outside of the higher education institutions</b>				
<b>Impact</b>	21	If the governance of the HEI is improved in terms of strategy, management and interaction with civil society, then HEI are actors of change within civil society	Neither confident nor not confident that () is true (or false) - no idea	0.5
	22	If HEI are strengthened with regard to their research capacities and research results are disseminated and taken up by early adopters from the public sector, then HEI contribute to public policy changes	More confident than not confident that () is true	0.50 – 0.70
	23	If research results are disseminated and taken up by early adopters from civil society, the private sector and / or the public sector, then different stakeholders of society adopt new practices	More confident than not confident that () is true	0.50 – 0.70
	24	If HEI are strengthened with regard to their educational capacities, then alumni contribute to tackle challenges relevant for development	Highly confident that () is true	0.85 – 0.95
	25	If HEI contribute to public policy change and alumni contribute to tackle development challenges, then major development issues are addressed and a contribution to sustainable human development in the partner countries is made.	Cautiously confident that () is true	0.70 – 0.85

Source: Syspons and Nuffic 2018

#### 4.2.3 Effectiveness and impact of the Belgian university cooperation – VLIR-UOS

Insights into the effectiveness and impact of the interventions of VLIR-UOS are of central importance to VLIR-UOS and SEO. While the criterion effectiveness captures to what extent the organisational objectives of VLIR-UOS have been achieved on the outcome level and what mechanisms facilitate or impede the achievement of objectives, the criterion impact investigates to what extent mid-term to long-term effects resulted out of these achieved objectives. As mentioned in chapter 2.2.2, VLIR-UOS as an organisation – broadly speaking – tries to strengthen research, educational and organisational capacities of its partner universities with its southern portfolio on outcome level to improve the living conditions in the partner countries in the long-run. It thereby has to be noted that IUC interventions target - although with a varying degrees of focus – all aforementioned capacity dimensions and the whole university, while projects take place

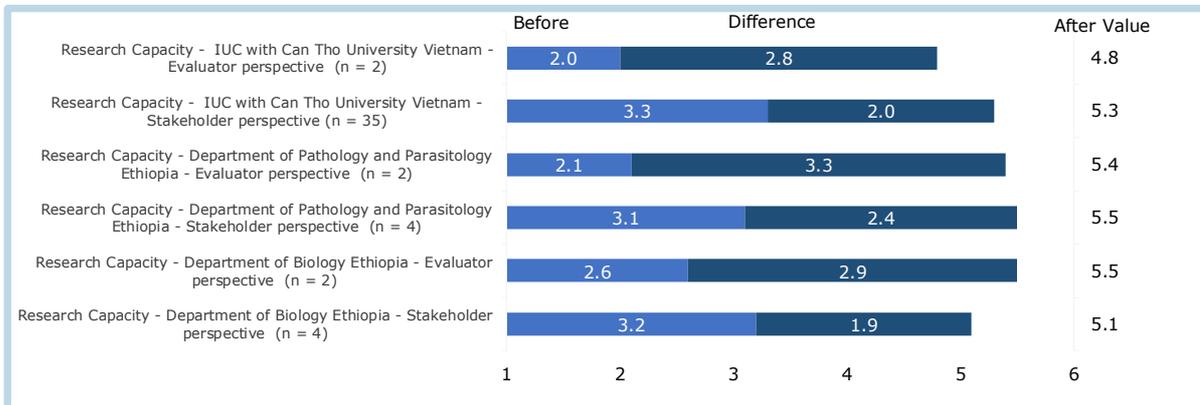
at departmental level and mostly aim at strengthening research, outreach and organisational capacities.

**4.2.3.1 Effects on research capacity**

In the first field – research capacity – VLIR-UOS with its interventions aims at generating new knowledge, services and technologies that are adopted by a wider population (*impact*). For this purpose VLIR-UOS strengthens the conditions for uptake, produces high quality research publications and training manuals as well as improves research processes and structures with its interventions at the participating partner universities (*outcome*).

According to the pen-and-paper survey conducted in the field missions, the research capacity at the visited partner institutions increased in all three analysed interventions due to the implemented activities. On average the Vietnamese and Belgian respondents see an increase of +1.9 to +2.4 in the research capacity due to the activities conducted in the different interventions and organisations, while the evaluators assessed this increase between +2.8 and +3.3. The difference in these two analyses can be thereby attributed to the difference in the baseline value from which the two assessments started (see figure 31).

**Figure 31: Changes in the research capacity<sup>40</sup>**



Source: Syspons and Nuffic 2018

The increase in the research capacities in the different partner universities can be firstly explained – according to the results of the different field missions – by the qualification of teaching and research staff through the analysed interventions. For instance, the IUC with Can Tho University funded 32 Master and 22 PhD scholarships, which made it the most significant programme developing human resources at Can Tho University at that time. Hence, it was responsible for an increase of 100% of Master and 62.9% PhD holders in the target organisational units and for 21.5% for Master and PhD level in the whole university in the time period 1998 to 2007. Also the OI/TEAM project in Ethiopia on the diagnosis and control of equine trypanosomosis could increase the qualification profile of its target department from 9% to 45.5% PhD holders. Interestingly, in this case the selected comparison department could not increase its ratio of PhD holders in the same time period.

At the same time it could be observed in the field missions that all interventions implemented short-term training courses, seminars or exchange visits to train the respective staff of the partner university in specific research methods or processes. According to the conducted interviews in the field missions these trainings increased the research capacities of the respective indirect beneficiaries by teaching them how to e.g. use research equipment, how to conduct modern research (e.g., how to write a lab

<sup>40</sup> The calculation of the index followed the same process as described in footnote 35.

journal, how to do sampling or how to work with milestones) as well as how to plan and manage research process in general.

The implemented trainings and the increase in the quality of human resources led to an improvement of research processes, according to the interviews conducted in the field missions. Hereby, the interview partners who benefitted from scholarships under the three interventions also explained that peer-to-peer learning from their Belgian supervisors was crucial to learning new research techniques and methods. In contrast to the two analysed OI/TEAM projects within the IUC another factor was fostering learning in this regard. Here, the set-up of the IUC in form of the programme coordination unit was also identified as crucial for learning how to organise and manage research projects. In this regard, the involved staff of Can Tho University copied processes and structures used for project management to manage their research projects.

These above described developments were underscored by the build-up of research structures in the form of research equipment and laboratories in all three evaluated interventions, according to the conducted field missions. In the OI/TEAM projects on land and water research for example, the respective department was supported in establishing a comprehensive Geographical Information System (GIS) database by supplying the needed basic research equipment for robust data gathering. Furthermore, in the analysed IUC 13 laboratories, three field stations and five classrooms were restored or equipped with state-of-the-art equipment (Vaes & Van Thang, 2008, pp. 55-58).

The combination of human resource development, the upgrading of research infrastructure and the set-up of the financed research projects under all three assessed interventions as transdisciplinary research projects, led in the opinion of all stakeholders interviewed to an increase in research quality at the respective universities or departments. This in turn led to an increase in research output in quality and quantity by the respective department and university in the analysed interventions. For example the College of Technology, which benefitted from the activities of the evaluated IUC, increased its international publications from two to three per year at the beginning of the IUC to on average 40 per year at the end of the IUC. Similarly, the department of the OI/TEAM project in Ethiopia on the diagnosis and control of equine trypanosomosis could increase its research output from nine national and six international publications per year at the beginning of the project to twelve and eleven national and international publications at the end of the project. In the latter case the department could increase its output more than the selected and analysed comparison department in the same time period and still publishes the same amount of publications.

Furthermore, the skill increase through the scholarships and the increase in publications also fostered the career development of the scholarships holders in all three assessed interventions in the field missions. For example, in the analysed IUC the majority of these former scholarship holders are either directors, (vice) deans or head of departments in their respective organisational units at the time of this evaluation. In the OI/TEAM project on land and water research one former scholarship holder is even currently serving as Vice-President for Research and Community Services.

As a consequence two out of three interventions enabled their respective departments, or in case of the IUC the whole university, to position itself as a centre for research and technology in their research field or region. In the IUC for example, the four research fields the IUC focused on – biotechnology, soil science, aquaculture and food technology – are the flagship disciplines in research and teaching at Can Tho University at the time of this evaluation, according to the external stakeholders interviewed in the field mission. The OI/TEAM project on land and water research also contributed to the establishment of a research centre of biodiversity, which is one out of six University Research Centres at the university.

In addition, two of three analysed partner universities were able to acquire additional research funding due to the improved human resources and research processes. While this was an unintended impact of the OI/TEAM project on the diagnosis and control of

equine trypanosomosis, it was an intended outcome for the analysed IUC. With regard to the former, the OI/TEAM project served as a door opener for the acquisition of two further OI/TEAM projects as well as an investment by GALVMed – an international company aiming at improving the livelihoods of resource-poor livestock keepers by facilitating provision of animal health tools. In contrast, the selected comparison department could not acquire any external funding in the same time period. Concerning the IUC, the intervention enabled Can Tho University to acquire 26 consultancy and eleven research contracts as direct spin-offs of the funded research projects (Vaes & Van Thang, 2008, pp. 71-76). Furthermore, the university acquired 5.51 million Euro of external research funds in the years 2009 to 2013, of which 38% were acquired by the College of Agriculture and the Institute of Marine Aquaculture – two of the main beneficiary organisational units of the IUC.

### Effects on final beneficiaries

Moreover, the aforementioned interventions were not only aimed at enhancing the research processes, structures and quality at the respective organisations but also at creating new knowledge and technologies to be adopted by early adopters (*outcome*). These in turn should then be adopted by a wider population (*impact*).

According to the field missions, all three interventions and all research projects funded under these interventions were successful in either developing new knowledge or new technologies.

- For example the research project under the IUC on rice developed two different farming models to increase the productivity of rice production without soil degradation. In the first model the farmer plants two rice crops a year and one other crop (either vegetable or cereal). In the second model the farmer plants three rice crops a year with a break of one to three weeks in between each harvest while simultaneously using organic fertilizer. Both models produced higher yields than the traditional models.
- Another example is the OI/TEAM project on the diagnosis and control of equine trypanosomosis, which developed fast diagnostic tests (serological and parasitological tests and Polymerase Chain Reaction based methods) and an appropriate drug schedule for equine trypanosomosis as well as successfully researched the enzootic situation of equine trypanosomosis in the focused regions of Ethiopia.

While the research projects under the IUC involved the early adopters – farmers and enterprises – in the conception and implementation of the research projects, the OI/TEAM projects involved the final beneficiaries only after the respective knowledge or technology had been developed. In the latter, mainly intermediate beneficiaries were involved in the rollout and dissemination of the research results or were trained by the respective project, which then shared the research results with the final beneficiaries. In the analysed IUC the majority of the research projects used conferences, seminars, trainings or workshops to distribute newly developed knowledge and technologies to extension services or other farmers.

In the case of the research project on rice under the IUC, the project was successful in transferring the first model to a large number of farmers, according to the local authorities interviewed in the field mission. The second developed model is less used by the farmers as it is more cost intensive due to the purchase of organic fertilizer. The application of the newly developed models led to yield increases per year of on average between 10% to 20% for the farmers, according to the farmers and local government authorities interviewed in the field mission.

Furthermore, the farmers using the newly developed methods could increase their income by 136.62 Euro per month and 161.66 Euro per hectare. In contrast the comparison group, which is statistically comparable in relevant parameters such as gender, use of fertilizer or frequency of crop failure, experienced an increase in their

monthly income by on average 1.81 Euro, but a decrease of -3.20 Euro per hectare. Moreover, the difference between the two groups can be statistically attributed to the intervention ( $p < 0.05$ ).

Furthermore, according to the implemented household surveys, the rice farmers in the region benefitting from the new model use their additional income mainly for their children's schooling (N=21) (e.g., in terms of material or paying for transport to the school) and monthly expenditures (N=31). On a personal level most farmers see the largest benefit of the additional income as gained life security and stability (N=30).

Moreover, the change in the farming methods also had an impact on the environment and health of the farmers, according to the interviewed local government authorities. There are less diseases in the rice and less chemical fertilizer is used. This has also improved the health of the farmers as they use less chemical fertiliser.

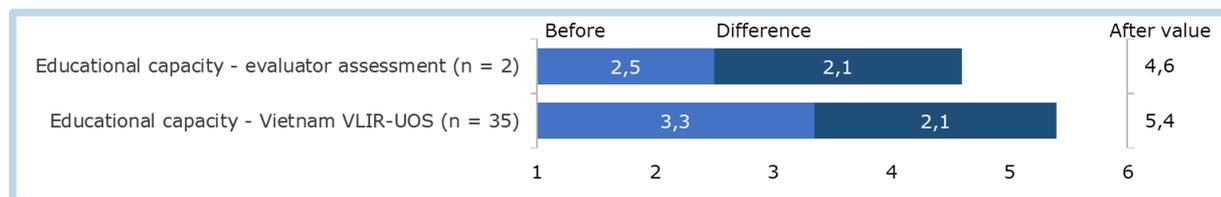
In case of the OI/TEAM project on the diagnosis and control of equine trypanosomosis the benefits for the final beneficiaries were mainly delivered during the implementation of the project and progressively vanished after the project had ended, according to the findings of the field mission. The equine drug that was found to be the only one having a sustainable effect (with no relapses of infected equines) is not available in Ethiopia and as a consequence at the local clinics. The Ethiopian authorities do not purchase the drug to be distributed in affected areas. The interviewees in the field mission linked this to the relatively high prices of the (French) drug in comparison to other drugs from China and India. These however have - according the funded research - only limited effect and horses relapse over time, which is a complaint often heard from equine holders using these drugs. Moreover, interviewees in the field mission regretted the missing sales representation of the producing French company in Ethiopia. During the project the drug was imported and paid for with project funds. Thus, during the project implementation, equine holders benefitted from these most effective drugs being applied by the OI/TEAM project, but not afterwards. In addition, staff turnover and the currently low relevance of the disease in the intervention region negatively affects the capabilities of the local clinics as the diagnostic tools developed by the OI/TEAM project are not available any longer.

#### 4.2.3.2 Effects on educational capacity

In the field of educational capacity the objective of VLIR-UOS' interventions is to improve the employability of its partner universities' students by strengthening the educational processes and structures of the respective partner organisations (*outcome*). This in turn should provide better qualified human resources in the partner countries, which are actively used in relevant sectors (*impact*). However, the two analysed OI/TEAM projects did not aim to improve educational quality as was the case with the assessed IUC. As a consequence the following chapter is only based on the findings provided by the analysis of the IUC.

The pen-and-paper survey conducted for the assessed IUC shows that the educational capacity at the visited partner university increased by +2.1 due to the implemented activities in the intervention. Both the Vietnamese and Belgian stakeholders as well as the evaluators came to the same assessment (see figure 32).

**Figure 32: Changes in the educational capacity**



Source: Syspons and Nuffic 2017

The increase in the educational capacity of the partner university can be explained by different factors. Firstly, prior to the IUC, the Dutch-funded MHO programme supported the partner university in the development of curricula and student-centred teaching methodologies. According to the stakeholders interviewed in the field missions this was the main impetus for the university to change from teacher-centred to student-centred methodologies as well as making the curricula more practice-oriented. Nevertheless, the intervention also revised or newly developed 15 curricula in its focus areas to make them more practice-oriented. Moreover, a total of 50 courses and trainings were developed in these fields (Vaes & Van Thang, 2008, pp. 61-63). Furthermore, the stakeholders interviewed in the field mission explained that this revision in combination with upgraded equipment, the integrated scholarships and the research projects initiated (see chapter 4.2.3.1) enabled the partner university to integrate research into the curricula. However, they also stated that this integration mainly occurred in the form of lecturer notes and not through a systematic process. The persons who had received an integrated scholarship also highlighted that their personal experience in these scholarships helped them via peer-to-peer learning with their Belgian counterpart to integrate research into their teaching as well as to use student-centred teaching methodologies.

This effect could also be observed in the OI/TEAM project on land and water research as an unintended effect. Here a knowledge transfer from research into education took place due to the PhD scholarship holders who have engaged in educational activities in the department after their graduation. For example, both PhD graduates provide academic backstopping and thesis supervision to MSc students. Through these educational activities, thematic, methodological and sector knowledge is transferred.

These strengthened educational processes and structures led in the case of the analysed IUC to an increase of the employability of the Bachelor graduates of the partner university from 53.9% six months after their graduation in 2012 to 88.1% in 2015.<sup>41</sup> In this regard, it should be noticed that over the same time period the employability rate of the Bachelor graduates from the colleges and institutes targeted by the intervention increased from 53.4% in 2012 to 92.3% in 2015 (Can Tho University, 2017g).

#### **4.2.3.3 Effects on organisational capacity**

To improve the overall organisational capacity and thus also the research and educational capacity of the partner universities, VLIR-UOS aims with its intervention to empower its partner universities in their role as drivers of change regarding their threefold mission of research, education and extension (*impact*). For this purpose VLIR-UOS' interventions aim at improving organisational processes and structures at the partner universities, which in turn should support the initiated reforms of the educational and research capacities by the financed interventions (*outcome*).

In this regard the field missions show that the three interventions were successful in upgrading libraries and laboratories with state-of-the-art equipment (see also chapter 4.2.3.1). Furthermore, in the analysed IUC the IT infrastructure could be strengthened through the installation of servers, which made the IT system and internet at Can Tho University faster, more reliable and more stable. At the same time the role of the IT department was changed through the IUC from a classical department for teaching and research to a service-oriented department that provides internal IT services to the university.

Moreover, the IUC also introduced E-Learning to the partner university for the first time, according to the field mission. The E-Learning platform that was set up provided training to over 350 teachers regarding the usage of this system. In addition 35 distance education courses were developed and over 100 courses were transferred onto the web-based platform during the implementation of the IUC. At the end, the system was rolled

---

<sup>41</sup> Can Tho University only started to conduct regular employability surveys among their bachelor graduates in 2012. Hence, earlier data regarding the employability of their graduates is not available in Can Tho University's database.

out to the whole university and reached around 20,000 students at Can Tho University (Vaes & Van Thang, 2008, pp. 61-63). In all three interventions, these initiated changes to the organisational structures and processes improved the educational and research processes in the three partner universities (see also chapter 4.2.3.1 and 4.2.3.2).

In contrast, no evidence could be found in the three analysed interventions regarding the establishment of support systems (e.g., management, quality assurance or accounting systems) or the strengthening of the governance and management structures of the partner universities. Moreover, no evidence was found regarding the implementation of technology transfer and innovation policies.

#### **4.2.3.4 Assessment of the effectiveness and impact of the Belgian university cooperation – VLIR-UOS**

Based upon these findings the evaluation team is highly confident that the interventions of VLIR-UOS have strengthened the **research capacity** of the partner universities. Particularly, the offered Master and PhD scholarships (*causal mechanism*) ensure that high quality research publications and training manuals are produced in the partner universities (*outcome hypothesis 1*) (see figure 19 and 33). Moreover, the evaluation team is highly confident that these scholarships (*causal mechanism*) strengthen the human resources in the partner universities and increases the individual research output, which in turn enhances the career development of the indirect beneficiaries (*outcome hypothesis 2*).

However, the evaluation team is highly confident that it is false that high quality research publications and training manuals form the basis of strengthened research practices in the partner universities (*outcome hypothesis 3*). Here the evaluation results demonstrated that the combination of the human resource development, the upgrading of research infrastructure and the set-up of the financed transdisciplinary research projects (*causal mechanism*) lead to improved research practices or even the build-up of important research centres in the partner universities. The same holds true for the hypothesis that research results, which form the basis for strengthened research practices, lead to improved research processes and structures as well as improved human resource capacities (*outcome hypothesis 4*). Also here it was the aforementioned *causal mechanism* that improved the research processes and structures in the partner universities. Hence, the evaluation team is also in this regard highly confident that this hypothesis is false.

Furthermore, the evaluation team is reasonably certain that it is false that raised research funds lead to improved research processes and structures as well as improved human resource capacities in the partner universities (*outcome hypothesis 5*). Here, the evaluation results showed that improved research processes and structures as well as improved human resource capacities lead to the acquisition of research funds by the partner universities. The improved research processes and structures by the respective intervention thereby formed the *causal mechanism* for the acquisition of new research fund by the partner universities.

In contrast hereto, it is reasonably certain for the evaluation team that the financed interventions developed new knowledge and technologies, which was adopted by early adopters (*outcome hypothesis 6*). This was particularly fostered by the implemented extension activities within the analysed interventions, which involved the final beneficiaries throughout the whole process of the research (*causal mechanism*). As a consequence, the evaluation team is also reasonably certain that the conducted extension activities in the interventions create conditions for uptake (*outcome hypothesis 7*).

As a result the evaluation team is reasonably certain that the newly created knowledge and technologies adopted by early adopters are disseminated among a wider population (*impact hypothesis 8*). The main *causal mechanisms* hereby are the planned and structured dissemination processes by the project via seminars, trainings, workshops,

conferences, etc. to other farmers or agricultural extension services as well as word-of-mouth propaganda by the farmers themselves. Thus, the evaluation team is also reasonably certain that the creation of conditions of uptake in form of the above described causal mechanisms fosters the adoption of the new knowledge or technologies by the wider population (*impact hypothesis 9*). Moreover, the evaluation could also prove reasonably certainly that this newly developed knowledge and technology improved the living conditions of the affected population in the project region (*impact hypothesis 10*) as could be seen e.g., from the income increases of the farmers.

**Figure 33: Overview of assessed impact hypothesis – research capacity<sup>42</sup>**

		Hypothesis	Qualitative assessment	Quantitative scale
<b>Research capacity</b>				
<b>Outcome</b>	1	If Master and PhD scholarships are offered, then high quality research publications and training manuals are produced.	Highly confident that () is true	0.85 – 0.95
	2	If human resources are strengthened and the individual research output is increased through VLIR-UOS' interventions, then the career development of indirect beneficiaries is enhanced.	Highly confident that () is true	0.85 – 0.95
	3	If high quality research publications and training manuals are produced, then research results form the basis for strengthened research practices.	Highly confident that () is false	0.05 – 0.15
	4	If research results form the basis for strengthened research practices, then partner institutions possess improved research processes and structures as well as improved human resource capacities.	Highly confident that () is false	0.05 – 0.15
	5	If research funds are raised, then partner institutions possess improved research processes and structures as well as improved human resource capacities.	Reasonably certain that () is false	0.01 – 0.05
	6	If new knowledge and technologies are developed, then new knowledge and technologies are adopted by early adopters.	Reasonably certain that () is true	0.95 – 0.99
	7	If extension activities are implemented, then conditions for uptake are created.	Reasonably certain that () is true	0.95 – 0.99
<b>Impact</b>	8	If new knowledge and technologies are adopted by early adopters, then new knowledge, services and technologies are adopted by a wider population.	Reasonably certain that () is true	0.95 – 0.99
	9	If conditions for uptake are created, then new knowledge, services and technologies are adopted by a wider population.	Reasonably certain that () is true	0.95 – 0.99
	10	If new knowledge, services and technologies are adopted by a wider population, then living conditions are improved.	Reasonably certain that () is true	0.95 – 0.99

Source: Syspons and Nuffic 2018

With regard to the **educational capacity** in the partner universities, the evaluation team is more confident than not confident that the interventions of VLIR-UOS led to an improvement. In this regard the evaluators are highly confident that if the partner institutions possess improved research processes and structures, then for the sector relevant curricula for trainings, courses or Master programmes are developed or renewed (*outcome hypothesis 11*) (see figure 34). In particular, the transdisciplinary research projects and research financed within the integrated scholarships (*causal mechanism*) enabled the partner universities to integrate research results into their curricula. However, this integration occurred on an individual basis via the respective lecturers and not on a systematic level in the form of newly developed processes. Moreover, in the analysed OI/ TEAM projects this impact was an unintended impact, as it was not foreseen as an objective of the respective analysed projects.

In addition, the evaluation team is also highly confident that newly implemented trainings, courses or Master programmes improve the educational processes and structures in the partner universities (*outcome hypothesis 12*) as the analysed interventions made curricula and courses more practice-oriented. Also in this case the integration of research findings into the curricula played a major role (*causal mechanism*). At the same time the evaluation team is also highly confident that the developed research-based education programmes also improve the educational processes and structures of the partner universities (*outcome hypothesis 13*). However, the evaluation also highlighted that other donor financed programmes had an effect on

<sup>42</sup> The impact hypotheses written in blue were not part of the Theory of Change. They were identified during the evaluation as relevant additional impact hypotheses.

the development of curricula in the partner universities and thus on the improvement of the educational processes and structures.

In contrast hereto, the evaluation is neither confident nor not confident that new didactical, pedagogical and teaching methodologies introduced by the analysed interventions led to improved educational processes and structures (*outcome hypothesis 14*). In the analysed interventions this was either not an objective or other donor financed programmes had a larger effect on this aspect. Furthermore, the evaluation team is also neither confident nor not confident that the improved educational processes and structures lead to an increased employability of the partner universities' students, as no relevant data or evidence could be found (*outcome hypothesis 15*). As a consequence, the evaluation can also not prove that the improved employability of the partner universities' students results in better qualified resources that are actively used in relevant sectors (*impact hypothesis 16*).

**Figure 34: Overview of assessed impact hypothesis – educational capacity**

		Hypothesis	Qualitative assessment	Quantitative scale
<b>Educational capacity</b>				
<b>Outcome</b>	11	If partner institutions possess improved research processes and structures as well as improved human resource capacities, then for the sector relevant curricula for trainings, courses or Master programmes are developed or renewed.	Highly confident that () is true	0.85 – 0.95
	12	If new trainings, courses or Master programmes are implemented, then partner institutions possess improved educational processes and structures as well as improved human capacities.	Highly confident that () is true	0.85 – 0.95
	13	If research-based education programmes are developed and implemented, then then partner institutions possess improved educational processes and structures as well as improved human capacities.	Highly confident that () is true	0.85 – 0.95
	14	If new didactical , pedagogic and teaching methodologies are introduced, adapted and implemented, then partner institutions possess improved educational processes and structures as well as improved human capacities.	Neither confident nor not confident that () is true (or false) – no idea	0.5
	15	If partner institutions possess improved educational processes and structures as well as improved human capacities, then the employability of the partner institutions' students is improved.	Neither confident nor not confident that () is true (or false) – no idea	0.5
<b>Impact</b>	16	If the employability of the partner institutions' students is improved, then better qualified resources are actively used in relevant sectors.	Neither confident nor not confident that () is true (or false) – no idea	0.5

Source: Syspons and Nuffic 2018

Finally within the field of **organisational capacity**, the evaluators are neither confident nor not confident that the implementation of support systems such as management or quality assurance systems improve organisational processes and structures (*outcome hypothesis 17*) as this was not an intended impact of the analysed interventions (see figure 35). This also holds true for the improvement of governance/ management structures as well as the implementation of technology transfer and innovation policies, which should lead to an improvement of organisational processes and structures in the partner universities (*outcome hypothesis 18 & 19*).

However, the evaluation team is highly confident that the upgrading of libraries and laboratories not only improves the organisational processes and structures (*outcome hypothesis 20*), but also the educational and research capacities of the partner universities. In the latter case, the upgrading of the relevant equipment was a prerequisite for the implementation of state-of-the-art research and the integration of research findings into the curricula or courses. Moreover, the evaluation results also show that it is more confident than not confident that ICT support improves the organisational processes and structures of the partner universities (*outcome hypothesis 21*). In this regard, particularly the introduction of distance learning improved the educational processes of the partner universities in the analysed interventions. Therefore, the evaluation team is also cautiously confident that the improved organisational processes and structures in the partner universities, strengthened the research and educational capacities of the partner universities (*outcome hypothesis 22*).

In this regard the evaluation team is also more confident than not that the improved organisational processes and structures in the partner universities empower the partner universities as drivers of change regarding their threefold mission of research, education and extension. However, with regard to the latter, the evaluation results also highlight that the improved extension activities of the partner universities are a result of the

initiated research activities under the analysed interventions and not a result of the improved organisational processes or structures.

**Figure 35: Overview of assessed impact hypothesis – organisational capacity**

		Hypothesis	Qualitative assessment	Quantitative scale
<b>Organisational capacity</b>				
<b>Outcome</b>	17	If support systems such as management systems, quality assurance, accounting, etc. are implemented and used, then partner institutions possess improved organisational processes and structures as well as improved human capacities.	Neither confident nor not confident that () is true (or false) – no idea	0.5
	18	If governance/ management structures of the partner institutions are strengthened, then partner institutions possess improved organisational processes and structures as well as improved human capacities.	Neither confident nor not confident that () is true (or false) – no idea	0.5
	19	If technology transfer and innovation policies are implemented, then partner institutions possess improved organisational processes and structures as well as improved human capacities.	Neither confident nor not confident that () is true (or false) – no idea	0.5
	20	If libraries and laboratories are equipped with state-of-the-art technology, then partner institutions possess improved organisational processes and structures as well as improved human capacities.	Highly confident that () is true	0.85 – 0.95
	21	If processes and structures of the partner institutions are supported by ICT, then partner institutions possess improved organisational processes and structures as well as improved human capacities.	More confident than not confident that () is true	0.50 – 0.70
	22	If partner institutions possess improved organisational processes and structures as well as improved human capacities, then the research and educational capacities of the partner institutions are strengthened.	Cautiously confident that () is true	0.70 – 0.85
<b>Impact</b>	23	If partner institutions possess improved organisational processes and structures as well as improved human capacities, then partner institutions have been empowered in their role as drivers of change regarding their threefold mission of research, education and extension.	More confident than not confident that () is true	0.50 – 0.70

Source: Syspons and Nuffic 2018

#### 4.2.4 Sustainability of the Belgian university cooperation

Sustainability is central for the interventions, since both VLIR-UOS and ARES aim to foster durable changes at the level of their partner institutions. Hence, it is important to analyse to what extent the interventions have promoted institutional, technical and academic sustainability. Moreover, it must be analysed whether they have initiated sustainable partnerships between the participating universities. For the purpose of this evaluation the different dimensions of sustainability were defined as follows:

- *Institutional sustainability* was defined as the degree to which human resources, processes and procedures of the interventions have been incorporated into the structures of the partner universities.
- *Technological sustainability* was defined as the degree to which newly upgraded or introduced equipment can still be used by the partner universities without external assistance and maintenance support.
- *Academic sustainability* was defined as the degree to which the partner institutions will be better able to fulfil their core functions in the future.

With regard to the *institutional sustainability*, the field missions have shown that the thematic fields in which the interventions provided support – health, veterinary sciences, forestry, agriculture, biotechnology as well as food technology and processing – are still priority areas of the partner institutions. The evaluation further showed that the human resources trained in the intervention have gone on to join the faculty of the partner institutions. In this regard, the PhDs trained in both research and education projects and IUC have played a particularly vital role. The reason for this is that increasing the number of faculty with a postgraduate degree was much needed due to the exponential growth of the number of university students in the partner countries. In addition, a number of indirect beneficiaries trained in the interventions have taken on decision-making positions in the partner institutions. For example, one of the beneficiaries of a PhD scholarship of the project training specialised doctors in anaesthesia and reanimation in Benin has gone on to become vice-dean of the Faculty of Medicine of the University of Abomey-Calavi and can advocate on behalf of the program in this position. Examples of beneficiaries having gone on to take on leadership positions in the partner universities were also identified for both IUCs in Vietnam as well as in the research projects in Ethiopia. In addition, for the interventions that have initiated structural

changes, such as the expansion of staff qualification and research activities, the updating of curricula or an upgrade of research equipment, interviews conducted during the field missions have shown a high degree of ownership over the changes initiated which facilitated institutional embedding of the changes.

In terms of *technological sustainability*, a mixed picture emerges. On the one hand, in the projects in Benin, very little infrastructure or equipment was introduced in the first place. On the other hand, for the other interventions, the evaluation team mostly found positive examples of equipment introduced or upgraded by the interventions that are still being used without external assistance or support. A particularly successful example is the case of the IUC with Can Tho University in Vietnam, where most of the equipment upgraded or purchased was from local materials, and where university staff was specifically trained to assemble equipment themselves. As a result, the staff was also in a position of repairing the equipment, which was not the case for equipment financed by other donors. Introduction to correct usage and proper supervision also proved a success factors for technological sustainability in other interventions. However, even at Can Tho University in Vietnam, as well as for the partner universities in Benin and Ethiopia, sufficient financial resources to maintain equipment and keep it up to date remains a challenge because of budget constraints. The only intervention in which budget constraints of the partner university does not constitute a challenge to the maintenance of infrastructure is the IUC with UPNT in Vietnam. Here, the close relationship between the city's health authorities and the university in combination with favourable economic growth figures, is an external factor positively influencing sustainability, because UPNT has an explicit mandate to train health personnel for the city and receives adequate funding for it. A less successful example for technological sustainability is the research project in Benin, where the equipment that was bought including motorbikes and a car, remained solely for personal use of the PhD scholarship recipients and the local project promoter, and did therefore not structurally reinforce the partner institution.

The *academic sustainability* is overall viewed positively in the different interventions. The partner universities have overall experienced very little turnover of their academic staff, and they have been able to cater to a growing number of students in the long run. Outside of the quality of the interventions, external factors have affected academic sustainability. For example, in Benin, several interview partners stressed the achievements of the last rector of the University of Abomey-Calavi in strengthening the organisational, educational and research capacities of the institution. His leadership thereby helped create a favourable environment for academics to evolve in. In Ethiopia, on the other hand, a regulation binds MSc and PhD students to work at a public institution for several years upon completion of their degree, which temporarily favours staff retention at the university. However, interview partners in Ethiopia also pointed out that universities remain highly politicised, resulting in favouritism that challenge staff motivation and distribute chances not according to merits but personal relationships and ethnic origin. As a result, these challenges decrease motivation and weaken staff retention once the compulsory period at the university is over. In contrast, Can Tho University in Vietnam contributes to staff retention by keeping close personal contacts with members of its personnel when they are selected for scholarships abroad. In addition, they offer young researchers their own research fund three years after their graduation if they stay with the university. UPNT is able to maintain the quality of its training because it retains its qualified teachers and continues receiving support from the city for infrastructure improvement and from external organisations for education quality improvement. Academic sustainability of UPNT is also strengthened by the parallel and subsequent implementation of IUC cooperation and smaller research projects which include UPNT, Belgian universities, hospitals and individual scholarships.

With regard to the *sustainability of partnerships*, the evaluation first of all found that most of the interventions examined were not the first cooperation between the Belgian and southern partners involved. For example, the cooperation between the Belgian and Beninese project promoters involved in the training project on anaesthesia and reanimation dates back until 1999 and continues until today. Prior to the intervention subject to evaluation, the cooperation had already been funded by the predecessor

organisation of ARES, and after the end of the intervention, funding from other sources was acquired.

The evaluation also identified new partnerships that emerged from the interventions, albeit not always at the institutional level. In many cases, researchers and lecturers from the partner countries maintained frequent contact with their respective Belgian counterparts to publish articles and to apply for funds. In several instances, interview partners testified that they established contacts with international academics via the interventions, and that these contacts were helpful for them to subsequently acquire research grants or scholarships for trainings. In this way, indirect beneficiaries of the interventions secured funding both from Belgium and from other parts of the world to pursue their academic interests. In this regard, it is noteworthy that both VLIR-UOS and ARES allow funding an institution or an individual that has previously benefitted from their support. The VLIR-UOS portfolio approach encourages starting a cooperation with a small intervention to gauge the potential for cooperating in a larger, more long-term intervention. Likewise, it encourages the implementation of small interventions after a large long-term intervention to ensure appropriate wrap-up that maximises results. Similarly, the field missions showed that ARES also allowed for a phasing out of the IUC with a small intervention. In addition, ARES and VLIR-UOS have created specific individual scholarships schemes that enable past beneficiaries of embedded scholarships that did not manage to finalise their PhD within an intervention to do so subsequently. In addition, the ARES individual Post-Doctoral scholarships (ELAN) aim specifically at young academics who did their PhD with ARES funding to implement a research or education project in a university in their home country.

The described portfolio approach is thereby a specificity of Belgian university development cooperation. While other European higher education cooperation organisations may sometimes fund the extension of interventions or grant the same partner institutions a follow-up project, they do not typically encourage repeated funding. In this regard, the field missions showed that the portfolio approach is a positive factor in terms of sustainability. At an institutional level, it gives the partner time to anchor results in the structures of the participating universities. At an individual level, it enables scholarship recipients to launch their academic careers under good conditions in their home country, which helps prevent brain drain. This in turn also sustainably strengthens the institutions. The involvement of other actors in the research projects (such as hospitals in the case of the PICs with UPNT) very much contributes to strengthening the embedding of the university in its environment and enhances its relevance as an actor of change. However, it is important to mention that ARES has not explicitly developed a portfolio approach as a strategy, as did VLIR-UOS.

With regard to prospects for continuity of the partnerships in the future, several Belgian project promoters voiced concerns that the young generation of Belgian academics might show little interest in engaging in cooperation with ARES and VLIR-UOS partner countries. Their observation is that there are not many incentives, career-wise or financially, to engage in cooperation with developing countries. First, young academics need to publish as much as possible and as visibly as possible to further their careers. According to the Belgian promoters, engaging in capacity building in the context of development cooperation is not the most efficient way to do so, and many internationally minded young academics are more interested in cooperation with e.g., the United States. In addition, in contrast to other institutions for academic cooperation, neither VLIR-UOS nor ARES offer a remuneration to the European universities involved in the interventions. The Belgian universities receive a small budget for administrative fees and get their travels reimbursed, but the work put in by the professors involved is not paid. As a result, several interview partners were concerned that when the current generation of Belgian promoters, many of whom are approaching retirement, cease to engage in university development cooperation, it may prove hard to find motivated young Belgian professors to take over.

#### **4.2.4.1 Assessment of the sustainability of the Belgian university cooperation**

Based upon these findings, the evaluation team comes to the conclusion that the evaluated interventions of Belgian higher education cooperation are sustainable, although some room for improvement could be identified with regard to technological sustainability. First, the interventions are institutionally sustainable, because processes and procedures introduced within the realm of the interventions have been largely incorporated into the structures of the partner universities. Along the same lines, the human resources trained in the interventions have largely been recruited to work and retained by the partner institutions, and have taken over positions of responsibility.

With regard to the second aspect of sustainability, technological sustainability, strengths and weaknesses were identified. Overall, the evaluation team finds that technological sustainability is partly achieved. In the case of the projects in Benin, very little equipment and infrastructure was acquired. From the perspective of the evaluation team, this is not in itself to be viewed negatively, if the partner institutions had other priorities. Nevertheless, the evaluation team deems it inappropriate that in one of these interventions, motorcycles and a car purchased with project funding remained in the hands of individual scholarship recipients and the local project promoter and were not transferred to the partner institution at the end of the project. However, in most interventions, infrastructure and equipment acquired or upgraded benefits the partner institutions and is still in use and the partners have the know-how to maintain it. One challenge, nonetheless, is that partner universities often lack the financial means necessary for maintenance (with a positive exception for UPNT).

The third aspect, academic sustainability, is assessed favourably by the evaluation team because the partner institutions have overall been successful at retaining the personnel trained in the interventions. With more and better trained researchers and professors, the universities have been able to better fulfil their core educational and research functions in a context of a strong increase in student numbers. In this regard, external aspects unrelated to Belgian university cooperation have also favoured academic sustainability. This included both policies and incentives for staff retention at national level or at the level of the partner institutions, as well as good leadership of individual partner universities.

Lastly, the sustainability of partnerships is assessed positively, but with one caveat. Overall, the long-term engagement of Belgian project promoters and their local counterparts, in combination with a portfolio of flexible instruments from VLIR-UOS and ARES, have allowed for durable cooperation. In this regard, it is particularly noteworthy that the portfolio approach of the two umbrella organisations (explicit for VLIR-UOS and implicit for ARES) allow for repeated funding for both institutional cooperation and individuals. However, one aspect which might jeopardise the prospects for sustainability of partnerships in the future is that a younger generation of Belgian academics may lack incentives to display the same commitment as the older generation in the future. Here, interview partners pointed out that involvement in university development cooperation neither furthers the careers of Belgian professors nor is financially attractive.

### **4.3 Evaluation results for individual scholarships**

In addition to the projects analysed above, Belgian university development cooperation encompasses granting individual scholarships to nationals of selected developing countries in order for them to study or complete a training at Belgian universities or university colleges.

The following chapter is concerned with analysing the effectiveness and impact of the programmes in this line of funding. Subject to this evaluation are ARES' International Masters (Cours Internationaux, CI) and International Trainings (Stages Internationaux, SI), as well as VLIR-UOS' International Courses Programme (ICP), International Training Programme (ITP), and its Short Training Initiatives (STI/KOI).

The following results are based on an online-survey of A- and B-list candidates with 2132 valid responses; 36 in-depth follow-up interviews; as well as five short validity interviews with non-responders to the online survey.

As indicated in chapter 4.1, the following results can be considered representative for the totality of the Belgian scholarship holder population. Yet, due to the different structural set-up of the different scholarship schemes (e.g., umbrella organisation, study vs. training scholarship, length of stay), the results will be presented firstly overall and – where appropriate – also disaggregated by umbrella and scholarship type. As it is not intended to evaluate differences between the umbrella organisations, discrepancies are described, but not rated. In addition, all data has been analysed in comparison between female and male respondents, as well as in between Belgian scholarship holders and their comparison groups. If not otherwise noted, no systematic differences were found.

In order to illustrate scholarship holders' development over time, the analysis made use of the stratified cohort approach. This approach allocates respondents to several groups illustrating different stations in their career: currently enrolled scholarship holders, recent graduated (up until one year after graduation), young professionals (between one and three years after graduation), and professionals (more than three years after graduation).

For the analysis of the results, the following guidelines have been adhered to: Significant differences are highlighted if the  $\alpha$  error probability is lower than 5% ( $p < 0.05$ ). The significance value and corresponding effect sizes (Cohen's  $d$ ) are denoted in footnotes. If differences could be observed, but did not prove to be statistically significant, they are presented as "in tendency". A capital "N" denotes the number of respondents who have answered either a question or subquestion ("How satisfied were you with the learning materials?"), while the lower case "n" is used to specify the respondents choosing a specific item (e.g., those choosing "fully satisfied").

### **4.3.1 Effectiveness and impact of the individual scholarship schemes**

With their individual scholarship schemes ARES and VLIR-UOS strive to win motivated persons to successfully complete studies or a training relevant to issues of development in their respective home country. Within these courses, they intend to equip scholarship holders with developmentally relevant knowledge and a set of competencies appropriate to work in the area of development. On a personal level, these scholarships aim to thereby increase employability of the scholars as well as to enable them to take up positions that allow them to promote change (*outcome*). By applying newly gained knowledge and skills, it is foreseen that the former scholarship holders act as change agents and contribute to professionalising their places of work. This in turn should lead to better organisational performance. Ultimately, the scholarship schemes intend to prepare their recipients to tackle developmentally relevant challenges and thereby eventually contribute to positive, sustainable development in their home country (*impact*).

#### **4.3.1.1 Participation and satisfaction with Belgian scholarship programs**

In order for a scholarship scheme to be effective, it must first of all attract and award appropriate candidates. In this regard, scholarships must be awarded to the most qualified and motivated candidates who are not able to afford a stay abroad by their own means. Secondly, the scholarship programs must be designed in a fashion that participants are satisfied and successfully finish the program.

The motivations for applying for a Belgian scholarship program are thereby manifold. According to the respondents, of which 1846 are female and 3140 are men<sup>43</sup>, the most important reasons for their application are the following: the wish to improve their

---

<sup>43</sup> For ten recipients, gender was not specified in the A-list.

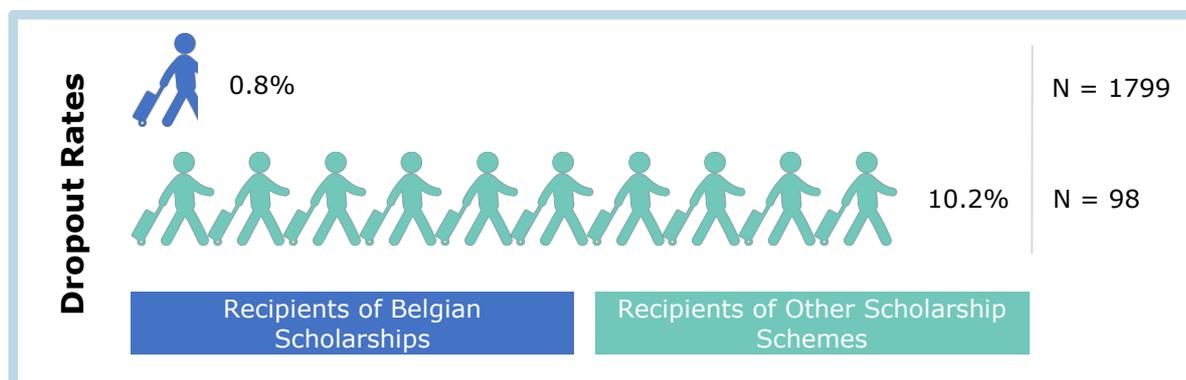
career prospects (average agreement of 5.72 on a 6-point scale, N = 1751), to obtain an internationally recognised degree (5.65, N = 1011), as well as to gain international experience (5.61, N = 1723). In addition, many hope to gain specialised knowledge and techniques for which European – and specifically Belgian – universities are renowned for (5.20, N = 1684). The interviews hereby suggest that this is particularly the case for training scholarships. When choosing in between different available training scholarships, the specialisation of certain programs is highlighted by several interviewees as the main reason for choosing a Belgian scholarship over others; for example in the areas of aquaculture, biotechnology, and food security. Personal connections (e.g., of professors, peers, or family) with the umbrella organisations and previous collaborations of their home university with a Belgian university (e.g., through an IUC or research project) are thereby relevant in making applicants aware of ARES’ and VLIR-UOS’ scholarship programs.

In general, the motivation to go abroad is high regardless of whether it is facilitated by a Belgian organisation or otherwise. Many interviewees claim to also have applied to other scholarship schemes. In addition, the majority of scholarship holders assess they would have applied for another scholarship had they not received the one with which they were awarded with (71.2%, n = 1349). Moreover, many state in both the online-survey and the interviews that they would have applied again in the next scholarship cycle(s) until their application was successful.

However, only few are able to finance their stay abroad without external funding. Of those respondents who did not receive the scholarship they applied for, only 4.8% were able to self-fund their own trip abroad (n=15). 31.1% went abroad on a different scholarship scheme (n = 98), whilst 64.1% remained in their respective home country (n = 202). Despite not receiving a VLIR-UOS or ARES scholarship, most rejected applicants study in Belgium (20.7%, n = 23). Other popular countries are the Netherlands (12.6%, n = 14), Germany (7.2%, n = 8), and Norway (7.2%, n = 8). As a result there exists a high motivation and demand among the scholarship holders to apply for Belgian scholarship schemes. Moreover, for many, these scholarship schemes represent the sole option of realising their ambition to study or train abroad.

In line with the high motivation, only very few Belgian scholarship holders terminate their stay in Belgium prematurely. Amongst respondents, this amounts to an overall drop-out rate of 0.8% (n = 15). This is a stark contrast to recipients of other scholarships in the comparison group, where 10.2% of respondents have dropped out before the end of the program (n = 10) (see figure 36).

**Figure 36: Drop-out rates of Belgian scholarship recipients (N = 1799) and other scholarship recipients in comparison (N = 98).**



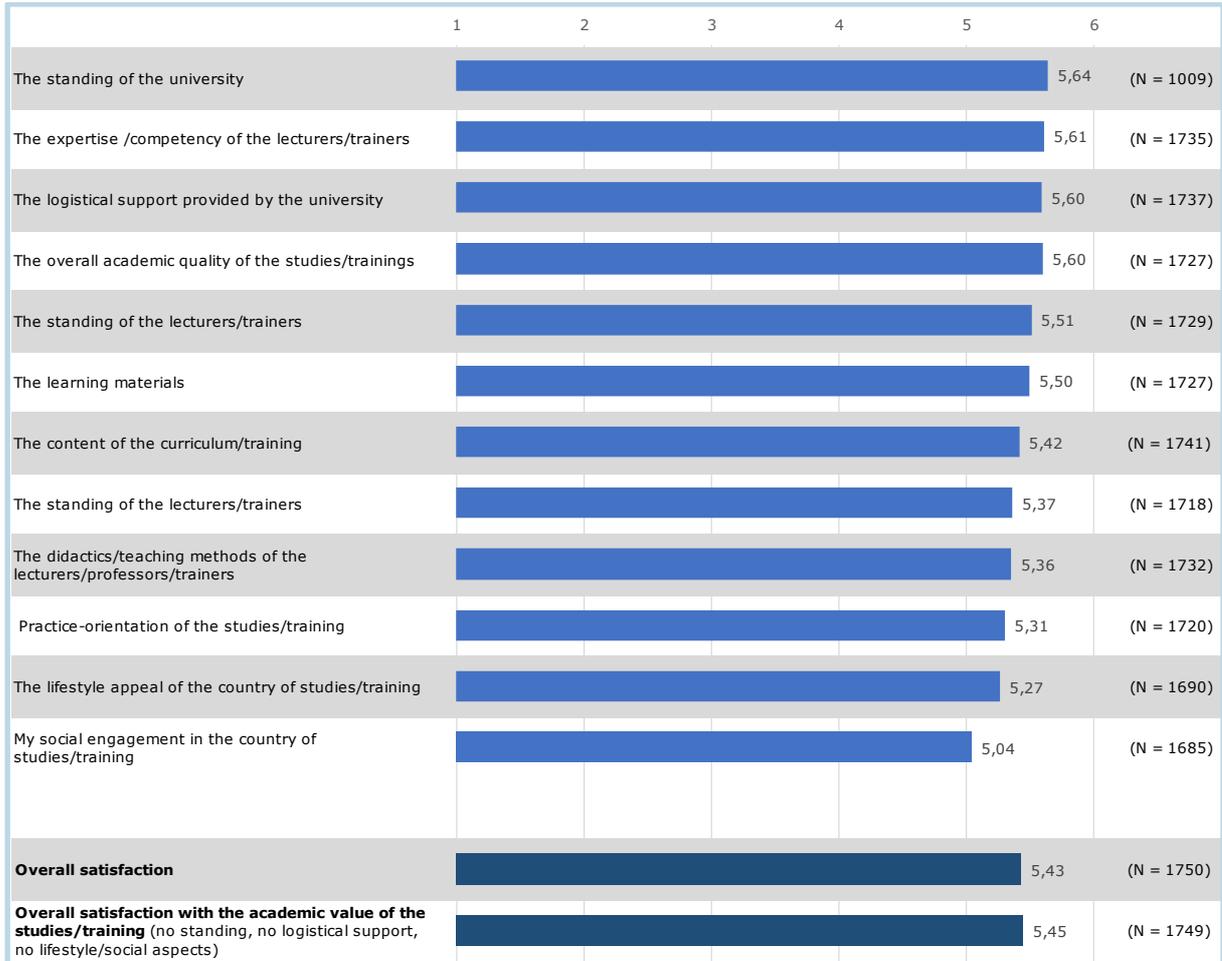
Source: Syspons and Nuffic 2018

Of the few recipients who dropped out prematurely, most state they were satisfied with their scholarship stay. Only two individuals cite stark dissatisfaction with the program.

This indicates that there is no general trend of drop-out due to dissatisfaction; individual personal reasons are a more likely cause for dropping out.

As exemplified by the low drop-out rates, recipients of Belgian scholarships are overall very satisfied with their scholarship stay. On a 6-point-scale they score an average satisfaction of 5.43 (N = 1750). Only 2.2% of the respondents are generally not satisfied (n = 38) (see figure 37). These ratings are also high when they are compared with holders of other scholarships: Belgian scholarship holders tend to be more satisfied with their stay than holders of other scholarships from the comparison group (5.43 vs. 5.36, N = 1750/87).

**Figure 37: Satisfaction of Belgian scholarship holders with different aspects of their stay abroad. Average agreement on a 6-point scale.**



Source: Syspons and Nuffic 2018

More specifically, they are most satisfied with the standing of their university in Belgium, the expertise/competency of the lecturers and trainers, the overall academic quality of their studies/training, as well as the logistical support they received from the university in terms of assistance with travel arrangements, accommodation etc. (all above 5.6). To a lesser extent, they are slightly satisfied with the social engagement in their country of studies (5.04).

In this respect the qualitative interviews highlight that particularly the support provided by the universities in Belgium has had a positive effect on the experience of the scholarship holders. Interviewees emphasised timely and kind assistance that met their respective needs. They furthermore highlighted the high academic quality in terms of professors and equipment and the topics as being highly relevant as major strengths of the programmes. This was also confirmed by the interviews with the non-respondents.

Within the context of these very high scores, recipients of Belgian training scholarships are significantly more satisfied with their stay than those of Masters' scholarships<sup>44</sup>, both regarding the entirety of their stay as well as its academic value. They hence tend to be more satisfied with all aspects; in particular contents/curricula, didactics/teaching methods, academic support, and practice-orientation.<sup>45</sup> Moreover, VLIR-UOS scholarship holders tend to be more satisfied than their ARES counterparts. This concerns particularly ARES Master scholarship holders who are less satisfied with contents, learning materials, and practice-orientation of their studies as well as logistical support provided vis-à-vis VLIR-UOS scholars. Also, for ARES in general, satisfaction with the academic support is lower.<sup>46</sup>

Yet, there is room for improvement voiced by lesser satisfied scholarship recipients. In particular, 22.2% of the scholarship recipients consider the length of their stay not sufficient to fully benefit from their international experience (n = 380). This concerns all groups staying less than a year, but those staying for studies in between six months up to one year criticise the duration of their studies most. Due to the programmes' set-up, this group consists mainly of ARES scholarship holders. Yet, this concern was also voiced in the qualitative interviews both by ARES and VLIR-UOS scholars, where the most frequent criticism was that too much content was foreseen to be covered in the respective time period.

Further room for improvement was voiced by a small group of respondents. They cited a lack of academic supervision (n = 24), problems with accommodation (n = 18), as well as a stronger focus on more practical elements (n=20) in the programmes as fields of improvement. Regarding the latter, the interviews elaborated that the content of the courses were sometimes too theory-driven and thus did not meet the needs of the participants.

#### ***4.3.1.2 Direct effects of Belgian scholarship programs: Skills, competencies, and contacts***

In order for scholarship holders to become change agents in their places of work and ultimately their home countries, scholarship programs must equip them with the skill set necessary to tackle these challenges. More specifically, the programs have to aim at developing both thematic knowledge, methodological competencies, as well as soft-skills that participants can later use in their everyday work. Additionally, the creation of networks can sometimes be beneficial when these networks are sustained after the scholarship holders' return to their home country.

When looking at the online-survey results, almost all Belgian scholarship recipients claim to have acquired new knowledge, new skills, or competencies during their time abroad (average score of 5.49 on a 6-point scale, N = 1693). Only 2.5% do not believe they have learned anything new (n = 42) (see figure 38).

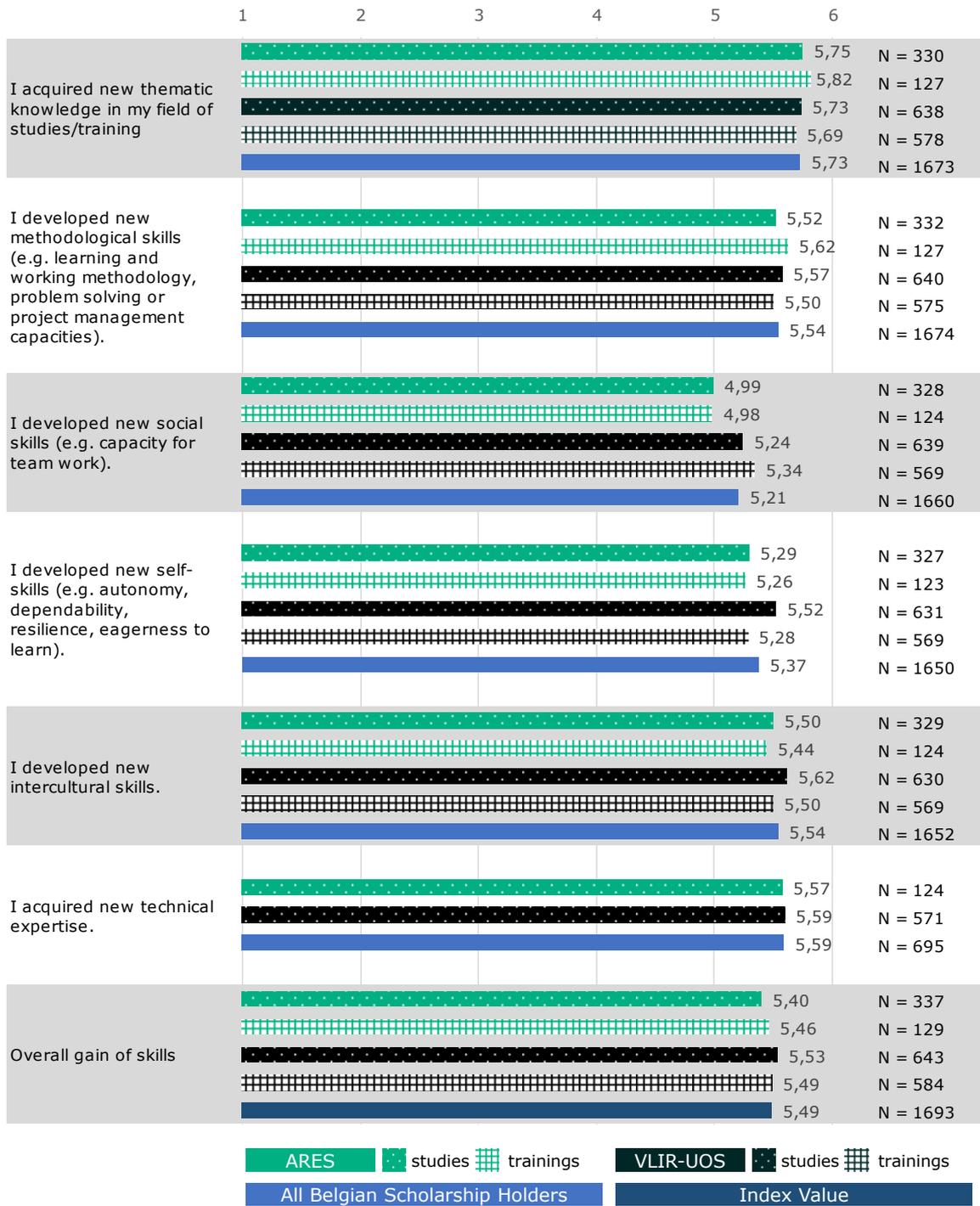
---

<sup>44</sup> p = 0.000, d = 0.436

<sup>45</sup> Contents: 5.60 vs. 5.29, N = 732/1009; didactics/teaching methods: 5.54 vs. 5.23, N = 726/1006; academic support: 5.56 vs. 5.23, N = 720/998; practice-orientation: 5.49 vs. 5.17, N = 724/996

<sup>46</sup> Contents: 5.20 vs. 5.34, N = 342/667; learning materials: 5.29 vs. 5.47, N = 340/662; practice-orientation of their studies: 5.09 vs. 5.22, N = 335/661; logistical support: 5.24 vs. 5.69, N = 343/659; academic support studies: 5.15 vs. 5.27, N = 334/664; academic support trainings: 5.48 vs. 5.58, N = 128/592

**Figure 38: Gains in competency and skills of Belgian scholarship holders during their scholarship stay. Average agreement on a 6-point scale.**



Source: Syspons and Nuffic 2018

Gains are particularly high with regard to new contents and methodology: 99.3% of former Belgian scholarship holders claim to have gained new thematic knowledge (n = 1661) and 97.7% new methodological skills (n = 1635) during their scholarship stay. In case of trainings, a further 98% state that they have acquired new technical expertise (n = 681). Moreover, as they are exposed to an international environment, 96.4% of respondents developed new intercultural skills (n = 1592).

The validity interviews confirmed these findings. Most commonly, interviewees referred to new information, new techniques and methodology they learned during their

time abroad. In addition, exposure to a different style of working, studying, and teaching had an influence on their own *modus operandi*. Access to high-end laboratory equipment and advancements in academic writing skills were repeatedly highlighted as aspects that facilitated the learning of new methods and knowledge. In addition, confrontation with new ideas and different life-experiences of both national and international classmates served to broaden the horizon of the interviewed scholarship holders.

Interestingly, there are significant statistical differences regarding gains in skills and competencies if the different home regions of the respondents are analysed.<sup>47</sup> In this regard scholarship holders from Anglophone African countries claim to have gained more skills in comparison to other regions.<sup>48</sup>

Moreover, the different foci in skill development between ARES' and VLIR-UOS' scholarship schemes become apparent when comparing the results for both organisations (see figure 39). For example, ARES training participants gained most in regard to thematic knowledge and methodological skills. In turn, VLIR-UOS recipients developed more social skills, and in the case of VLIR-UOS Master scholars more self-skills. This might indicate that the scholarship schemes inherently follow different priorities in transmitting competencies, particularly regarding the importance of soft skills.

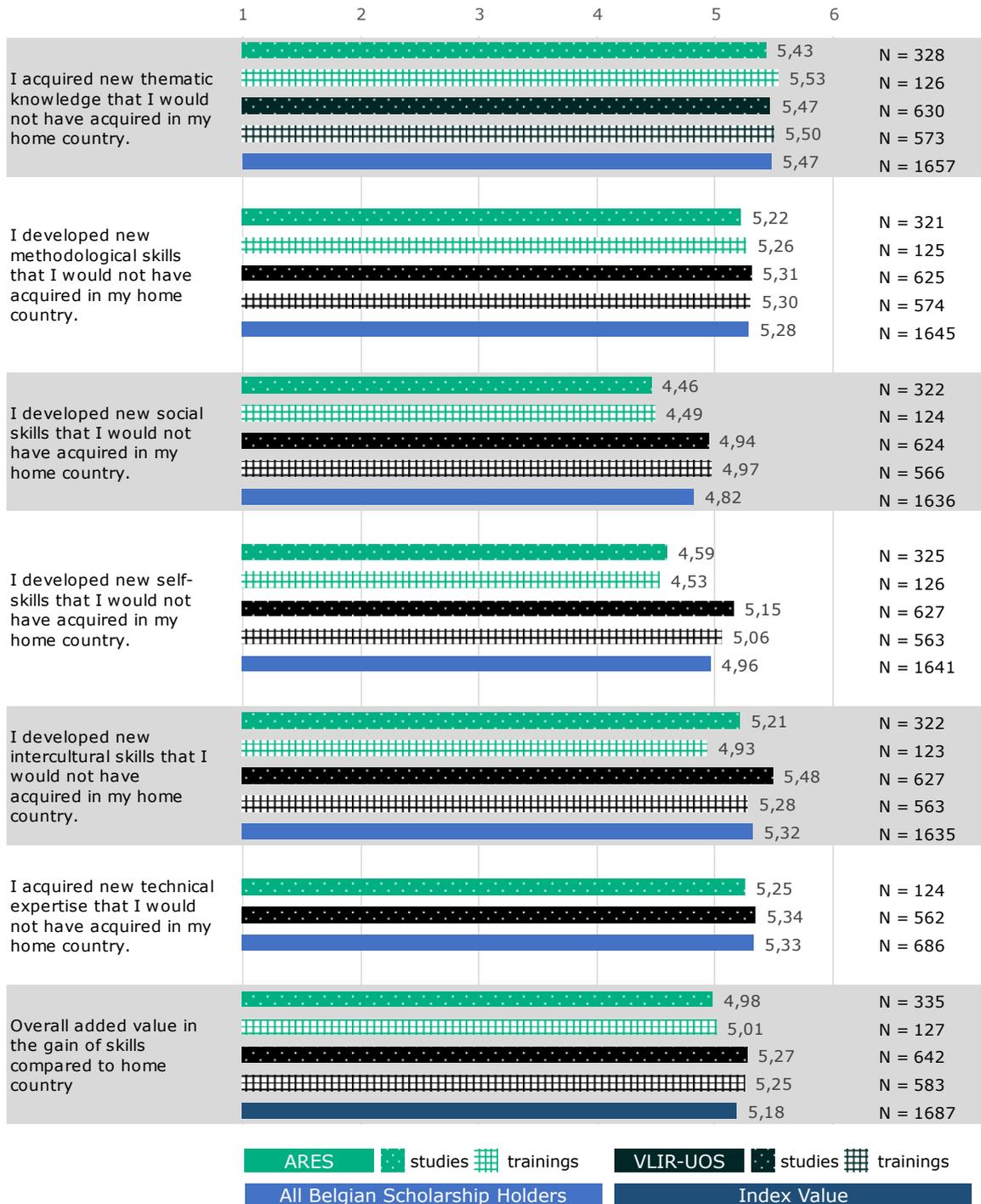
To determine the added value of the stay abroad, it is equally relevant whether scholarship holders would have gained the same skills in competencies had they stayed and studied or received a similar training in their home country. Here the results show that the majority of recipients agree that they acquired new skills that they would not have gained in their home country (average agreement of 5.18 on a 6-point scale). This concerns specifically thematic (95.7%, n = 1585) and technical knowledge (93.9%, n = 644) as well as methodological skills (94.2%, n = 1550) and intercultural competencies (92.1%, n = 1506) (see figure 39).

---

<sup>47</sup>  $p = 0.000$ ,  $d = 0.267$

<sup>48</sup> 5.56 for anglophone African countries vis-à-vis 5.25 (Middle East), 5.33 (Latin America and the Caribbean), 5.42 (Africa francophone), 5.43 (Africa both/neither anglophone and francophone), 5.49 (Asia and Oceania).

**Figure 39: Gains in competency and skills of Belgian scholarship holders during their scholarship stay that would have not been available in their home country. Average agreement on a 6-point scale.**



Source: Syspons and Nuffic 2018

Also here, skill gains diverge significantly between regions, albeit with a smaller effect; particularly between the groups with the comparatively highest and lowest gains.<sup>49</sup> In this regard added value is notably higher in Anglophone Africa, Asia and Oceania than in

<sup>49</sup> Overall:  $p = 0.000$ ,  $d = 0.315$ . Pair-wise comparisons show a significant difference between francophone Africa and both anglophone Africa and Asia and Oceania at the 1% significance level, between Latin America and the Caribbean and anglophone Africa at the 1% level, as well as between Latin America and the Caribbean and Asia and Oceania at the 10% level.

francophone Africa, Latin America and the Caribbean, where scholarship holders stated to have learned most in comparison to what would have been available in their home country (5.34 and 5.24, N = 598/472 compared to 4.95 and 4.99, N = 303/173).

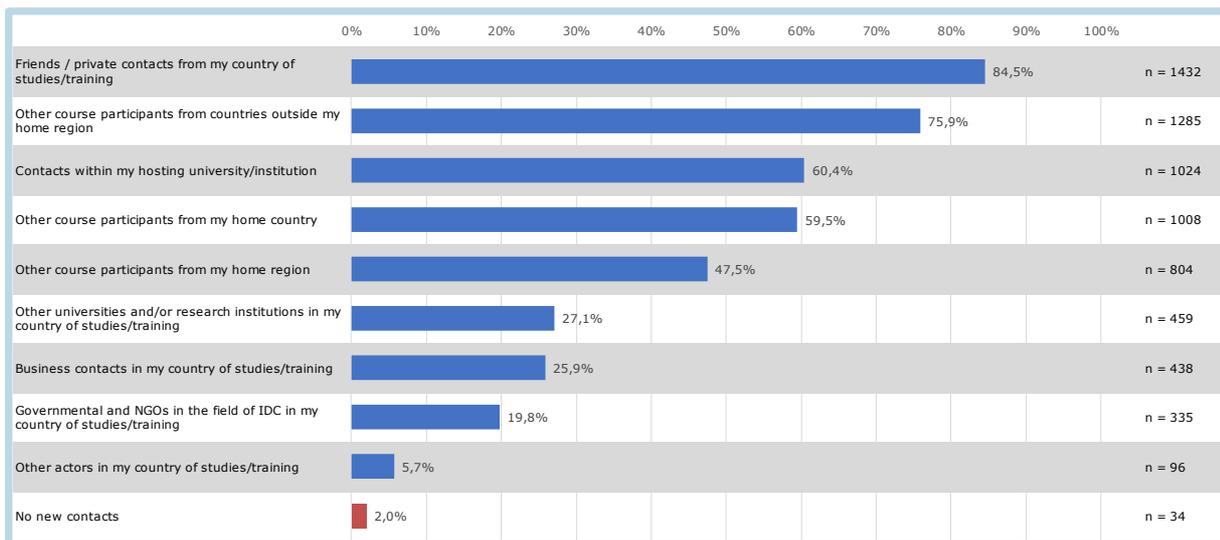
Compared over time, scholarship holders equally state that they have acquired skills and competencies due to their scholarship. Currently enrolled, young professionals, and professionals more than three years after graduation all assess their gains equally highly (5.50, N = 152; 5.50, N = 475, 5.51, N = 698). Only those recently graduated rank their skill development slightly, but not significantly lower (5.42, N = 337). Furthermore, no major difference was found regarding the skill development of Belgian scholarship holders and others who received a different scholarship.

When analysing the gains in skills and competencies in-depth, it becomes apparent that the inclusion of practical elements into the study period positively influences the skill development of scholarship recipients. Those who claim that their stay abroad covered no practical elements, such as practical exercises, independent research, an internship or the like, gained significantly less skills than those with practical elements (5.27 vs. 5.49, N = 70/1621).<sup>50</sup> Most of the difference can thereby be attributed to the positive effects of practical exercises; they are particularly helpful in acquiring new technical expertise. Independent research projects and internships make little to no difference.

Similarly, additional offers such as additional trainings only for scholarship holders, networking events, or an alumni network during the scholarship stay have a positive effect on the acquisition of skills and competencies. Those scholarship recipients benefitting from these activities report significantly higher gains than those whose scholarships did not cover the respective aspect.<sup>51</sup>

However, independent of the integration of network events within their scholarship programme, the majority of Belgian scholarship holders stated that they were able to establish contacts and new networks during their time abroad. Only 2% state that they did not make new contacts during their stay (see figure 40).

**Figure 40: New contacts made by Belgian scholarship holders during their time abroad. Multiple answers were possible (N = 1694).**



Source: Syspons and Nuffic 2018

<sup>50</sup> p = 0.004, d = 0.349

<sup>51</sup> Additional trainings: p = 0.03, d = 0.106; networking events: p = 0.000, d = 0.179; alumni network: p = 0.000, d = 0.219

The scholarship holders primarily established new personal contacts within their courses as well as within their respective university.<sup>52</sup> Additionally, a notable portion of scholarship holders made contact with other universities or research institutions in Belgium (27.1%), with businesses (25.9%), or Belgian organisations in the field of international development cooperation (19.8%). The implemented interviews confirmed thereby that most contacts are made on a personal level. The interviewees explained that the international set-up of their scholarship programmes was a major benefit for them as they could expand their social network beyond their immediate home region. Close professional contact to former professors or other research institutions was seldom cited in the interviews.

Not surprisingly, scholarship holders who have taken part in network events during their scholarship programme tended to make more contacts in all categories than those who did not take part in those events. The only exception to this were contacts with businesses.

At the same time male and female scholarship holders extend their networks similarly in terms of friends, private contacts, and within their course. However, men make significantly more contacts within their hosting university (64.4%, n = 658 vs. 54.5%, n = 366) other research institutions (30.7%, n = 313 vs. 21.7%, n = 146), professional contacts with businesses (29.8%, n = 304 vs. 19.9%, n = 134) and with Belgian organisations involved in international development cooperation (22.7%, n = 232 vs. 15.3%, n = 103) than women.<sup>53</sup>

Likewise, participants of other scholarships also gain similar contacts in terms of friends in general and within their course. Yet, they report to have made significantly more new contacts within their hosting university (76.5%, n = 65 vs. 60.4%, n = 1024)<sup>54</sup>, as well as (in tendency) more new business contacts (35.3%, n = 30 vs. 25.9%, n = 438). Furthermore, they also established more contacts to development organisations in their country of studies/training (27.1%, n = 23 vs. 19.8%, n = 335).

Respondents of both groups have participated equally in networking events for scholarship holders, yet participants from other scholarship schemes seem to have networked more extensively. Significant positive correlations between independent research projects and contacts within the university and to businesses<sup>55</sup>, as well as between internships and business contacts<sup>56</sup> suggest that these additional contacts might be due to more practical elements embedded in comparative scholarship schemes: 79.3% (n = 73) undertake own research projects vis-à-vis 51.7% of the Belgian scholarship holders (n = 915). Also, 27.2% (n = 25) complete an internship while abroad, compared to 19.4% of Belgian scholarship holders (n = 337).

#### **4.3.1.3 Impact on a personal level: Professional trajectories of scholarship holders**

On a personal level, Belgian scholarship schemes intend to positively influence the career development of former scholarship holders, aiming to both increase their employability and qualify them to take over positions of responsibility in their respective countries. Once employed, it is intended that graduates of Belgian scholarship schemes apply their newly acquired knowledge and skills as well as make active use of the networks established during their stay.

---

<sup>52</sup> Friends / private contacts: 84.5%, n = 1432; course participants from countries outside my home region: 75.9%, n = 1285; course participants from my home country: 59.5%, n = 1008; course participants from my home region: 47.5%, n = 804; contacts within my hosting university/institution: 60.4%, n = 1024.

<sup>53</sup> For all p = 0.000

<sup>54</sup> p = 0.001, d = -0.329

<sup>55</sup> r = 0.173 & r = 0.126, for both p = 0.000

<sup>56</sup> r = 0.170, p = 0.000

First of all, scholarship recipients themselves judge the impact of their scholarship on their career very positively: 97.3% of all scholarship recipients believe that participating in the scholarship has improved their career prospects (n = 1412). More specifically, most assess the international experience, the knowledge, and the skills acquired to have been important factors for their career development (see figure 41).

**Figure 41: Self-assessed impact of their participation in the scholarship onto their career by former Belgian scholarship holders. Average agreement on a 6-point scale.**



Source: Syspons and Nuffic 2018

In this regard male and female scholarship recipients claim an equally positive effect on their career prospects. However, those working in international organisations, research, and governmental institutions tend to consider the positive effect of the scholarship on their career higher than those working in the private sector or in CSO/NGOs. Between ARES and VLIR-UOS, the latter claim overall a more positive impact onto their career.<sup>57</sup> This is mostly due to the fact that ARES scholarship holders consider the contacts gained abroad to be less important for their career development than VLIR-UOS scholars. Yet in total, it is almost equally agreed upon by all that the scholarship has improved their career prospects.

In a similar tendency, Belgian scholarship holders assess the impact of their scholarship on their career prospects to be higher than other scholarship recipients (5.64 vs. 5.54, N = 1451/71). In contrast, other scholarship holders claim that the established contacts were more relevant to their career advancements (5.17 vs. 4.97, N = 71/1420). The latter finding aligns with the result that recipients of other scholarship programs have networked more extensively during their time abroad than Belgian scholarship holders.

This self-assessed positive impact on the career development of the former scholarship holders also manifests itself in the time it takes scholarship holders to find employment after finishing their education. On average it takes them 2.2. months.<sup>58</sup> Scholarship holders completing a Master in Belgium take on average 2.4 months to find employment after graduation. Moreover, currently, 8.2% of respondents are unemployed (n = 122), half of them having graduated within the previous year.

Most notably, the duration of job search is significantly shorter for those having gone abroad on a scholarship compared to those having stayed home.<sup>59</sup> Rejected applicants, who did not go abroad, searched on average 7.9 months for a job, while those having

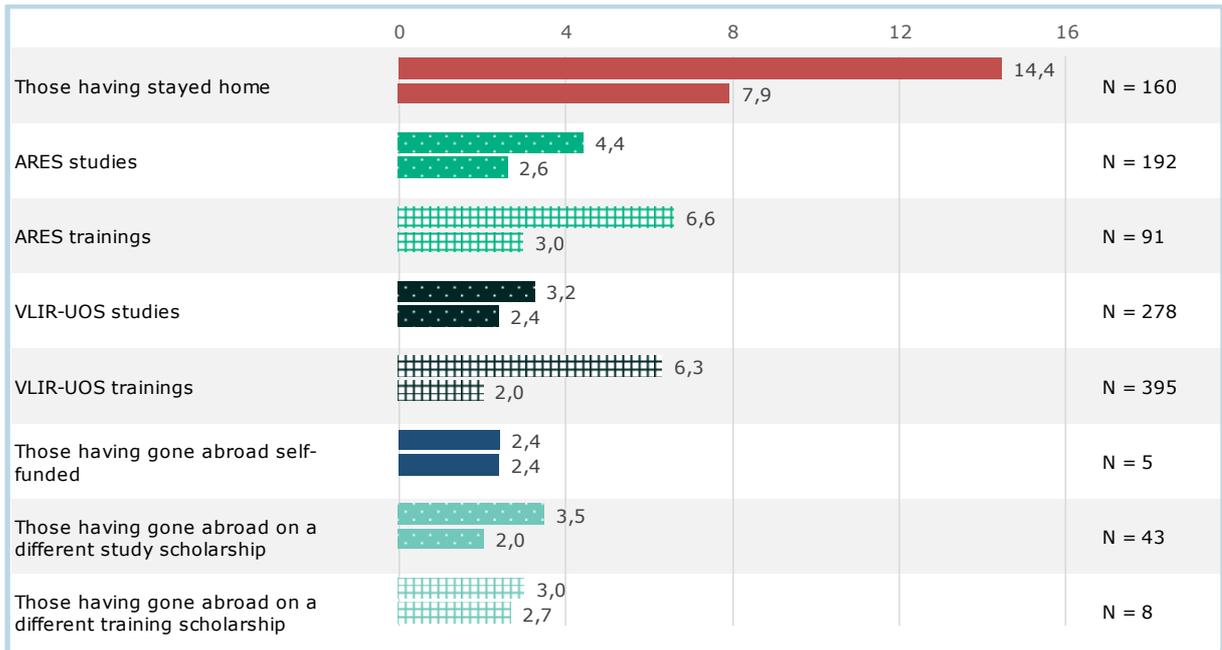
<sup>57</sup> Studies: 5.58 vs. 5.35, N = 494/304; trainings: 5.53 vs. 5.41, N = 561/121

<sup>58</sup> Due to high extreme values, the averages referred to in this section on job search represent 5% trimmed means, meaning the highest 2.5% of scores as well as the lowest 2.5% have been excluded from analysis. In order to provide the full picture, figure 42 contrasts both values.

<sup>59</sup> p = 0.000, d = 0.605

gone abroad searched in between 2.0 and 3.0 months. In this regard, no difference could be found between ARES'/VLIR-UOS' scholarships and scholarships of other organisations.

**Figure 42: Duration of job search after finishing education for Belgian scholarship recipients as well as the comparison groups. Displaying both the average duration (first bar) as well as the 5% trimmed mean (second bar).**



Source: Syspons and Nuffic 2018

The short timespan to find a job can be partially explained by the eligibility criteria of both umbrella organisations regarding the applicants' professional background. For ARES' scholarships the first eligibility criteria for applicants is that they currently reside and work in their home country. Moreover, ARES requires applicants to produce proof of at least two years of professional experience before applying for their scholarship programmes. VLIR-UOS similarly gives "priority to candidates who are employed in academic institutions, research institutes, governments, social economy or NGO's [sic], or aim a career in one of these sectors" (VLIR-UOS, n.d.). Yet, they also deem professionals from the private sector and new graduates without working experience eligible. For training programmes, both organisation specifically require employers to attest (re)integration of the scholarship holder into a position where they can apply their new knowledge and competencies. In the eligibility criteria of both organisations, no reference is made to a contractual commitment of scholarship holders to return to their previous employers.

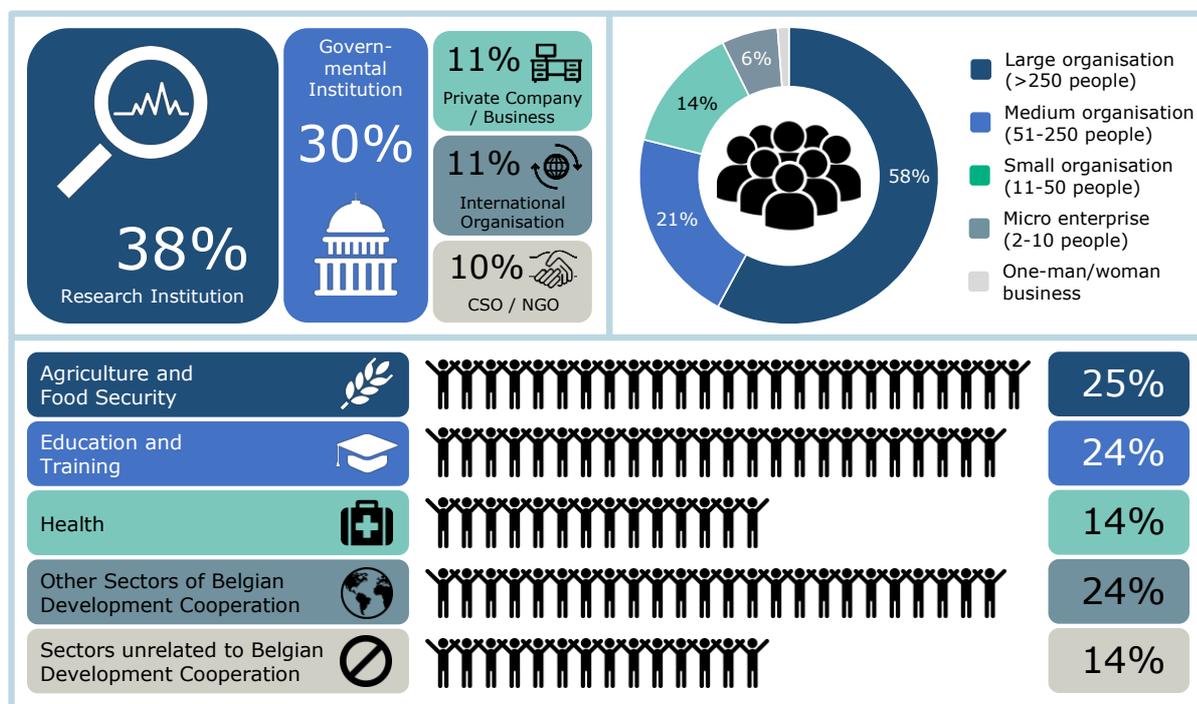
As a consequence, 90.8% of Belgian scholarship recipients were already working at the time of application, being either employed or self-employed (n = 1641). The numbers do not differ much between studies and training, but are higher for ARES than for VLIR-UOS. While 97.1% of ARES applicants work at the time of application (n = 477), 88.2% of VLIR-UOS applicants do (n = 1164). This corresponds with VLIR-UOS' commitment to also accept recent graduates without professional experience.

After the scholarship stay, 74.9% of those who have worked return to their previous employer (n = 750). This concerns primarily those going abroad for a training (89.1%, n = 450) as only 60.4% (n=300) of the study scholarship holders return to their previous place of work. Despite the (re)employment confirmation given to VLIR-UOS and ARES training participants, 10.6% did not return (n = 43).

The qualitative interviews provided three explanations in this regard: 1) not all employers gave a returning guarantee; 2) sometimes structural factors do not allow for a return despite a previous (informal) commitment, e.g., an unforeseen end of the project; and lastly, but most commonly cited 3) proactive decisions were made to change jobs. Reasons included that the scholarship holder had gained new perspectives on what job (s)he would like to do, that (s)he took up a job with more responsibilities that (s)he qualified for through the scholarship, or wanting to start a business.

After finding a job, former scholarship holders work in a variety of organisations and fields. At the time of the evaluation, the largest share worked in research, e.g., in universities, think-tanks, or similar institutions (38.2%, n = 408). This is particularly true for former VLIR-UOS' scholars of which 45.2% (n = 341) worked in research vis-à-vis 21.3% of previous ARES' scholarship holders (n = 67). ARES graduates in turn work primarily in governmental institutions (38.9%, n = 122 vs. 26.4%, n = 199). Furthermore, independent of the umbrella organisations, 11.1% work in the private sector (n = 119), 10.9% in international organisations (n = 117), and 9.7% in civil society or non-governmental organisations (n = 104) (see figure 43).

**Figure 43: Current workplace of former Belgian scholarship holders with regard to type of organisation, size of organisation, and sector (N = 1069, 1068, 1075).**



Source: Syspons and Nuffic 2018

In comparison to the Belgian scholarship holders both comparison groups show in part diverging job profiles. In particular, former holders of other scholarships work predominantly in research (51.9%, n = 28) and almost none in CSO/NGOs (1.9%, n = 1). For those having stayed home, government represents the most important employer (39.2%, n = 67), followed by research institutions (30.4%, n = 52). This suggests that either Belgian scholarships equip their recipients with different skills which qualify/disqualify them for taking up different jobs than the comparison groups or alternatively, that Belgian scholarship graduates have different aspirations regarding their employment.

In terms of organisational size, more than half of former Belgian scholarship holders work in large organisations/institutions with more than 250 employees (57.9%, n = 618). Keeping in mind the abovementioned sectors, universities might account for a large portion of these organisations. Only very few (1.2%, n = 13) run a one-

man/woman business or work in micro enterprises between two and ten employees (6.1%, n = 65).

In terms of occupational area, most former Belgian scholarship holders work in the three following focus areas of Belgian development cooperation. Only 13.9% work in sectors not directly related to one of the sectors of Belgian development cooperation<sup>60</sup> (n = 149) (see figure 43).

- 1) agriculture and food security (24.6%, n = 264);
- 2) education and training (23.9%, n = 257); and
- 3) health (13.6%, n = 146).

While both former ARES' and VLIR-UOS scholars are equally engaged in agriculture and food security, ARES scholars are more active in the health sector (25.0%, n = 79 vs. 8.8%, n = 67). VLIR-UOS scholarship recipients are more often engaged in education and training (28.6%, n = 217 vs. 12.7%, n = 40).

However, over time a shift in employment priorities by the Belgian scholarship holders can be observed<sup>61</sup>. Whilst the share working in governmental institutions decreases from 37.3% for those only recently graduated (n = 72) to 28.4% of professionals (n = 145); the share working in international organisations rises steadily (6.7%, n = 13 to 9.3%, n = 32 to 13.5%, n = 69). At the same time, employment in research institutions decreases slightly (42.0%, n = 81 to 38.8%, n = 133 to 36.7%, n = 187), whereas the ratio of those working for CSO/NGOs remains almost the same. Most variance can be found in the private sector, where numbers almost triple from 5.2% (n = 10) right after graduation to 13.4% for young professionals (n = 46), before slightly decreasing again to 12.0% for professionals in their later years (n = 61).

With regard to organisational size, no major changes occur over the span of the graduates' career. Merely, employment in large organisations decreases (64.7%, n = 123 to 56.6%, n = 290) to the benefit of medium-sized organisations (16.3%, n = 31 to 22.3%, n = 114) in later stages of employment. Concerning employment in sectors, the foci on agriculture and food security as well as education and training remain stable over time. However, employment in health decreases from 18.1% for recent graduates (n = 35) to 11.8% for professionals (n = 61). Additionally, the rate of those working in sectors not directly related to Belgian development doubles from 7.8% for recent graduates (n = 15) to 15.5% of professionals (n = 80).

In summary, it can be observed that during the course of their career, a notable portion of former Belgian scholarship holders tends to shift towards employment with higher remuneration schemes, e.g., into international organisations or the private sector. Yet, this shift only concerns a fraction of former scholarship holders as a high percentage remains in other types of organisations. Similarly, the focus areas agriculture/food security and education as well as development in general remain attractive sectors of work.

Regardless of their place of work, former Belgian scholarship holders consider their newly gained skills and competencies to be highly applicable to their everyday work. Of those having gained new skills, at least 93.3% use their new thematic knowledge, methodological competencies, social skills, self-skills, intercultural competency, as well as their newly acquired technical expertise in their professional work (see figure 44).

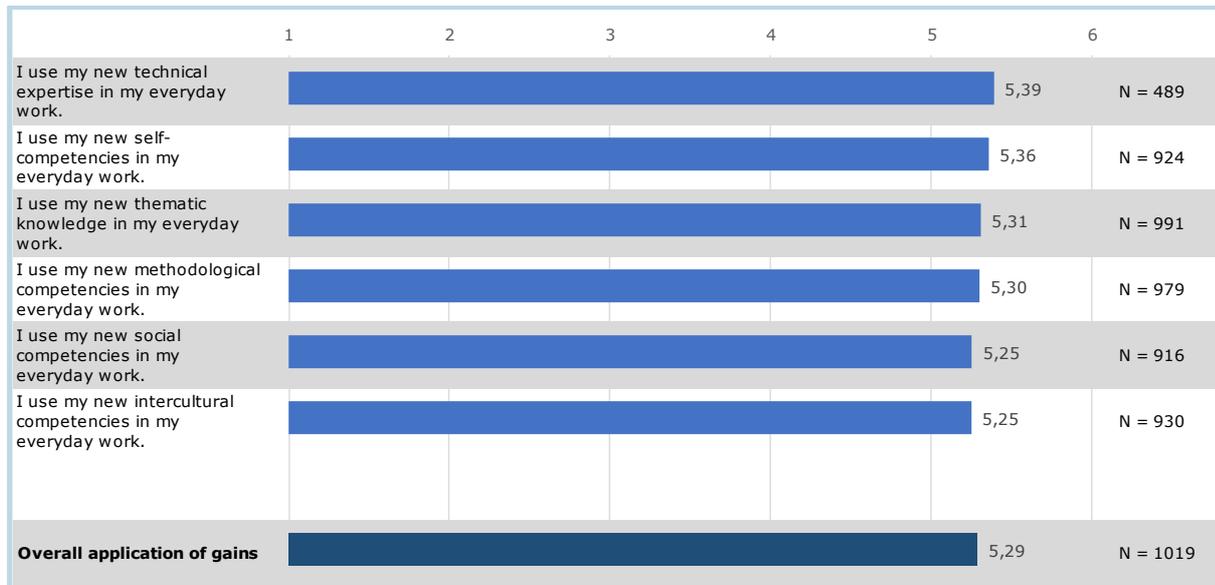
---

<sup>60</sup> Namely: Agriculture and food security; Aid for Trade; Biodiversity; Climate Change; Debt relief; Desertification; Education and training; Gender; Human rights; Health; Infrastructure, industry and technology; Innovative financing; Migration; and Private sector development

<sup>61</sup> As exemplified by the stratified cohort of recently graduated scholarship holders, young professionals one to three years after graduation, and professionals more than three years after graduation.

Significant positive correlations for all skill areas show that the more skills are gained, the more they are applied at work later.

**Figure 44: Application of new skills gained during stay abroad in the everyday work of Belgian scholarship recipients. Average agreement on 6-point scale.**



Source: Syspons and Nuffic 2018

The interviews highlighted that applicability is particularly high for those working in research and/or teaching. Especially in this sector, respondents stated a continuous application of knowledge and skills learned abroad. In other sectors, it was mostly the techniques and ways of working that are now useful in the scholarship holders' everyday work. One very positive example shows that the skill set gained can also be translated into the private sector: One scholarship recipient used the knowledge gained at a short training on cocoa production to found his own chocolate-making business. They recently produced their first chocolate bar.

When comparing ARES and VLIR-UOS almost no differences can be identified in the application of skills. Differences can merely be found in the area of soft skills, as former ARES scholarship holders make less use of self-skills learned in their everyday work (5.23, N = 183/86 vs. 5.46/5.37, N = 277/378) than VLIR-UOS scholarship holders. Likewise, VLIR-UOS training recipients use their intercultural skills less often than their ARES counterparts (5.19 vs. 5.28, N = 379/90).

Moreover, men apply skills significantly more often in their everyday work than women, although male and female scholarship recipients had claimed similar acquisition of skills. Men apply newly gained thematic knowledge (5.38 vs. 5.19 N = 611/379), methodological skills (5.37 vs. 5.18, N = 603/375), and intercultural competencies (5.30 vs. 5.16, N = 581/348) more often in their work than women.<sup>62</sup> However, the application of social skills, self-skills and technical expertise do not diverge significantly between men and women.

Over time the applicability of the newly acquired skills and competencies is also assessed as stable by the respondents. Recent graduates, young professionals, and professionals all rank the application of their new skills approximately the same. In the interviews however, several scholarship holders stated that the skills gained were very relevant at

<sup>62</sup> Thematic knowledge: p = 0.002, d = 0.198; methodological skills: p = 0.002, d = 0.203; intercultural competencies: p = 0.038, d = 0.142

their previous job, but became less applicable once they changed jobs (particularly into the private sector).

In comparison with the comparison groups more Belgian scholarship holders tendentially claim to apply their newly developed skills than their counterparts who received other scholarships. This applies for all skill areas. However, none of these differences can be considered statistically significant.

The newly acquired skills and competencies by the Belgian scholarship holders and their application in their everyday work translates into responsible positions with decision-making power. At the time of this evaluation<sup>63</sup>, almost all former Belgian scholarship holders hold positions in which they can actively influence parts of their organisation. Only 7.1% claim that they are not authorised to make any decisions at any given level (n = 75). For example, 87.8% of the currently employed can decide autonomously on operational issues such as deadlines or managing tasks (n = 896). Furthermore, 78.2% have power over personnel (n = 714) and 61.5% over budgetary decisions (n = 551). Finally, 82.2% have strategic decision-making powers (n = 796), meaning that they have influence on the future orientation of their teams/units/divisions/organisations and can set long-term goals.

Not surprisingly, the decision-making powers vary depending on whether they can be exercised over a team, a business unit/department, a division/faculty, or the entire organisation/institution. Equally, they vary with the size of the employing organisation. For example, 46.0% can take strategic decisions for the entire organisation in micro enterprises (n = 29), while only 10.3% can do so in organisations with 250 employees and more (n = 57). Moreover, former scholarship holders who have returned to their former employers tend to hold positions that are slightly more influential than those scholarship holders who have switched jobs (index value<sup>64</sup> of 12.03 vs. 11.06, N = 731/241). Nevertheless, those who have switched jobs could claim a bigger professional advance compared to their previous responsibilities (4.24 vs. 2.81, N = 242/729).

When looking at the differences between men and women, it becomes obvious that men who have participated in a scholarship currently hold positions with significantly higher decision-making powers than women (12.35 vs. 10.69, N = 648/405).<sup>65</sup> This refers in particular to personnel, strategic, and operational decisions; less so for budgetary decisions. Nevertheless, the results also demonstrate that the gain in responsibilities from before the scholarship to after is in tendency larger for women than it is for men (3.33 vs. 3.05, N = 377/608). A potential explanation for the still existing difference in the end can be found in the mainly patriarchal context of the participants' home countries, which influences the positions and decision-making powers women can hold in organisations.

In comparison with the comparison groups, the current positions held by Belgian scholarship holders vis-à-vis their comparison groups do not differ significantly. However, in tendency those having received (any) scholarship have more decision-making power than those who stayed home (Belgian scholarships 11.71, other scholarships 11.84 vs. 11.49, N = 1054/51/172).

When examining the development of decision-making competencies across time, it becomes apparent that both intervention and comparison groups gain more decision-making powers over the course of their career. However, the development paths differ

---

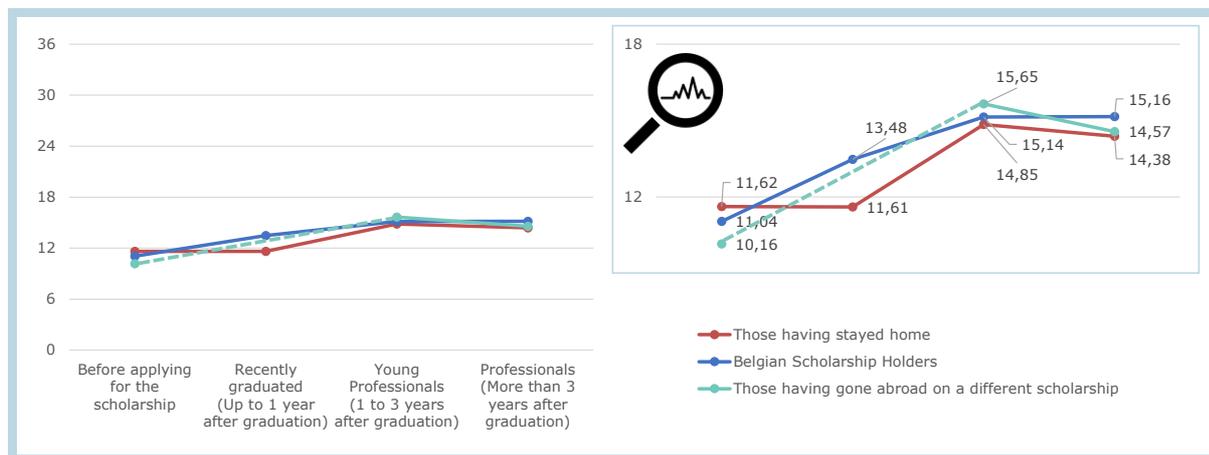
<sup>63</sup> As of October 2017.

<sup>64</sup> To reduce complexity, decision-making power was operationalised according to operational decisions (weighted 1), personnel and budgetary decisions (each weighted 2), as well as strategic decisions (weighed 4); and the level on which they are able to be exercised (team level = 1, unit/department = 2, division/faculty = 3, organisation/institution = 4). In this regard, decision-making power can range between 0 and 36 (operational, personnel, budgetary, and strategic decisions at organisational level). For their current employment, the scale was furthermore adjusted by organisational size (ranked). Timeline and differences are calculated based on the unranked scale as restricted information is available on previous employments.

<sup>65</sup> p = 0.001; d = 0.21

between the three different groups. While Belgian scholarship holders experience an increase in their decision-making power directly after their graduation, the decision-making power for those who stayed home remains the same from the baseline to approximately a year after their application and only increase afterwards. For scholarship holders who received other scholarships almost the same trajectory can be observed as for the Belgian scholarship holders. However at the end – more than three years after graduation, Belgian scholarship holders hold the positions with the most decision-making power in comparison to the other groups. These results indicate that receiving a Belgian scholarship unfolds its effect primarily by enabling scholarship holders to take up more responsible positions soon after graduation. Over time, the comparison groups acquire a similar professional level, with former Belgian scholarship holders holding the most influential positions (see figure 45). Hereby, professional advances are in tendency more tangible for former VLIR-UOS scholarship holders than for their ARES counterparts.<sup>66</sup>

**Figure 45: Decision-making responsibilities' development over the stratified cohort and differentiated by intervention and comparison groups. Index value ranging from 0 to 36.**



Source: Syspons and Nuffic 2018

Parallel to the career development of the scholarship holders, established networks persist after the conclusion of the scholarship stay. This is particular true for informal contacts to friends and classmates, with whom in between 68.8% and 78.8% of former Belgian scholarship holders are still in touch (n =553-1012). Also, 64.6% have remained in touch with contacts they made within their hosting university (n = 662). Moreover, 48.9% (n = 214) of scholarship holders remain in contact with Belgian businesses, 43.1% (n=198) with other Belgian research institutions, and 36.7% (n=123) with Belgian organisations involved in development cooperation. The interviewees thereby confirmed that scholarship holders mostly stay in touch with friends. Contacts to professors are mostly maintained by those seeking to do/ doing a PhD.

While recipients of other scholarships had claimed to have established more contacts to businesses and development cooperation organisations in their country of studies/training, they are now to a lesser extent still in touch with these organisations (businesses: 40.0%, n = 12 vs. 48.9%, n = 214; organisations in development cooperation 17.4%, n = 4 vs. 36.7%, n = 123). The comparison suggests that professional networks established during a Belgian scholarship stay might be less extensive in size, but more stable over time.

The established networks are primarily used as platforms for exchanging information by the former Belgian scholarship holders. Former scholarship holders predominately use these networks to gain new knowledge (85.7%, n = 1176) and to provide others in the

<sup>66</sup> Studies: 4.29 vs. 2.74, N = 280/206; Trainings: 2.97 vs. 1.47, N = 404/95. Significant differences could be found between VLIR-UOS studies and ARES trainings (p = 0.007), which are not directly comparable. The other discrepancies are not statistically significant.

network with knowledge (82.5%, n = 1099). Interviewees in the implemented interviews confirmed this by emphasising that they mostly use their networks for thematic exchanges and to update each other on recent developments.

While the way of using networks is similar for both ARES and VLIR-UOS, former ARES scholarship holders, and in particular those having received a study scholarship, use these networks less extensively.<sup>67</sup> This is underlined by their aforementioned self-assessment of the lower relevance of the contacts they made for their career.

Moreover, in approximately 70% of cases, some form of further cooperation arose after conclusion of the scholarship stay. The scholarship holders and their respective contact either engaged in joint participation and/or invited each other to events. Sometimes scholarship holders and their contacts also initiated publications together or implemented joint projects. Particularly fruitful examples of cooperation include joint publications with staff of their hosting university (e.g., 10.4% of those who made contacts with the academic staff of their hosting university; n = 107); or joint projects with Belgian organisations active in international development cooperation (7.2% of those who networked with these organisations; n = 24).<sup>68</sup>

Recipients of other scholarship schemes used their networks similarly in terms of gaining, providing, and generating knowledge. Yet, they claim to have had more follow-up activities with businesses, organisations engaged in development cooperation, and their hosting as well as other research institutions (at least 80% in each category of cooperation partner). However, the results suggest that this cooperation took place fairly soon after graduation, considering the amount of people who have lost touch with businesses and organisations of development cooperation since making contact (see above).

#### **4.3.1.4 Impact on an organisational level: Scholarship holders as change agents in their organisation**

On an organisational level, it is hoped that Belgian scholarship holders become change agents in their respective organisations. Being in positions of power and using the competencies and networks acquired abroad, it is the aim that these scholarship holders professionalise their work places and thereby contribute to the better performance of their organisations.

In order to professionalise their organisations, scholarship holders have to share their newly acquired knowledge and skills at the workplace. According to the online-survey, 98.3% of the scholarship holders shared what they have learned during their stay abroad in their professional environment (n = 1003). Another 95.0% have trained colleagues and/or employees in their organisation with regard to the skills they have learned (n = 934). This is particularly true for male graduates, who claim significantly more often to play a multiplicatory role in disseminating knowledge and training others.<sup>69</sup> Examples gathered in the qualitative interviews thereby suggest that the dissemination of knowledge and skills is mainly focussed on the immediate environment of the former scholar, e.g., colleagues and within the team.

In addition, many claim to use these skills and knowledge to professionalise the organisation/institution they work at (88.1%, n = 844). In particular, they claim that they have helped their organisation/institution to reach its goal more effectively and more efficiently. Least influence is exercised with regard to securing new financing for the organisation (see figure 46).

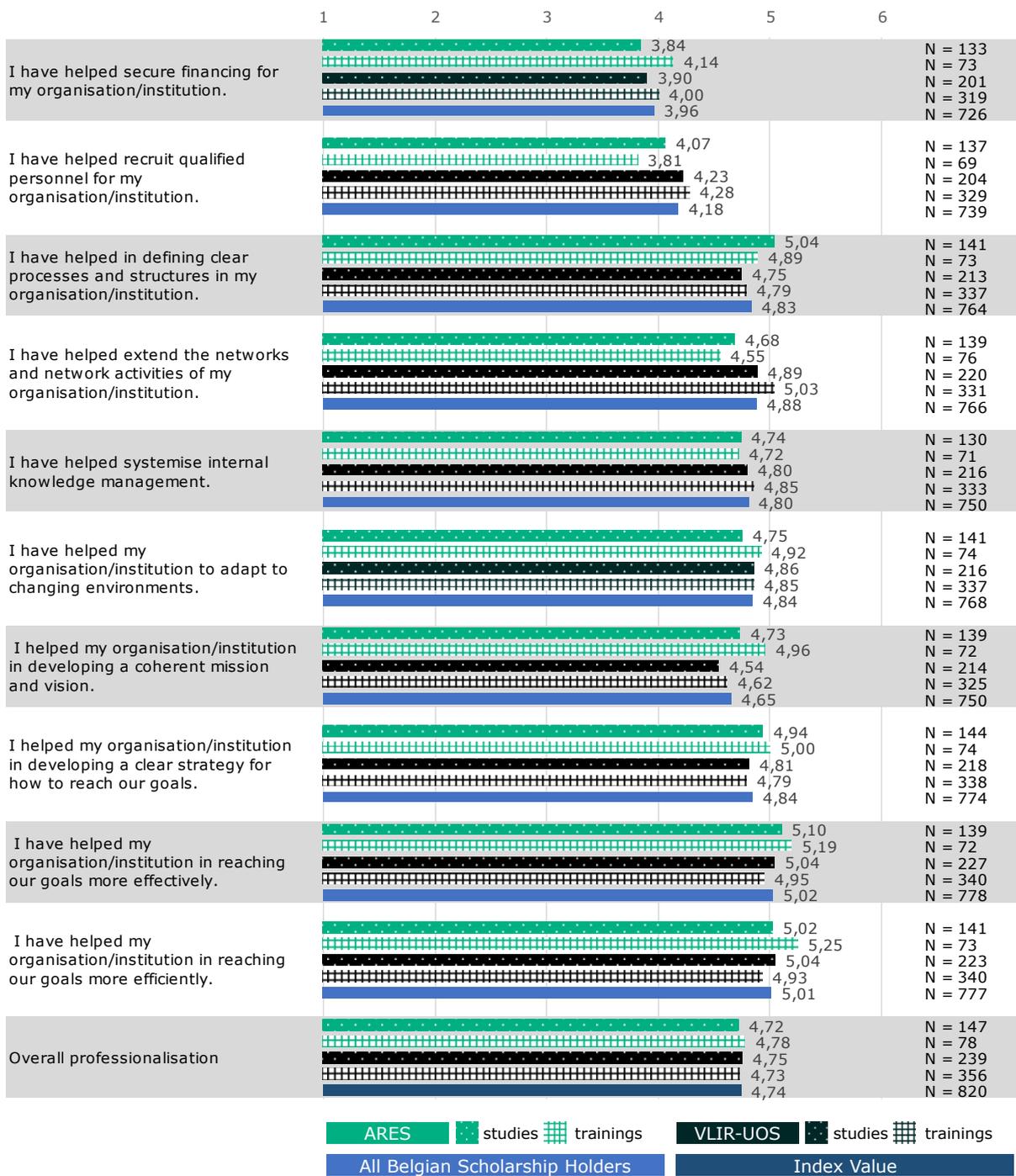
---

<sup>67</sup> Drawing knowledge: 74.5%, n = 199; providing knowledge: 73,6%, n = 190; generating knowledge: 63.1%, n = 157

<sup>68</sup> Here, case numbers were too small to differentiate between ARES and VLIR-UOS.

<sup>69</sup> Disseminating knowledge: p = 0.024, d = 0.134; training others: p = 0.045, d = 0.211

**Figure 46: Contributions of former Belgian scholarship recipients in professionalising their organisation/institution. Average agreement on a 6-point scale.**



Source: Syspons and Nuffic 2018

No major difference can be found when comparing the overall contribution to professionalization by former ARES and VLIR-UOS scholarship recipients. However, different foci of professionalization become apparent when comparing the different aspects used to operationalise professionalization (see figure 46). For example, VLIR-UOS training participants contribute comparatively most with regard to extending networks, while ARES participants (both studies and training) are more active in strategic roles such as defining roles and processes, developing mission and vision as well as action plans. ARES training participants also seem to be more active in financial areas, such as fund raising and improving efficiency.

Highly significant positive correlations show that the more influence scholarship holders have in their organisations, the more they contribute to the professionalization of their workplace. The size of the respective organisation is thereby not systematically related to the extent of professionalization, highlighting the previous finding that changes are mostly made in the immediate environment of the former scholarship holders. This was also confirmed in the interviews conducted.

Also in this aspect men claim to have a higher impact in terms of professionalization than women. This becomes specifically evident in strategic areas such as developing a coherent mission and vision as well as developing a strategy to reach the organisation's goals. They also claim to contribute more in terms of reaching the goals more effectively and efficiently.<sup>70</sup>

Professionalization efforts do not diverge significantly between Belgian and other scholarship holders. Yet, it is noteworthy that Belgian scholarship holders claim higher values in almost all categories; whereas former holders of other scholarships emphasise more how they have assisted in extending networks and network activities of their organisation as well as systemised its internal knowledge management.

#### ***4.3.1.5 Impact on a societal level: Scholarship holders' role in the development of their home country***

Going beyond the impact to be achieved at the work place, Belgian scholarship schemes also aim to enable their participants to actively contribute to the development of their (home) country. By equipping them with the skills and competencies necessary and by enabling them to take up appropriate positions, the scholarship holders are anticipated to contribute to solving developmental challenges as well as to acting as change agents in the broader context of their country's development.

In this regard, 84.4% of the former Belgian scholarship holders have made use of their newly developed set of competencies to initiate projects relevant to the development of their country (n = 822). Their decision-making power is thereby crucial and highlights the importance of professional development: The more influential their position, the more they state that they have been able to initiate relevant projects.<sup>71</sup>

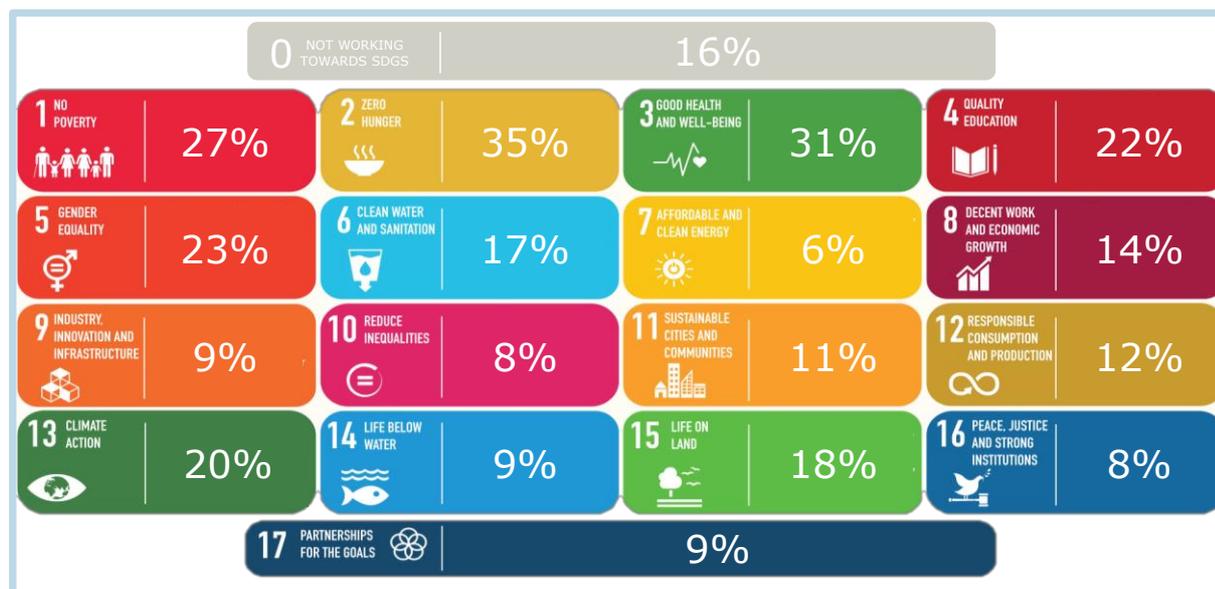
Most of the former scholarship holders have hereby initiated these projects in sectors relevant for Belgian development cooperation as 84.4% (n = 889) work in direct relation to one (or multiple) of the Sustainable Development Goals (SDGs). Merely 15.6% claim that their work is not directly geared towards one of the 17 SDGs (n = 164) (see figure 47).

---

<sup>70</sup> Overall professionalisation: p = 0.014, d = 0.178; developing a coherent mission and vision: p = 0.001, d = 0.295; developing a strategy to reach the organisation's goals: p = 0.000, d = 0.311; reaching the goals more effectively: p = 0.003, d = 0.233; reaching goals more efficiently: p = 0.002, d = 0.253

<sup>71</sup> r = 0.245, p = 0.000

**Figure 47: Share of former Belgian scholarship holders actively working towards the SDGs according to their own assessment (N = 1053).**



Source: Syspons and Nuffic 2018

The largest share of former Belgian scholarship holders (35.0%, n = 369) state that they contribute towards SDG2 (End hunger, achieve food security and improved nutrition and promote sustainable agriculture). Further foci include:

- SDG3 (Ensure healthy lives and promote well-being for all at all ages) with 30.5% (n = 321),
- SDG1 (End poverty in all its forms everywhere) with 27.1% (n = 285),
- SDG5 (Achieve gender equality and empower all girls and women) with 22.7% (n = 239),
- SDG4 (Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all) with 22.2% (n = 234), and
- SDG13 (Take urgent action to combat climate change and its impacts) with 19.6% (n = 206).

Furthermore, the largest group (40.1%, n = 432) focuses its work on one SDG, yet notably large groups exist that claim to contribute to two (17.3%, n = 182) or three goals at the same time (14.2%, n = 150).

When comparing the focus areas of men and women, it becomes apparent that male former scholarship holders work comparatively more on food security and health issues, while women are more engaged in issues of gender equality. For other fields of work, men and women are active alike.

Moreover, a systematic brain drain caused by sending scholarship holders abroad cannot be observed in the case of the Belgian scholarship programmes. Of those actively working, 92% work either in their home country or its neighbouring countries (n = 988). Few stayed either in Belgium (1.7%, n = 18), other European countries (1.6%, n = 17), the US (0.9%, n = 10), or other countries outside their home region (3.8%, n = 41).

As a result the return rate in the Belgian scholarship programmes is higher than in the comparison group. Respondents from the comparison group who had received other scholarships work abroad slightly more often (16.4%, n = 9). Furthermore, other similar scholarship programmes such as the DAAD EPOS programme experience lower return rates around 70%. (DAAD, 2013). In contrast, the Netherlands Fellowship Programmes

(NFP) report a slightly higher return rate of 97% (Source: Nuffic, NFP tracer study 2015).

However, across time the threat for more brain drain increases for the Belgian scholarship programmes as more former Belgian scholarship holders leave their home region for work. While 96.4% of the recent graduates work in their home country or its neighbouring countries (n = 188), only 94.2% of young professionals (n = 324) and 89.0% of professionals (n = 455) work in their home region.

This tendency is also exemplified by the given answers of the Belgian scholarship holders as only 2.9% of Belgian scholarship recipients do not plan to ever return to Belgium (n = 46). In contrast, 68.6% consider returning for further studies (n = 1084), while 32.3% consider Belgium to be attractive for full-time employment (n = 510). For further studies, it is mostly young professionals and more established professionals who consider returning (76.0%, n = 335; 66.5%, n = 430). Full-time employment is most enticing for those currently still in Belgium (40.0%, n = 60), yet also young professionals (34.5%, n = 152) and professionals (31.2%, n = 202) continuously consider this option. These answers were also confirmed by the conducted interviews, in which the overwhelming majority of former Belgian scholarship holders plans to return to Belgium or Europe – either for further studies or work.

#### **4.3.2 Assessment of the effectiveness and impact of the individual scholarship schemes**

Based upon these findings, the evaluation team comes to the conclusion that the individual Belgian scholarship schemes are effective and achieve impact on the individual and organisational level. It can be reasonably assumed that these results also translate into impact on a societal level.

First of all, Belgian scholarship programmes provide the necessary preconditions for an effective scholarship scheme: They award scholarships to the relevant target group and provide highly satisfying programmes which guarantees very low drop-out rates. Due to this, they are effective in transmitting both thematic knowledge, methodological competencies, as well as soft skills. They also effectively support the building of stable networks. In the view of the evaluation team, the latter could however be further improved by supporting more practical elements such as own research projects and internships in order to strengthen academic and professional networks.

Furthermore, the high applicability of the newly gained skills through the scholarships and the continuous use of their international networks positively impacts the career development of Belgian scholarship recipients. On a personal level, scholarship participation significantly shortens the time necessary to find employment after graduation which is particularly relevant for those completing their Masters on a Belgian scholarship. Moreover, scholarships effectively assist their recipients in accessing (and maintaining) positions of influence.

Here, it can be concluded that former scholarship holders returning to their old employer achieve more influential positions in the long-term while former scholarship holders, who change their employer after their immediate return, experience a faster rise in influence. However, in the latter case these former scholarship holders on average reach overall less influential positions than the former scholarship holders who remained with their employer. This in turn makes the former scholarship holders, who have remained with their former employer more influential as change agents and multipliers in their respective organisations.

In this role they are better able to professionalise their organisations than those who have changed their employer. However, in both cases the impact on the organisational level is mostly confined to the scholarship holder's personal sphere of influence (e.g. project team or department) and less to the overall improvement of the organisation's performance.

Moreover, due to the former scholarship holders' high motivation, their places and areas of work, as well as their decision-making power, the evaluation also concludes that former scholarship holders are also equipped to act as change agents in their society and can contribute to the development of their home country. This is best exemplified by the high return rates to participants' home countries/regions which ranges (far) above comparative scholarship schemes as well as their areas of work which mainly comply with the SGDs and the priority areas of the Belgian development cooperation.

Considering gender relations, the evaluation team concludes that Belgian scholarship schemes effectively aid the professional advancement of women. Yet, women still hold lower positions of power than men which influences their ability to act as change agents. This might be explained by the existing gender relations in the Belgian partner countries. Nevertheless, it has to be pointed out that on a general level in the last years significantly more scholarships are awarded to male applicants which effectively hinders the transformation of gender relations in the partner countries.

#### **4.4 Analysis of synergies and complementarity between different instruments**

For both umbrella organisations it is of central importance that their different instruments generate synergies with each other in order to broaden or diversify their impact. In this regard instruments of both ARES and VLIR-UOS can be complementary in the following different ways to generate synergies:

- On the one hand, ARES and VLIR-UOS can implement different interventions in parallel within their portfolio to intensify or diversify the impact of each individual intervention.
- On the other hand, they can implement interventions at consecutive points in time, so that each intervention can build upon the effects of the previous intervention and thus generate synergies and broader impacts.
- Moreover, instruments can be used to guarantee the sustainability of the previous implemented interventions in order to secure their achieved impacts.

Within their portfolio ARES and VLIR-UOS fund integrated and individual scholarships (see chapter 4.2 and 4.3). While the former are a means within the funded projects to receive the respective projects' objectives, the latter primarily aim at the individual advancement of the funded person. In this regard both instruments complement each other in the umbrella organisations' portfolio and broaden the impact of the umbrella organisations, according to the evaluation results (see chapter 4.2 and 4.3). The integrated scholarships thereby solely reach beneficiaries within the partner universities and advance their careers as well as the particular project's objectives. They thereby strengthen the faculty in light of an increasing number of students (see chapter 4.2.1) and experience high retention rates. In contrast hereto the individual scholarships mainly reach persons outside of the partner universities and therefore expand the possible impact radius of both umbrella organisations. Hence, they serve as a means to achieve impacts outside academia.

Furthermore, the field missions also demonstrated that both umbrella organisations also fund different type of projects in parallel at the same partner university in order to have a larger effect on the improvement of their research, educational and organisational capacities. In the case of VLIR-UOS, an IUC and OI/TEAM project were funded at the same partner university in Ethiopia, albeit in different faculties. ARES also financed a project and an IUC in parallel at a partner university in Benin. However, in all observed cases there was no active coordination between the different types of interventions to generate synergies. In the case of UPNT, the evaluators found a positive effect of the subsequent and parallel implementation of IUC and smaller research projects which were found to strengthen each other. However, this was not part of an explicit approach.

Moreover, VLIR-UOS actively structures its funding in a so-called portfolio approach, in which it uses certain instruments as seed funding and harvest funding. For example, in the analysed partner universities it was often the case that OI/ TEAM projects were used to build up the relationship between the Belgian and partner universities as well as to test the management capacities of the latter. Only in case of a positive assessment larger projects such as IUC were funded to build upon the results achieved by the respective OI/ TEAM projects. Furthermore, in some cases, e.g., Can Tho University, Research Initiatives Programme (RIP) programmes were used to further broaden the impact of the financed IUC. RIPs were thereby specifically developed to support research initiatives on a development oriented subject, led by a department that received substantial support and capacity building in the course of an IUC.

Similarly, ARES also uses a portfolio approach, which however differs in content from VLIR-UOS' approach. The field missions hereby show that ARES allows for consecutive financing to the same partners to build upon the impacts of previously funded projects. For example in the case of the anaesthesia project in Benin, ARES funded the same partners twice in order to broaden the impact of the predecessor project.

Finally, ARES and VLIR-UOS have created specific individual scholarships schemes that enable past beneficiaries of integrated scholarships that did not manage to finalise their PhD within an intervention to do so subsequently in order to secure achieved impacts. This could be observed in both field missions in Benin and Vietnam.

#### **4.4.1 Assessment of synergies and complementarity between different instruments**

Based upon these findings the evaluation team comes to the conclusion that both umbrella organisations actively try to generate synergies among their instruments to broaden and diversify their impact. However, they do this depending on the modus operandi either in a structured or ad-hoc manner.

The ad-hoc approach to complementarity can be found in the parallel implementation of different interventions either in the overall portfolio or in a specific partner university in both umbrella organisations. Here interventions are implemented in parallel and generate synergies on a coincidental basis. This is further reinforced by the fact that parallel running implementations at partner universities are not actively coordinated. This is however also difficult for the umbrella organisations, as they are institutional actors who do not implement the interventions by themselves. Hence, the responsibility of the coordination rests with the funded universities.

However, in their portfolio approach both ARES and VLIR-UOS actively structure their funding and instruments in such a manner that impacts from different consecutive interventions can be harvested to broaden the overall impact of their interventions in the specific partner universities. This is also the case with the individual scholarship schemes specifically created by ARES.



# 5. Conclusions and recommendations

## 5.1 Conclusions

### 5.1.1 Conclusions about the evaluability of the Belgian university development cooperation

The evaluation concludes that the Belgian university development cooperation is a difficult sector to evaluate. First of all, the types of impact Belgian university development cooperation intends to achieve are very diverse and no official consensus on how to define impact in this field had been established prior to this evaluation. To even come up with an all-encompassing definition for this evaluation proved to be challenging, as it had to include impacts at the individual and institutional level both within and outside academia by taking into account different types of beneficiaries. Moreover, this definition had to be interpreted in the context of the interventions analysed in this evaluation in order to come to meaningful results regarding the impact of these interventions, which took place between ten to 20 years ago.

Moreover, on the level of the individual interventions – despite in some cases existing project cycle management approaches – a lack of impact-orientation in the planning documents as well as a missing use of the Theory of Change approach constituted a challenge to the evaluability of the selected interventions. Furthermore, the interventions' proposals often did not adequately distinguish between outputs, outcomes and impacts. In addition, for many interventions, indicators formulated in the proposals did not go beyond output level and/or do not fulfil quality criteria for indicators. Further, intervention proposals seldom included baseline data, and annual and final reports often did not provide information beyond output level. This resulted in additional work processes and costs for this evaluation to increase the evaluability of the selected Interventions.

However, it could also be demonstrated that the evaluability of ARES and VLIR-UOS' interventions improved over time. In addition, this impact evaluation proved that challenges in the evaluability of these interventions can be overcome if (1) the project proposal is clear enough for an outsider to understand what an intervention intended to achieve, (2) a Theory of Change and indicators that fulfil quality criteria can be reconstructed with the relevant stakeholders, (3) stakeholders involved on the Belgian side and in the partner countries are still available and are committed to the evaluation process. At the same time these efforts however also increase the cost-benefit ratio of this and future evaluations.

The aforementioned diverse types of interventions as well as their highly heterogeneous architecture demanded a flexible response in the evaluation design to come to robust conclusions regarding the interventions' impacts. In this regard, it could be demonstrated by this evaluation that for the development of an appropriate and robust evaluation design measuring impact, the different institutional set-up of an intervention, the types of impact to be analysed as well as the existing framework conditions have to be taken into account. As a result this evaluation – following the approach of Stern et al. (2012) – conceptualised a modular evaluation design for the measurement of impact which could be flexibly adapted to the above mentioned conditions. The advantage of the combination of different evaluation designs was that different evaluation questions related to impact could be answered. In addition to increasing the robustness of

evaluation results, the combination of different approaches to causal inferences made it possible to not only analyse whether contributions to impacts were achieved, but also to understand the specific mechanisms that enable (or prevent) impacts to unfold. Thus, the modular approach built further upon the mixed methods approach which underpinned the previous impact evaluations commissioned by SEO, while in comparison to “classical” evaluation designs it has an added value not only in terms of providing accountability, but also in terms of learning. Furthermore, this approach made it possible to adapt the respective evaluation designs with regard to cost-benefit considerations.

Moreover, the developed theoretical concept in form of the Capacity Development Index (CDI), to measure the interventions’ impact on the capacity of the partner universities or departments in this evaluation, proved to be a valid approach to measure changes in the capacity of the partner universities. In combination with qualitative data methods it was possible to understand how impacts on the level of the partner universities unfolded, while the used quantitative methods for data collection at the level of final beneficiaries enabled a nuanced analysis of the impacts of university development cooperation. Furthermore, it could be proven that this approach is – despite some inherent weaknesses regarding recall bias, analysis of different perspectives and the depiction of results – particularly valuable for showcasing whether an intervention led to sustainable change that lasted after the end of the intervention, or whether it primarily reinforced partner institutions for the duration of the intervention. In addition, it makes it possible to compare the development of a department that was supported through Belgian university development cooperation with another department at the same university that was not by using the same parameters.

Despite the successes in coming up with appropriate evaluation designs and theoretical concepts for measuring (contributions to) impacts under the given framework conditions, it however has to be mentioned that the approach adopted for this evaluation in the Terms of Reference resulted in a selection bias for project related interventions. As a consequence, only project related interventions were chosen that actually achieved an impact in order to identify the causal mechanisms leading to these impacts. This resulted in rather positive and not representative findings regarding the project related interventions analysed (see below).

In contrast hereto, the evaluation could confirm that this approach to the measurement of impact is not only restricted to funded projects, but can also be applied to the individual scholarship schemes of ARES and VLIR-UOS. Also here a combination of a contribution analysis, a quasi-experimental approach including a comparison group as well as a before—and-after design using a stratified cohort yielded robust and representative measurements about the impacts of the individual scholarship schemes.

### **5.1.2 Conclusions about the Belgian university development cooperation’s interventions**

The evaluation concludes that the analysed interventions are effective and are achieving contributions to impact. VLIR-UOS’ and ARES’ intervention were thereby particularly strong in strengthening the research and educational capacities of its partner universities, and weakest in strengthening organisational capacities.

For both umbrella organisations IUCs could achieve more contributions to impacts than the projects. This can be explained by the fact that IUCs have a more holistic approach, are longer in duration, and have a substantially higher budget. However, the difference between the contributions to impacts of the evaluated projects and the evaluated IUC was stronger for ARES than for VLIR-UOS as ARES’ project depicted on average lower contributions to impacts than VLIR-UOS’ projects. This difference can be explained by the fact that the ARES projects included in the sample had a much stronger focus on individual capacity development than the VLIR-UOS projects included in the sample.

The evaluation could thereby demonstrate that a key factor for the success of the analysed interventions in strengthening the research and education capacities of the

partner institutions was their temporal and strategic relevance. All of the analysed interventions took place at a time in which the partner universities experienced a massive increase in their student population and thus were ill-equipped to face this demographic development without external support. In addition they were all aligned with the relevant national strategies and strategies of their partner universities and thus were focusing on relevant areas of interventions, such as post-graduate training. This fostered ownership among the involved partner universities and enhanced the impact of the interventions

In this regard, the combined support of human resource development in the form of the integrated scholarships, the upgrading of infrastructure and the implementation of transdisciplinary research projects also facilitated the strengthening of research and educational structures in the partner universities. Through this approach integrated scholarship holders could over time acquire positions of influence in the respective partner universities, which positively affected the impacts and their sustainability. Furthermore, research, outreach and educational functions could be strengthened in the partner universities through this approach. The introduction of new or the improvement of existing processes and procedures, such as the introduction of e-learning or the revision of curricula, also strengthened the partner universities in their core capacities.

However, sometimes the sustainability of the achieved impact in the field of upgraded equipment was hampered by the limited budgets of partner institutions to maintain said infrastructure and equipment. In this regard, interventions that invested in locally sourced infrastructure were a good practice, because the use of local materials in combination with appropriate training in maintenance increased the likelihood of partners being able to take care of maintenance.

A further success factor that contributed to the observed contributions to impacts and sustainability of the interventions was the portfolio approach of the umbrella organisations and the possibility for partner universities and individuals to receive funding more than once. In this regard, VLIR-UOS specifically foresees particular types of projects as seed money for longer-term cooperation between two institutions. In the case of both VLIR-UOS and ARES, longer-term cooperation through IUCs was phased out with projects to ensure sustainability. In addition, ARES and VLIR-UOS have conceived scholarship modalities specifically for past beneficiaries of embedded scholarships who did not manage to finalise their PhD within an intervention to do so subsequently. In addition, the ARES individual Post-Doctoral scholarships (ELAN) aim specifically at young academics who did their PhD with ARES funding to implement a research or education project in a university in their home country. This enables scholarship recipients to launch their academic careers under good conditions in their home country, which helps prevent brain drain. This in turn also sustainably strengthens the institutions.

Looking at impacts of the interventions outside of academia, a slightly positive picture emerges as the analysed interventions improved the living conditions of e.g., farmers. However, it has to be pointed out that these analysed interventions were selected with a selection bias, making them positive examples regarding impact outside of academia in terms of research – as only interventions which achieved an impact were selected – and thus cannot be generalised to the whole portfolio of both organisations. The practical evaluability assessment hereby showed that many of the interventions not selected did not aim or did not achieve any impact outside of academia.

Within the sample of evaluated interventions, the interventions could however successfully increase the income of farmers through research findings and extension services or improve the medical care given to the general population through the better qualification of medical personnel. Hereby it proved to be essential that the projects possessed or developed dissemination mechanisms to transform knowledge into application and thus impact outside their institution as it was the case with the IUC with Can Tho University. These dissemination mechanisms could take the form of long-standing partnerships between the partner university and government bodies, the involvement of the final beneficiaries and relevant local authorities throughout the whole

research process, a strategy of dissemination that included practical trainings or recognition agreements of diplomas in the field of education.

Furthermore, the interventions were also successful in increasing the institution's standing by developing them into centres of research and technology – particularly in the cases of IUCs. This also enabled one of the analysed partner university, Pham Ngoc Thach University of Medicine in Vietnam, in its role as change agent to influence public policy on national level.

### **5.1.3 Conclusions about the Belgian university development cooperation's individual scholarships**

The evaluation concludes that the individual scholarship schemes of ARES and VLIR-UOS are effective in achieving impact in their home country or region, as the former scholarship holders act as change agents in their respective organisations to solve developmental relevant challenges. Former scholarship holders are thereby working in relevant fields of Belgian development cooperation and the SGDs. Due to the chosen evaluation design these findings are moreover robust and possess a high external validity.

Moreover, the former scholarship holders gain influential positions in their respective organisations due to the skills and competencies they have gained in the individual scholarship schemes of ARES and VLIR-UOS. In this regard, former scholarship holders who return to their old employer outperform their peers in terms of influence within their organisations in the long run. In the short term, however, former scholarship holders who change their employers upon their return experience a faster rise in influence than those who return to their old employers. Nevertheless, the former have – due to their position of higher influence – a larger impact on the performance of their organisation. This however is confined to their personal sphere of influence (e.g. project team or department) within the organisation, and does not extend to the organisation's overall performance.

Therefore, the Belgian scholarship programmes provide the necessary preconditions for an effective scholarship scheme: They award scholarships to the relevant target group and provide highly satisfying programmes, which guarantees very low drop-out rates. Due to this, they are effective in transmitting both thematic knowledge, methodological competencies, as well as soft skills. They also effectively support the building of stable networks. In the view of the evaluation team, the latter could however be further improved by supporting more practical elements, such as own research projects and internships, in order to strengthen academic and professional networks.

As a result, scholarship recipients took significantly less time to find employment after graduation in comparison to students who did not receive a scholarship from Belgian university development cooperation. One explanatory factor for this is that applicants for a scholarship from VLIR-UOS and ARES have to submit a letter from their employer that provides a guarantee for re-employment upon graduation. In this regard the Belgian individual scholarships also experience a much higher return rate of participants to their home countries or regions than comparable scholarship schemes.

Considering gender relations, the evaluation concludes that Belgian scholarship schemes effectively aid the professional advancement of women. Yet, women still hold lower positions of power than men, which influences their ability to act as change agents. This might be explained by the existing gender relations in the Belgian partner countries. Nevertheless, it has to be pointed out that on a general level over the last years significantly more scholarships have been awarded to male applicants than to female applicants, which effectively hinders the transformation of gender relations in the partner countries.

However, in comparison to the integrated scholarships, the proportion of individuals who stay with the same organisation upon graduation is higher among recipients of

integrated scholarships than among recipients of individual scholarships. Since individuals who stay with the same employer outperform their peers in terms of influence within their organisation in the long run, embedded scholarships achieve more impacts at the institutional level. Nevertheless, integrated scholarship schemes are only targeted at academia and not at sectors outside academia. As a consequence, individual scholarships are more prone to achieve impact outside academia than integrated scholarships and thus complement the portfolio of ARES and VLIR-UOS by broadening the impact of their instruments.

## 5.2 Recommendations

The evaluation team highlights that the following recommendations regarding Belgian interventions in the field of university cooperation are based on findings from a limited sample and thus possess limited external validity. At the same time the recommendations concerning the individual scholarship schemes are based upon a representative sample and a very robust evaluation design and thus possess high external validity.

### 5.2.1 Recommendations to VLIR-UOS and ARES

#### Strategic recommendations

1. *VLIR-UOS and ARES should reassess their approach to increase organisational capacities at the partner institutions as this is an essential success factor for changes in the research and educational capacities of the partner institutions.*

The evaluation has shown that VLIR-UOS and ARES interventions are less successful in strengthening the organisational capacities of the partner institutions than in strengthening their research and educational capacities. These results mirror the expertise of the Belgian intervention promoters, who are professors teaching and researching in a given discipline. In addition, for the partner organisations, it is easier to accept academic improvements in research and education than to allow and accept involvement in governance. Moreover, some partner institutions also perceived their needs in terms of strengthening educational and research capacities as particularly important. At the same time however, the evaluation identified the initiated changes in the organisational capacities of the partner institutions as an essential success factor for changes in the research and educational capacities of the partner institutions. Therefore, VLIR-UOS and ARES should revisit the concept of organisational projects in order to identify strategies to make these interventions more effective in the future. For this purpose they should assess whether Belgian universities have the competencies to provide capacity building in this field, or whether additional expertise (e.g., experts in organisational development) should be sought out and / or new modalities of cooperation should be introduced to specifically strengthen organisational capacities of the partner institutions.

2. *To strengthen the dissemination of research results and development impacts outside of academia, VLIR-UOS and ARES should prioritise the selection of interventions that have a sound dissemination strategy.*

The evaluation revealed that interventions providing support to the research capacities of the partner institutions are successful in strengthening research infrastructure and in developing the capacities of the faculty of partner institutions in terms of research as well as their educational research capacity through research-based education. They thereby successfully contribute to increasing the quality of education as well as the quantity and quality of research produced by the partner institutions. However, the evaluation has also shown that the dissemination of research results remains largely confined to the realm of academia, which limits impacts in terms of development. This is

the case even for interventions that put emphasis on the achievement of impacts outside of academia in their proposals. In this regard, the evaluation has shown that intervention promoters prioritise academic objectives, as this furthers their career development and is the area in which they have most expertise. To ensure that interventions strengthening the research capacities of partner institutions also lead to development impacts outside of academia, VLIR-UOS and ARES should therefore put heightened attention on this aspect in the selection process of interventions. First, they should ensure that project proposals in this area formulate a sound strategy for disseminating results outside of academia, at either the beneficiary level or at policy level. This dissemination should go beyond a one-off restitution process, and should ideally entail a participatory process that involves policy makers / and or final beneficiaries throughout the whole research process as well as in the development and revision of curricula in the case of interventions focussed on strengthening educational capacities. It should furthermore ensure that dissemination of research results at the level of final beneficiaries includes a multiplier approach, in which members of the target group have incentives to disseminate research findings to their peers. Second, the umbrella organisations should consider strengthening this aspect by incorporating it as a mandatory element of intervention proposals in the field of research. To further strengthen accountability in this aspect, VLIR-UOS and ARES could consider requesting that project proposals allocate a specific budget for dissemination measures in the proposals.

- 3. ARES should obtain a mandate from their leadership to overhaul requirements regarding impact-oriented planning towards the universities in the proposal process, and to provide adequate support to universities to adhere to these requirements as weaknesses in planning and M&E lead to challenges regarding the evaluability of Belgian university development cooperation.*

The evaluation has shown that the quality of planning, including the establishment of an M&E system, has strong implications for the evaluability of interventions. In this regard, the interventions subjected to this evaluation showed significant weaknesses, even though the quality of impact-oriented planning and elaboration of M&E systems. To continue to improve the evaluability of interventions, the evaluation team recommends that ARES adjusts its requirements in terms of impact-oriented planning towards universities in the proposal process. To ensure that higher standards lead to the desired effects in terms of evaluability, it is necessary that universities are adequately supported in the application of these standards. For a significant shift to occur, commitment from the leadership of ARES is needed. These decisions should therefore be taken at strategic level before entrusting the M&E department with operational implementation.

In particular VLIR-UOS embarked on an overhaul of its existing M&E system in the past years, which covered most of the mentioned items in this evaluation (see also operational recommendations 1-3). As a consequence, this strategic recommendation and its subsequent operational recommendations in particular address ARES.

- 4. To strengthen the development of networks for scholarship holders, the scholarship schemes should be adapted to include more practical exercises, independent research projects and internships.*

The individual scholarship schemes are successful in providing participants with thematic knowledge, methodological competencies and soft skills. This contributes to the professional advancements of scholarship recipients. They also gain influence in their workplace, which means they are able to professionalise the organizations they work for within their sphere of influence. However, from the perspective of the evaluation team, the scholarships schemes would benefit from more focus on measures that contribute to the development of networks, as networks play a vital role in acting as a multiplier and agent of change. In this regard, the evaluation team specifically recommends the inclusion of more practical exercises, independent research projects and internships in

the scholarship programmes in order to favour the development of academic and professional networks.

- 5. VLIR-UOS and ARES should maintain the requirement for applicants to scholarship schemes to provide a letter from their employer that guarantees reemployment upon graduation and consider strengthening it as it has proven to be a valuable tool for the professional reintegration of scholarship recipients.*

The evaluation has shown that the recipients of individual scholarship schemes take significantly less time to find a job upon graduation than the comparison group. One factor that contributes to this is that the applicants for scholarships of Belgian university development cooperation have to provide a letter from their employer guaranteeing reemployment after graduation. In addition, the evaluation has shown that in the long run, the scholarship recipients who returned to their former employer upon graduation achieve a stronger increase in influence within their organisations than those who do not. The requirement for this letter at the time of application is thus a useful instrument. Hence, the umbrella organisations should maintain this requirement. Furthermore, they should also consider strengthening this requirement, which is not enforced universally at this time. However, when considering this option, VLIR-UOS and ARES should also bear in mind that making this requirement mandatory potentially excludes talented applicants who do not have a job at the time of application, or whose employers are not supportive. In addition VLIR-UOS has to investigate for which kind of offered Master programmes this is feasible as VLIR-UOS also offers next to professional masters also initial masters in which students often do not have professional experience.

- 6. VLIR-UOS and ARES should establish specific mechanisms to exert influence on existing gender relations and equality of opportunity to further strengthen the contribution of Belgian university development cooperation to the advancement of women.*

The evaluation has shown that women benefit from the interventions of Belgian university development cooperation as well as from individual scholarship schemes. However, there is no explicit mechanism in place for either interventions or individual scholarships to contribute to transforming existing gender dynamics and contribute to equality of opportunity in the partner countries. This would however be relevant, as women are still highly underrepresented within academia in some partner countries. The evaluation team therefore recommends that VLIR-UOS and ARES develop explicit policies to contribute to counteract existing gender imbalances.

- 7. VLIR-UOS and ARES should continue to focus university development cooperation on relevant subjects and align it timely and strategically with priorities of the partners, as this has proven to be a major success factor for achieving impacts.*

The evaluation has shown that a key success factor for strengthening the research and educational capacities of the partner institutions was their relevance. In addition, the individual scholarships are highly relevant, as a result of which former scholarship holders are working in fields of Belgian development cooperation and the SDGs. Belgian university development cooperation should therefore continue to focus on relevant subjects and interventions should continue to align with institutional, national and regional priorities of partner universities and partner countries. In addition, particular attention should be paid to the added value of Belgian support in a given context.

#### Operational recommendations

- 1. A specific weakness in terms of evaluability is the lack of a Theory of Change and of quality indicators in intervention proposals. The format for intervention proposals should therefore be revised to make these elements mandatory.*

The challenges in terms of evaluability stem to a large part from lack of impact-orientation and the establishment of appropriate M&E systems in the planning of interventions. The appropriate instrument for ARES to improve quality in this regard is to adjust requirements in the format for intervention proposals. Specifically, the evaluation team recommends making the elaboration of a Theory of Change a mandatory component of an intervention proposal. In addition, a clear distinction between planned outputs, outcomes and impacts should be mandatory. In addition, the formulation of indicators that meet quality criteria (CREAM or SMART) and go beyond output level should be mandatory. Finally, it should be a requirement that intervention proposals contain baseline data on the indicators formulated.

2. *As the cooperation of stakeholders involved in the interventions is key for evaluability, ARES should ensure that universities understand why it is necessary to improve impact-orientation at the planning stage. They should also ensure universities are equipped to meet increased standards.*

The evaluation has shown that the cooperation of the stakeholders involved in the interventions is a major factor influencing evaluability. Since they are the ones who know what their interventions are intended to achieve, elaborating a Theory of Change and developing indicators, and later reporting on them, depends on their input. ARES should thus foster their willingness to participate in this process at several levels. First, they should ensure that universities understand that higher standards in terms of impact-oriented planning and M&E not only increase evaluability, but are ultimately also a means to achieve greater impact in the interventions. Second, the universities should receive adequate support to meet increased standards in terms of impact-oriented planning at the stage of the formulation of an intervention. For this, ARES should develop a simple manual explaining the rationale for the introduction of new standards, and how to apply them. Third, they should designate someone who can assist the universities with questions related to impact-oriented M&E at the planning stage.

3. *Since the cooperation of stakeholders involved in the implementation of interventions is key for evaluability, ARES should take measures to ensure partner universities are committed to supporting evaluation efforts.*

While cooperation of the universities at the planning stage of interventions is a key for evaluability, so is their cooperation at the stage of the actual evaluation. In this regard, the evaluation team needs feedback and assistance from the stakeholders to ensure data collection instruments adequately capture intended impacts, and to provide access to beneficiaries and external actors. If evaluation efforts solely rely on intrinsic motivation of stakeholders to support an evaluation, this bears the risk of a selection bias. Therefore, ARES should make it mandatory for project promoters to declare their willingness to support an evaluation as part of the intervention proposal. In addition, each project proposal should define an adequate timeline for an impact evaluation, as the heterogeneity of interventions and their Theories of Change means that different timelines can be appropriate to observe impacts in different contexts. Lastly, ARES should also consider involving the hierarchies of the partner institutions to ensure commitment to an evaluation effort. For example, the rector of a partner university could systematically be informed of an upcoming evaluation and asked to ensure that stakeholders involved in the intervention support the evaluation. Since many partner universities apply for funding from Belgian university development cooperation more than once, involving the hierarchy may contribute to better cooperation from stakeholders involved in the intervention, as this could inform the decision about future cooperation.

4. *VLIR-UOS and ARES should consider introducing the Capacity Development Index as an element to be included in the intervention proposals to establish a baseline at the beginning of each intervention, and use this baseline for M&E as it has proven to be a valuable tool to measure changes at the level of the partner institutions.*

The Capacity Development Index developed for this evaluation has been a valuable instrument to measure changes in the core capacities of the partner institutions before and after the interventions. It has been particularly valuable to analyse whether interventions led to durable change at the institutional level, or only strengthened capacities for the duration of the intervention. In addition, the approach made it possible to compare the development of departments supported by Belgian university development cooperation to others within the same university that were not. However, a weakness with regard to the application of the tool in this evaluation was that the baseline had to be reconstructed, inducing a potential recall bias. A further weakness was that there is currently no universally accepted approach on how to deal with different perspectives by the respondents and the evaluators. To strengthen the evaluability of university development cooperation, the evaluation team therefore proposes that VLIR-UOS and ARES consider introducing the CDI as an element to be included in the intervention proposals to establish a baseline at the beginning of each intervention, and to use this as baseline for subsequent monitoring and evaluation. Moreover, a common approach should be developed on how to deal with different perspectives between evaluators and respondents. To this effect, the CDI questionnaires developed for this evaluation should be adapted into a shorter, general format that is not tailored to an individual intervention but applicable for all interventions aiming at strengthening research and educational capacities of the partner institutions. In addition when depicting the results of the CDI also minimum and maximum values should be displayed.

### **5.2.2 Recommendations to DGD**

- 1. DGD should continue to fund both integrated and individual scholarships as they are complementary and lead to impacts within and outside academia.*

The evaluation has shown that both integrated and individual scholarships lead to impacts, albeit with different foci. In this regard, scholarships embedded in interventions have a strong added value in strengthening the educational and research capacities of partner universities, as there is a high retention of former scholarship recipients as members of faculty in the partner institutions. At the same time, recipients of individual scholarships also contribute to professionalising the organisations they work for. Since they also end up working outside of academia, e.g., in government institutions, civil society organisations or in the private sector, they are more prone to achieve development impacts in these sectors. Therefore, the two types of scholarships complement each other and DGD should continue to fund both.

- 2. DGD should continue to fund IUCs and projects as the existing portfolio of VLIR-UOS and ARES interventions has proven to be well-suited to achieve impacts at the individual and institutional level.*

The evaluation has shown that both projects and interventions have been successful at strengthening the capacities of partner institutions and, to a certain extent, contributed to development impacts outside of academia. They are different instruments that complement each other well, since projects aim at changes at department level in a specific area, whereas IUC provide longer holistic support to a whole university. Given the complementarities between the two intervention types, DGD should continue to fund both.

- 3. Belgian university development cooperation is strong in strengthening research and educational capacities of the partner institutions, but weaker in strengthening their organisational capacities. DGD should therefore engage in a strategic dialogue with VLIR-UOS and ARES to decide how organisational capacities could be strengthened more effectively in future interventions and determine the*

*resources to be allocated in this field. (See also strategic recommendation one to VLIR-UOS and ARES).*

The evaluation has shown that the interventions of VLIR-UOS and ARES are comparatively weaker in bringing about changes regarding the organisational capacities of partner institutions, but at the same time identified the strengthening of organisational capacities as a success factor for the increase of research and educational capacities at the partner institutions. As a consequence, DGD should take up a dialogue with the umbrella organisations on an adequate response to this finding. For this purpose DGD together with ARES and VLIR-UOS should examine whether Belgian universities have the necessary expertise to provide capacity development regarding the strengthening of organisational capacities, and if necessary, explore tapping into other sources of expertise (e.g., experts in organisational development) and/ or developing new modalities to strengthen organisational capacities.

- 4. DGD should continue to allow the possibility for institutions and individuals to receive funding from Belgian university development cooperation more than once as this has proven to be a success factors in terms of sustainability of impacts.*

The evaluation has shown that the portfolio approach of VLIR-UOS and ARES, and the possibility for individuals and institutions to receive funding more than once, has proven to positively influence the sustainability of impacts achieved by Belgian university development cooperation. First, the possibility to test the waters for a cooperation through a project and then enlarge the realm of cooperation is useful to test and solidify partnerships. Second, the possibility to phase out IUCs with projects enables the consolidation of results at institutional level. Third, scholarships specifically geared to enable beneficiaries of interventions to finalise their PhD or do a post-doc to launch their academic careers under good conditions in their home country, which helps prevent brain drain. This in turn also sustainably strengthens the institutions. DGD should therefore continue to make it possible for VLIR-UOS and ARES to fund the same institutions and individuals more than once.

### **5.2.3 Recommendations to SEO**

- 1. SEO should adopt the impact definition developed for this evaluation as it has proven to be a sound basis for evaluating the interventions of Belgian university development cooperation.*

The lack of a clear definition of impact in the realm of Belgian university development cooperation constituted a challenge to evaluability. However, the definition developed in the context of this evaluation has worked well, and the different stakeholders involved could rally behind it. These definitions should therefore be adopted by SEO.

- 2. SEO should use the approach of Stern et al. (2012) to choose the most appropriate evaluation design in a given context for future evaluations as it could be proven in this evaluation that this approach makes it possible to answer more than one impact questions and at the same time is sensitive to cost-benefit considerations.*

The evaluation has shown that the interventions of Belgian university development cooperation and their Theories of Change are highly heterogeneous. Therefore, no one size fits all evaluation design can be applied. The evaluation approach of Stern et al. (2012) to choose the most appropriate evaluation design in a given context and to combine designs and methods whenever possible to increase the robustness of evaluation results has been a success in this evaluation. The advantage of the combination of different evaluation designs was that different evaluation questions related to impact could be answered. In addition to increasing the robustness of evaluation results, the combination of different approaches to causal inferences made it possible to not only analyse whether impacts were achieved, but also to understand the

specific mechanisms that enable (or prevent) impacts to unfold. Thus, the modular approach built further upon the mixed methods approach which underpinned the previous impact evaluations commissioned by SEO, while in comparison to “classical” evaluation designs it has an added value not only in terms of providing accountability, but also in terms of learning. Furthermore, this approach made it possible to adapt the respective evaluation designs with regard to cost-benefit considerations. Hence, SEO should adopt this approach in future evaluations to weigh different degrees of rigour against the costs of an evaluation, and opt for evaluation designs that constitute an appropriate balance between the two. When using this kind of approach, SEO should also pay attention to the analysis of possible alternative explanations for observed outcomes and impacts as this will increase the rigour of future evaluations.



# List of annexes

## Annex A: Annex to the final report

- A.1 Terms of reference
- A.2 Bibliography
- A.3 Assessment grids
  - A.3.1 General assessment grid – interventions
  - A.3.2 Assessment grid – individual scholarships
  - A.3.3 Assessment grid – capacity development index

## Annex B: Inception report

## Annex C: Country reports

- C.1 Country report Benin
- C.2 Country report Ethiopia
- C.3 Country report Vietnam ARES
- C.4 Country report Vietnam VLIR-UOS

© FPS Foreign Affairs, Foreign Trade and Development Cooperation

July 2018

Printed by: FPS Printing Office

Evaluation no S4/2016/01

Legal deposit: 0218/2018/020

This document is available in PDF format in Dutch, French and English on the website [http://diplomatie.belgium.be/nl/Beleid/Ontwikkelingssamenwerking/Onze\\_werkmethode\\_n/Dienst\\_Bijzondere\\_Evaluatie/Verslagen](http://diplomatie.belgium.be/nl/Beleid/Ontwikkelingssamenwerking/Onze_werkmethode_n/Dienst_Bijzondere_Evaluatie/Verslagen), or at the Special Evaluation Office.

The report will be cited as follows:

Special Evaluation Office of the Belgian Development Cooperation / SEO (2018), *Impact Evaluation of the Belgian University Development Cooperation. Lessons on the Evaluability of Institutional Partnerships and Scholarships*, Federal Public Service Foreign Affairs, Foreign Trade and Development Cooperation, Brussel.

