Final evaluation of the Institutional University Cooperation with

Universidad de Cuenca, Ecuador

vliruos
SHARING MINDS, CHANGING LIVES

12 June 2017
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ACRONYMS

ACORDES	Acompañamiento Organizacional al Desarrollo
CEAACES	Consejo de Evaluación, Acreditación y Aseguramiento de la Calidad de la Educación Superior
CES	Consejo de Educación Superior
CIFSEX	Centro de Investigacion Sexualidad
COLEF	Colegio de la Frontera Norte
CONEA	Consejo Nacional de Evaluación y Acreditación
CPM	City Preservation Management
DGD	Directoraat Generaal Development
DIUC	Dirección de Investigación Universitaria Cuenca
ENIPLA	Estrategia Intersectorial de Planifiacion Familar y Prevencion del Embarazo
EPN	Escuela Politécnica Nacional
ESPOL	Escuela Superior Politécnica del Litoral
GoHUL	Go Historic Urban Landscape
HUL	Historic Urban Landscape
HumSex	Human sexuality
ICOMOS	International Council of Monuments and Sites
ICRH	International Centre for reproductive Health
IECE	Instituto Ecuatoriano de Crédito Educativo y Becas
IOM	International Organisation for Migration
IUC	Inter University Cooperation
JC	Judgment Criteria
KU Leuven	Katholieke Universiteit Leuven
LAZEN	Latin American Zebrafish Network
LFA	Logical Framework Approach
LOES	Ley Orgánica de Educación Superior
MoU	memorandum of Understanding
Msc	Master in Science
OECD/DAC	Organisation for Economic Cooperation and Development/Development Assistance Committee
PROMAS	Programa para el manejo del Agua y del Suelo
PROTERRA	Red Iberoamericano de Arquitectura y Construcción con Tierra

PSU	Programme Support Unit
PUHC	Paisaje Urbano Histórico Cuenca
R	Result
Senescyt	Secretaria Nacional de Educación, Ciencia, Tecnología e Innovación
SRHR	Sexual and Reproductive Health and Rights
ToR	Terms of Reference
UA	Universiteit Antwerpen
U Cuenca	Universidad de Cuenca
UGent	Ghent University
USFQ	Universidad San Francisco Quito
UTN	Universidad Técnica del Norte
VLIR-UOS	Vlaamse Interuniversitaire Raad – Universitaire Ontwikkelingssamenwerking
VUB	Vrije Universiteit Brussel
WHO	World Health Organisation

PREFACE

We had the honour of meeting very motivated and engaged people who have shown their passion for scientific research. Despite their heavy workloads many of them made time to share their experiences with us. We would like to thank all the people that participated in this evaluation and wish them a lot of success in their academic careers. Special thanks to the programme support unit in Cuenca and the programme coordinator who were very helpful in planning and implementing this evaluation. Thank you for the pleasant collaboration.

Geert Phlix (ACE Europe) Mechelen, Belgium, 2017

EXECUTIVE SUMMARY

This evaluation concerns the evaluation of the second phase of the Institutional University Cooperation (IUC) programme implemented in partnership between the University of Cuenca, Ecuador and the universities of Leuven, Brussel, Gent and Antwerp in Belgium. An IUC programme combines objectives of institutional strengthening and strategic thematic capacity building and covers a period of 10 to 12 years, with 2 main project phases of 5 years each. The IUC partner programme in Ecuador was subdivided in 7 constituting projects in the areas of food, nutrition and health, human sexuality, integrated water quality management, medicinal plants, world heritage city preservation management, international migration and local development and an institutional transversal project. At the moment of the evaluation the programme was running the phasing out phase. The total planned budget of the IUC programme mounted to 3.060.000 EUR.

The evaluation was expected to collect data to account for the results towards the different stakeholders (accountability), but also to draw lessons learned (learning) and to formulate recommendations to support further decision making process on the IUC, including the overall policy framework (steering).

The evaluation was based on an assessment of the 5 OECD/DAC criteria and an additional criterion on scientific quality, at programme and project level. The evaluation was implemented in three phases, namely an inception phase, a data collection phase, and an analysis and reporting phase and took place in the period between February 2017– June 2017. The evaluators applied a mixture of data collection methods, such as document analysis, semi-structured interviews, focus group discussions, on-site project visits, a workshop to reconstruct a timeline and restitutions meetings both in Cuenca and Belgium. Principles of outcome harvesting were applied.

Brief summary of the assessments at project level

Food, Nutrition and health project – This project aimed to develop knowledge on nutrition epidemiology, physical activity, food consumption, food safety and quality assessment, in particular focusing on infants and adolescents. The project realised the academic objectives and has become an important actor in informing policy makers at local, regional and national level regarding food safety and quality, physical activity and food consumption among adolescents. Their success is the result of a combination of a good inter-relation and working environment (horizontal leadership style), good relation and guidance from the Flemish partners. This group has taken the largest jump from the initial to the final state. The research group is integrated in the research department on biosciences, created in the course of this VLIR-IUC programme. The group is also involved in the master in biosciences, created by another VLIR intervention (VLIR-Network), not subject of this evaluation.

Human Sexuality – The objectives of the project on human sexuality were to develop knowledge on sexual development of adolescents and to improve sex education of adolescents, based on the analysis and comprehension of contextualized and updated knowledge about human sexuality. This research group started from nothing, not even with a clear project proposal and without full support of a specific faculty. Several team members had quit the project during the first phase because of retirement or other interests, and the research lines have been restructured. In spite of these conditions, the group has reached a good dynamic, formed PhDs and Msc, created a professional master in sexuality and sex education, built networks and obtained scientific results. The research group contributed to increased awareness on sexuality and sex education among practitioners, mental schemes are broken and at public policy level debates are generated on controversial subjects. The objectives related to the development of a school curriculum on sex education could not be realized due to changing government

policies hampering the implementation of such curricula. Sustainability is at risk. The research group is not embedded in a research department and suffers from the policy vacuum at university level regarding the institutionalization of research groups.

Integrated water quality - The project on integrated water quality is focusing on the water resources in the Paute river basin, aiming at reaching and maintaining good water quality for present and future generations and for its different uses. The project is embedded within the faculty of engineering but implemented by PROMAS, a separate research department linked to the faculty. PROMAS had already a long history with the KU Leuven. In spite of being the most successful project - realizing all the academic and development objectives and obtaining high level of sustainability - this group has above all attained results building further on the existing capacity and former networks and people trained in Belgium, due to former collaborations. The second phase has mainly brought equipment and new PhDs added to the several existing ones. Apart from PROMAS, an independent research department on water resources management is existing at the university of Cuenca, created after a division of the first research group/PROMAS. This results in a duplication of efforts and master courses. The other research group (non VLIR) has taken initiatives of the same or larger magnitude, at the margin of the VLIR-IUC cooperation.

Pharmacological characterization of medicinal plants - The objective of the project was to strengthen the research and teaching capacity and the infrastructure of laboratories in the fields of phyto-pharmacology and phyto-chemistry. The initiators wanted to get specific knowledge about therapeutic properties of plants. Standardizing the extracts for a specific content would offer the possibility of using them as herbal drugs. This group is well settled in terms of infrastructure, equipment and research lines developed. They achieved important scientific results. It was still too early to assess the contribution of the project to improving the use of traditional herbal plants by the communities. The group is embedded within the research department on biosciences at the faculty of chemistry. The group faced several implementation problems related to the lack of an intellectual property management at university level; but also at government level. Sustainability seems guaranteed though the human resource consolidation seems still weak and the group rather small. The research group is also involved in the master in biosciences, created by another VLIR intervention (VLIR-Network), not subject of this evaluation.

City Preservation Management – This project aimed to contribute at improving the management of world heritage sites of the southern part of the country, by generating scientific based tools and knowledge, the provision of high level education and getting stakeholders to understand and use the tools and knowledge acquired. The project was very successful in obtaining the academic objectives but also in delivering services to the society. The group has demonstrated strong communication skills. A professional master in city preservation management is being successfully implemented. The existence of a good inter-relation and working environment (horizontal leadership style), strong collaboration and support from the Flemish partner contributed to the success of the project. The research group is fully supported by the faculty of architecture. Through its involvement in the UNESCO chair on preventive conservation, established at the KU Leuven, and in other international networks there are several opportunities to mobilise external resources. Institutionalisation of the research group is dependent on the university policy to that end, which was lacking at the moment of the evaluation.

Migration and development – This project aimed at building knowledge on the dynamics of international migration and its disruptive impact on the local development in order to take advantage of its strengths and potentialities and to avoid negative drawbacks. Focus was put on changing the practice of analysing migration events and its effect from a mainly rhetoric perspective to a more scientific and applied one. Despite the difficulties experienced during the start-up of the project, the academic objectives have been

achieved. However, the research group is very small, not really embedded within (nor supported by) the hosting faculty of psychology, and with several institutional and financial sustainability challenges.

Institutional transversal project – This project assisted in bringing about institutional changes in the university's organisation and management in order to develop a combined, integrated (undergraduate and postgraduate) teaching and research culture. The second phase consolidated the interventions realised during the first phase, such as the evolution of the library towards a virtual library supporting research and the ICT infrastructure and aimed at supporting policy development and improving strategic management capacities. Regarding the latter not much results have been achieved because of the lack of support and/or willingness at university level. The most important result of the second phase is the development of an honours programme (Vanguardia) that stimulates and supports students to enhance their research skills and motivates them to apply for PhD scholarships, by preference abroad.

Following the main conclusions at programme level are described.

Relevant programme but project design could be improved

The IUC programme is a very relevant programme, responding to the university needs as formulated in their consecutive strategic plans and the needs and interest of the different faculties involved in the projects. With the approval of the new law on higher education (LOES) in 2010, and implemented from 2012 onwards, national conditions were created to support further the implementation of the IUC programme. The IUC programme supported the University of Cuenca in evolving in the right direction as demanded by the LOES, by stimulating research, building up high profile professionals and promoting institutional modernisation. The projects also responded to specific societal needs and have potential to contribute to the development of the region within the framework of the "National Plan of Good Living".

The majority of the projects were well designed, which was -among others- the result of the time given for the formulation of the different projects (year 0). However, several projects also suffered from an initial mismatch between the project leaders in Cuenca and Belgium and/or suffered from a weak initial design or project proposal formulation, which could not be solved in the formulation period. In all projects the hypotheses were not well identified and there was a lack of appropriate risk and opportunity management. This was the most evident in the institutional project. The intervention strategy of this project was based on a good analysis of the problems and challenges at stake but lacked an analysis of the conditions that needed to be in place as a leverage for obtaining clear results.

IUC investing in a long term cooperation programme has clear added value

The added value of the IUC programme is the fact that, due to the long-term collaboration of 10 years, a critical mass of researchers was trained, research groups have been formed and lab infrastructure and equipment significantly have improved. This is visible at the entire university and triggered the debate on the evolution towards a university involved in teaching combined with scientific research. A momentum has been created, which requires follow-up initiatives at the level of the University of Cuenca.

Several attempts were made to look for synergy between the projects but this was severely hampered by the lack of a collaborative culture at the University of Cuenca, lack of exchange between project leaders and -staff and the heavy workload and requirements to deliver within each of the projects. As such, the combination of projects was not a leverage for increasing the level of effectiveness and efficiency.

High level of effectiveness

The IUC programme has almost fully realised all academic and development objectives. Almost all projects produce high level of scientific quality, evidenced by the number of international publications, the active participation in international conferences, the involvement in international academic networks and the international recognition of the expertise built. Although the number of scientific papers published in internationally peer reviewed journals is not very high, the total number is very justifiable based on the number of PhD students graduated. In all projects, the link was strengthened between research and teaching. Although there are indications of new ways of teaching being applied, the opportunities to experiment with blended learning or problem oriented teaching were not fully explored.

Contributing factors are the commitment of the people involved (in Belgium and in Cuenca), the support provided by the respective faculties, the level of accompaniment and coaching of the Flemish project leaders, the leadership style in the research groups and the manner in which a possible clash between old and new culture (or between generations) was managed. Level of effectiveness was lower in those faculties where there was no real commitment to support PhD students involved in research.

Excellent programme and project management

The IUC programme demonstrates the added value of having a separate programme support unit at the hosting university and an ICOS at the Flemish university; and demonstrates the importance of a good selection (and continuity) of the programme managers, which require sufficient management skills. This contributed to swift communication between the programme managers in Belgium and Cuenca and with the projects. Overall programme and project management were assessed as excellent.

Management tools are well developed and well applied. The procedure manual contributed to transparency and good understanding of the guidelines and requirements. A lean monitoring and evaluation system is developed by VLIR-UOS, supported by practical and user-friendly tools (reporting formats, self-assessments formats). The set of indicators to be monitored, in particular the key performance indicators are relevant, SMART and conducive for effective monitoring of the projects. There are some problems in the correct understanding or interpretation of several of the key performance indicators for each of the key result areas but this has not hampered the monitoring of the projects (mainly complicated the accountability requirements).

Efficient implementation of the programme but hampered by several delays

The choice of activities and financial inputs was justified taking into account the nature of the IUC programme, with a dominance of investment costs and scholarships. Cost-effectiveness in several projects was enhanced by the mobilisation of complementary resources, enabling the expansion of the group of researchers and/or adding research activities. A combination of long term training and short term technical training was also conducive for enhancing skills of the entire research group (not only the PhD students).

Project implementation was delayed because of institutional factors in Belgium and Ecuador and operational issues at project level. VLIR-UOS and the University of Cuenca have successfully looked for creative solutions to address the problems related to the management of the programme. Flexibility of the ICOS unit was very much appreciated to that end. At operational level, there have been problems in mobilising students or professors to become engaged in PhD studies abroad.

The commitment of the University of Cuenca was only described in a general manner in the cooperation contract, which resulted in the fact that there was a lack of commitment of the University of Cuenca during the second phase in providing sufficient resources for programme management, service contracts and the reinsertion of PhD students.

Sustainability of the project results at risk

The academic and institutional sustainability of the results achieved, and in particular of the research groups created, is varying and dependent on the level of maturity, strength and initiative taken by each of the research groups to secure its sustainability, as an overall policy at university level regarding the embedment of research groups, the institutionalisation of research and an appropriate human resource policy are currently lacking.

Financial sustainability is hampered by the decreasing amount of government funding becoming available for the universities. Financial sustainability is guaranteed for three research groups, which have demonstrated the capacity to develop good research proposal and to attract local, regional and/or international funding. These research groups also have established relationships with a variety of academic actors and are involved in international networks. The other research groups depend mainly on the existing collaboration with the Flemish partner and the access they might have to other VLIR projects.

The phasing-out phase is focusing above all on the consolidation of the knowledge built, research conducted and the dissemination of the results within the university and among external stakeholders. The phasing-out programme does not include a strategy to strengthen institutional and financial sustainability of the project results.

Recommendations

A set of 10 recommendations have been formulated for VLIR-UOS and 4 for the University of Cuenca. For the latter, the recommendations relate to the need for policy development on organising research, establishing research departments and human resources management; which were all included in the transversal institutional project but not implemented. It is also recommended to institutionalise the PSU unit, which has built relevant capacity to manage international research project funding.

Recommendations for VLIR-UOS relate to the following:

- Measures to improve matchmaking and programme design (genuine matchmaking, improve risk analysis, explore the opportunities and boundaries of external support to organisational and institutional development, develop realistic ambitions, synergy);
- Suggestions to explore how commitment of the partner university can be monitored and even enforced;
- To learn from the good practice of the PSU in this programme;
- Enhance strategies to improve institutional and financial sustainability (integrate sustainability considerations already at the start of the second phase of IUC programmes, importance of supporting partners in developing good research proposals and attract external funding).

1. Introduction

1.1. Background

1.1.1. General objectives and guiding principles of the IUC

The general objective of the VLIR Institutional University Cooperation (IUC) programme is empowering local partner universities as institutions to better fulfil their role as development actors in society. This objective is to be attained through the implementation of a coherent set of interventions, guided by the strategic plan of the partner university, aimed at improving institutional policies and management, and the quality of local education, research and societal service delivery. The guiding principles of the IUC programme can be summarized under four items as follows:

1) *Academic Leadership*: The IUC programme is about academic collaboration henceforth leadership and overall responsibility rest with the academic authorities, and with the individual academics that are tasked with responsibilities for coordination and implementation.
2) *Process Facilitation*: While having components of technical assistance, IUC facilitates and supports processes of change such that its implementation needs to be considered against a background of ongoing and contextualised process facilitation.
3) *Pragmatic and Transparent Institutional Arrangements*: Each IUC programme is unique in terms of its managerial set-up and organisation. VLIR in general is encouraging a pragmatic approach in so far that it proves to be effective and transparent.
4) *Incorporation into Local Structures and Systems*: VLIR encourages arrangements that build upon existing structures and practices at the level of the partner university

VLIR-UOS applies the logical framework approach. In the IUC programme, this approach calls for the articulation of both academic objectives (changes at the level of the partner university) and developmental objectives (changes at the level of the society). Both originate from academic cooperation, bringing together expertise and experience from two different settings thus 'Sharing minds'. This 'mind sharing' translates in the following effects:

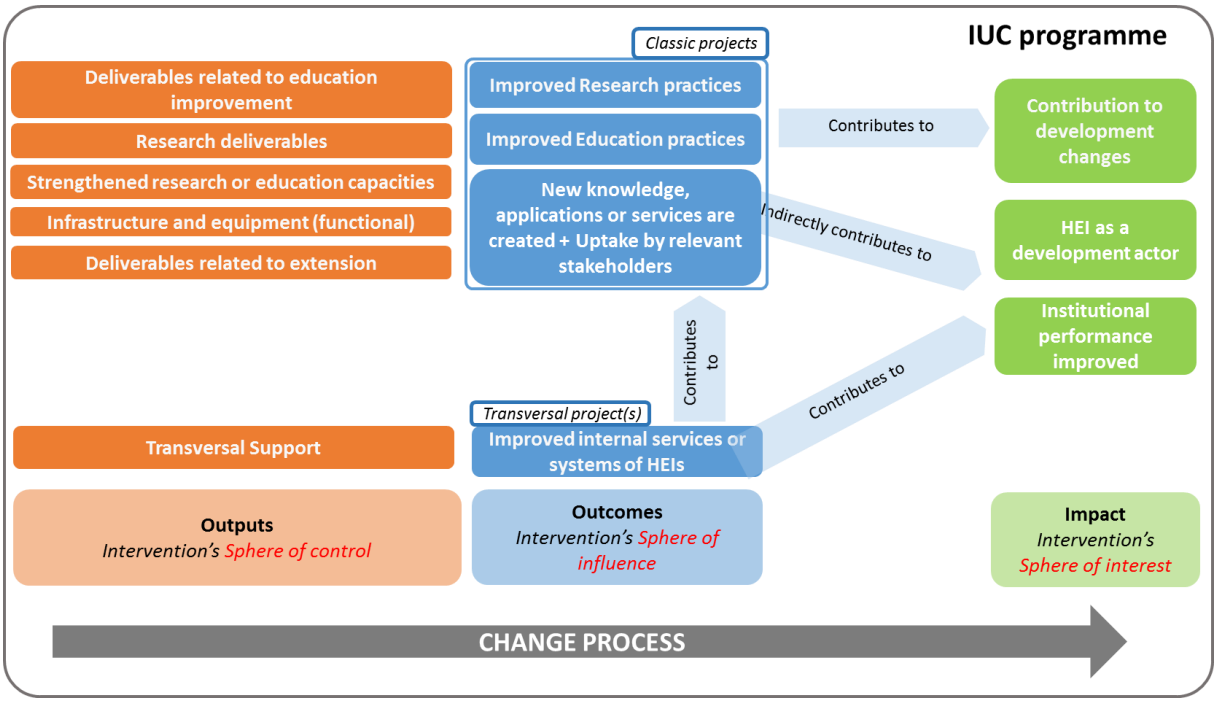
- (Research) capacity is built at the level of those academic units that benefit from an IUC partner programme. This may include human capacity (training), tangible capacity (equipment) as well as the building of organisational and social capital (Academic Objective);
- This mind sharing, and the use of the created capacity allows the generation of knowledge for development “to change lives” (Developmental Objective).

Obviously, there may be a time-lag between both. Naturally, capacity needs to be created prior to actual research findings becoming available. Given its long term nature and depending on the baseline situation, the IUC programme may, in particular during its second phase, generate the knowledge that addresses societal needs.

1.1.2. Subject of the evaluation

Subject of the evaluation is the Institutional University Cooperation programme implemented in partnership between the University of Cuenca, Ecuador and the universities of Leuven, Brussel, Gent and Antwerp in Belgium. This programme combines objectives of institutional strengthening and strategic thematic capacity building. The IUC cooperation covers a period of 10 to 12 years with 2 main project phases of 5 years each. The IUC partner programme in Ecuador is subdivided in 7 constituting projects in the areas of food, nutrition and health, human sexuality, integrated water quality management, medicinal plants, world heritage city preservation management, international migration and local development and an institutional transversal project. At the moment of the evaluation the programme was running the phasing out phase.

Figure 1: Generic Theory of Change (ToC) of the IUC programmes



A generic Theory of Change for the IUC programme is developed, which summarizes the expected output, outcome and impact of the supported change processes. Output refers to deliverables related to education improvement, research deliverables, strengthened research or education capacities, improved infrastructure and equipment, and deliverables related to extension. These outputs are assumed to contribute to outcomes related to improved research practices, improved education practices and new knowledge, applications or services that are also up taken by relevant stakeholders. In the long term, the IUC partner programme aims at contributing to development changes. All projects within the IUC programme with the University of Cuenca refer to this set of outputs and outcomes.

Table 1 presents an overview of the 7 projects constituting the IUC programme with its specific academic and development objectives. According to the ToR the IUC programme has contributed to the formation, development and establishment of scientifically qualified research groups at different faculties of the University of Cuenca. However, there are still several challenges that need to be addressed to obtain sustainability of these research groups and to allow their full integration within the University of Cuenca and the implementation of a research friendly management system into the institution.

Table 1: Overview of the specific academic and development objectives for each of the IUC projects

Projects	Academic objective	Development objective
Institutional change	Managing change processes to help improve the quality and efficiency in key aspects of teaching and research	The University has an organisational structure and processes which promote high quality standards in teaching and research to form professionals and scientists committed with the improvement of the quality of life in the country and the region in the context of multiculturalism and in harmony with nature
Food, nutrition and health	To implement a nutrition department in order to strengthen the knowledge on nutrition epidemiology and health promotion, food safety and food quality assessment	To improve food intake and physical activity behaviour of infants, mothers and adolescents
Human sexuality	The university of Cuenca has reinforced the capacity to academically work in the area of human sexuality with a holistic approach	Sex education for adolescents has been improved through the establishment of systematic processes, based in contextual knowledge
Integrated water quality management	Teaching and research capacity at Msc, PhD and postdoc-level in the field of integrated water quality management are developed and strengthened	Management tools related to integrated water management and based on science are developed
Pharmacological characterization of medicinal plants	Development of research capacity, teaching and infrastructure of the laboratories in the field of phytopharmacology and phyto-chemistry	Ecuadorian people use standardized medicinal plant extracts for GI infections
World heritage and city preservation	Heritage cities management knowledge and tools are available	Stakeholders understand and use adequate heritage cities management knowledge and tools
International migration and local development	Generating a systematic data collection process relevant within the area of migration and able to produce information of high quality research projects. Creating a knowledge community at the university of Cuenca, in the area of migration and development studies	Facilitating the exchange of information among stakeholders involved in the evaluation research and/or design of public policies in areas related to development and migration

1.1.3. Objectives of the evaluation

The ToR of the evaluation of the second phase (see annex 1) have formulated three objectives:

(1) As the IUC programme is about to finalize, data need to be collected to account for the results towards the different stakeholders (accountability).
(2) The objective is not limited to take stock of the achievements but also to draw lessons learned on what worked well and what didn't and why (learning).
(3) The identification of lessons learned will contribute to the quality of on-going and future IUC programmes. Recommendations need to be formulated to support further decision making process on the IUC, including the overall policy framework (steering).

The evaluation needed to evaluate the performance of the IUC at programme and project level based upon the 5 OECD criteria + an additional criteria on scientific quality. A particular focus had to be given to the evaluation of the effectiveness and sustainability. As such a specific attention was given to the follow-up plan of the programme for the post IUC-period.

1.2. Context

1.2.1. Political, economic and demographic contextual factors

Ecuador is located in the North-West of South America. It covers 256,370 km^2 and is very biodiverse. Ecuador has four major regions: the coastal area (Costa) with tropical lowlands along the Pacific Ocean; the Andes region (Sierra) with a mountain chain running from Colombia to Chile; the Amazon Region (Oriente) with a tropical jungle and lowlands, and the small insular Galapagos islands. The official language is Spanish, but Kichwa (Quechua) and Shuar are now being recognized as official languages for intercultural relations. Although the country is now considered of middle income country, the inequality is still very high with high poverty rates.

The Universidad de Cuenca (UCuenca) is based in Cuenca, which is at the heart of the so-called Austral Region that includes the Southern Provinces of Azuay, Cañar and Morona-Santiago. The economy of the region was relatively strong due to mining, textiles, handcrafts and incipient industrialization supported by crude oil exportation which started in 1972. The Austral Region suffered a severe economic contraction, related to the bank, financial and economic crisis of 1999, which even more increased emigration of thousands of poor peasants. The Austro Zone is one of the first emigration zones of the Country since the late seventies. The city of Cuenca, the third largest city of Ecuador, is the capital of the province of Azuay and has a tradition of cultural and political leadership for the development of the Austral Region and for the south of Ecuador. Cuenca is located at 2.600 meters of altitude. The results of the 2010 census show 702.893 inhabitants for the metropolitan area.

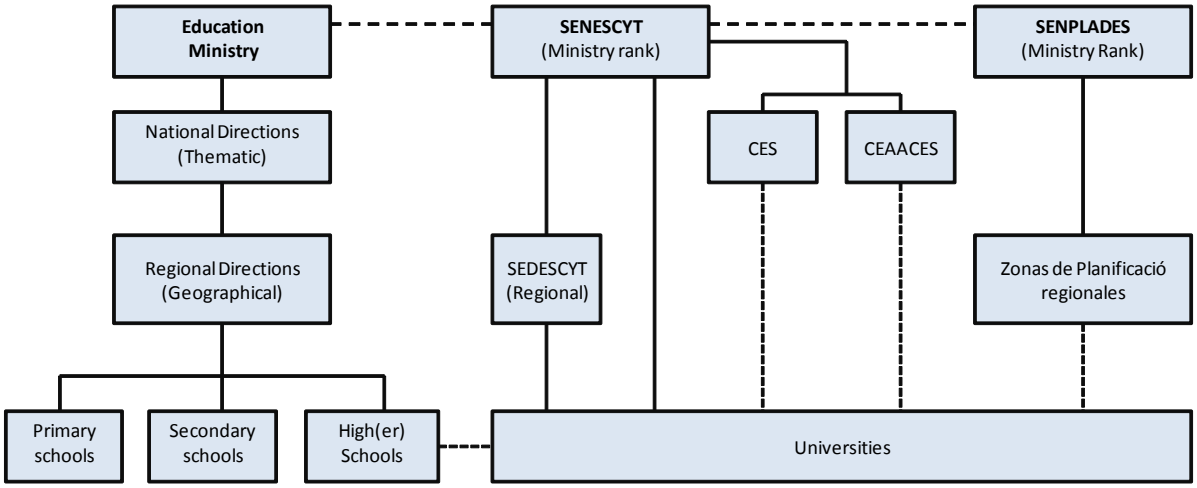
President Rafael Correa-Delgado and Vice President Lenin Moreno are in power since 15 January 2007. At the last election of 2017 vice president Lenin Moreno was elected as the new president. Correa's administration tried to reduce the high levels of poverty, indigence, and unemployment. To achieve these objectives an ambitious "National Development Plan for Good Living 2009-2013: Building a Plurinational and Intercultural State", known as "Plan del Buen Vivir", was developed by the Secretaría Nacional de Planificación y Desarrollo (SENPLADES, 2010). Linked to this, transformations in the (higher) education sector were implemented in the wish of making Ecuador a 'country of knowledge'. For this purpose

regions were defined. Region 6 of the central south contains the Southern Provinces of Azuay, Cañar and Morona-Santiago (intervention zone).

1.2.2. Educational context

Higher Education is provided by universities, polytechnics and, at non-university level, “Institutos Pedagógicos” and “Institutos Técnicos Superiores”. In accordance with the Constitution and the Ecuadorian Law for the Higher Education, universities whether public or private have autonomy to govern themselves. Higher education institutions are supervised by CES/ SENESCYT.

Figure 2: institutional organogram of higher education in Ecuador



Traditionally, Ecuadorian higher education has been primarily focused on teaching. In general, the level of education was rather high, but it was progressively becoming obsolete and disassociated from the modern social requirements and challenges. Especially, the decline of in the high education system was serious in the decade of the 90’s, when the national allocated budget was gradually lowered and legislation amendments allowed the creation of private universities with nearly no quality control. Public universities had to survive and compete in that environment, with little capacity to flexibly interact with other institutions, temporarily or permanently contract interesting professionals, or allow continuous training of their own staff. That situation started to be reverted in the following decade from the central government.

On 22 July 2008, the National Assembly (Parliament) issued Constitutional Mandate 14 giving the mandate to the National Council on Evaluation and Accreditation (CONEA) to elaborate a technical report with respect to the level of performance of the superior education establishments to guarantee quality. Indicators used by CONEA for the assessment of Universities and other higher education establishments were: (i) Teacher training, (ii) Budget for scholarships, (iii) Mobility of students and credit acknowledgment, (iv) Investment in libraries, (v) Financial resources and budget performance, (vi) Coherence between academic processes and mission and objectives of the University, (vii) Use and creation of extensions to guarantee academic quality and infrastructure (classroom spaces). In the CONEA final report of November 2009, five categories were distinguished for the classification of 68 universities and poly-technical high schools. The report classified the University of Cuenca in the highest A Category.

The ranking UCuenca was given in this classification challenged the University to keep this qualification and to play a leading role in the region. Higher Education in the Austro Region is offered by the 37 institutions (16 Universities and extensions and 21 higher institutions) located in the zone 6 consisting of the Provinces of Azuay, Cañar and Morona Santiago.

The New Law on Higher Education of 2010 (LOES)

In October 2010 the new LOES (*Ley Orgánica de Educación Superior*) was launched and later implemented in 2012. The LOES promotes the concept of a university based on three pillars (research, teaching, and community service). The law also introduced important changes in administrative regulations: CONESUP (the Counsel of Ecuadorian universities or the equivalent counsel as VLIR) disappeared and was replaced by a National Secretariat (SENESCYT). Another important issue was the importance given to assessment and accreditation, organised by the CEAACES, also a part of SENESCYT. This institution was an outcome of the CONEA report, and responsible for follow up of accreditation of Universities. At administrative level, SENESCYT became the most important institution for higher education and investigation.

The LOES favored professional stability and promotion. Along with the LOES there were stimulus for older professors to retire and allow the younger generation to take over. This process has been, and still is, very chaotic. It provoked the retirement of a good fraction of the staff (in some cases about 50%). In 2014 a deadline was set for 2017 in which universities have to account for 70% of the permanent staff holding a PhD degree. The implementation of the LOES was complemented with an evaluation process of the universities (in 2013 and 2016), and massive scholarship grants for people to study abroad. In addition to these law changes, the years from about 2010 to about 2015 saw large investments from the national government in higher education, favored by the high oil international prices (Ecuador's main source of income).

Important here was the implementation by SENESCYT of a scholarship programme for higher education abroad and a "prometeo" fund for attracting professors from overseas (all nationalities are allowed) for a period of maximum 2 years. The Senescyt scholarships for Ecuadorian students to study abroad in order to improve qualifications of young professors were awarded on an individual basis without direct link/coordination with Ecuadorian universities. Students who graduated at Universidad de Cuenca were successful in obtaining scholarships but there was little guarantee they would return to their former institution.

The law on higher education of 2010 did not pass without political turmoil, especially because it granted more control of the Higher Education System by the government at a loss of autonomy for the universities. One of the general aspirations was to change the universities in Ecuador from teaching institutes with little research to a higher level of teaching and research. At time of elaborating the second phase of the IUC programme (2011) it was estimated that only 87% of the staff in public universities had already obtained a master's degree and fewer than 5% had a Ph.D.

The University had to go through a modernization process resulting in the organisation of an academic service of undergraduate and graduate education, research and services. This required simultaneously working towards: (i) An upgrading of the educational level of the academic staff; (ii) The establishment of quality and competitive postgraduate programmes; (iii) The training of staff in new pedagogic techniques; (iv) The introduction in the institution of a culture of research; (v) Providing staff members more capacity in the writing of project proposals research; (v) Providing staff members more capacity in the writing of project proposals and manuscripts publishable at national/international conferences/meetings and in peer reviewed journals; (vi) The development of regulations and the strict applications of those

regulations for staff recruitment and promotion; (vii) The introduction of a monitoring, staff evaluation and reporting system; (viii) The modernization of the ICT-infrastructure and the promotion of the use of ICT-based techniques in education, research and services. In fact, the new law was very much in line with the objectives of the VLIR IUC programme.

All these national changes have been critically positive, and occurred in perfect timing, becoming a major factor of success for the IUC programme. With VLIR support the Cuenca university has been marching in the right direction by stimulating research, building up high profile professionals, and promoting institutional modernization.

There are several context factors that had a negative influence on the roll-out of these modernization processes and in particular also on the international cooperation programmes. For example, the implementation of the new rules for financial management of the universities applied by the current Ecuadorian Government made financial transactions since 2013-2014 more bureaucratic. This was due to the implementation of the SERCOP and the further inclusion of the public universities in this system. SERCOP is a centralized system of purchasing and contracting for the public sector. Its purpose is that all public expenditures, carried out in this common “market place”, become transparent and open to all possible suppliers. The intention is to avoid closed “ad-hoc” contracting and therefore corruption. In practice however, the system is highly complex and inefficient. Many service providers do not sell though SERCOP for this reason. Besides, since the public payments are in general delayed by few to several months, products offered through SERCOP are always more expensive because sellers charge these extra financial costs to the end user. Other associated extra costs arise because both suppliers and buyers often need to hire specialized people to process their transactions through the system. In qualitative terms, for standard products, a simple purchase that can be done in a couple of days, will take at least about three months through SERCOP and it will cost at least about 50% to 100% more. For universities (research material) the situation can even more complex because the required products are usually not standard. SERCOP does not have the scientific capacity to handle the purchase of scientific equipment and consumables according to strict technical specifications. For some products it is usually hard to find more than one supplier and it is unlikely that these few suppliers are selling through SERCOP.

Since 2010, with the introduction of the LOES, there has been also a much more close and strict control of public universities mainly by CES and SENECYT. Important were also the continuous changes in regulations with immediate and semi-retroactive effect, so that applications had to be revised several times and even already approved programmes required re-application. This includes not only educational programs but also research, funding agreements and recruitment of new professors. At this time, most if not all inter-university programs organised with foreign universities (mainly at Master level) were put on stand-by until their curricula could be (re-)evaluated. This process was slow and took a couple of years. Many (even high quality) programmes had to close because they lost the links with the overseas partner universities who became frustrated by the lack of progress.

This control system was carried out also at financial level. Since SENECYT started financing several national research projects, they requested universities to declare agreements and financing from external institutions, with the purpose of avoiding double financing of projects. External funding made through national agreements would no longer go directly to the university or the project administration accounts, but it would be part of the yearly university budget in the Ecuadorian Central Bank through the Ministry of Finances. This is a major drawback for budget use efficiency because the budget has to go through a couple of national institutions, then through the university budget and bureaucracy before it can be used.

1.2.3. The University of Cuenca

The University of Cuenca is located in the city of Cuenca. The university was created by a legislative decree on 15 October 1867 under the initial name of Corporación Universitaria del Azuay with the objective to actively support the development of the region. In 1887, a Faculty of Applied Sciences was created, offering teaching in industrial chemistry, botany, zoology, geology, engineering, lithography and carving. Teaching in those areas was conducted by German teachers. In 1890, the Faculty of Sciences was established focusing on pure and applied mathematics, physical and natural sciences.

The Public Instruction Law of the late 19th century recognized the university status of the Corporation and the institution was subsequently called Universidad del Azuay. In 1919 the authorities admitted students' representatives in their council as a sign to society of democratic governance. To ensure the university's involvement in the society, Rector Dr. José Peralta (1923-1925) added the extension function to the mission statement of the institution. The institution acquired autonomy in 1926, and got its current name of 'Universidad de Cuenca'. More schools and programmes were created and now the university has 12 faculties, and about 50 study programmes in different domains. From these 12 faculties 6 are more or less directly involved in the IUC-programme: Engineering, Architecture, Chemistry, Economics, Philosophy and Medicine (in the second phase replaced by psychology).

In the eighties, several research institutes were created, unified in 1996 under the Direction for Investigations of the Cuenca University, Dirección de Investigaciones de la Universidad de Cuenca (DIUC). Research still is coordinated and organised by DIUC and also partially funded by it. DIUC organises yearly calls for investigation projects with own funds, and channels external funding.

Fourth grade education is organised under the Directorate for PostGraduates (DPG). This directorate evaluates and approves programmes (masters and shorter courses) organised by the Faculties. It also advises University personnel for their 4th grade training, as a kind of Human Resource Development entity.

There is also a Commission called "Link with the Community" which elaborates actions and programmes to link University life to broader society. The Universidad de Cuenca has 8 cross-cutting service departments (e.g. languages, informatics development, wellbeing, culture, central administration,...), 13 programmes and projects (e.g. PROMAS, CEA, PYDLOS, CESPLA, IMPULSAR, CEFA, CIDI,...) and about 20 complementary service centres and organisations (e.g. theatre, shops, print office, students and professor organization,....) completing the University structure.

In the period 2008-2017 the number of professors with permanent contract increased up to more than 1.200, but a minority of them are full-time (full time is defined as 30 hours a week). At the time of the mid-term evaluation (2012) there were in total 700 professors, about one third had a master degree, and only 25 PhD. In 2017 from the 1.200 professors there are 527 professors with a permanent contact of which 366 with a master degree and 61 with a PhD (12%).[1]

Almost 15.000 students are studying an undergraduate programme. The 12 faculties organise more than 40 different studies. The University offers about 70 postgraduate formations (4th grade education), consisting of specializations, masters and shorter diploma courses. All classes are given in small groups up to a maximum of 40 students, which implies a lot of repetitions of the more general courses and thus reduced teaching efficiency.

[1] Based on information obtained from the planification department

The University of Cuenca elaborated a Strategic Plan at the start of the VLIR-IUC programme. The plan was updated for the 2009-2013 period. It consisted of 8 strategic areas of intervention. For all of these, strategic objectives were defined. The eight strategic areas were respectively: (i) Academic management, (ii) Scientific and Technological management, (iii) ITC management, (iv) Link with the "community", (v) University wellbeing, (vi) Administrative management, (vii) Financial management, and (viii) Infrastructure development. For each strategic area, five to fifteen strategic objectives were elaborated, including responsible parties, tasks, strategic views, indicators and financing.

As far as financing was concerned, the Plan distinguished four types of resources: (i) own resources (public endowment), (ii) (international) cooperation, (iii) gifts and (iv) generation of own resources. All interventions / operations are supported with own resources from the public endowment. Gifts and (international) cooperation are seen as more fit for equipment, (specific) training (of professors), general agreements with other universities, specific items such as a follow-up system for graduates, research and know-how, etc. Infrastructure is considered an entirely internal affair, to be financed entirely from own resources.

In general, the Plan aimed at overall academic quality improvement with respect to (i) programmes and teachers, (ii) research based education, (iii) application of up to date methods and technologies, (iv) a better positioning of the University in the Region, (v) a "bigger" University, (vi) incorporation of e-learning in standard programmes, and (vii) an overall assessment system. (viii) Furthermore, better and more productive international contacts were considered important. (ix) Another item of importance was transparent and efficient management to effectively achieve these purposes. These overall priorities were very well in line with the purpose of the transversal VLIR project, and with the opportunities offered by the present legal, legislative and political context.

As a part of its social mission, the University offers several services to the community in general, such as legal assistance in civil and criminal legal matters, tax and labour questions, migration and administrative support. Some of the laboratories such as the water quality laboratory of the engineering faculty offer services to municipalities, rural communities and private businesses. The medical clinic laboratory offers hematologic, blood chemistry, serological, microbiological and other diagnosis to the general public. The medicine and the dentistry faculties also offer their medical services, apart from the in house services to students, teachers and University personnel. Provided services are encompassing, including for example: general medicine, physiotherapy, speech therapy, nutrition, neurology, psychology and there is also an acupuncture centre. Sports infrastructure like swimming pool and sports fields are accessible to general public. A University store completes the offer. All these services are offered in a spirit of social service, and in general do not generate extra income for the University.

The administrative structure of the University of Cuenca is not straightforward. At present its administrative structure is under discussion, with no general consensus, about what is the more convenient administrative model to be applied. Traditionally the Cuenca university has been divided in Faculties. These faculties operate nearly as completely independent entities in terms of regulations, policies, personnel, and even curricular structure. There are several issues in this model. The first is that several core courses that could be centralized for all students are nowadays offered separately. The result is that the content, level, number of students per course, among others, can be totally different from one faculty to another. This creates inefficiencies in the institution seen as a whole and does not allow to set standards.

Apart from the faculties, there are other administrative units like Departments, Institutes, and Centres. The precise definitions and differences among them are not well established. In principle these units are

useful to better organize teaching, research, and the development of projects with external partners. However, the lack of clarity and rules often challenge the general administration. A department can be created by request from a relatively low number of professors. These departments can or cannot belong to a Faculty. The faculty however is the main teaching unit, so a department outside a faculty can be excluded from teaching (for instance a research department).

1.2.4. Brief description of the VLIR-IUC programme

The first VLIR-UOS Own Initiative project started in 1996. In total the UCuenca successfully acquired 6 VLIR-UOS Own Initiative projects and 2 VLIR-UOS SI projects. ACORDES and PROMAS are two of the Institutes created with the support of VLIR-IUC.

In 2005 the VLIR launched an open call inviting the Flemish universities to submit proposals for new IUC partnerships. The University of Cuenca, after having participated in a long formulation process, which ended in the month of June of the year 2007, was pre-selected, together with “Rafael Landivar” University of Guatemala, in Latin America, as well as The University of Jimma in Ethiopia, Moi University in Kenya, “Eduardo Mondlane” University in Mozambique, and “Anton de Kom” University in Surinam, in the rest of the world. The University of Cuenca launched an internal call, in response to which its researchers presented more than 50 research projects, out of which 8 were selected, covering the different areas of knowledge and conforming the general programme denominated “Improvement of the Quality of Life in the Ecuadorian Austro.”

The overall objective of the UCuenca IUC Programme is to improve the quality of teaching, research and services at the Universidad de Cuenca, so that UCuenca increases its relevance for the development and improvement of the quality of life in the region. This objective requires changing into a more stimulating institutional and organisational structure and the execution of a number of selected thematic academic projects. The overall developmental objective is that the Universidad de Cuenca aims at training graduates with the right skills and ethical attitudes in order to help the country reaching an improved quality of life for all Ecuadorians, and not only for a privileged group of society. Furthermore a relevant research capacity needed to be enhanced in order to contribute to the development of the society’s science and technological platform as leverage for the socio-economic development of the region and the nation. The Universidad de Cuenca being a comprehensive university has a wide range of disciplines across the spectrum relevant to the central theme. Each of the vertical academic projects envisages education/ training and research by a multidisciplinary approach. The transversal project aims at institutional management and change to create a more dynamic institution stimulating the research and teaching innovations. The main goal of the University of Cuenca is to become more actively involved in the political, economic, social and cultural activities of the society, and to play a more leading role in the search for technical and economically feasible and sustainable solutions.

The Transversal Project assists in bringing about institutional changes in the University’s organisation and management in order to develop a combined, integrated (undergraduate and postgraduate) teaching and research culture. The six vertical academic projects aim to tackle strategic challenges in the respective six sectorial / thematic areas concerned, more particularly: (i) To evolve from ex-cathedra teaching and passively absorbing students to a concurrent, problem-based teaching with active involvement of the students; (ii) To encourage faculty to be actively involved in teaching and research and to

develop research-based teaching; (iii) To attract external funding from various donors through the organisation of quality postgraduate education; (iv) To develop research projects in a regional / interregional network context, and; (v) to activate the students to become active participants in learning, research and services. All six are basically research projects, but also contain substantive aspects of curriculum development for master programmes and of (intended) extension work. UCuenca institutional policy and strategies, and service delivery (to the vertical projects and to the entire university, e.g. library, ICT, training, ...) are the responsibility of in the Transversal Project.

As the IUC programme's aim is to contribute to the achievement of the general university policy and strategic objectives, the programme is integrated in the general management structure of the University. Originally it resorted under the DIUC (Research Department), but later got a more central and mainstreamed institutional anchoring in the Vice-Rectorate. In order to provide strategic directions and to closely monitor the IUC programme, a UCuenca Local Steering Committee composed of the Local Coordinator, the Project Manager and all project Team Leaders was constituted.

Table 2: Overview of the project leaders in Belgium and Cuenca for the transversal and thematic projects

Project	**Flemish project leaders**		**Project leaders UCuenca**	
	Name	*University*	*Name*	*Faculty*
Institutional change	M. Euwema (AP 2011 – AP2012) G. Wyseure (AP 2012 onwards)	KU Leuven	S. Larriva (AP 2011-2015) C. León (2016 onwards)	Vice-rector
Food, Nutrition and health	J. Van Camp	UGent	S. Donoso	Chemistry
Human Sexuality	P. Enzlin	KU Leuven	M. Jerves	Psychology
Integrated water quality management	W. Bauwens	VUB	F. Cisneros	Engineering
Pharmacological characterization of medicinal plants	P. De Witte (KU Leuven; resigned end of 2012) Y. Vander Heyden (AP 2013 onwards)	VUB	Is. Wilches	Chemistry
City preservation management	K. Van Balen	KU Leuven	F. Cardoso	Architecture
International migration and local development	G. Calfat (started AP 2009)	UAntwerpen	A. Neira (started AP 2012)	Philosophy

1.3. Evaluation methodology and process

1.3.1. Evaluation framework

The evaluation was implemented in three phases: an inception phase, a phase of data-collection and a phase of analysis and reporting. During the inception phase an evaluation framework (see annex 2) was developed, composed of five evaluation questions related to the five OECD evaluation criteria. The evaluation questions were elaborated based on the evaluation questions formulated in the ToR and the assessment criteria used in the self-assessment reports. The evaluation questions consist of different judgement criteria and guiding questions or indicators. These indicators and guiding questions indicate what information would be looked for and as such guided the data-collection and development of interview guidelines. For each of the judgement criteria an appreciation scale was developed as requested in the ToR. A four-point qualitative scale is used.

Excellent	Sufficient	Low	Poor

This scale has not the intention to cover all indicators/guiding questions (some of them are more important in the final judgement than others) but was above all helpful in formulating a balanced judgement in a transparent manner. Table 3 presents an overview of the five main evaluation questions and their judgement criteria at project and at programme level.

Table 3: Overview of the five evaluation questions linked to the five OESO/DAC evaluation criteria

Evaluation questions	**Judgement criteria project level**	**Judgement criteria programme level**
1. To what extent is the project relevant?	1.1. The objectives of the project are consistent with the needs of the U Cuenca, the country/local needs, country educational policies, partner and donors' policies	1.1. The objectives of the institutional project respond to the needs of the University of Cuenca and are aligned to the country educational reform process.
	1.2. The project has looked for complementarity and synergy with other projects aimed at capacity development and institutional strengthening of the University of Cuenca	1.2. The combination of the different IUC projects has an added value for institutional strengthening of the University of Cuenca
	1.3. The intervention logic of the project is coherent	1.3. The intervention logic of the institutional project is coherent
2. To what extent the project's specific objectives have been achieved (effectiveness)?	2.1. The specific academic objectives have been realised	2.1. The specific academic objectives have been realised
	2.2. The specific development objectives have been realised	2.2. The specific development objectives have been realised
	2.3. The project has ground-breaking nature and ambition (scientific quality)	
3. What is the level of efficiency in the projects?	3.1. Intermediate results have been delivered.	
	3.2. Relationship between means and results achieved and objectives (qualitative assessment)	

	3.3. Project management is conducive for efficient and effective project implementation	3.1. Programme management is conducive for efficient and effective project implementation
4. To what extent the project results will continue after the IUC programme is completed?	4.1. Level of institutional sustainability	4.1. Level of institutional sustainability
	4.2. Level of financial sustainability	4.2. Level of financial sustainability
5. What are the indications of impact (long-term effects) of the project?	5.1. Indications of impact at academic level	5.1. Indications of impact at academic level
	5.2. Indications of impact on local, regional or national development processes	5.2. Indications of impact on local, regional or national development processes

Indicators as formulated in the log-frames at programme level and at project level overlap at several times. An assessment of the results at programme level evidently relate to the results at project level. For the assessment at programme level ACE Europe has tried to formulate specific judgement criteria and indicators that focus on the added value and results of the combination of the vertical/thematic projects and has included the assessment of the institutional/transversal project in the assessment at programme level as this project contributes to the institutional strengthening of the whole university.

1.3.2. Methodology

The evaluators used following methodologies for data-collection.

Analysis of existing data – The evaluators made optimal use of existing documentation and in particularly of the self-assessment reports. The self-assessment reports were studied and analysed before the effective data-collection in the field took place. During interviews with the project leaders in Belgium and Ecuador the self-assessment reports have been further discussed. Also secondary sources were consulted when relevant.

Analysis of the capacity changes at institutional level and in the thematic areas: the IUC programme is one of the factors contributing to capacity development. Capacity development processes usually are non-linear. Moreover, improbable, unpredictable and unexpected events are bound to happen and may have a substantial impact. Hence, it is important to also focus on 'what has emerged', instead of immediately focusing on the assumed intervention logic.

To that end, the evaluators facilitated a timeline exercise at the level of the transversal project, involving people holding strategic positions such as the rector and vice rector, director of DIUC, director of department international relations, director human resource management, director planning department, director post-graduate studies and IUC-programme coordinator. ACE Europe assumed that it would not be relevant to develop a timeline at faculty level for each of the thematic projects as focus in the projects was very much on the establishment of research groups and only to a limited extent other stakeholders within the respective faculties had been involved. To assess the level of ownership and possibilities for integration of the research groups in the respective faculties, separate interviews were organised with the deans of the faculties.

Outcome harvesting – Complementary to the self-assessments, the documentation and analysis of outcomes and impact was based on the outcome harvesting approach, since it allows a systematic mapping of outcomes and a participatory reflection on their scope, importance and on the programme's contribution. An adjusted version of the outcome harvesting methodology was applied and involved

following steps: (1) before the mission: mapping all the outcomes based on document study (self-assessments) and introduction interviews with project leaders; (2) participatory session in Cuenca to identify outcomes, review the information provided through the self-assessment reports and joint analysis of the outcomes; (3) the outcomes were further validated through interviews with internal and external stakeholders; (4) final review of the outcomes and joint sense-making during restitution workshop.

Semi-structured interviews (individual and group) and focus group discussions– semi-structured interviews were conducted with a variety of internal and external stakeholders, to complement information gained through the different data collection methods.

No surveys were planned targeting the current students or alumni (if any) of the master courses strengthened or created, The available time as indicated in the ToR did not allow for extensive research at the level of students, alumni or among specific communities benefitting from the project results. Focus group discussions were planned with current master students and the students participating in the Vanguardia programme.

Restitution and sense-making workshops – Two workshops were organised. One at the end of the field mission, based on a power point, in order to enable all stakeholders involved in sense-making of the data and to identify and exchange on lessons learned. And one at the end of the evaluation in Belgian, to discuss the results of the evaluation with the IUC programme coordinator and project leaders.

1.3.3. Limitations of the evaluation

The evaluation was executed as planned. The team could talk to all relevant internal and external stakeholders. The high quality of the self-assessment reports, developed by each of the project teams, contributed to the quality of this evaluation. It enabled the evaluators to gain a profound insight in the projects strengths and challenges, which could be validated and further discussed during the evaluation visit.

There were only a few limitations in this evaluation:

(1) Although the ToR requested an impact assessment, one has to take into account that the programme was just phasing out and impact might be expected at the medium and longer term. As such, mainly indications of impact could be identified and described.

(2) Monitoring of the programme is done based upon indicators related to the key result areas (research, teaching, management, human resources development, infrastructure and management, mobilization of additional resources/opportunities, extension and outreach). Due to the short period available for the evaluation visit, it was not possible to verify all the data provided on these indicators. The evaluators also preferred to document “what has emerged “, instead of controlling monitoring data. The programme coordinator already had indicated that there are some misinterpretations of some indicators. The evaluators confirm this conclusion. It was sometimes difficult to link information on the indicators with the practice evaluated. However, the evaluators are of the opinion that there are no fundamental mistakes and that the key result areas grasp sufficiently the results achieved.

(3) As this evaluation concerned the second phase of the programme, the evaluators did not analyse in-depth the origin and starting up phase of the programme. This was also complicated as several initiators of projects and other people involved in the first phase (in Belgium and Cuenca) had left the project and were not available for interviews (retired or sensitivity considerations). As such, the evolution in the projects and its impact on the level of relevance of the projects were not assessed profoundly. Assessment of the relevance was focused on the second phase of the programme.

1.4. Structure of the evaluation report

The results of the evaluation are described in following chapters. Chapter 2 presents the assessment of the IUC porgramme acording to the different OECD/DAC criteria. Section 2.1. describes the results at programme level and in the following six sections the assessment per project are presented. In chapter 3 the conclusions and recommendations are described.

2. Evaluation

2.1. Evaluation of the programme level

In this chapter the assessment of the IUC programme at "programme level" is presented, based on the evaluation questions, judgement criteria and indicators developed in the evaluation framework. A cross-project assessment was done, complemented with the assessment of specific programme features. The assessment of the institutional project is also included in the programme assessment. For each OECD/DAC criterion a table is presented that provides an overview of the assessments at project level, which are further elaborated in detail in section 2.2.

2.1.1. Relevance

Table 4: Overview of the scores for evaluation question 1 on relevance at project and programme level

	Food, nutrition, health	HumSex	Water	MedPlants	CPM	MigDev	institutional
1.1. Responding to needs							
1.2. Synergy							
1.3. Intervention logic							

Relevance

In general the IUC programme has been very relevant. One of the main goals of the University of Cuenca is to change from a university that is limited to teaching and knowledge transferring to a university with the capacity to conduct research and to produce scientific knowledge. All the projects respond to specific needs related to enhancing academic knowledge, research capacities and teaching in specific thematic areas. The programme, with its constituting projects, is aligned to the strategic plans of the Cuenca university and the strategic plans of the faculties involved (when existing). It must be acknowledged that not as such these strategic plans were guiding in the formulation of the thematic projects but more so the individual interests of professors at each of the universities and the general guidelines of the VLIR-UOS IUC programme. Project proposals had to fit within the policy guidelines and objectives of the IUC programmes as set by VLIR-UOS. These objectives were at the start not always fully understood by all the project leaders in the south such as the characteristics and requirements for conducting rigorous scientific research, the characteristics and consequences of international PhD studies in a sandwich formula, the identification of concrete research lines and all the conditions that needed to be in place for creating a research friendly environment. This explains why several projects had a slow start as time was needed to achieve a mutual understanding of the project among the project leaders in Cuenca and Belgium and justifies the time taken for joint formulation of the projects (year 0).

The focus put by VLIR-UOS on supporting the formation of PhDs, the creation of research groups, equipment of laboratories, improvement of English proficiency and the pressure to publish scientific papers in internationally peer reviewed journals was coherent with the guiding principles as set by the new law on higher education (LOES) approved in 2010. The new law was conducive for the further

implementation of the IUC programme. Apart from that, the VLIR-UOS investments experienced a multiplying effect because of the availability of resources at the Cuenca university (as a consequence of the new law), complementing the projects and able to provide the necessary infrastructure (e.g. ICT investments).

The concept of an institutional project is very relevant, taking into account the need to create a research friendly environment at university level and responded to clear demands. Focus was put on several supporting functions within the university that needed to be modernized and concentrated on three main areas: organisational development, postgraduate and the library and ICT infrastructure. The project was developed in a participatory manner involving rector, vice-rector, deans of faculties and directors of administrative department. It can be questioned to what extent the project was an appropriate answer to the key needs and challenges identified. The project seemed very ambitious and several conditions were not in place to support the envisaged change processes (see further under intervention logic).

Synergy and added value of an IUC programme

Synergy between the different VLIR-IUC projects was actively looked for by each of the research groups but was difficult to realize because of the very different nature of the thematic projects and the heavy workload of the team members within each project. To the extent possible specific knowledge was made available between projects (e.g. training on qualitative methodologies) and/or lab assistance provided (providing access to lab equipment for other research groups). Each of the projects operated in a rather isolated manner. There was not much exchange between the different projects and - if any - this was limited to exchange between project leaders. Cost-effectiveness was not explicitly looked for by the Northern project leaders and only stimulated by the Flemish programme coordinator (e.g. purchase of a common statistic software packet for different projects – not succeeded[2]).

Some of the interventions within the institutional project were supportive in realizing the objectives of each of the thematic projects. This relates mainly to the significant improvement of the ICT infrastructure and the organisation of several workshops or training at university level on scientific writing and English courses. However, the effectiveness and sustainability of the thematic projects could have benefitted from the results of organisational and institutional change processes, as was foreseen in the institutional project, (such as improved human talent management, university policy on research, etc.) but as not much activities had been implemented, the respective research groups still suffer from the institutional challenges that had been identified while elaborating the institutional change project. There was also not much influence from the thematic projects on the discussions at institutional level. However, it must be acknowledge that with the presence of several research groups, of which several are also recognized at international level, the need to develop an appropriate institutional policy enhancing teaching and research has become more urgent and the debate is ongoing at university level.

Most of the projects received a score of good regarding synergy, not because of the level of synergy between the VLIR-IUC projects but because of the synergy that was actively looked for with other VLIR projects and projects/interventions financed by other donors.

[22] This appeared difficult for several reasons, among them: different perspectives between research groups involved in human sciences and those involved in exact sciences regarding the usefulness of specific software (according to some project leaders); the fact that Northern teams preferred for their own efficiency reasons to use their own, familiar and commercial software and did not regard the general U Cuenca benefit of a common approach as useful for themselves personally (according to the programme coordinator).

Coherent intervention logic

All projects were based on a coherent intervention logic, combining interventions related to the implementation of research, the formation of PhD and training of lecturers, the improvement of the link between education and research (including the development of professional masters in two projects) and the development of outreach services.

In 3 thematic projects (Medplan, MigDev, Water) some interventions (set of activities and results) were lacking in the formulation but mostly had been implemented such as relationship building with external stakeholders, influencing public policy debates and/or the creation of a research group.

In all projects (including the institutional project) the identification of assumptions and the risk management is weak. Assumptions relate mostly to external factors like changes in government policy, which were well managed. However, internal factors, such as university policy or engagement of faculties, have been identified but a proper analysis of the conditions that need to be in place to facilitate the envisaged change processes was lacking. This is the case for all projects but in particular the institutional project is weak to that end. An interesting intervention logic was elaborated with a clear list of activities to be executed. However, an analysis of the conditions that would facilitate or hamper the implementation of these activities was not done (or only superficially). The institutional project reads as a very ambitious plan of which feasibility was not sufficiently, which is demonstrated for example by the fact that the "soft dimensions" of the institutional project, touching upon policy change, organizational culture and alike have not been implemented or have not obtained the intended effect. The lack of a proper analysis of the assumptions, risks and opportunities explains the current challenges regarding sustainability of the projects.

2.1.2. Effectiveness

Table 5: Overview of the scores for EQ 2 on effectiveness at project and programme level

	Food, nutrition, health	HumSex	Water	MedPlants	CPM	MigDev	institutional
2.1 Academic objectives							
2.2.Development objectives							Not relevant
2.2. Scientific quality							Not relevant

Realisation of the academic objectives

The academic objectives for each of the vertical projects have been fully achieved or are in a process to become fully achieved. The projects have provided results on each of the key result areas and often provides more results than planned. A critical mass of professors and lecturers have been trained and obtained a master and/or PhD degree. Research groups have been installed and are composed of a number of permanent (tenured) and contract professors, researchers, research assistants and when relevant lab assistants. All staff have received appropriate training and are involved in conducting scientific research. Research groups have defined research lines and are able to develop good research protocols. Researchers obtained competencies to apply quantitative and qualitative research methodologies. This is evidenced by a high number of scientific papers that are published in national and inter-

national peer reviewed journals of several research results have been presented at international conferences. Several research groups gained recognition at international level and have become involved in international academic networks. The level of performance evidently varies between the different projects (see further under each project description) and can also be explained by the varying level of initial research competence and maturity of research groups (non-existent, emerging or already established). In terms of cost- effectiveness (level of increase compared to the initial situation making optimal use of the project's input) the evaluators made following ranking.

Table 6: Ranking of the different project regarding cost-effectiveness

Project	**Arguments**
1. Nutrition, Food and health	This group seems to have taken advantage of all incoming possibilities (forming people, contracting them, making strategic networks). They recognize that their success has been a combination of a good inter-relation and working environment (horizontal leadership style), good relation and guidance from the Flemish partners, and good luck. This group has taken the largest jump from the initial to the final state.
2. Human Sexuality	This group has started from nothing, not even with a clear project proposal and without full support of a specific faculty. The original members and directors had quit because of retirement and other interest, and the research lines have been restructured. In spite of these conditions the group has reached a good dynamic, formed PhDs and Msc, created a professional master, built networks and obtained scientific results.
3. City Preservation	This group has also taken advantage of the given conditions, trained people (not yet truly incorporated). The group is very skillful in materializing and delivering services to the society. They also took good advantage of their strong communication skills.
4. Medicinal Plants	This group is well settled in terms of infrastructure, equipment, and research lines, with a strong potential through the MsC programme. They achieved important scientific results. However, the human resource consolidation seems still weak.
5. Water quality	In spite of being the most successful, this group has attained results mainly on the basis of existing capabilities and former networks and people trained in Belgium due to former collaborations. The second phase has mainly brought equipment and some new PhDs added to the several existing ones. The subject and the group is so strong that efforts have been duplicated because of the division of the group. The other research group (non VLIR) involved in water resource management has taken initiatives of the same or larger magnitude, at the margin of the VLIR-IUC cooperation.
6. Transversal project	The transversal project has actually worked as a logistic support project. Management and coaching of the processes at UC, including those generated by the changes introduced by the new laws and the interactions and troubleshooting within the groups have not been addressed. It might have been possible to address several institutional problems, which has not been done (or possible) in the end. There has been little or no advice and feedback to and from university authorities, and little or no advice to project leaders to identify synergies or discuss problems.
7. Migration	Apart from the PhD formed, the project at the end is not a lot more than what it was at the beginning of the second phase. The group is not consolidated and it is very likely to disappear at the end of the end of the IUC.

Regarding the institutional project, only the objectives in the domains of library/ICT and the development of the postgraduate department have been obtained to a certain extent. The library evolved towards a virtual library, a learning center is about to be finalized and a library policy developed . Regarding ICT new fiber and servers are available and suitable for cloud storage. All research groups have access to internet and several administrative procedures have been systematized and digitalized. The improved library services in particular enabled access of the wider public and the students to hard and soft copies of theses and books. The library is not supporting yet the scientific research conducted in the research groups as there is lack of access to specific database and scientific journals. Researchers still rely on their international networks to access specific journals, relevant for their research.

The strengthening of the postgraduate department was limited to the implementation of a honours programme, called Vanguardia that stimulates promising students to invest in scientific research and prepare them for Msc and/or PhD studies, by preference abroad. The programme is running its third year and has substantially evolved over the years. A curriculum is available with opportunities of blended learning. The pool of professors providing courses in this honours programme is growing and more faculties have embraced the programme by sending and coaching Vanguardia students. Quality and relevance of the programme is highly appreciated by students and lecturers involved. The programme has not resulted yet in a significant number of students studying a PhD abroad, which can be explained -among others- by the decreasing amount of scholarships funded by Senescyt but also the short period the programme has been running. The programme has already shown its potential as several Vanguardia students have been picked up by the VLIR research groups such as Food, nutrition and health and the Migdev project.

No results could be evidenced regarding the envisaged organisational processes. Several external factors can explain the difficulties in improving strategic management and policy development at university level. Changing policies, requirements and even contradictions at the levels of the institutional actors such as CEAACES, CES and Senescyt complicated strategic management and caused a lot of administrative workload. However, one can not only blame the external factors, internal issues also added. For example, at the start of the second phase the University of Cuenca preferred to collaborate with the Applied Sciences University of Munich within a German short-time project to strengthen strategic planning, a cooperation outside the IUC that eventually did also not contribute to improved strategic management. Another incident was that a director of human resources travelled to Belgium for setting up a policy on new recruitment and the transition generation while he had resigned just before his mission, which was unknown in Belgium. Moreover the 2 PhD scholars for the transversal project after obtaining a PhD in human resources and in library management have not been reintegrated into the transversal project and therefore their expertise could not be sufficiently valorised.

Several initiatives could have been taken at Cuenca university level regarding the development of certain policies and the further structuring of the university. At least it might had been expected that the university would have developed a policy regarding the embedment of the research groups within the university.

Factors that contributed (positively, or negatively in the case the factor was not present or weak) to the level of success within each project:

- The commitment and dedication of the research teams
- The development of a good intervention logic and good planning of the research
- The intensity of collaboration with projects leader in Belgium (combining training, coaching, facilitating contacts, etc.)

- The involvement of students in the research (national and Belgian)
- Selection of appropriate profiles for PhD studies
- The organizational culture and level of group work within the research group
- Horizontal versus vertical leadership within the group
- Support from the deans of the faculty, with a varying understanding of and commitment to research
- Creating a conducive environment for research, among others the provision of adequate infrastructure (for offices and labs) and time made available for doing research
- Initial level of English proficiency

Realisation of the development objective

The development objectives have been fully achieved in 3 of the 6 thematic projects, partially achieved in 2 projects and not in the MedPlan project (the latter because of the nature of the project). Often applied research was conducted providing research results that could be used by external stakeholders for policy development and/or implementation in the respective thematic areas (see details under the project descriptions). In all projects (only to a limited extent in the Medplan project) the research groups have established good relations with different institutional stakeholders at local and national level. The level to which developed knowledge, instruments, tools and approaches were effectively used by the external stakeholders depended on the institutional capacity of each of these stakeholders (organisational capacity, human and financial resources). The expertise of the Cuenca university in the different thematic areas supported by the VLIR projects is widely recognised by Ecuadorian stakeholders (and in some case even at international level, like the CPM project) and frequently advice is requested.

Another element contributing to development is related to the provision of well-trained professionals that can be integrated in public and private institutions. Staff members of several projects had joint institutional actors and were able to put their knowledge into practice. This is the most evident in the water sector as the university delivered several high-qualified technicians operating now for state institutions such as ETAPA and Hydro-Paute, but was also visible in the CPM and Food, nutrition and health projects. Additionally, through the professional masters (human sexuality, city preservation management) but also through the short term trainings provided in most of the projects (not much in Medplan project) a number of practioners gained access to specific knowledge and research results that was useful for their own practice. From the interviews was learned that transfer of knowledge within each institutional context (be it a school, city administration of the national institute of heritage) was difficult at institutional level but participants of these courses could implement some of the acquired competencies within the scope of their individual work.

Scientific quality

The scientific quality of the research conducted was assessed as excellent in three projects, good in 2 projects and low in one project. Within the VLIR-project 11 PhD were completed and 11 PhDs are about to finalise. Also 6 students have completed a master in Belgium. All (except 2) of them are involved in conducting scientific research within their project. Only one has not returned to U Cuenca. The VLIR research projects have been a leverage for attracting 24 other research projects within the university. A relevant number of articles has been published in international peer reviewed journals of which the majority are of high quality (28 Scopus database). The research groups has actively participated in international and national conferences and maintain strong relations with other research groups (national and international level). The VLIR-project was also conducive to developing two master in science programmes, funded through the VLIR-Network programme (one in hydrology and one in biosciences). The water project also initiated a PhD programme.

2.1.3. Efficiency

Table 7: Overview of the scores for EQ 3 on efficiency at project and programme level

	Food, nutrition, health	HumSex	Water	MedPlants	CPM	MigDev	institutional
3.1. Intermediate results							
3.2. Input-Output							
3.3. Programme management							

Level of realisation of intermediate results

Most or almost all intermediate results have been finalized at project level. Results to be finalised relate mainly to the finalisation of PhD and of publications. More details are described in the project assessments (next chapter).

Most of the intermediate results of the institutional projects have not been realized. Several results have been suspended, mostly those related to strengthening organizational and institutional change processes (human talent management system, evaluation of the credit system, strategic planning, university management). The institutional project was too ambitious and the conditions that needed to be in place to implement the desired change processes were not sufficiently analyzed. Eventually it appeared that several assumptions were not fulfilled, making it difficult to implement the planned interventions. Another factor was the lack of leadership at the university of Cuenca to fully invest in the institutional project. In consultation with the university of Cuenca it was explored what elements of the initial plan still could be implemented. The development of postgraduate programme was chosen, which resulted in the development of a honours programme, which has been successfully implemented.

Clear investments were done to evolve from a physic library to a modern and virtual library. There were delays in realizing electronic access at the library, which was partially due to the discussions at the Ecuadorian universities on selecting specific common library software. As several universities were working on the electronic library it was good to build up shared knowledge. Also an electronic data-warehouse was established so that all historical documents could be stored electronically after scanning. The library converted in a learning center including dedicated spaces for students to work in small groups. The university invested with own resources in modifying the library infrastructure, which will be finalized by the end of the year. A strategic plan for the library was elaborated. PhD

Appropriate investment in ICT software and infrastructure were done, complemented by university's own resources to update the fiber-optic connection and the server room.

Relationship between means and results and objectives

In the initial project proposal a total planned budget of 3,060,000 EUR was foreseen for the VLIR-IUC programme. The budget was equally divided over the different projects with the institutional project being assigned with the largest budget. For phase II a specific project on biodiversity was foreseen but after the first year of implementation this project seemed not feasible (no initiatives and dynamics at

UCuenca). This project was transferred and integrated into the VLIR Network project aimed at creating a master in biosciences (not subject of this evaluation).

Table 8: Overview of the planned budgets per project of the VLIR-IUC programme second phase (in euro)

	AP 2012	AP 2013	AP 2014	AP 2015	AP 2016	Total
Institutional Change (P1)	110,300	110,300	97,000	72 ,001	44,800	434,401
Nutrition and Health (P2)	88,000	88,000	74,800	66,000	44,000	360,800
Human Sexuality (P3)	69,000	69,000	60,786	64,460	35,060	298,306
Water Quality (P4)	88,000	88,000	74, 800	66,000	44,000	360,800
Medicinal Plants (P5)	88,000	88,000	74, 800	66, 000	44,000	360,800
City Preservation (P6)	63,000	63,000	62,900	55,500	37,000	281,400
Migration Development (P7)	74,000	74,000	62, 859	55, 918	37, 000	303,777
BioDiversity (P8)	13,700	13,700	-	-	-	27,400
PSU	151,000	151,000	127,055	114,121	89,140	632,316
TOTAL	745 000	745 000	635 000	560 000	375 000	3, 060,000

The budget spent for the programme support units in Leuven and Cuenca, which can be seen as the total overhead of the programme (including administrative and management salaries, traveling in the framework of monitoring visits) amounted to 632,316 EUR or 21% of the total programme budget, which is a reasonable amount for overhead of this kind of projects that are set-up in co-creation and shared management responsibilities. The share of the administrative costs is acceptable with 8% of the total programme budget (11% in 2016) with 5% spent in Cuenca and 3 % in Belgium, as shown in following table.

Table 9: Overview of the administrative costs in Belgium and Ecuador, part of the overall PSU cost for the second phase of the project (in euro)

	2012	**2013**	**2014**	**2015**	**2016**
Administration costs in Belgium	22,500	22,500	19,200	17,000	15,000
Administration costs in Cuenca	37,500	37,500	32,000	28,000	25,000
Total	60,000	60,000	51,200	45,000	40,000

There was a planned gradual decrease of the total cost for the programme, which seems logical. One can expect a higher investment at the start of the second phase (programme being at implementation speed) and a decrease of the budget evolving towards the phasing out phase. Also the available budget for the PSU decreased over time. It was assumed that the University of Cuenca would gradually take over the administrative costs, which did not occur. Salaries of the staff at the PSU in Cuenca remained fully covered by the VLIR-budget (combination of different budget posts such as employment contacts and administrative costs). During the phasing out phase, no contribution in the salary of the PSU personnel was foreseen by the programme. The University of Cuenca however did not fulfil its commitment to cover these salaries. Only recently in May 2017 the service contracts for the administrative staff were

signed (no payment yet). Salaries of staff were paid based on remaining non-earmarked budget for programme administration.

The compensation for the Flemish programme coordinator, as foreseen in the PSU budget, was used for salary compensation of the Flemish coordinator, whereas in other VLIR-UOS programmes and projects this budget can be used to hire an assistant to the programme coordinator. This resulted in an increased workload for the Flemish programme coordinator.

The IUC programme with Cuenca demonstrates the importance of a PSU unit at Cuenca and an unit in Leuven. The availability of well-capacitated staff responsible for the management and administration of the programme was an important factor in the successful management and implementation of the programme.

The table on the next page presents an overview of the budget division and the absorption capacity. The budget division shows the importance given to external scholarships and investments, which have been the dominant activities in each of the projects. From the start of the second phase there has been an underspending of the budget, fluctuating between 7% (in 2014) and of 19% in 2013. Underspending was the highest related to the scholarships (less PhD than planned, delay in starting up of PhD) and to some extent in the operational costs. This was compensated by an overspending in investments. VLIR permits a flexible management of the budget, including flexible transfer between budget posts, as long as the changes are justified.

Underspending was also explained by the several delays in programme implementation, due to institutional factors in Belgium and Ecuador and operational issues at project level. The programme suffered from funding uncertainties as a consequence of delays and policy discussions and -changes at the level of the back donor (DGD). As the KU Leuven does not allow pre-financing of international programmes, budgets could only be transferred after the signing of the MB (Ministrieel Besluit), annually stipulating the budget that would be made available. The debate on the "*usurperende bevoegdheden*" (regional versus federal authorities over university development cooperation) in 2014 created uncertainty on the continuity of the budget for inter-university cooperation, which also caused a delay in funding becoming available. In Ecuador, government policy decisions regarding the administration of the university budget (central bank account) and the regulations regarding public procurement (see under context 1.2.2.) increased the level of bureaucracy and hampered efficient use of the available resources. These decisions caused several delays in 2013 and 2014, till solutions were found. The University of Cuenca created a public company (*empresa pública*) to channel international funds. And to bypass the strict Ecuadorian government procurement rules, the University of Cuenca and VLIR-UOS decided in 2015, to purchase several goods directly from Belgium (but still being bought in Ecuador). This caused an additional workload for the ICOS team at the KU Leuven but was conducive for further programme implementation. This flexibility was very much appreciated by the project teams and the PSU in Ecuador.

Table 10: Overview of the approved budgets and expense ratio for the years 2012, 2013, 2014 and 2015 (source: annual financial reports)

	2012		2013		2014		2015	
	Approved budget	Expense ra-tio	Approved budget	Expense ra-tio	Approved budget	Expense ratio	Approved budget	Expense ratio
Investment costs	81,500	156%	78,520	175%	59,970	177%	40,436	80%
Operational costs	176,875	94%	191,285	82%	263,674	83%	240,938	111%
Personnel costs	27,000	130%	30,000	119%	59,993	109%	48,566	123%
Scholarship costs	281,477	57%	233,832	51%	200,363	74%	185,060	51%
International travel costs	62,500	113%	78,800	54%	/	/	/	/
Residential costs	55,648	77%	72,563	69%	/	/	/	/
Shipment costs	0	209,16 EUR	0	129,17 EUR	/	/	/	/
Administration costs	60,000	100%	60,000	100%	51,000	100%	45,000	100%
total	745,000	86%	745,000	81%	635,000	93%	560,000	89%

In terms of assessment of efficiency, the evaluation did not have the resources or the mandate to do an audit of the financial management systems, or to do an in-depth cost-effectiveness analysis at project level. On the basis of the available reports and interviews, the relationship between input and output and outcome was assessed in a qualitative manner. Overall it can be stated that cost-effectiveness was looked for in all the projects and project budgets were balanced and in coherence with the programme, logic. Following factors have contributed to the level of efficiency:

- The combination of master and PhD studies: at the University of Cuenca in most cases a master career was lacking, which hampered the identification of PhD students. In several projects students were given the opportunity to first follow a master and continue with a PhD. In several projects the opportunity was also given for students to follow only a master. These students have become researchers or research assistants in the projects and might access a PhD scholarship later on (locally or internationally)
- Quality and transparency of the selection process of PhD candidates (mostly good selection system)
- The implementation of short term trainings and visits from Cuenca to Belgium and vice versa (in particularly strong in the projects on Human Sexuality, Food, nutrition and Health and Medicinal Plants)
- It was envisaged to look also for dual master and PhD theses, jointly implemented by students from Belgium and Ecuador. Implementation appeared not to be evident (different rhythms, interests between Belgium and Ecuador). However, in several projects there was exchange between students from both countries (like in the projects on food, nutrition and health and city preservation management), which contributed to enhancing the quality of research conducted.
- In several projects, project leaders in Belgium could attract additional funding, which was necessary to implement the research lines as foreseen and to create a critical mass of researchers (e.g. strong in the projects on Food, Nutrition and Health). In several projects, local project leaders also could attract complementary funding at local or international level (e.g. strong in city preservation management).
- Contribution of other actors to the projects, in particular professors engaged through the Senescyt Prometeo programme (e.g. food, nutrition and health project, human sexuality, medicinal plants)
- Close follow-up and accompaniment of project implementation by several project leaders (e.g. strong in Food, Nutrition and Health and in City Preservation Management)
- High quality of programme and project management (see further)

Some factors having a more negative influence on efficiency:

- It appeared difficult to identify suitable PhD candidates with an interest of staying abroad for several months and obtaining a sufficient level of English proficiency.
- Lack of a university policy of reinsertion of graduated PhD. Although the university needs to increase its number of tenured professors with a PhD, no specific policy was established so far to offer PhD graduates the possibility to apply for a vacancy at the university. There is a risk that graduated PhD will have to leave the research groups in 2019, in the occasion no extra funding would have been attracted and/or no extra vacancies are opened again.
- Lack of a human resource policy at the University of Cuenca. The majority of the researchers active in the projects were working under a temporarily service contract, with a maximum term

of four years. Because of this job insecurity several researcher had left the projects in 2013 and 2014 (losing social capital). The programme coordinator in Cuenca could negotiate with the ministry of international relations, and eventually convince the human resources department at the UCuenca, to create job security for the staff working in the project by considering the VLIR project as an investment project. This guaranteed employment contracts for the entire duration of the project until December 2018.

- Lack of commitment of the university to guarantee sufficient research hours to be spent by PhD students at the University of Cuenca. Decisions to that end were left to each of the faculties, resulting in varying practices between the different projects. Not having the possibility to invest sufficient time in the PhD research while being at Cuenca was one of the factors that caused delay in finalisation of PhD.
- In some projects the participation at a relatively high number of international conferences can be questioned (e.g. Human Sexuality and Migration and Development).

The relationship between means and results of the institutional projects is assessed as low. Apart from the fact that many interventions had to be abandoned because of lack of commitment at the university, the choice of investing in PhDs student that accompany some of the organisational change processes after graduation seemed not effective. These PhD graduates were not strategically positioned within the university and were not assigned the tasks and responsibility to accompany specific change processes. Coaching would be an appropriate means to support organisational change processes. However, the former and current project leaders of the institutional programme could not make enough time available for such coaching processes and the VLIR regulations do not permit to look for these services in the market.

Many interviewees also referred to the fact that the University of Cuenca has not fully taken up its responsibility and engagement. The university committed to provide labour contracts to the staff involved in the projects but did not proactively looked for solutions to secure job security of the researchers involved in the projects. The university did provide sufficient space for offices and laboratories but only after long negotiations. The university did not invest much in the purchase of equipment of goods that could not been bought from the project budget (apart from the investments done in the library and ICT infrastructure). The lack of commitment is seen in the limitation of financial resources of the university during the phasing out year. The fact that the commitment of the University of Cuenca was not precisely defined in the cooperation contract (identifying the share of financial contribution) is one of the factors that explains this situation.

Project and programme management

Combining the strict government rules with the internal rules of the University of Cuenca and in accordance to the rules of VLIR/DGD became a tremendous bottleneck in the second phase of the IUC programme, which caused several delays as explained in the above. Due to the excellent management and coordination skills of programme coordinators and -managers appropriate answers were found to tackle the aforementioned problems.

Overall project and programme management were positively assessed by all stakeholders interviewed in Belgium and Ecuador. In particular the high quality and excellent capacity of the programme managers at the PSU and ICOS units was frequently mentioned. Also the work and pro-active attitude of both

programme coordinators looking for creative solutions related to the different administrative and logistical bottlenecks in programme implementation was highly appreciated among the people interviewed. Both programme coordinators spent more time than foreseen in programme coordination and in particular in Ecuador the soft diplomacy as conducted by the programme coordinator to obtain as much as possible engagement of all necessary stakeholders within the university was crucial for the level of success of the programme. The fact that the autonomy of the university of Cuenca was respected for example regarding the management of operational costs and overall decision taking was very much appreciated by the people interviewed.

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

- Presence of appropriate management tools enabling adequate and transparent financial management. Reference was also made to the development of a tool for the management of mobilisation expenses, upon initiative of the Flemish programme coordinator
- Continuity of the programme manager at the university of Cuenca – the same persons was responsible for the entire programme duration and demonstrated high quality of management capacity;
- The investment in capacity development of the programme manager at the start of the programme to acquire sufficient knowledge on result based programme management (technical and financial), the administrative guidelines and reporting formats applied by VLIR-UOS
- The effective and efficient organisation at the ICOS in Leuven
- Transparency in procedures and decision taking processes
- Clear guidelines and procedures, understandable and applicable for all
- Swift communication between PSU and ICOS and between PSU and project leaders in Cuenca
- Clear definition of roles and responsibilities between programme coordinators and programme managers
- Timeliness of project leaders regarding narrative and financial reporting

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

- The aforementioned changing government rules and regulations, in particular at the level of the Ecuadorian government
- At the start of the IUC an online database had been developed for programme management (to be applied in all IUC programmes), which was very much appreciated by the PSU in Cuenca. Due to implementation problems of this system in other IUC programmes the system was abandoned. According to the PSU in Cuenca this resulted in some loss of time (time that had been unnecessarily in familiarizing with the system, and loss of a system that would contribute to time gains in programme administration).
- Lack of synergy between the different projects
- Lack of sufficient exchange between the project leaders in Cuenca but also between staff involved in the different projects
- Mismatch between project leaders at the start of some of the projects and changes in project leaders during project implementation
- Lack of administrative and technical support from different departments at the University of Cuenca, such as the department for human resources, department for financial management, department for strategic planning, department for international relations, etc., to look creatively for solutions related to programme implementation. Initiatives taken were almost always induced by the programme coordinator

- Differences in respecting the regulations by Flemish project leaders, for example in applying in time permissions to attend international conference or the development of financial proposals

The project leaders have appreciated the M&E tools applied in the programme. As there does not exist a real evaluation culture at the university, the research groups have learned to systematically reflect upon progress, strengths and weaknesses. The research groups have learned to develop appropriate planning. Also the self-assessment exercises were appreciated and valuable to take stock of results achieved.

The sustainability of the capacity gained regarding programme management at the University of Cuenca is questionable. No strategy to that end is foreseen. The department for international relations, which could be assigned with the management of external donor funded projects, is not fully developed and has currently not the capacity to attract foreign funding. This is left to the initiative of each of the professors and faculties. There is no plan to integrate the programme support unit into the department for international relations, which could strengthen the management of donor funded projects.

2.1.4. Sustainability

Table 11: Overview of the scores for EQ 4 on sustainability at project and programme level

	Food, nutrition, health	HumSex	Water	MedPlan	CPM	MigDev	institutional
4.1. Institutional sustainability							
4.2. Financial sustainability							

Academic and institutional sustainability

The academic and institutional sustainability of the results achieved, and in particular of the research groups created, is varying and depended on the level of maturity, strength and initiative taken by each of the research groups to secure its sustainability as an overall policy at university level regarding the embedment of research groups, the institutionalization of research and an appropriate human resource policy are currently lacking. The food, nutrition and health group and the Medplan group have joined forces and created formally a research department that is embedded within the faculty of chemistry. Such a research department secures access to appropriate infrastructure and administrative support services. The water project was already embedded within PROMAS and staff trained have joined either PROMAS or the research department of water resources. All these groups count on sufficient researchers, have engaged students and research assistants and can rely on tenured professors that can develop research proposals to be presented at DIUC.

The institutional sustainability of the other research groups created is less guaranteed. The research group on city preservation management is more likely to continue as it receives support from the faculty of architecture, which has a vision on and interest in strengthening scientific research at the faculty. The faculty however is confronted with a high number of tenured professors, compared to the careers offered. Most probably not much vacancies for tenured professors will be created at the faculty of architecture and it is not guaranteed that researcher from the group will win this competition. The group however is strong, has international recognition and ability to attract external funding. The research group on Human Sexuality and on Migration and Development are more at risk. The CIFSEX group will

not lose its social capital as the majority of the researchers involved are tenured professors. However, the time and space needed for scientific research is not guaranteed as the group is not embedded within a research department and not supported by a faculty that has shown already strong commitment in investing scientific research. The research group on migration and development is confronted with the same bottleneck but additionally suffers from the lack of tenured professors in the group.

Strategies to guarantee sustainability of the results achieved were foreseen in the institutional project. However, this project did not realise the development of policies, necessary for the creation of conducive research environment at the university. In particular, no vision and policy was developed regarding the structuring of research department and the management of professors investing in research.

Sustainability of the Vanguardia programme is not guaranteed. However, the university administration has taken ownership of the programme and demonstrated the willingness to structurally embed the programme in the university course offer. The director of the postgraduate department is very interested in the programme and the staff involved in the programme have received authorization from the vice rector to start a process of designing the curriculum in order to adjust it to the official regulations and student evaluation systems. It is too soon to state that sustainability will be guaranteed.

Financial sustainability

Financial sustainability is hampered by the decreasing amount of government funding becoming available for the universities. However, some research budgets will remain available. Financial sustainability is guaranteed for three research groups, which have demonstrated the capacity to develop good research proposal and to attract local, regional and/or international funding. These research groups also have established relationships with a variety of academic actors and are involved in international networks (Food, Nutrition and Health, Water Quality and City Preservation Management). The other research group depend mainly on the existing collaboration with the Flemish partner and the access they might have to other VLIR projects. Financial sustainability is in particular weak to poor for the research groups on human sexuality and migration and development. There are some opportunities to attract external funding but these are limited and not guaranteed.

The current rector of the university stresses the importance of research groups being able to attract external funding and to become auto-sustainable. A strategy to enhance capacities to that end was not explicitly included in the IUC programme.

The phasing out phase is focusing above all on the consolidation of the knowledge built and research conducted and the dissemination of the results within the university and among external stakeholders. The phasing out programme does not include a strategy to strengthen institutional and financial sustainability of the project results. During the closing event of the programma a one week programme is planned to discuss the future research organization aimed at designing a future research strategy for the university. Taking into account the absence of concrete interventions and commitment to that end during the ten years of programme implementation there is a risk that this activity will remain lip-service.

2.1.5. Impact

Table 12: Overview of the scores for EQ 5 on impact at project and programme level

	Food, nutrition, health	HumSex	Water	MedPlants	CPM	MigDev	Institutional
5.1. Academic impact							
5.3. Development impact							Not relevant

Impact at academic level

The projects have not had much impact on the other faculties within the university of Cuenca or on the university policy in general but contributed substantially to the obtainment of category A for the Cuenca university in 2016, because of the number of tenured professors with PhD, the number of scientific articles in international peer reviewed journals and the lab infrastructure and equipment. A critical mass of active researchers is working in different research groups and good practices of conducting research are visible. The project demonstrated within the university, for example, the importance of professors being actively involved in lab work or conducting field surveys. The IUC programme has put the debate on how to create a research friendly environment and - management system on the agenda of the university. However, discussions did not result yet in clear action and decisions taken. As described in the above, the institutional project was not able to contribute to substantial progress to that regard.

The most important achievement of the institutional project is the development of the Vanguardia programme, the honours programme that is supporting and stimulating the best students to finish there theses in time, to gain basic knowledge on research methodologies, to enhance their English proficiency and to apply for master and PhD scholarships locally or internationally. To date only 5 students have applied for a PhD scholarship, but the university has embraced the programme and an increasing number of faculties has started to show interest in the programme.

In each of the projects attempts were made to strengthen the link between teaching and research, with varying levels of success, from the development of masters in sciences, professional masters to the development of specific modules that could be integrated in existing curricula. Several of these masters were seen by Senescyt as exemplary for Ecuador, but only through the VLIR Network project (not part of the IUC) effective exchange with other universities could be established, which shows that additional funding is required to support scaling-up or multiplier effects of IUC project results Within the IUC there was little to no exchange with other universities that could adopt research or teaching practices.

The good assessment of the impact at academic level for the different projects was mainly caused by the fact that several research groups gained international and/or regional recognition for their expertise and several national and international universities look for collaboration with these research groups (mainly Food, nutrition and health, Water quality, Medicinal Plants and City preservation Management).

Finally, the IUC programme has not sparked other departments to initiate interuniversity collaboration. The IUC programme was embraced by the most active faculties that have shown interest in evolving towards a teaching and research university. Weaker faculties are left behind and there was no spill-over effect noticed from the IUC programme, most probably because the basic conditions to invest in research were not present at these faculties, among others the willingness to invest in scientific research.

Impact at development level

Impact at development level is linked to the extent the development objectives had been fully achieved (see effectiveness), which was the case in 3 of the 6 thematic projects, partially in 2 projects and not in the MedPlan project. The extent the projects effectively contributed to public policy development and to the up-scaling of knowledge and of management tools development was highly dependent on the absorption capacity at these institutional actors, which is in general low. The biggest impact can be noticed in the water quality project as there was a close collaboration with the public institutions responsible for water quality management and tools could be directly used by staff working at these institutions. Technical advice in this sector is frequently asked at the University of Cuenca. It can be assumed that this will contribute to better management of the availability of drinking water in the region.

Another substantial impact is the contribution of the project on human sexuality to open the debate on sensitive subjects such as sex education and sexual diversity. This has been actively taken up by the municipal and provincial government, though obtaining large impact is hampered because of the conservative national government policy regarding the subject. Also the food, nutrition and health project effectively has contributed to some impact, through the training of ambulant vendors in food safety and through the improved physical and nutrition condition of adolescents among the target group. The city preservation group had an impact through the improvement of housing conditions of a number of community members involved in the project.

It is too early to effectively measure impact at the level of public policy, but in particular at the level of the final beneficiaries.

2.2. Evaluation per project

2.2.1. Food, Nutrition and Health[3]

Overall the project aims to develop knowledge on nutrition epidemiology, physical activity, food consumption, food safety and quality assessment, in particular focusing on infants and adolescents. In Ecuador, there are large differences in the prevalence of malnutrition, evidencing nutritional transition characterized by rapid shifts in diet and reduction of physical activity. These changes are reflected in nutritional outcomes such as the co-existence of overweight and underweight in the same population and the appearance of chronic diseases. The project Food, Nutrition and Health aims to establish an interdisciplinary research department focusing on solving problems related to food insecurity and nutrition and health status. The department is expected to function as a source of information and centre of active knowledge exchange, combining teaching, research and extension activities. External services are offered related to epidemiological research, extension, and food laboratory analysis to contribute to the sustainability of the project.

The acquired knowledge about nutritional status, physical activity, food consumption and food quality and safety is used to design and develop intervention programmes, particularly in vulnerable groups and groups responsible of nutritional habits, i.e. infants and mothers (intervention about breastfeeding and complementary feeding), and adolescents. These interventions include the development of an integral educational programme on food consumption, food quality and safety to ensure adequate diet and physical activity patterns, aiming to improve nutritional lifestyles. A further implementation of these interventions by the government or local institutions is expected.

At the first phase of the VLIR-IUC project the nutritional status, mean intakes, current physical activity and fitness status in adolescents was assessed. Also dietary patterns, nutritional status, food quality and food safety among infants under 2 years was evaluated. Research targeted infants, their mothers and adolescents from the schools in Cuenca (urban) and Nabón (rural). In the second phase research on mycotoxins, vitamin A bio accessibility is continued as well as an impact evaluation of the intervention on breastfeeding and complementary feeding and a second impact evaluation of the interventions targeting the improvement of health of adolescents, aged 10 to 16 years old who attend secondary schools in an urban (Cuenca) and a rural (Nabón) area, in the context of the epidemic increases of overweight and related chronic diseases. In the second phase specific attention is paid to the establishment and consolidation for the research department, the finalization of the PhD studies that had started in phase 1 and the start of new PhD studies. Also the equipment of the lab accelerated in the second phase.

[3] Introduction sections for each project are extracted from the project proposal for the second phase

Factual data per research group

Hosting faculty	Faculty of chemistry
Number of staff in research group	A research group, currently composed by 17 researchers and assistants, integrated in the research department on biosciences of the faculty of chemistry – 8 researchers (4 with PhD and 4 with master degree) – 8 research assistants – 1 Lab assistant
Status of staff (fixed position, service contract, others)	3 tenured professors 5 contracted professors Other staff under temporary contract for the VLIR research project
Number of PhD finished/ongoing (within VLIR IUC)	3 finished PhDs 1 PhD to be finalised in 2017
Number of PhD finished/ongoing outside VLIR IUC	1 PhD trained in Spain
Number of publication in peer reviewed journals	22 scientific articles published in 12 different journals, all quartile 1

Evaluation questions

Relevance	
1.1 Responds to needs Score: Excellent	- Based on an initial request from UCuenca and in close collaboration between the project leaders to invest in research on the link between food, nutrition and health - Not much research was being done on nutrition and public health in Ecuador. - Prevalence of malnutrition and in the same time of overweight among infants and adolescents. - Research fitting in the national government policy "living well" but during the course of the project the ministry of health prioritized the group between 5 and 11 years, while the research is focusing on adolescents aged 10 to 16 years. - A lot of interest among stakeholders to participate in training and seminars and of students to start the Msc in Bioscienes. A market study was done beforehand that indicated that there is a market for MsC in Bioscience. Market study needs to be repeated.
1.2 Synergy Score: **Good**	- Limited collaboration with other VLIR projects, but several attempts to look for collaboration: o *Migration*: attempts to conduct joint research, but some methodological constraints (different intervention regions, different survey requirement) o *Water quality*: students and researchers engaged in the water quality research could make use of the lab of the food, nutrition and health research group.

	○ *Medicinal plants*: both research group form the research department on biosciences. Joint training of students and lab-assistants in the lab. ○ *Human sexuality*: PhD researcher from CIFSEX has trained the food, nutrition and health group on the application of qualitative methodologies. - Not much support received from the transversal project. The English courses and scientific writing provided by the library were relevant. The digitalization of the university as well. - The faculty of chemistry has strongly supported the Vanguardia programme
1.3 Coherence Score: **Good**	- Coherent intervention logic - Relevance of year 0 as the formulation period in order to explore relevant collaboration and achieve a consensus on the project between the project leaders. - List of external context factors of assumptions but no proper risk analysis - Intervention flexibly adapted to changes in the context

Final judgement/comments

The project is highly relevant. It responds to the need of the university to evolve towards an university combining education and research. The project was formulated based upon a project proposal elaborated by a team of professors from the faculties of Medicine and Chemistry focusing on enhancing research on food epidemiology and strengthening the laboratory. In close consultation between the project leaders the final project was developed aimed at institutionalising research on nutrition, food quality and safety and their impact on health. As the faculty of medicine lost interest (retirement of professors, low interest in conducting scientific research), the project was taken over by the faculty of chemistry.

Only the private university San Francisco in Quito had a small research group on the topic. In general not much research was being done on food, nutrition and health in Ecuador. The project was very welcomed by the university of San Francisco but also by other institutional stakeholders such as the ministry of health and the city of Cuenca (the latter receiving more competences regarding food safety and health due to the on-going decentralisation process).

The research topics address real needs in the Austral region where patterns of overweight and underweight are visible. The project is coherent to the national plan on “living well” that foresees in supporting health related research, and the Ecuadorian food programme implemented by the Ministry of Social Economic Inclusion that aims at achieving a 16.6% of decrease in malnutrition. During the course of the project the ministry of health changed its focus towards prioritizing the group of 5-11 years while the project was conducting research on the nutrition status and health of adolescents. The ministry would like to replicate similar research on this target group.

Regarding food quality, an updated Ecuadorian food composition database is not available which would allow the development of nutritional programmes based on local diets with the most accurate data of energy content, in regard to macronutrient composition. In addition, knowledge about micronutrient composition, particularly vitamin A, is highly needed in order to prevent its deficiency that is one out the 5 most important deficiencies in Ecuador. Further, Ecuador does not have any

food safety regulation for consumption or importation of different goods, for example regarding to mycotoxin contamination.

The lack of knowledge and appropriate policy development regarding food, nutrition and health legitimizes the research, the investment in short term trainings and the development of a master in biosciences. The latter was based on a market study that showed the need for such a master course.

The food, nutrition and health group has actively looked for collaboration with the other VLIR research groups and proposed to organise joint trainings. They received not much response. The people interviewed referred to several factors that hampered the weak synergy between the VLIR projects, such as the changes among project leaders in different projects, the lack of exchange between research groups (which was only limited to the level of project leaders), the heavy workload in each of the projects. The group assumes that with the level of maturity of the different research groups it might be more relevant and easier now to identify possible alignment and collaboration with the other projects.

The group is actively involved in the Vanguardia programme. 4 of the 5 teachers in Vanguardia-belong to this groups. Two ex-students of Vanguardia have joined the food, nutrition and health group. In the Vanguardia prgramme they had already developed two research proposals to the city of Cuenca. Access to the lab seems difficult for students but not for Vanguardia students.

The intervention logic is coherent and combines in a relevant way different research topics, short and long term training and education and relevant extension services (lab analyses and educational and health promotional programmes). The assumptions underpinning the intervention logic are poorly developed. The intervention was flexibly adapted, for example, the impact evaluation on breastfeeding and complementary feeding was removed when the pilot study showed that an intervention study would not be justified.

Effectiveness	
2.1 Academic Score: excellent	- Creation of a research group, embedded in the research department of biosciences, and development of research lines - 3 students that finished PhD have become contracted as professor and assigned with teaching hours (+/- 10/week) - Researchers combine teaching and research but receive sufficient hours for research. PhD researcher only teach a minimum number of hours. - Strong link between research and education – identification of students to do a thesis on research related themes and incorporation of good students in research group. - Established relations with University San Francisco Quito and the universities involved in the VLIR Network - Master students from Belgium have done internships at U Cuenca. Also exchange of students with Colombia. - Not possible to develop specific modules on nutrition that could be integrated in other curricula at university level (rigid structure) - Involvement in several networks:

	○ VLIR Network: Msc and Ecuadorian food safety network ○ Network of food science and technology of Argentina ○ Collaboration with universities of Colombia ○ Latin American Network of food composition data systems ○ Latino American Society of Nutrition (SLAN): creation of national chapter (together with USFQ) ○ NCD risk factor collaboration ○ International group of food monitoring
2.2 Development Score: **Excellent**	- The research group is member of the advisory board on nutrition and food safety for children and adolescents in Cuenca and provides advice on policies and regulations, for example related to school cantines and street vendors. The board uses the results of research in the preparation of a local law on food security and to launch a capacity building programme for ambulant vendors. The group has prepared a research proposal for micro-biological analyses of food sold by ambulant venders. - At national level, the research group also provided feedback on the reformulation of the national organic health code and on the Ecuadorian nutritional guidelines (in collaboration with the USFQ). The research group is part of the Ecuadorian network of food security and the advisory network of codex alimentarius in Ecuador. The research group is also leading the Ecuadorian chapter of LATINFOODS (researcher is vice-president of the advisory board) - School based health promotion campaign to improve food intake and physical activity targeting more than 3000 adolescents, their parents and teachers living in Cuenca. Results were shared with ministry of health. Not possible to implement a similar campaign in the rural area of Nabón. - No integration yet of specific nutrition and sports modules in the school curricula as curricula revision was not taking place (planned every 4 years). There is openness from the ministry of education to include nutrition in the next revision. - Specific outreach activities such as an integral health evaluation of the administrative staff and nurses of the public hospital in Cuenca; nutrition and food safety workshops in Nabón. - Results of the research on mycotoxin in Nabón shared with the ministry of agriculture and the Ecuadorian Agency on agro-quality assurance and discussion on actions to be taken - Development of a local food composition database
2.3 Scientific quality Score: Excellent	- 22 scientific articles published in 12 different journals, all Scopus quartile 1 and 5 articles in national peer reviewed journals - Research finding presented at international scientific conference (International food composition data conference, India, 2015) and 40 contributions in the forms of posters and lecturers at international and national conferences and the organization of a national Symposium of food, nutrition and public health, Quito, in collaboration with USFQ - Alliances with other national and international universities

	- Teaching skills improved because of experience at UGent: research based teaching (mainly applied in the Msc in biosciences). A course on analytical statistics, courses on research methodology and writing of scientific papers are integrated in the undergraduate and master programmes - Participating in the Msc in biosciences (created in July 2015 - VLIR Network project).

Final judgement/comments

The academic objective has been fully achieved. A research group was developed comprised by a multidisciplinary team that includes members with a chemical, nutritional and epidemiological background, who are part of the faculties of Medicine (Health Research Unit) and Chemical Sciences (Schools of Chemical Engineer and Biochemistry & Pharmacy) at Cuenca University. Both faculties contribute directly with physical spaces (offices, laboratories) and researcher. In addition, frequently under-graduated students are linked to the project through extension works and theses. The research group is embedded in the research department on biosciences at the faculty of chemistry. The research group is actively involved in the Msc developed in 2015 within the VLIR-Network project. 12 students have started in the first cohort, of which 5 come from Cuenca university.

Although the research group is a multi-disciplinary group, collaboration with the faculty of medicine has not always conducive. For example, the group did not achieve yet the integration of new modules on food and nutrition in the under graduate career on nutrition that is being organized at the faculty of medicine. Since the new dean of the medicine faculty, dialogues have restarted.

The scientific quality of the research conducted has been assessed as excellent. A high number of articles has been published in international peer reviewed journals of high quality. The research groups has actively participated in international and national conferences and maintains strong relations with other research groups (national and international level) involved in research on food, nutrition and health. The group won the INFOODS Success Stories Award for the work on developing a local food composition database.

The development objectives have been fully achieved. The research group has established good relations with different institutional stakeholders at local and national level, provides policy advice and nurtures the debate on nutrition, public health and physical activity with professionals and government representatives. This results in concrete actions taken by the city of Cuenca and schools to improve the health and nutrition situation of adolescents in Cuenca and to improve food quality of food sold by street vendors. The ministry of health and the city of Cuenca keep an interest in the research conducted by the research group and ask for replication of research towards other target groups and/or in other regions. At several occasions advice from the research group is requested. This is formalised by the integration of the research group in the advisory board on nutrition and food safety for children and adolescents in Cuenca.

Explanatory factors:

- Dedication of the team
- Good planning
- PhD in sandwich formula; alternating so that there was always one PhD present in de group to assure continuity of research conducted in Cuenca

- Close collaboration with project leader in Belgium: coaching from Ghent, close follow-up of the writing process, not only by the project leader but also by other team members or the research group in Belgium, Support from a Belgian PhD students doing field work in Ecuadorand several Belgian interns in Cuenca - Good selection of PhD students - A lot of internal consultation and strong group work (learned in Belgium) - Project leader, former dean of the faculty of chemistry, understanding the need for scientific investigation - The faculty of chemistry valorizes research but also problems were mentioned regarding the assigning of sufficient hours for research - Good relations with the city of Cuenca and the ministry of health. The coordinator of the nutrition unit of the ministry has a master in nutrition and understands the importance of research for policy development.

Efficiency	
JC. 3.1 Intermediate results Score: good	R1: Research on **adolescents** (with 14 publications in phase 2) R2: **Myxcotoxin monitoring** of most consumed food and risk exposure and food quality of infants and adolescents (8 publications) and one spin off project from the International Foundation of Sciences R4: data on **vitamin A bioaccessibility** on the local most consumed food is available (results presented in national and international meetings, publication in progress) R5: Creation of **nutrition department with physical infrastructure** (1 office and 2 labs), sufficient team members, laboratory and procedure manuals, no external services provided yet but potential) R6: **Trained personnel** (4 PhD) R7: Material for training and **promotion of healthy habits** disseminated and published R8: **Educational modules** on nutrition included on the Msc bioscience (not in school curricula) The research on breastfeeding (R3) was removed from the logframe: A research protocol was developed but based on a pilot study the intervention study was not justified
JC. 3.2 relationship input-output Score: Excellent	- Reasonable division over different project posts - Problems related to public procurement - Problems in obtaining permission for sample collection (R4) - No resources for rural campaigns - Additional external funding - Senescyt is supporting with scholarships.

JC. 3.3 Project management Score: Excellent	- Good relations with the PSU. Periodical meetings were held to provide a clear overview of the ongoing activities and administrative procedures - All research members have participated in financial, operational and strategic planning. - Good collaboration between researchers in Ghent and Cuenca, supported by clear protocols and manuals - VLIR has reacted fast and was flexible to manage the procurement problems that had arisen since the creation of the Sercop procurement policy.

Final judgement/comments

Almost all *intermediate results* have been achieved or are in a process of being fully achieved by the end of the year. The research on breastfeeding and complementary feeding was not implemented (not assed as justified after pilot study) and the promotional health campaigns were limited to the urban region in Cuenca; it appeared too ambitious to conduct a similar campaign and research in the rural area of Nabón with the resources available. There were several delays in the implementation of the project, mainly related to the delays in procuring lab equipment (due to the changed government policy on public procurement).

The project knew a slow start during the first phase: the project had started with a group of tenured professors of the faculty of medicine. It appeared difficult to engage professors for PhD studies. In particular de faculty of medicine did not give permission. With the mass retirement in 2013 most of the initiators of the research project had left. A similar delay did not take place in the second phase of the project.

Input-output: the project shows a budget division coherent to the other projects and the overall programme logic. Several PhD students alternated their stay in Belgium and in Cuenca, guaranteeing the continuity of the research being conducted. The project also enabled exchange of students between Cuenca and Belgium. Additional funding was obtained (in Belgium and in Ecuador) to enlarge the group of researchers. With support from the university additional assistant researchers could be hired. There was an overspending in investment costs during the first years of the second phase. Not enough operational resources were foreseen to conduct research also in rural areas.

Management roles, tools and procedures and systems were clear and respected by all stakeholders involved and helpful for monitoring and managing the project. The research group acquired relevant project management competencies. Moreover, the research group improved working in group, joint planning and participatory decision taking. The strong participation process has allowed to develop and coordinate the annual planned activities of the project and generate a working environment with good communication between the members.

Sustainability	
4.1 Institutional Score: Excellent	- The research group is integrated in the research department on bio-sciences, embedded within the faculty of chemistry. - Research oriented faculty supporting researchers assigning sufficient research hours and appropriate physical infrastructure - 1 PhD graduate is a tenured professors, the other PhD graduates are contracted professors. The faculty of chemistry has planned to open 7 vacancies, one or two will be made accessible for the nutrition group. PhD graduates can also participate in competition at the faculties of medicine or physics - 2 posts for laboratory assistant will be created in the research department of bioscience - Strong link between undergraduate and master courses and research conducted - Involvement in different national and international networks (see effectiveness)
3.2 Financial Score: excellent	- The group has shown the capacity to present research proposals to the DIUC (e.g. with university funds research materials could be purchased for one of the master researches; one VLIR PhD has been complemented with a Senescyt scholarship) - Laboratories have potential to provide paid services to external actors - The group is developing a VLIR TEAM project (including one PhD) and another research proposal involving a PhD at UGent (if project will not be approved it will be covered by DIUC funding). - The group was able to attract funding from: Nutrition Third World, International Foundation of Sciences, REDU (Red Ecuatoriana de universidades y escuelas politecnicos para investigacion y posgrados) and of additional VLIR projects (VLIR Network and TEAM) and DIUC
Final judgement/comments	
Institutional sustainability of the food, nutrition and health research group is guaranteed. The group is embedded in a research department and as such has access to administrative and operational support from the university. Most probably the current number of researchers and research assistants will not be maintained after the project but a critical group of researchers, including tenured professors will continue conducting research in the field of food, nutrition and health. The research group is also embedded within the Ecuadorian society and advice is frequently requested. The research group has gained international and national recognition and acquired project proposal development skills. The research group has potential to attract external funding and is very much stimulated by the Flemish counterpart in doing so.	

Impact	

5.1 academic level
Score: good
	- Limited impact on other faculties but:
	  ○ The research group has invested a lot in communicating with different faculties, to show the importance of the research being done and its contribution to development (limited response).
	  ○ Collaboration is looked for with different faculties: chemistry, medicine, physics and philosophy. Regarding the latter a specific research project is being implemented with the collaboration of the faculty of philosophy (link between nutrition, health and sports in schools).
	  ○ Dialogue restarted with the faculty of medicine to integrate a module on nutrition and health in their curriculum on nutrition
	- Other national and international universities are asking for collaboration and want to make use of the laboratory
	- Good practices are shared with other universities at international conferences, e.g. Successes of developing a local food composition database.
	- Exchange of research results with the only other research group in Ecuador on nutrition and public health at USFQ

5.2. Development Score: good	- Contribution to policy debate on nutrition and public health - Successful implementation of the school-based health promotion intervention among adolescents in Cuenca with effects in improving dietary intake, physical activity and physical fitness among adolescents. No up-scaling yet at national level due to other government policy priorities. - Municipality of Quito interested to apply the educational toolkits during their school-based health promotion interventions
Final judgement/comments	
Academic impact: The project had not much impact on the other faculties within the university of Cuenca or on the university policy in general but contributed substantially to the obtainment of category A for the Cuenca university in 2016, not at least because of the number of scientific articles in international peer reviewed journals. The research group is embedded within the faculty of chemistry that has embraced scientific research. The group is calling the other faculties to do the same and small achievements are being realised with the faculties of medicine and philosophy. The research group has received national and international recognition for its expertise and several national and international universities look for collaboration with the research group. *Development impact*: the biggest impact has been achieved through the health promotional campaign among adolescents in Cuenca, with clear indications of improved nutrition and health of the targeted adolescents. Other impacts are less evident to document. The research group has influenced the policy debate on the nexus between nutrition and public health but policy development and implementation in Ecuador is slow, in this case - among others - due to (i) staff changes at the health department of the city of Cuenca and at the nutrition unit within the ministry of health;	

(ii) lack of financial resources at government level to up-scale health promotional campaigns or finance research (e.g. on food and nutrition in the age group of 6-11 years) and (iii) regime change.

2.2.2. Human Sexuality

Although big efforts have been made on the issue of preventing teenage pregnancies, in 2008 Ecuador had the highest rate of teenage pregnancies in the Andean region. Most of these pregnancies were unplanned or unwanted. With respect to violence, according to the latest Demographic and Maternal and Child Health (ENDEMAIN, 2004) approximately 10% of women between 15 and 49 had suffered some form of sexual violence. For 42% of women who have been victims of sexual abuse, this happened before age 15. The project on human sexuality aims at contributing to improved sex education for adolescents in order to have an impact on the decrease of the prevalence of early pregnancies, sexual transmitted diseases and abortion.

The study and understanding of human sexuality as planned in the VLIR projects is based on a holistic approach, which requires an interdisciplinary professional team, in order to integrate different thematic approaches as well as address the complexity of the issue. It involves the participation of professionals from different disciplines that need - in addition to their disciplinary training – extra training in the field of sexuality and relationships, and in research and knowledge generation. The objectives of the project on human sexuality are (i) to promote the professional training of the professors of the University of Cuenca, with the possibility to develop PhD studies in the field of sexuality; but also (ii) to improve the teaching processes that will be based on the analysis and comprehension of contextualized, updated knowledge about the topic of human sexuality. Since there is no expertise about sexuality or sex education at the Cuenca university, the project aims at the formation of two people at a master degree of which one can continue with a PhD during phase 2. The project also aims at developing a professional master on family and sexuality studies.

During Phase I of the project, the research had focused on getting to know the reality of sex education adolescents receive at schools in Cuenca. Research was conducted with adolescents, parents and teachers as main actors of the educational process. The analysis of the results of the studies made clear that there are two main problems in sex education in Cuenca. The first one is the lack of contextualized knowledge about the sexuality in adolescents, which makes that the majority of educational programs are not aligned to the reality of the adolescents and have no impact in the population; and the second one is the lack of trained teachers to address the issue in the high schools. An important finding of the studies was that the identified actors have been working in an isolated and often disorganised way, without setting forward clear goals and without any evaluation of the processes or the outcome of their work.

For the second phase of the project, a proposal of sex education for the teachers of the high schools in Cuenca is developed in a “training the trainers” style, including a process of evaluation of the results and the impact of this training programme. This training proposal, together with the creation of formal links among the different actors, will allow a better establishment of goals, monitoring, evaluation and feedback of the interventional programmes on human sexuality. Moreover, the permanent research processes will provide contextualised knowledge about the sexuality of adolescents which will constitute an important input for the relevance of the interventions.

The research component of the project builds further on research lines identified in the evolution of Phase I: sexual development of adolescents and cultural factors that have an impact on the sexual development of adolescents. The intervention component requires close collaboration with Ministry of Education and other stakeholders that are dealing with sex education and sexual violence.

Factual data per research group

Hosting faculty	Philosophy
Number of staff in research group	CIFSEX – Centro de Investigacion Sexualidad A research group composed by 6 researcher
Status of staff (fixed position, service contract, others)	Multi-disciplinary group at CIFSEX (psychology, philosophy): - 3 tenured professors having a PhD (one to be finalized in 2017), all involved in research - 1 contracted lecturer, PhD in process, researcher - 1 contracted lecturer, PhD in process (not VLIR), responsible for networking and collaboration with external stakeholders - 1 contracted undergraduate in psychology, research assistant Complementary to the CIFSEX group, two other staff members are involved in the project, in particularly in the management of the professional master in sexuality, developed by the project. 1 contracted lecturer, with a master in sexuality from KU Leuven, is current director of this master and 1 contracted teacher of the faculty of medicine is the coordinator of the master. Staff of the research group give courses in the professional master. The research assistant is currently studying this master.
Number of PhD finished/ongoing (within VLIR IUC)	1 PhDs finished and 2 PhDs on-going (complemented by a Senescyt scholarship); 2 in biomedical sciences (KU Leuven) and 1 in educational sciences (UGent)
Number of PhD finished/ongoing outside VLIR IUC	1 PhD in ? (Maria Dolores) 1 PhD in educational sciences on-going, in Argentina
Number of publication in peer reviewed journals (scopus + quartile)	2 scientific articles in Scopus Q1 3 scientific articles in Scopus Q2

Evaluation questions

Relevance	
1.1 Responds to needs Score: **Excellent**	- Subject of the project for the second phase clear (focus on sex and relationship development in adolescents and sex education) and

	responding to real needs at academic level and at development level - High number of unplanned and unwanted pregnancies, lack of data on adolescent sexuality at national level and in Cuenca - High prevalence of gender based violence - Lack of appropriate sex education in schools, universities and in non-formal education spaces - Lack of appropriate or efficient policies on sex education, sexual diversity and gender based violence - No research practice on human sexuality at the Cuenca university (some research practice on reproductive health and intra family violence) and no formal education(courses) on human sexuality - Request from different policy makers at city and provincial level for research data on adolescent sexuality - During project implementation the national policy on reproductive health and rights, incl. sex education, changed into a conservative policy hampering the promotion of sexual health and sex education and as such limiting outreach of the project. (from Plan Familia to ENIPLA[4])
1.2 Synergy Score: **Sufficient/Good**	- Limited collaboration with other VLIR projects o *Migration*: synergy was looked for but no cooperation could be obtained o *Human sexuality*: PhD researcher from CIFSEX has trained the food, nutrition and health group on the application of qualitative methodologies. o *No support received from the transversal project*: except ICT improvements - No synergy with other VLIR projects in the country or at regional level - Synergy with project support by Spain on sexual diversity (through the Promoteo programme of Senescyt). Spain is accompanying the reflection on the continuation of the professional master. - Collaboration has been looked for with other faculties involved in similar research topics such as the faculty of medicine (psychiatry), Faculty of jurisprudence (career on gender and development), Faculty of philosophy (teacher training- sex education in elementary education) and faculty of psychology (sexology and sex education for children and adolescents). Lecturers of these faculties collaborate in the professional master and joint workshops and conferences have been organised.

[4] ENIPLA: Estrategia Intersectorial de Planifiacion Familar y Prevencion del Embarazo. The former national policy Plan familia was based on a multi-sectoral approach to prevent teenage unwanted pregnancies. The new plan is based on conservative views on sexual education, limits the access of youth to contraceptives, criminalizes abortion and emphasizes abstinence as basic prevention principle.

1.3 Coherence Score: **Sufficient/good**	- Difficult start of the project, because of different interests among project leaders in Belgium and Cuenca (foci on reproductive health, human sexuality, family violence). Eventually agreement to work on the promotion of human sexuality. - Coherent intervention logic - List of external context factors of assumptions but no proper risk analysis - Difficulties in adapting the project to the changes in the context (limited political support for sex education in schools)

Final judgement/comments

The project on human sexuality is very relevant both at academic level and at development level. At the start of the project, there was no research practice on human sexuality at the university of Cuenca. Most of the related research was done from a biological/medical point of view and lacked rigorous research methodologies. In several faculties subjects related to human sexuality were included in curricula but limited scientific research was being done. The university had no culture of doing multi-disciplinary research, which was – inspired by the counterpart in Belgium – perceived by the project leader in Cuenca as necessary for studying the complexity of human sexuality. The project was seen as an opportunity to introduce mixed-method approaches in social scientific research and to strengthen qualitative research competencies.

The project had a difficult start and lost about two years in the first phase before it effectively could be started. Several factors explain the slow start of the project. Most importantly, the initial project proposal was rather weak and focused mainly on enhancing knowledge on sexual and reproductive health, from a medical point of view and on family violence. This did not match with the expertise that could be provided by the counterpart in Belgium. The lack of local expertise on studying sexuality from a holistic point of view also explain why the initial focus of the project was put more on sexual and reproductive health. Other factors related to the lack of knowledge of English of the first project leader and conflicts between the second project leader and the Flemish project leader[5]. Since the appointment of the third (and actual) project leader communication improved, a common understanding of the project could be achieved and clear research lines could be defined.

The project is also very relevant taking into account the Ecuadorian context, with a lack of a comprehensive strategy on sex education, the high number of unwanted teenage pregnancies and high level of family-violence. Decreasing the number of unwanted pregnancies always has been a priority for the Ecuadorian government and is included in the national plan on good living. The Ministry of Education (Directorat of the province Azuay, department of health and well-being of students) showed interest in a collaboration with the university of Cuenca and gave permission to implement research in schools in Cuenca in order to study sexuality of adolescents, which could provide information to adapt the modules on sex education. However, during project implementation the national policy on sexual and reproductive health and rights, including family planning and sex education, changed three times. In 2015 the new policy (ENIPLA) was approved by the government, which limited the room for manoeuvre regarding sex education (conservative approach on sex education, with for example a focus on abstinence as the only preventive strategy). The

[5] Conflict -among other issues- was mainly the result of incorrect translations of the south project leader of project documents, using his power to push through his own ideas causing a division within the research group.

principles and guidelines of the new government policy were in contradiction to the points of view of the research group and to the results emerging from research on sexuality among adolescents. The new policy also prohibited the implementation of sex education as was conceived by the research group. The project subject remained very relevant but the outreach/extension component of the project lost relevancy taking into account the changed government policy.

The project looked for synergy with other VLIR projects but, mainly because of the heavy workload within the project and the relatively small team of researcher, no collaboration or alignment with the other projects could be achieved. Only a workshop on qualitative research methodologies was provided to the food, nutrition and health group. The CIFSEX group only benefited to a limited extent from the transversal project (mainly improved ICT infrastructure) and is not actively involved in the Vanguardia programme (only recently the group was asked to provide some teaching classes on qualitative research methodologies). The CIFSEX group could not benefit from the expertise on statistics, acquired by one PhD student within the transversal project. The CIFSEX group is not involved in other VLIR projects. A score of "good" is given because the group actively looked for synergy with other projects (like the Prometeo intervention with Spain) and tried to strengthen multi-disciplinary research and education, looking for collaboration with other faculties (medicine, psychology, philosophy, law). The results are still limited but education modules are being integrated in curricula provided by each of these faculties.

The intervention logic is coherent and combines in a relevant way different research, master (in Belgium and in Cuenca) and PhD training, short term trainings in Cuenca, the development of the research group and the development of extension services based on research results. The assumptions underpinning the intervention logic are poorly developed and there is a lack of risk management. No appropriate answer could be developed to the changed policy on sex education (lack of time and resources to explore alternative approaches).

Effectiveness	
2.1 Academic Score: **Excellent**	- 3 PhD formed (1 finished and 2 to be finalised); 2 in biomedical sciences and 1 in educational sciences 2 researchers have also finished first a master at KU Leuven, one in educational sciences ; and one in human sexuality studies. - Research conducted on sexual behaviour of adolescents in Cuenca (schools and university) and on gender based violence - Several publications in national and international peer reviewed journals (#10, of which one in the first phase) and chapters in books (#8, of which 6 during the first phase) - Participation in international conferences (# 12) - Creation of a professional master on sex education (based on the master in sexuality in Leuven), approved by CES in 2013 for two cohorts (about to finish), targeting school teachers, with a total of 50 students (# 27 + 23). - CIFSEX is only involved in two international academic networks:

	○ RED-LIESS: Laboratorio iberoamericano para el estudio socio-histórico de las sexualidades ○ Thematic network for SRHR policy research and advice, launched in December 2016 (directed by ICRH UGent)
2.2 Development Score: **Good**	- The objective to systematize sex education in a sustainable matter was not achieved due to the changing political context. Developed modules to be integrated in school curricula were not approved because of being in contradiction to the (very conservative) national plan on sex education (Plan Familia) - A module on sex education still is integrated in the education courses offered by the faculty of philosophy (teacher training) - Consolidation of the Sexual and Reproductive health Network (REDSEX) – Involvement of the city of Cuenca, Sendas (NGO) and the U Cuenca; and 26 other NGOs and mouvements - Contribution to the creation of the Cantonal board for the eradication of gender based violence, directed by the gender department of the city of Cuenca. Results of research on gender based violence were shared with the board. ○ Red de Salud Sexual y Reproductiva del canton Cuenca ○ Mesa Cantonal para la Erradicación de la violencia de genero e inrefamiliar - Expertise of the CIFSEX is recognised by police, the city of Cuenca and provincial government - Training of 150 school teachers and 100 professionals - Module on sexuality for students of the university of Cuenca
2.3 Scientific quality Score: **Sufficient/good**	- Five scientific articles in international peer reviewed journals, indexed by Scopus (2 in Q1 and 3 in Q2) - 15 full papers in international conference proceedings and 1 presentations at an international conference (Conference on adolescence, youth and gender, 2016)

Final judgement/comments

The academic objectives have been fully achieved. Knowledge on human sexuality has increased, is being used in policy debates and integrated in curricula at different faculties of the Cuenca university. An interdisciplinary research group, though relatively small, is formally created. More PhD have been formed than planned and researchers have acquired competencies to implement qualitative research methodologies and have begun to explore mixed-methods approaches.

A professional master on sex education was approved by CES in 2013 for two years. This master responds to a specific need as it targeted school teachers and professionals active in the field of sex education, SRHR and gender based violence. The master is very much appreciated by the students because of its relevance and high quality. Critical comments relate to some repetition of courses, lack of alignment of thesis to practice of students, varying quality of lecturers (national and international). It seems that there is a missed opportunity to experiment with blended learning, group work, problem based education. Professionals interviewed also referred to the difficult access to the master because of the teaching hours, irregular planning, high cost and required English proficiency level to be obtained at the end of the master. These considerations need to be

taken into account in the reflections on whether or not to apply for a new recognition of the professional master or to develop a master in science (need for a market study).

The scientific quality of the research conducted is assessed as good, taking into account the number of scientific articles published in international peer reviewed journals and the presentation of research at one international conference. As the research group is a multi-disciplinary group, there is no direct or strong link with undergraduate and master careers at the university of Cuenca, but research is integrated in existing undergraduate studies at different faculties, through specific modules on sex education given by the members of CIFSEX. The research group is only member of two international networks and still needs to be positioned within these networks.

The objective to systematize sex education in a sustainable manner was not achieved because of the changed political context. Within the project, school teachers and professionals in the field of SRHR have been trained but outreach evidently is limited. At the faculty of philosophy future school teachers are also trained in sex education. The extent to which acquired knowledge and teaching modules can be put in practice will be limited at the short term. However, the project contributed to new knowledge and better comprehension of sex education among a growing group of people, which will pay-off at the moment the political context will change.

The expertise of CIFSEX is recognised by several institutional actors such as the city of Cuenca, the province of Azuay, the ministry of education and several NGOs. CIFSEX has contributed to improved knowledge on sexuality on adolescents among practitioners and has influenced the policy debate on SRHR at city level and provincial level. CIFSEX also contributed to the consolidation of the REDSEX, a network of different public actors and civil society organisations active in the field of SRHR and sex education.

Explanatory factors:

- Very committed team
- Combination of master and PhD studies in Leuven, short term training in Cuenca and group visit to the university of Ghent (ICRH)
- Inter-university collaboration in Belgium (KU Leuven and UGent)
- The structure of the CIFSEX group was very much supported by DIUC and seen as an example for the set-up of research groups
- In the first phase 4 professors have finalised master trainings in social psychology (#1) and on sex education (#2) at the University of Camahue, with local scholarships. Two professors finished a master in educational sciences at the university of Cuenca. These people have left the project but still support the project and facilitated the integration of sex education in the curricula of their respective faculties.
- Having a staff member in the research group that is specifically responsible for liaising with external stakeholders, which explain the good collaboration with external stakeholders. This kind of investment is not valorised by DIUC (not valorised in research proposals).

Efficiency	
3.1 Intermediate results Score: **Excellent**	R1: Two researches on sexual development of adolescents in Cuenca (survey in different schools of Cuenca) – no publication yet R2: research done on the impact of migration of parents on the affective development of adolescents in Cuenca – with publications R3: Research on cultural patterns and attitudes and behaviour affecting sexuality of adolescents – publication under revision R4: 150 school teachers trained on sex education, accompanied with research on sex education R5: 3 professors with PhD, 7 team members trained in Belgium on scientific writing, violence prevention, research methodology, education, sexuality and creation of a professional master programme at university of Cuenca R6: 4 curricula have included a module on sexuality on their curricula (medicine, psychology, jurisprudence, philosophy) and development of an elective course on sexuality for all students R7: creation of CIFSEX with appropriate infrastructure and equipment
JC. 3.2 relationship input-output Score: **Sufficient/Good**	- Reasonable division over different project posts - Good combination of activities such as long term stay in Belgium (sandwich scholarships), masters in Belgium, short term trainings in Belgium and Cuenca - Participation in a high number of international conferences by the same researcher can be questioned - Not sufficient resources available to conduct social science oriented research (e.g. need for enumerators)
3.3 Project management Score: **Excellent**	- Good relationships with the PSU - Clear and transparent procedures and guidelines - All team members participated in decision making
Final judgement/comments	
Almost all *intermediate results* have been achieved or are in a process of being achieved by the end of the year (publications to be finalised, PhDs to be finalised – one exception with one PhD to be finalised in 2019). Apart from the initial delay at the start of the project, no major delays in project implementation could be noticed. The most important delays are the finalisations of the PhDs that require more time than planned, due to a combination of factors: personal factors, the low number of research hours made available for the PhD students in Cuenca and the competition of many other tasks at the university and the sometimes slow response from (co-) promoters in Belgium. The initial low English proficiency also explains the time needed to publish scientific articles. All these factors were managed properly within the given context. *Input-output*: there is a reasonable division over the different project posts, in line with the overall programme logic. There was a good combination of activities such as long term stay in Belgium	

(sandwich scholarships), masters in Belgium, short term trainings in Belgium and Cuenca. There was an overspending in investment and an underspending in the scholarships. Not sufficient resources were available to conduct social science oriented research (e.g. need for enumerators). The participation in a high number of international conferences by the same researcher can be questioned. There have been discussions between the project leaders and the programme coordinator on the purchase of specific software (SPSS), which related also to the lack of synergy between the projects.

Management roles, tools and procedures and systems were clear and respected by all stakeholders involved and helpful for monitoring and managing the project. The research group acquired relevant project management competencies.

Sustainability	
4.1 institutional Score: **Low**	- CIFSEX established and involving 3 tenured professors. Group still small and not formally integrated in a research department. - No policy at the involved faculties to assign sufficient hours for research. Research threatened by other tasks (teaching and administration) - Interest of students from the faculty of psychology that are doing their theses on related subjects. - Master programme only approved for two years. CIFSEX is studying whether it is relevant to apply for a new approval of the professional master or to start developing a master in science (with support from Spain)
4.2 Financial Score: L**ow**	- Tenured professors can present research proposals at DIUC but no initiative taken so far - The new city policy on the promotion of sexual and reproductive health and rights has resulted in a 5-year action plan with an annual budget (2-10% of the city budget). Part of the budget is assigned for research. Currently no research proposals have been presented as the team is finishing the VLIR research projects and no time is left for other initiatives. But potential the coming years. Lot of demand for applied or policy oriented research by the city of Cuenca and the provincial government
Final judgement/comments	
Institutional sustainability of CIFSEX is weak. The research group had been officially recognised as a research group in 2011 by the university board but policy regarding the institutionalisation of research groups has changed since 2012, resulting in a policy vacuum on that matter. The research group is not integrated in a research department but is exploring possibilities to create a research department. Ideally, too strengthen the multi-disciplinary character of the research on sexuality, a research department could be formed by research groups on related subjects that exist within the faculties of philosophy, psychology, medicine and law. There are however no real commitments, except the fact that the faculty of psychology is interested to host such a research	

department. There is not yet a good practice on multi-disciplinary and inter-faculty research departments at the Cuenca university. The research department on population studies could have been an interesting option (and was explored by the group) but this department is weak in itself.

The research group, although small, counts sufficient tenured professors that could provide continuity of the work being done (set-up new research, attract students to make their thesis in the field of human sexuality, continue developing a master programme, etc.) but they are taken by many other responsibilities and only assigned with a limited number of research hours. The group is not embedded within a specific faculty (though hosted by the faculty of philosophy), as such each of the professors have to fulfil their duties at their respective faculties and there is a lack of alignment in education and research policy between the faculties involved. If the group cannot attract sufficient external resources for research, the group risks to vanish.

Financial sustainability is also at risk. From the interviews, it is learned that it is difficult to attract funding for research on human sexuality. The researchers have been taken by so many tasks that there has not been time yet to develop research proposals that could been presented at DIUC or external funders. Participation in international networks did not offered possibilities yet to access external funding.

Possible external funding has been explored by the group. A new research line is in the pipeline that could be presented at SENESCYT, the WHO and UNICEF. At national level, the REDSEX contributed to a local law (ordenanza) at the city of Cuenca that promote SRHR and sexual diversity. The policy also foresees in an annual budget with a budget line specifically for scientific research. CIFSEX is recognised by the city of Cuenca as a legitimate research institute to provide this kind of research.

Impact	
5.1 academic level Score: **Low**	- CIFSEX is recognised as a model for research groups by DIUC but lack of policy of the university to that regard. - Some modules on human sexuality and sex education are integrated in curricula of other faculties (medicine, philosophy, psychology, law) - No protagonist leadership of the research group at international level but strong at national level. Only group conducting research on human sexuality. - Not much transfer of research practice or teaching practice gained during the project to other faculties. Rather isolated project that is limited in its operation due to limited financial and human resources and lack of sufficient research hours.
5.2 Development Score: **Good**	- Successfully lobbied the city of Cuenca to obtain a public policy on the promotion of sexual and reproductive rights and sexual diversity. The policy includes different intervention lines (prevention, promotion of sexual health, support, …) including research. - The REDSEX is a model for strengthening the participation of the civil society in policy implementation on sexual

	and reproductive health. Opportunities to upscale the network up to national level. - Through the training on sex education awareness raised on sexuality and sex education, mental schemes broken and debate generated on controversial subjects - Mesa Cantonal demanded to develop a structured and systematic referral system for victims of gender based violence. The experience of the visit to Gent was conducive in creating such a referral network. - Although the curriculum on sex education could not be integrated in the teachers' and school curricula, a number of teachers and professionals have been trained on new concepts of sexuality. They are becoming change agents.

Final judgement/comments

Academic: The project had not much impact on the other faculties within the university of Cuenca or on the university policy in general but contributed to the obtainment of category A for the Cuenca university in 2016, because of the number of scientific articles in international peer reviewed journals and the PhDs being formed. The research group operates as a rather isolated group within the university although many attempts were made to strengthen collaboration with other faculties such as medicine, philosophy, psychology and law. The research group is the first multi-disciplinary group in Ecuador that is conducting research on human sexuality and as such has not found yet counterparts at other universities. The group is only starting to profile itself at international level.

Development impact: the project had substantial impact on the public debate in Cuenca and at provincial level regarding sexuality and sex education. The research group is the first group in Ecuador that approaches sexuality from a holistic perspective and focused on human sexuality and sex education. Through the trainings on sex education, awareness is raised on sexuality and sex education, mental schemes are broken and debates are generated on controversial subjects. People trained are becoming change agents regarding sex education. The REDSEX, a network that was revitalised and consolidated with the support from CIFSEX, is seen by several external stakeholders as a model for strengthening the participation of the civil society in policy development and -implementation on sexual and reproductive health. Policy makers at municipal and provincial level have appreciated the provision of research results that were used for policy development. There are opportunities to upscale the network up to national level.

The project could not achieve the integration of sex education in school curricula and as such had no direct impact on awareness raising of adolescents. Impact was limited to students that followed the elective course on sexuality and sex education at the Cuenca university.

2.2.3. Integrated water quality management

The full name of Cuenca is "*Santa Ana de los cuatro ríos de Cuenca*". The four rivers: Tomebamba, Yanuncay, Tarqui, and Machangara dominate the topography of the city. As such the water project is very much linked to the essence of the city. The project on integrated water quality is focusing on the water resources in the Paute river basin, aiming at reaching and maintaining good water quality for present and future generations and for its different uses. Although the region is seemingly blessed with water, the enormous temporal and spatial variation in micro-climate urges for a cautious use of the basin's water resources. In the project proposal several problems are described such as: slash and burn of vegetation, Land use changes resulting in an increase of agricultural and urban activity in the upper part of the catchment and in the water source areas, Increase of erosion and high sediment production.

The Subsecretaria de Saneamiento Ambiental (SSA) attached to the Ministerio de Desarrollo Urbano y Vivienda (MIDUVI) is the guiding body concerning governmental regulations on drinking water quality. In addition, the Ministerio del Ambiente (MA) published the 'Texto Unificado de Legislación Ambiental Secundaria' (TULAS). The standards formulated by SSA and MA are compulsories for all institutions that are responsible for water supply as there are the municipalities, public or private companies and water councils. In general terms, SSA mentions regulations on: the location of water collection, piping and pumping-stations, source protection and maintenance of ecological discharges. SSA specifies as well the physical, chemical and biological characteristics of drinking water, which need to be regularly updated. There is however a lack of political support and control on the implementation of the legislation, lack of research on wastewater treatment for region-specific conditions, absence of an inventory of water quality resources and Lack of funds to implement systematized studies and monitoring to determine water quality and its variation in time.

In order to address these problems, the project is focusing on the evaluation of the basin's water resources and its potential uses, the current uses, losses and contaminations, the potential factors that put at risk the appropriate supply of water as much in quantity as in quality to satisfy the different needs. The project aims at enhancing knowledge on the vulnerability of the water availability in the Paute river basin among all public and private stakeholders involved in water management at national, provincial and local level. To that end the project collaborates with different institutions such as ETAPA (public drinking water company), CELEC EP Hidropaute (public hydroelectric power company), Elecaustro (private electricity company), EMAPAL, UMACPA (etc. to allow a continuous exchange of knowledge and good practices. The project aims at developing management tools related to integrated water management based on science and train water management administrators to use these management tools.

The project builds further on the research conducted during the first phase. Topics included were among others: watershed management, an integrated analysis of the effect of human interference on the water quality at catchments scale, the establishment of a detailed monitoring system at catchments scale, the capacity improvement in water quality analysis and the modelling at catchment scale of the sediment transport. In the second phase research focused on wastewater treatment systems, the impact of climate change on water quantity and quality, the chemical composition of stream flow of the Tarqui river basin, groundwater surface water interaction in the Tarqui alluvial plain and the groundwater resources of the Paute basin. It was also foreseen to develop educational programmes in the field of water resources management and technology at bachelor, master and PhD level within the faculty of Engineering of the U. Cuenca, in close collaboration with PROMAS, with regional partners and with international partners. Formal collaboration was looked for between the Msc in water sciences in Ecuador and the

Interuniversity Programme in Water Resources Engineering in Flanders. The structure allows for the exchange of teaching staff and students and aims at common curriculum development.

PROMAS has already a long history with the KU Leuven and the group was one of the driving forces behind the development of the initial proposal responding to the VLIR call for IUC programmes.

Factual data per research group

Hosting faculty	Faculty of engineering, department of civil engineering
Number of staff in research group	No research group was created. The 6 PhD formed joined either PROMAS or the research department of water resources (the latter not being part of the VLIR IUC).
Status of staff (fixed position, service contract, others)	Both PROMAS and the research department on water resources are departments operating outside the engineering faculty but maintain relations with the faculty. The director of PROMAS is a tenured professor with PhD involved in doing research at PROMAS and teaching at the faculty. Most of the researchers dedicate their time to research, some of them are also involved in teaching in the undergraduate and master careers. PROMAS: 40 persons Research department water resources: 30 persons
Number of PhD finished/ongoing (within VLIR IUC)	3 PHD finished and 3 to be finalised in 2017
Number of PhD finished/ongoing outside VLIR IUC	Several researchers at PROMAS and the water resource department have obtained a PhD, through former VLIR projects, Belgian scholarships or other foreign scholarships. A total of 20 PhD researchers
Number of publication in peer reviewed journals	8 scientific articles in Scopus Q1 and 5 scientific articles in Scopus Q2 journals, spread over 9 different international peer reviewed journals + 2 articles in lower quartiles.

Evaluation questions

Relevance	
1.1 Responds to needs Score: **Excellent**	- Project based on initial interest of PROMAS to enhance knowledge on water quality on the Paute basin - Need to increase the number of PhD researcher and strengthen scientific research
1.2 Synergy Score: **Low**	- Not much collaboration with other VLIR projects: ○ *Medicinal plants*: the project on integrated water quality is making use of some of the lab equipment available at the research department on biosciences. Professors of this project are asked to teach courses in the Msc in hydrology

	○ *CPM*: attempts were made to make use of the monitoring tools developed in the CPM project (monitoring surfaces through air photography) ○ *Transversal project*: apart from the ICT support, not much support received. PROMAS has its own library that is being used by students and access to international journals is facilitated through the international contacts with Belgium and abroad. Not much involved in Vanguardia. The own undergraduate courses attain already a high level, including research methodology and English proficiency and good students continue with masters at the own faculty. ○ *VLIR-Network*: PROMAS is collaborating in the Msc program in water resources setup by ESPOL (together with UTN and EPN) which was recognized by CES in 2014 for 5 years - Weak synergy with the projects implemented by the research department on water resources
1.3 Coherence Score: **Good**	- Coherent intervention logic but the focus was put on the formation of new PhDs. Several other interventions not included in the original logframe but later on added - Weak development of assumptions and risk analysis

Final judgement/comments

Relevance – the project is very relevant in the national and regional context. In the first place it provided an answer to the need of PROMAS and the engineering PROMAS was created in the nineties (after the Josefina flooding that showed the urgent need to enhance knowledge on water management in the Paute river basin). With close support of the university of Leuven. PROMAS has established a long term collaboration with Flemish universities. The VLIR IUC created the opportunity to strengthen further the scientific research and the training of a significant number of PhD students. The project needs to be situated in its context, characterised by the existence of two research departments on water resources linked to the engineering faculty. The VLIR project supported mainly PROMAS. At the time of project formulation there was little interest at the engineering faculty to invest in research.

PROMAS functions as a service platform combining scientific research and the provision of knowledge based services. In 1996 a research department of water resources was created by former PROMAS researchers, graduated at the KU Leuven who could not integrate within PROMAS nor the Faculty (due to different perspectives on research, objectives and organisation of the research group, personality issues). Nowadays, both groups function as rather independent research groups (working on the same topics) but there are examples of researchers that work in both PROMAS projects and projects of the research department.

PROMAS participates in the VLIR-Network master programme in water resources organized by ESPOL. In turn, the Research Department has developed its own master and PhD programs also in water resources. This is evidently a duplication of efforts.

The project is also relevant as it responds to a need among public and private actors involved in water quality management to enhance knowledge on the vulnerability of the water availability at the Paute river basin.

Synergy - Due to the specific nature of the project there were not many opportunities for collaboration or alignment. Where possible, collaboration was established such as making use of the labs at the faculty of chemistry for analyses demanded by the water quality project and some small attempts with the research group on city preservation management. Through the VLIR IUC PROMAS got to known professors of other faculties, such as chemistry and the research they are involved in. This enabled the identification of professors to teach also in the Msc hydrology. Without the VLIR IUC this would not have happened as all faculties operate in a very isolated manner.

Intervention logic - The intervention logic is coherent but focused above all on PhD formation and the improvement of lab equipment. Several interventions such as the outreach activities and the creation of postgraduate courses (master in science and doctoral) or enhancing the link between research and education (development of a specific course on hydrology in the undergraduate training) were not included in the original proposal but added since 2013. The logframe changes several times (formulation and numbering of intermediate results). The assumptions are weakly developed and it is not clear how risk management was conducted.

Effectiveness	
2.1 Academic Score: **Excellent**	- 3 students have finished a PhD and 3 PhD students are about to finalize their PhD - Expansion of research lines - Increased analytical capacity of the scientific sanitary laboratory of the engineering faculty and further equipment of the PROMAS laboratory - Researchers have sufficient time for conducting scientific research (project based) as most of them are not highly involved in teaching (only a limited number of tenured professors assigned with a higher number for teaching) - Publication of scientific articles in international and national peer reviewed journals, which has contributed to the positioning of the research group in the scientific community
2.2 Development Score: **Excellent**	- High level of education delivering well trained professionals and technicians to be employed in the water sector. Several technicians at public and private institutes such as ETAPA, CELEC, ELECAUSTRO, EMAPAL, etc. but also at private companies have been trained at the UCuenca - Thesis students conducting applied research upon demand of these public and private institutions - Results of research shared with public and private stakeholders: monitoring tools and models for integrated water quality assessment made available
2.3 Scientific quality Score: **Excellent**	- 8 scientific articles in Scopus Q1 and 5 scientific articles in Scopus Q2 journals, spread over 10 different international peer reviewed journals

	- Research findings have been presented at 4 international conferences and 13 conference papers have been developed - Labs with high-tech equipment - Collaboration in the Msc in hydrology (VLIR Network project and organised by ESPOL) and a doctoral programme

Final judgement/comments

The academic objective has been fully achieved. The research capacity has significantly improved with the training of 6 PHD students, the development of several research lines related to water quality management (environmental sanitation, climate change, quality of surface sources, groundwater, watershed management) and the further equipment of several laboratories. The project attracted the interest from the engineering faculty (in combination with the push of the LOES) to gradually invest more in scientific research. PROMAS collaborates strongly with the engineering faculty as such was able to integrate specific modules on hydrology in the undergraduate studies. Two PhD students have been contracted by the faculty on a permanent base (tenured professor).

The scientific quality is assessed as excellent based on the number of scientific publications, the strong link between education and research and the presence at international conferences. The researcher at the Cuenca university in the field of water resources and in particular PROMAS are highly recognised for its expertise at national level and to a certain extent also at international level.

At development level the project contributed to enhanced knowledge and availability of monitoring tools and models for integrated water quality management for public and private actors involved in water quality management. The project contributed to the training of well skilled students that can be employed (and are being employed) by the institutional actors. PROMAS has enhanced its knowledge on water quality management and is able to deliver technical advice upon demand. Several institutional stakeholders have been involved in the research conducted and knowledge and monitoring tools and models have been made available.

The phasing-out is used to consolidate all research results and present them to a variety of stakeholders.

Explanatory factors:

- Administrative and logistical support from PROMAS
- The long term collaboration with the universities of Leuven and Brussels, including exchange of professors, researchers and students (both ways)
- Good collaboration with external stakeholders enabling experimental research designs in the Paute river bassin , the Tarqui river bassin, Cumbe river.
- Collaboration with the engineering faculty, e.g. making use of their lab equipment for specific analyses of water samples

Efficiency	
3.1 Intermediate results Score: **Excellent**	R1: Improved knowledge of performance optimizing of wastewater treatment systems – 1 PhD and 7 publications R2: Improved knowledge of climate change and the impact on water quantity and quality for mountain river catchment – 1 PhD and 5 publications R3: Improved knowledge of processes controlling the generation and the chemical composition of stream flow of the Taqui river basin – 1 PhD (to be finalised) and 2 publications R4 Improved knowledge of assessment of the effect of reforestation and vegetation recovery on sediment production R5: Improved knowledge of groundwater resources of Paute basin – 1 PhD and 2 publications R6: Monitoring system for groundwater quality and quantity in place and operational – physical infrastructure and technical procedure manual R7: Analytical capacity of the scientific sanitary laboratory increased and providing support to PhD research – 100% increase of analytical capacity, 3 of 5 planned methodologies for determination of nutrients R8: Improved knowledge of performance optimizing of wastewater treatment systems – 1 PhD to be finalised and and 2 publications, Other intermediate results linked to the development of a module on hydrology in the undergraduate curriculum, the participation in the Msc and doctoral and postdoc programme, and the different outreach activities were not included in the self-assessment but have been successfully implemented according to the annual reports and confirmed through the evaluation visit.
JC. 3.2 relationship input-output Score: **Excellent**	- Reasonable division over different project posts, with a considerable amount for investments (lab equipment) - Overspending in investment and underspending in scholarships - Dominant focus on PhD scholarships
3.3 Project management Score: **Excellent**	- Excellent working relation with the PSU unit - Participatory approach, team work and joint decision taking, trust and good working relations - Autonomy of the group respected (PROMAS having sufficient capacity to manage external funded projects) - Transparency guaranteed - Self-assessment tools supports internal reflection (obliging to look also to what was not working well)

Final judgement/comments
The *intermediary results* are almost fully realised and contribute to the realisation of the specific objectives. Not much delays in conducting the research were reported. Some research activities had to be postponed due to external factors (e.g. too much rainfall). There were some problems in the accreditation procedures regarding the development of methodologies for determination of nutrients but these have been solved. The ambitions related to the intermediate result on climate change had to be adapted as for climate change management there is a need for long term data to show climate change behaviour, which is not available yet. The project used climate modelling data instead. *Input-output*: there is a reasonable division over the different project posts, in line with the overall programme logic. There was an overspending in investment and an underspending in the scholarships during the first years of the project in the second phase. The project benefited from the excellent administrative support of PROMAS in arranging personal contracts, purchases, mobilisation, equipment and provision of offices. The project did not have to rely much on the management support from the project leader in Belgium as sufficient knowledge was available at PROMAS. *Project management* was assessed as excellent. Contributing factors were the availability of clear procedures and transparency in decision taking; the excellent capacity of the PSU in Cuenca and their respect for the autonomy and management capacity of PROMAS.

Sustainability	
4.1 Institutional Score: **Excellent**	- PhD graduates continue conducting research at PROMAS. - Two PhD graduate has obtained a permanent contact at the engineering faculty - Fully operational labs - Clear research lines developed - Research integrated in undergraduate training (specific module and recognized by CES) and linked to the Msc in hydrology created by PROMAS (in collaboration with the engineering faculty and the VLIR Network project), certified by CES for 5 years. A mix of national and international professors are giving classes.
3.2 Financial Score: **Excellent**	- Demonstrated capacity to attract external funding - Presence of tenured PhD professors that can apply for DIUC funding - Strong networking and collaborations with other universities at national and international level
Final judgement/comments	
Institutional sustainability is guaranteed. PhD graduates have the opportunity to continue conducting research at PROMAS and two graduated PhD have obtained the status of tenured professor. Both PROMAS and the research department are well established departments that guarantee continuity of scientific research. Evidently, also the engineering faculty suffers from the absence of clear guidelines and policy regarding research departments and the insertion of graduated PhD. This project has the advantage of being embedded within PROMAS, a research platform that is able to attract funding from several donors and as such can provide more job security for its researchers compared to the other research groups. The project also succeeded in implementing a	

post-doctorate level that creates the opportunity for graduated PhD to return and remain at the research group. Evidently this is linked to the level of financial sustainability obtained by PROMAS.

Through the project the engineering faculty has started to recognise and valorise the importance of scientific research and is fully supporting the establishment and functioning of research departments. Within the faculty three research departments have been established (civil engineering, electricity, computer sciences) and the faculties collaborate closely with the research department on water resources and PROMAS (both created outside of the faculty). The faculty guaranteed that PhD researchers could dedicate all their time to research. Professors not involved in research are assigned with more teaching hours. The faculty opened 7 vacancies for tenured professors in 2016 and two graduated PhD from the VLIR project acquired a permanent position within the faculty.

The fact that PROMAS is a rather independent research platform did not hamper the opportunities of strengthening the link between teaching and research. PROMAS maintains a close link with the faculty and several staff members teach modules in the undergraduate and master courses.

Financial sustainability – PROMAS is an independent research platform that operates in an autonomous manner. PROMAS has demonstrated sufficient capacity to attract and manage external donor funded projects and attract research funding from Senescyt and several public institutions. PROMAS has a consultancy branch that provides technical advice upon payment. Five projects have been developed in this context. PROMAS has already a long relationship with Flemish universities and these relationships will be maintained. PROMAS obtained extra funding from the Coorporación Andina de Fomento for enhancing the link with external stakeholders and exploring the development of specific water topic courses, starting with a course on effective management in water operators agencies.

Impact	
5.1 Academic level Score: **Good/sufficient**	- Put scientific research stronger on the agenda of the engineering faculty - Integrated a specific module on hydrology in the existing curricula - Participation in the Msc in water resources program (VLIR-network), organized by ESPOL, where other universities are also involved (EPN and UTN). - Well-equipped labs
3.2 Development Score: **Excellent**	- Knowledge and monitoring tools and models for water quality management are made available. No info could be obtained of the use and their results. - Public and private stakeholders can rely on technical advice provided by PROMAS
Final judgement/comments	
Academic: The project contributed to the obtainment of category A for the Cuenca university in 2016, because of the number of scientific articles in international peer reviewed journals, the PhDs being formed and the well-equipped labs. The project had further not much influence on teaching and research practice at other faculties and could not stimulate the debate at university level regarding the need for regulations of research (research department, human talent management,	

etc.). The project developed good practices related to the organisation of scientific research, which are recognised at university level but not given any follow-up in other faculties yet.

Within the faculty of engineering PROMAS, with support of the VLIR project, has put the need for investing in scientific research on the agenda. The faculty is currently dealing with three research departments within the faculty, PROMAS that is very much linked to the faculty, and a rather isolated research department on water resources operating outside of the faculty. The VLIR project did not have influence yet on the alignment between these different research groups (in terms of structuring, operations, coherence). Moreover, currently two masters in subjects related to water resource management are existing at the engineering faculty.

Developmental: as stated under effectiveness the project contributed to enhanced knowledge and availability of monitoring tools and models for integrated water quality management for public and private actors involved in water quality management. Several public stakeholders have enhanced their collaboration with PROMAS, for example involving students to conduct master thesis on the relationship between water and problems of geological instability around the water reservoirs and energy facilities. External Interviewees confirmed the quality and added value of the research being conducted by PROMAS researchers and its contribution in strengthening their water quality management capacity. The evaluation visit was too short to collect further evidence on the results claimed by the interviewees.

2.2.4. Pharmacological characterization of medicinal plants

In Ecuador regulatory policies and laws on herbal medicines were issued in 1998. However, Ecuador currently is not regulating herbal medicines (over the counter medicines, dietary supplements, health foods and cosmetics). At the start of the second phase of the project, now report or plant monographs ere present. There was no information on industrializing requirements for herbal medicines and there are no safety requirements. Herbal medicines were not registered or included on an essential drug list. In Ecuador, herbal medicines are sold in special outlets without restriction. The MedPan project aimed at improving knowledge on medicinal plants so that patients can make use of herbal medicines in a safe and efficient way. The project aimed at contributing to the capacity of official control agencies, such as the Ministry of Public Health, to implement knowledge based policies to control dispensation of medicinal plants and natural medicines.

Before the start of the project not much scientific research was carried out on plant characterization. The plant collection was based on an ethno-botanical approach which was carried out with some communities of the South of Ecuador. The initiators of the project wanted to get specific knowledge about therapeutic properties of plants. Standardizing the extracts for a specific content would offer the possibility of using them as herbal drugs. The implementation of a microbiology laboratory and a zebrafish facility would allow the screening for the determination of specific pharmacological potential for anti-infective (bacteria and parasites), anticonvulsant and anti-inflammatory effect present in plant extracts and their constituents. The objective of the project was to strengthen the research capacity, teaching and infrastructure of laboratories in the fields of phyto-pharmacology and phyto-chemistry.

The second phase built further on the results of the first phase. During the first phase three laboratories had been equipped, scientific training was provided to the members of the research group and the teaching-research link was strengthened. During the second phase PhD studies would be finalised and scientific research continued. During the second phase also the development of a master in science programme would be considered.

Factual data per research group

Hosting faculty	Faculty of Chemistry - Department of Biochemistry and Pharmacy of the School of Chemical Sciences
Number of staff in research group	Group of 9 researchers and laboratory assistants
Status of staff (fixed position, service contract, others)	2 tenured professors, other staff working on contract base
Number of PhD finished/ongoing (within VLIR IUC)	2 PhD finished but have left the project 2 PhD to be finalised in 2017 (of which one PhD is being done within the transversal project – statistics)
Number of PhD finished/ongoing outside VLIR IUC	1 PhD (at Univesitat Autònoma de Barcelona)
Number of publication in peer reviewed journals	12 scientific articles published in 8 different journals, of which 7 in Scopus Q1, 2 in Scopus Q2 (of which one published in 2011) and 3 in Scopus Q3

Evaluation questions

Relevance	
1.1 Responds to needs Score: **Excellent**	- Interest to study pharmacological characterization of medicinal plants at the faculty of chemistry - Commitment from the faculty to strengthen research and the teaching-research link - No clear policy on biodiversity and plant wealth in Ecuador - Due to the lack of knowledge of the medicinal potential of plants, rural communities prefer to substitute endemic vegetation with other cultivation that can imply better income - Medicinal plants are not used or not used in a safe manner - No official regulation of herbal medicine
1.2 Synergy Score: **Good**	- As much as possible collaboration with other VLIR projects was looked for, taking into account the nature of the research project. o *Integrated water quality management*: the project on integrated water quality is making use of some of the lab equipment. o *Food, nutrition and health*: together with this research group a research department was installed within the faculty of chemistry o *Transversal project*: apart from the ICT support, one of the team members is studying a PhD in statistic data analysis. Not much added value of the improved library services o *VLIR-Network*: the group is involved in the Msc on biosciences, certified since 2015
1.3 Coherence Score: **Good**	- Coherent intervention logic but some results are lacking to realise the objectives - Weak development of assumptions and risk analysis - Adaptive capacity demonstrated responding to changes in context or unforeseen situations
Final judgement/comments	
Relevance - The project is very relevant at academic and development level. Several of the current members of the research group are involved in the project since the beginning. There was a genuine interest to improve the scientific research on medicinal plants. A lot of studies had been done on the Ecuadorian's plant wealth but mainly at international level and results were unknown in the country. Moreover, the faculty of chemistry had a keen interest in investing in its scientific research capacity and in establishing well-equipped laboratories that would support research but also enable students to gain practical lab experience. The project is also a response to a societal problem. Several Ecuadorians make use of traditional plants as alternative medicine but herbal medicines are not well regulated or controlled. There is a lack of knowledge on plant monographs among the institutional actors, no information on industrializing requirements for herbal medicines and there are no safety requirements. The project also aimed at improving the use of medicinal plants. Due to the lack of knowledge of the medicinal	

potential of plants, rural communities prefer to substitute endemic vegetation with other cultivation that can imply better income.

Synergy - The research group pro-actively looked for synergy with other VLIR-projects. Due to the specific nature of the project there were not many opportunities for collaboration or alignment. Where possible, collaboration was established such as making space in one of the labs for analyses demanded by the water quality project. The group had the opportunity to strengthen statistic data analysis capacity through a PhD student as part of the transversal project. Other research projects, however, could not rely on this expertise for example for advice or training. The research group took advantage of the presence of the VLIR Network project in Ecuador to effectively continue with the objective of creating an Msc in biosciences. The VLIR Network offered better conditions to develop such a master (compared to the situation in an isolated project) and the research group is actively involved in the implementation of this master.

Intervention logic - The intervention logic is coherent and includes a combination of scientific training, PhD formation, research, and lab equipment. The development of a research group is not included as a strategy nor the initial objective to explore the possibilities to develop a master in science. However, both interventions have been implemented. Also no specific actions had been planned regarding the collaboration with external stakeholders with regard to the realisation of the development objective.

The project had to deal with several contextual factors such as the lack of a policy on intellectual property at the university but also conflicting views between the university and the government regarding the use of traditional plants for research purposes. It is not clear to what extent appropriate risk management was done already from the start of the second phase and to what extent measures could have been taken to prevent the situations that have complicated the implementation of the project. However, the research group has responded in a fast and accurate way to the conditions hampering swift implementation of the project, such as the installation of the unit on intellectual property.

Effectiveness	
2.1 Academic Score: **Excellent**	- Creation of a research group, embedded in the research department of biosciences, and development of 3 research lines - Researchers trained - 2 students have finished a PhD but left the research group, 1 PhD students is about to finalize her PhD - Researchers combine teaching and research - Research hours under pressure. Current PhD receiving 15 hours for research, other contracted lecturer-researcher receive even less. Many staff members perform extra hours. - Strong link between research and education: results of research included in teaching classes, improved syllabus and students able to make use of the lab infrastructure. Students develop theses on research related subjects.

	- Publication of scientific articles in international and national peer reviewed journals, which has contributed to the positioning of the research group in the scientific community - Involvement in several networks
2.2 Development Score: Poor	- Ecuadorian people have not yet access to scientifically characterized natural products extracts
2.3 Scientific quality Score: **Excellent**	- 12 scientific articles published in 8 different journals, of which 7 in Q1, 2 in Q2 and 3 in Q3 - Research findings have been presented at 2 international conferences - Labs with high-tech equipment - Syllabi have been improved, research results introduced in teaching and students can practice in well-equipped labs - Development of the Msc in biosciences (VLIR Network project) - Registered patent

Final judgement/comments

The academic objective has been fully achieved. Several research projects within the three research lines have been implemented and were complemented with additional research projects with other funding attracted (Senescyt and FWO, Prometeo project of Senescyt, 2 other DIUC funded projects). The MedPlan and nutrition groups together have successfully introduced a project at Senescyt, which enabled the purchase of high-tech (and expensive) equipment for the area of structural analysis. Research capacity of the members of the research group was strengthened through specific training, exchange with the researchers and students in Belgium and the equipment of the laboratory. The research group is formally created and embedded within the department of biosciences. The link between research and teaching is strengthened. The research group is rather small and the number of PhD researchers is limited to 2 (of which one is finishing the PhD). The group lost knowledge built during the project with the departure of two PhD staff members. Transfer of knowledge, in particular on Zebrafish was hampered due to the re-integration problems of one of the PhD students that eventually left the group.

The scientific quality is assessed as excellent based on the number of scientific publications, the strong link between education and research and the presence at international conferences. However, it must be noticed that most of the articles resulted from research developed in Belgium, which was disconnected from local research. With the departure of the two PhDs the potential of maintaining high level of scientific quality has somehow decreased.

At development level the project has not yet contributed to the realisation of the objective. The research group has characterized about 20 different plants but no publication related to the use, recipes and other particularities has been published yet. Due to the delays in project implementation (administrative, legal and logistical problems) and the departure of the 2 PhD staff members, not much collaboration had been looked for yet with external stakeholders to disseminate the research results. Currently dialogues with institutional stakeholders are taking place. The Ministry of Environment has established some laws to protect zones such as the rainforests. These zones

have been declared Natural Patrimony with the purpose of preserving their vegetation and environmental conditions. Meetings are being organised between universities, Ministry of Environment, SENESCYT and the Ecuadorian Institute for Intellectual Property in order to establish a national policy to allow the development of national and international research projects. After 9 years of negotiating the university finally received the permission to collect plant material and import some biological products.

The phasing-out year is used to realise one of the expected results and objectives, namely the compilation of all knowledge gained into a publication that will be shared with institutional stakeholders and specific communities. Information was collected on the use of herbal plans in different communities. This information will be shared in a conference that will be organise dduring the closing event.

Explanatory factors:

- Strong support of the faculty, showing a genuine interest in strengthening research and research based education
- Good mix of activities, including exchange with the Flemish research teams and Flemish students. In particular close accompaniment of the second project leader
- Attraction of additional expertise and funding
- Problems with the reinsertion of one of the PhD students (combination of personal factors and clash of research cultures)
- Several administrative, legal and logistical problems hampered the implementation of research. Only towards the end of the project the labs were fully operational.

Efficiency	
3.1 Intermediate results Score: **Good/sufficient**	R1: Ethno-medical information of natural products – information on 83 plants collected R2: Collection and botanical characterization of medicinal plants and/or microalgae are developed – 31 natural products characterized and samples deposited at the UDA herbarium R3: Pharmacological characterization of collected natural products used as anti-infective, anti-convulsant and anti-inflammatory – 8 plants with 69 different individuals analysed R4: Active extracts are selected and phyto-chemically characterized, applied on 3 most interesting plant extracts. One active molecule isolated and structurally characterized and patent registered. One scientific article. R5: Phytopharmaceutical forms from active natural products extracts are obtained – not realised (depending on results of research conducted under the former result areas, research not sufficiently evolved to obtain phytopharmaceutical forms) and postponed

	R6: Laboratories are equipped and operational – 7 labs equipped (including the Senescyt contributions). R7: Two PhDs are formed – 2 students finished PhD at KU Leuven but left the group. One PhD is finalising the study at VUB.
JC. 3.2 relationship input-output Score: Good	- Reasonable division over different project posts, with a considerable amount for investments (lab equipment) - Overspending in investment and underspending in scholarships - Dominant focus on PhD scholarships - Loss of 2 PhD - First 2 PhD studied full time in Leuven, low transfer of knowledge, low linkages with local research and low integration in teaching. Third PhD under sandwich formula - Difficulties in attracting PhD students - Importance of short term training in Belgium (1 month to 3 months) for researchers and lab assistants (access to fully-equipped labs) – effectiveness influenced by the presence of a good operational plan for these trainings
3.3 Project management Score: **Excellent**	- Project was well planned and monitored, participatory process and group work within the research group - Excellent relationship with the PSU - Clear and transparent guidelines and procedures - Communication between project leaders improved in the second phase after the change of Flemish project leader - Good communication with other projects, e.g. resulting in the joint efforts of two research groups to create the research department - Administrative and logistic problems well managed by the Cuenca university and VLIR
Final judgement/comments	
The *intermediary results* are almost fully realised and contribute to the realisation of the specific objectives. The project implementation suffered from several delays, caused by administrative, operational and logistic factors. Because of the administrative regulations in Ecuador, the lack of intellectual property regulation (at government level but also at the level of the university), the lack of a policy to support research on natural resources it was difficult to collect plant material, import cell cultures, microorganisms, parasites, animals and reagents necessary for lab activities, etc. Lack of intellectual property regulations also delayed the publication of several articles. A lot of time and energy was spent in negotiating with ministries (Health, Environment). As written in the above, only after 9 years of negotiating the university obtained the permission to collect specific natural species and import biological products. Implementation was further hampered by the loss of knowledge built when the two PhD students did not return to the group (one never returning and staying in Europe; one having difficulties to integrate in the research group and moved to the medicine faculty). This caused problems for example in the continuation of the pharmacological research on zebrafish. Project implementation was further hampered by illness of staff, which also resulted in only one instead of 2 professors studying a PhD. Another problem demanding a lot of energy was the discussion regarding the registration of the patent. There were discussions between the researchers involved in the research at KU Leuven	

about the process of patenting the molecule identified. This was eventually resolved, with good interference of the Cuenca university administration, and demonstrated the necessity to have a unit on intellectual property at the university, which was later effectively installed.

The group however dealt in an effective way with these delays and looked for creative solutions in collaboration with the team at VUB. For example, through contacts with the university of Guayaquil the purchase of laboratory mice was facilitated.

Input-output: there is a reasonable division over the different project posts, in line with the overall programme logic. There was an overspending in investment and an underspending in the scholarships in the first years of the second phase of the project. The project had difficulties in attracting PhD candidates and the first two PhD candidates were not permanently employed by the university. There were discussions between the project leaders in Ecuador and Belgium on the permanent character of the PhD students as a sandwich formula was not applied. This resulted in a disconnection of the PhD research with the local research and as the PhD graduates were not reintegrated in the research group transfer of knowledge was limited. The project also implemented a good combination of activities, including the short term training of researchers and lab assistants. Quality of these technical trainings in Belgium was of varying quality, explained by the presence or not of a well-developed training programme and the intensity of follow-up provided. The project was complemented with additional funding and resources, such as a Prometeo professor that assisted the research group in preparing for a conference and in creating the research department and the FWO-Senescyt cooperation programme complementing the research on "Ecophysiology of phyto- and zooplankton from alpine lakes of the Cajas National Park. The project knew two project leaders in Belgium. Collaboration improved with the entrance of the second project leader.

Project management was assessed as excellent. Contributing factors were the availability of clear procedures and transparency in decision taking; the excellent capacity of the PSU in Cuenca and in Leuven and the flexibility both from the Cuenca university, VLIR and PSU in Leuven to deal with the administrative and logistical bottlenecks. Communication between project leaders had improved since the replacement of the project leader in Belgium. Disagreements existed with the first project leader regarding the full-time PhD study in Leuven.

Sustainability	
4.1 Institutional Score: **Excellent**	- Research group integrated in the research department on biosciences created in 2014 and embedded in the faculty of chemistry - Fully operational lab - Clear research lines developed. - Research integrated in syllabi used in undergraduate training. Group strongly involved in the Msc biosciences, certified by CES for 5 years - Unit for intellectual property formally created within the university
3.2 Financial Score: **Good/sufficient**	- Demonstrated capacity to attract external funding - Presence of tenured PhD professors that can apply for DIUC funding - Limited networking or collaborations with other universities or donors to attract international funding

Final judgement/comments
Institutional sustainability – is guaranteed. The research group, although small, includes four tenured professors and three PhD researchers and can rely nowadays on fully equipped laboratories and state of the art lab technology. The research group is integrated in the research department on bioscience (together with the research group on food, nutrition and health). These research groups opted -following advice of the former project leader, for a research department embedded within the faculty, which strengthens integration of research in teaching. The research group is very committed and engaged to continue implementing research. Research however is still put under pressure because of the lack of a clear policy at university level regarding the installation and functioning of research departments, the balance between teaching and research and human talent management. The group experiences time pressure to conduct research (lack of policy on research hours, increasing amount of students) and lacks sufficient time to develop scientific articles. *Financial sustainability* – according to several interviewees it is difficult to attract funding for this kind of analytical research. Cuenca and VUB are considering the development of a VLIR-TEAM project proposal and are exploring a N-S-S project involving Ecuador, Vietnam and Cuba. The research group has demonstrated the capacity to attract additional funding, already during the project. The research group has successfully attracting funding from two research calls: one at local level for the implementation of zebrafish biological model and another at international level, in the FWO-SENESCYT call, for analysing the pharmacological potential of microalgae. The group is considering the submission of new research programs to national organisations such as SENESCYT, MIPRO (Ministry of Productivity), SENPLADES (National Secretary of Planning and Development). The evaluators did not receive concrete information on the status of these processes. The research group has started to link to the academic network LAZEN (Latin American Zebrafish Network) for future scientific cooperation.

Impact	
5.1 Academic level Score: **Good/sufficient**	- Collaboration with other faculties such as agronomy, civil engineering and philosophy but not much spill-over effect - Demonstrating that professors have to do lab work - Pushed the creation of the intellectual property department at the university of Cuenca - Well-equipped labs
3.2 Development Score: **Poor**	- No impact achieved yet. There has not been much collaboration with different stakeholders besides the discussions with the ministry of environment (on the collection permits)
Final judgement/comments	
Academic: The project contributed to the obtainment of category A for the Cuenca university in 2016, because of the number of scientific articles in international peer reviewed journals (4 articles were not counted as no tenured professors of the UCuenca was on the list of authors), the PhDs being formed and the well-equipped labs. The project pointed at the necessity to have university regulations on intellectual property and contributed to the installation of the unit on intellectual property. The project maybe has had the most influence on the policy discussions at university	

level because of its commitment to invest in research and willingness to evolve towards a teaching university investing in research: (i) the current dean of the faculty has been the vice-rector during the VLIR project and was responsible for the implementation of the institutional project. (ii) The VLIR programme coordinator is member of this research group. (iii) The project had not much direct influence on the teaching and research practice in other faculties but has demonstrated the importance of professors working actively in the laboratory. As such, the project is installing a certain (and new) practice that might have a spill-over effect in the long term. (iv) The same can be said of the installation of the research department, showing a good practice on how to organise research within the faculty. However, because of lack of university regulations to that end, not much up-scaling of these good practices within the university could be noticed so far.

Developmental: because of the delays in the research, the project did not obtain yet all results and had no time yet to compile all knowledge built on plant material. Research has not sufficiently evolved in order to develop proposals for policy and regulation development regarding the control dispensation of medicinal plants and natural medicines.

2.2.5. City Preservation Management project

Brief description of the project

Overall the Project pretends to develop the scientific base and provide high level education to contribute in the aim of improving the management of world heritage sites of the southern part of the Country by generating tools and knowledge and getting stakeholders ready to understand and use them. The project has as academic objective the generation of management related knowledge and tools. These knowledge and tools are related to two main topics that would broaden the vision of heritage domain. One is the view of heritage in an ampler context as to Historic Urban Landscape. The other is related to the need of understanding Heritage as a resource of development.

The knowledge and tools for the management of historic sites are disseminated to the stakeholders in order to let them understand their use and apply them in reality. As a complement a Preventive Conservation Plan will be applied to a pilot study area to validate it.

As to the means to reach these objectives several intermediate results have been posed, some of them are purely academic such as the proposal to have a master program ongoing (IR1) during the years of the project operation and to develop research activities that will provide input to education as well as to the various tools (IR5 and IR6). There are other results which are both related to the academic output and to capacity building such as the application of a Preventive Conservation Plan Including Maintenance Strategies (IR2), The development of a Methodology for the Analysis of the characteristics of Historic Urban Landscape (HUL) resulting in a management tools (IR3), The creation of a Methodology for the Analysis of Heritage as a Resource (HR) which allows to outline development Strategies (IR4). In addition there are other results mostly linked with capacity building such as the development of Adequate Intervention And Maintenance Tools for the HUL (IR5) as well as the development of Adequate Management Theoretical Models and Tools for Sustainable Use of Heritage HR (IR6).

For the second phase of the project the objectives are related to heritage in a wider context regarding not only heritage buildings and sites but also the (urban) landscape related to it. Furthermore, heritage

cannot be only seen as an object to be conserved but also as a resource for development. In consequence the Project aim is to contribute to an integral conservation of heritage, not only of the historic city of Cuenca, but also to cultural valuable heritage places around the south of Ecuador.

Factual data on the research group created

Hosting faculty	Faculty of Architecture
Number of staff in research group	Currently a total number of 52 researchers (including research assistants and students), contracted through different research projects
Status of staff within the research group	- 3 tenured professors[6] (with PhD) - 3 VLIR PhD researchers, contracted but not yet with a tenured status - 18 researchers and research assistants, assistant laboratory, related to VLIR research projects. - 3 researchers done master in conservation of monuments and sites at KU Leuven supported by the VLIRUOS, 4 master finalized and 4 ongoing supported with other funds (scholarships SENESCYT, IECE) - Varying number of short term researchers
Number of PhD finished/ongoing (within VLIR IUC)	1 finished, 2 to be finished in 2017
Number of PhD finished/ongoing outside VLIR IUC	3 professors with PhD, financed by other universities.
Number of publication in international peer reviewed journals (scopus + quartile)[7]	1 article in the Journal of Cultural Heritage Management and Sustainable Development (Q4) 1 article in the Historic Environment: Policy and Practice (Q3)

Assessment of the evaluation criteria

Relevance	
1.1 Responds to needs Score: **Excellent**	- University of Cuenca is the only university in the country with research in the field of city preservation management - Students have the possibility of studying "Urban Architectonic Restoration", which is an option in the curriculum of the last year - The historic centre of the city of Cuenca was declared as cultural heritage since 1983 and inscribed on the UNESCO World Heritage List since 1999 - Limited city preservation management capacity within the municipality of Cuenca but also at the National Heritage Institute

[6] The project was started upon initiative of 5 tenured professors. Only one remains in the group. Three have left the research group and one prof died.

[7] The project leaders point to the fact that the impact of publications made related to organised conferences on Preventive Conservation within the project must not be underestimated (though not included here as an indicator). The number of publications should be benchmarked with the field of architecture in which scientific articles in this kind of journals is not the tradition, nevertheless a great advancement was made by project publications made within the project.

	- 22 cities in Ecuador with the responsibility to manage cultural heritage - International trend to focus also on preventive conservation and to link city preservation to development

JC. 1.2 Synergy
Score: **Good/sufficient**
	- Limited collaboration with other VLIR projects
	  ○ *Migration*: potential to study influence of migrants on architecture; but opportunities not explored (lack of time and resources, all operating within pre-defined project lines)
	  ○ *Water quality*: monitoring system (to develop inventories) could be shared but no collaboration was started
	  ○ *Medicinal plants*: limited to the use of lab (faculty of chemistry) for the analysis of earth colours (part of a research project)
	- Limited impact of the institutional project: participation in training on scientific writing; improved ICT infrastructure
	- Involved in a N-S-S VLIR project
	- Several other research related projects funded by other donors
	- 14 students have been motivated to join the Vanguardia programme. The faculty assigned one professors with the task to support these students.

JC. 1.3 Coherence Score: **Excellent**	- Coherent intervention logic - Intervention flexibly adapted to changes in the context: e.g. Lessons learned from one campaign were taken into account for the implementation of the second preservation and restoration campaign.

Final judgement/comments

Relevance: The project is very relevant at academic level and at development level. At academic level the project responded to a project proposal formulated by a group of five professors working at the faculty of Architecture, with an interest in strengthening academic research in the field of city preservation management. The proposal was built on existing links between UCuenca and KU Leuven.Both Ucuenca and KU Leuven had an interest in doing research on the link between cultural heritage and sustainable development. The start of the project coincided with the start of the PRECOM^{3}OS UNESCO chair on Preventive Conservation, Monitoring and Maintenance of Monuments and Sites at the university of Leuven in 2008, which was shared by the UCuenca and which created the opportunity to develop jointly research projects on city preservation management, preventive conservation and city preservation as an instrument for development.

At development level the project is very relevant taking into account the weak institutional capacity in Ecuador regarding city preservation management. Moreover, since the decentralisation process, the cities and municipalities have received the competence for the management of their cultural heritage. For example, the government policy obliges all cities with cultural heritage to develop inventories. Cities and municipalities overall lack appropriate knowledge. As far as the evaluators know, not many preventive conservation plans have been developed so far by cities or municipalities. The same applies for institutes such as the National Heritage Institute.

Synergy: The synergy with the other IUC projects was non-existent or limited, mainly because of lack of time and resources, but the project took advantage of the N-S-S VLIR cooperation modality and started a collaboration with the university of Santiago, Cuba. The faculty of architecture actively supports the Vanguardia project. The research groups is able to attract research funds from other donors (see further under sustainability) and as such could expand the research themes.

The intervention logic is coherent and combines in a relevant way the development of a professional master, the implementation of research and the development of concrete tools for city preservation management. As such the project contributes to strengthening education and research. Workshops and the approach of 'living labs' are included in the activities, which enable a close collaboration with the communities and city administration.

Effectiveness	
JC. 2.1 Academic Score: **Excellent**	- 3 PhD researcher linked to three specific research lines - Established multi-disciplinary research group - Research group able to attract national research funds (through DIUC and other cooperation projects) - Professional master in city preservation management, recognized for 5 years (2 cohorts already) - Strong link between the undergraduate and master studies and the research conducted. 20 undergraduate theses, 28 master theses and 3 doctoral theses have been conducted within the project. - Presentation of research results at local and international events (#13) - Involvement in various national, regional and international networks - Improved knowledge of English of researchers - Enhanced team work, more horizontal relationship between researchers and professors, improved self-esteem, acquired skills in scientific writing, critical dialogue - The project has organised 9 academic events
JC. 2.2 Development Score: **Excellent**	- Dissemination of methodologies and tools for city preservation management through various workshops, seminars and congresses - Enhanced competencies of community members to use heritage as a resource for development
JC. 2.3 Scientific quality Score: **Good**	- A lot of articles, booklets and congress papers have been developed. 2 scientific articles in journals indexed by Scopus (1 in Q3 and 1 in Q4) - Research findings have been presented at 33 international conferences and 20 local conferences, in the period 2008-2016 - x international conferences - Research is integrated in the undergraduate courses and students can participate in the research. - Master is accredited by CES for 5 years and assessed by students as being of high quality.
Final judgement/comments	
The academic and development objectives have been realised. At academic level a well-established research group is functional. There is a strong link between education and research. Several undergraduates and master students have been involved in the different research lines and in the living labs organised within the research projects. Some of the undergraduate students have continued to do the professional master in city preservation management and one of them continued for a PhD. The research group is a multi-disciplinary research group attracting also researchers from other faculties, like art, economy, chemistry, anthropology and civil engineers. A lot of "soft" skills have been acquired such as improved team work, improved self-esteem and improved critical dialogue. And improved teaching skills that result from a changed relationship between teachers and students and the integration of research in several teaching courses. The professional master in city preservation is assessed by teachers and students as relevant. The master responds to a specific need for enhanced knowledge on city preservation management that is not covered by the existing curriculum (no duplication). The master fulfilled all eligibility	

requirements and received a certification by CES for 5 years. The master is given by a combination of national and international professors (total of 22 professors of which 10 of the university of Cuenca), cutting edge research is presented. Students interviewed referred to the high quality of teaching, attention given to research and scientific writing.

The scientific quality of the research conducted has been assessed as being good with the remark that despite the amount of publications (4 scientific papers in Scopus and web-of-science, 13 scientific papers published in regional journals, 8 booklets and 46 articles in books) only two articles were published in a scientific journal indexed by Scopus (and in the lower quartiles 3 and 4). This can be explained by the nature of the project (applied research) and the focus put on the link between city preservation and development (which consumes a lot of time). One has to acknowledge that the UCuenca is the only university in the country conducting this kind of research, and which has assumed a leading role at regional level, evidenced by presentation of research and the hosting of several local and regional conference. UCuenca is also full partner in the UNESCO chair hosted at the KU Leuven.

Regarding the contribution to the development objective, there is a lot of evidence that tools, guidelines and manuals have been made available for all kind of stakeholders involved in city preservation management. Moreover, several institutes such as municipalities and the national heritage institute have accepted (sometimes stimulated) that their staff is following the professional master in city preservation management. For the living labs, the research group achieved the mobilisation of a variety of stakeholders such as the city administration, the army and police, schools and community members.

Explanatory factors:

- Dedication and commitment of the people involved
- Horizontal leadership
- Support from the dean of the faculty
- Close collaboration between the two project leaders and strong involvement of the Flemish project leader and other North team members
- Collaboration between peers
- Close collaboration with well-known experts at international level (contribution of PRECOM^{3}OS UNESCO chair)
- Engagement of students in the research projects (Flemish and Ecuadorian)
- Availability of additional finances for complementary research projects
- Commitment of the faculty/university to invest in infrastructure and lab facilities
- Engagement of a research assistant responsible for multi-stakeholder management
- Good relations with local authorities

Efficiency	
JC. 3.1 Intermediate results Score: **Excellent**	R1: **Professional master** on city preservation management developed, accredited by CES in December 2013 for 5 years. 2 cohorts of students (total 45 students). 18 of the 30 students of the first cohort are graduated. Some master theses were linked to the VLIR project, e.g. conservation campaigns. R2: three city conservation campaigns conducted in Susudel and Cuenca: **development of preventive conservation plan and maintenance strategies**, implementation through a multi-stakeholder approach. Testing CPM system, methods and tools. Students involved in the conservation campaigns in Susudel and Cuenca R3: Development of Historic Information System - **methodology for an analysis of the characteristics of historic urban landscapes (HUL)** (part of master thesis and PhD at KU Leuven)

	R4: **Development of a methodology for the analysis of heritage as resource and strategies** for the adequate use as heritage as a source (PhD) R5: **Manuals for HUL** interventions and management adapted to urban environment developed (see also R3) R6: Models and tools guiding the sustainable use of heritage as resource developed – acquisition of laboratory equipment to develop basic essays of mechanic properties of **earthen architecture** and research conducted in this area.
JC. 3.2 relationship input-output Score: **Excellent**	- Reasonable division over different project posts, with a considerable amount for investments (lab equipment) - Overspending in investment and underspending in scholarships - Faculty making available appropriate working space for the research group - Close collaboration and follow-up of the project leader in Leuven - Additional external funding and university funding to complement research and engagement of students in field work and research - Mobilisation of local resources for conducting the campaigns
JC. 3.3 Project management Score: **Excellent**	- Good working relation between project leader and programme support unit - Good quality of communication with the research group, with the faculty and with the PSU - High level of mutual confidence, respect and willingness to solve problems that emerged - Improved team work, including planning and joint decision making within the research team and with the project leader in Belgium. - High workload for project leader, combining project management with teaching and research assignments - Clear programme management guidelines and transparency in decision taking
Final judgement/comments	
All *intermediate results* have been achieved or are in a process of being fully achieved by the end of the year (research that still needs to be finalised, manuals that need to be finalised, lessons learned that need to be consolidated). There were several delays in the implementation of the activities, such as the long approval process of the professional master, illness (and in one case death) or departure (human resource policy) of several researchers, delays in the selection and assignment of PhD candidates, but delays were properly managed. *Input-output*: there is a reasonable division over the different project posts, in line with the overall programme logic. There was an overspending in investment and an underspending in the scholarships during the first years of the second phase. The project was successful in mobilising local resources for the implementation of the living labs (preservation campaigns) and in engaging students to conduct theses in research related areas.	

Management roles, tools, procedures and systems were clear and respected by all stakeholders involved and helpful for monitoring and managing the project. The research group acquired relevant specific project management competencies.

Sustainability	

JC. 4.1 institutional
 	
Score: **Good**
	- Research group not institutionalized yet.
	- Research oriented faculty (>60% of professors is involved in research according to actual dean).
	- Dean guarantees sufficient hours for research (e.g. 24 hrs for research) and does not assign many or no teaching hours to doctoral students.
	- Focus on young people for PhD scholarship, working at the university on contract base.
	- Involvement in different national and international networks:
	  ○ UNESCO Chair on preventive conservation
	  ○ GO HUL network (urban historic landscape)
	  ○ Red Iberoamericana PROTERRA (earthen architecture)
	  ○ CONACYT-UNAM network (housing in historical centers)
	  ○ SICOT (during the VLIR project the faculty organised for the first time an academic conference for this network)
	  ○ PUEC (link with Mexico)
	  ○ ICOMOS[8]
	- Master on city preservation management approved for 5 years
	- Public opinion putting pressure on the university to maintain the research lines
	- Research group with specific own infrastructure (remodeled during the project)

JC. 3.2 Financial
 	
Score: **Excellent**
	- Ability to develop research lines and protocols and develop research proposals that can be presented at DIUC and external donors.
	- Demonstrated capacity to attract various research funds
	  ○ Three DIUC projects that are being implemented
	  ○ Collaboration with ETAPA (conservation project Cajas) – 100.000 USD
	  ○ Provincial government Azuay investing in a small research project
	  ○ City of Cuenca contributed to the campaign in San Roque – 180.000 USD
	  ○ Other VLIR projects: TEAM, North-South-South (Belgium, Ecuador, Cuba)
	  ○ International projects like Horizonte 2020
	- Faculty has explicit policy to attract research funding via DIUC and invests in research with own resources
	- Professional master is self-sustainable

Final judgement/comments	
As for all the projects institutional sustainability of this research groups is also not guaranteed yet by the university. There is not much perspective for PhD researchers in the near future to become tenured staff members of the faculty (selection processes have been put on hold and only a limited posts will become vacant in the faculty of architecture – a maximum of 8 of which 1 or 2 could be open for a PhD researcher from the VLIR project). There is no research department yet installed	

[8] International Council of Monuments and Sites

within the faculty because there is a lack of sufficient research groups to constitute a research department, but also because of the lack of a policy and clear guidelines at university level regarding the establishment of research departments. There are different perspectives between the faculty and the university regarding the requirements of the establishment and the management of research departments.

However, this research group has a high level of institutional sustainability taking into account the commitment of the faculty to institutionalize the research group, the policy of the faculty that is research oriented, the commitment of the researchers and the presence of at least two tenured professors that are actively engaged in the research group.

The research group has developed competencies (skills, networking) to attract foreign funding and to attract research funds from within the university (through DIUC). Currently research activities will continue because extra funding is available. For example, the VLIR project stimulated the group to develop two complementary research projects that are currently being financed by DIUC (one on colour's soil and one on monitoring project for the historic city centre of Cuenca). The group is also still involved in the N-S-S VLIR project.

The professional master seems to be self-sustainable. Students pay 6.100 USD for the two years. However, cost is a problem for many students. Not many scholarships are available and student loans are difficult to access (high rate of 11,25% and lot of administration work)

Impact	
JC. 5.1 academic level Score: **Good**	- Research group involved in the UNESCO chair on preventive conservation at KU Leuven (enabling international networking and mobilization of professors and students) - Research group involved in other international networks (PROTERRA, Go HUL, and PUHC) - Preventive conservation methods and techniques disseminated at regional and international level and expertise at UCuenca internationally recognised - Research group taking a leading or pro-active role in several international research groups
JC. 5.2 Development Score: **Good**	- Inventory finished and digitalized for the city of Cuenca but not actualized by the city administration. Methods and tools for city preservation management disseminated, but not yet replicated. - Not much results yet at the level of improved city preservation management capacity at institutional level (city of Cuenca and national heritage institute) - Improved housing conditions for inhabitants in Susudel (48 houses; San Felipe de Oña) and San Roque (24 houses; Cuenca). Improved self- esteem and recognition of the rural community members of Susudel and improved cohesion in the neighbourhood of San Roque. City of Cuenca demands a replication of the campaign but does not commit with funding. - Other cities showing interest in the research of the university and ask for collaboration (but lack of means). Some of them have sent staff to participate in the master. - National Heritage Institute has an agreement with the university of Cuenca to deliver consultancy and has invested with a small budget in interventions related to the VLIR project.
Final judgement/comments	
Academic impact: the project had not much impact on the other faculties within the university of Cuenca or on the university policy in general but contributed to the obtainment of category A for the university of Cuenca in 2016. The research group however has had an influence on other universities and researchers in the field of city preservation. The group has taken the lead in several regional and international research groups and is as such inspiring other research groups in Latin America and even in Europe (e.g. through the UNESCO chair). The project has put themes	

such as preventive conservation and city preservation as a tool for development on the international agenda.

Development level: the research group could not yet contribute to improved policy and city preservation management capacity of the city of Cuenca or the national heritage institute. There is a lot of interest among the different institutional stakeholders but lack of capacity and financed to effectively implement tools and approaches in practice. The city of Cuenca has not applied the newly developed inventory system yet in order to actualized the inventory done during the research. A new regulatory framework to manage the heritage properties of the city has not been implemented due to changes of staff, policy priorities and lack of funding. The same institutional bottlenecks that hamper the implementation of a preventive conservation policy are present at the national heritage institute. Staff of municipalities and the national heritage institute have participated in several workshops and seminars and some of them attend the master in city preservation management, but implementation of acquired knowledge and competencies remains limited and at personal level (e.g. acquired competencies applied such as improve documentation, use of photography, and application of a multi-stakeholder approach in preservation projects). There is no room for transfer of acquired knowledge and skills within the institution.

Nonetheless the lack of institutional impact, both the city of Cuenca and the national heritage institute, but also public entreprises like Etapa actively support the implementation of specific conservation campaigns, like for example: San Roque campaign in Cuenca (municipality), research to declare the neighbourhood El Ejido as cultural heritage (analysis of urban historic characteristics, involving 366 houses) and analysis of a new destination and use of the Virgin de Bronze church in El Ejido, Cuenca (national heritage institute) and the restoration of natural heritage areas in the national park Cajas (Etapa). All stakeholders also participate in seminars to sensitize institutional stakeholders and community members on the importance of city preservation.

At the level of individual households and community members, a clear impact could be notice in Susudel and the san Roque neighbourhood in Cuenca, related to improved housing conditions, improved self-esteem and improved social cohesion, as a consequence of the conservation campaigns.

2.2.6. Migration and Development

As in many other developing countries, migration in Ecuador continues to play the role of a common livelihood strategy for an important segment of the population, and remittances have become one of the largest sources of foreign exchange. According to the Central Bank of Ecuador in the past eight years more than two million Ecuadorians have left the country to live abroad. Many of them migrated to Europe – mainly to Spain and Italy, others to the United States, in search of employment and the possibility of a better life for their families. In the Austro region, Azuay and Cañar represent the provinces with major percentage of migrants. No doubt, the phenomenon of migration has generated transformations in the socio-economic landscape of the Austro region. Although it has been argued that migration has brought new opportunities to the region, its impacts on local development and more specific on socio-spatial dynamics have not been yet widely investigated.

The analysis of the implications of the migration events, have concentrated in the macroeconomic implications of remittances and its contribution in the generation of economic wealth. In terms of the micro implications of the migration phenomenon, at the local, regional and household levels, the evidence is less abundant and isolated. The establishment of the necessary statistical sources, as a crucial ground of comparable information nationwide, is still inexistent. The analytical capacity in the sector compared to other countries with equally sound migration experience, similar to the case of Ecuador, continues to

be a drawback factor in the understanding of the dynamic of the migration phenomenon and as a result a missing link in the formulation of public policies in the sector.

The development of the first phase of the project relied on two main goals: (a) to understand the dynamic of international migration, its disruptive impact on the local development in order to take advantages on its strengths and potentialities and to avoid negative drawbacks (b) to create a knowledge community at the University of Cuenca on international migration and development, in cooperation with local, national and international stakeholders' networks, for enforcing the academic capabilities (research, teaching, extension) on these issues. In terms of research capacity, 2 master studies were finalised and one team member initiated a PhD at the Universidad de Guadalajara, Mexico. Some students did a bachelor dissertation on migration studies and several training seminars on research methodologies have been organised. Two surveys were conducted in two communities in the Cañar province. The academic research capacity however needed to strengthen in the second phase. The initial researchers (except two) have left the project. The two main goals remained the same. Focus was put on changing the practice of analysing migration events and its effects from a mainly rhetoric perspective to a more scientific and applied one. Future researchers and lecturers need to be able to introduce rigorous methodologies and sound theories in their teaching and research activities. At development level, the project aims at improving the quality of the discussion among stakeholders on the consequences of migration, which is either mainly anecdotic or includes a significant emotional burden resulting in few productive initiatives. Via the generation of systematic and relevant information the project will provide local authorities with sufficient tools for policy design aimed at reducing the negative effects and enhancing the potential gains from migration; and to provide stakeholders with more objective and rigorous studies.

Factual data per research group

Hosting faculty	Psychology
Number of staff in research group	6 researchers and research assistants
Status of staff (fixed position, service contract, others)	All contracted lecturers Multi-disciplinary group (faculties of economy, psychology, philosophy)
Number of PhD finished/ongoing (within VLIR IUC)	1 PhD about to finalise in 2017
Number of PhD finished/ongoing outside VLIR IUC	1 researcher with PhD in economy (USA), contracted lecturer at the university of economy, assisting in the project for a about 6 hours/week
Number of publication in peer reviewed journals (Scopus)	None yet

Evaluation questions

Relevance	
1.1. Responds to needs Score: **Excellent**	- Lack of specific on-going research activities linking migration and local development in the Austro - Need for a data-collection system that provides rigorous data on the migration phenomenon on a permanent base

	- Cuenca (and the province Azuay) has a high number of migrants
1.2 Synergy Score: **Low**	- Limited collaboration with other VLIR projects. Collaboration was looked for with the projects on human sexuality and food, nutrition and health, mainly to look for integration of specific research items in the surveys conducted by the migration project. - Several teaching and research done by other faculties on migration but alignment and collaboration appeared difficult. New group created upon interest from different faculties. There was no genuine interest to create a research group - Looked for expertise in statistics but no support received from the VLIR PhD in statistics (transversal project) - Two researchers strongly involved in the Vanguardia programme.
1.3 Coherence Score: **Good**	- Coherent intervention logic, including good assumptions - Not clear to what active risk management was conducted in order to guarantee sustainability and have influence on public policy debates - Lessons learned during project implementation (e.g. after conducting the first survey) have been used to adjust approaches. - The project did not achieve to develop a coherent proposal during the first phase. At the start of the second phase a clear research line was chosen.

Final judgement/comments

The project is highly relevant. There is a lack of solid data on the migration phenomenon at national level, although several professors were conducting research at the Cuenca university. The analysis of the implications of the migration events, have concentrated on the macroeconomic implications of remittances and its contribution in the generation of economic wealth. In terms of the micro implications of the migration phenomenon, at the local, regional and household levels, the evidence is less abundant and isolated. This hampers policy makers to develop policies based on rigorous scientific and up-to-date data.

The initial project proposal also focused on the study of remittances (proposed by the faculty of economy). The project suffered from a late start in the first phase, as there was no clear intention at Cuenca university to genuinely increase scientific research capacity (including an international PhD) and to develop a multi-disciplinary research group that is needed to study all aspects of migration. Such a group was not existing at the university and needed to be created. The start of the second phase was used to bring more direction and coherence in the project and to strengthen the research capacity. The initiators of the project had left the project (not interested to pursue a PhD degree) and a new group of researchers was formed, showing potential to develop a multi-disciplinary research group on migration and development. The focus was put on developing tools to conduct scientific surveys and collect rigorous data on the impact of migration at the local level.

These data are relevant for policy makers and the city of Cuenca and the ministry of human mobility showed interest in this kind of data.

The project touches upon a very relevant societal phenomenon in the Austro region, where Azuay and Cañar represent the provinces with major percentage of migrants (which includes migration, immigration, refugees and returnees).

The research group is actively looking for synergy with relevant projects (VLIR projects or other research projects in the university) but not much synergy or alignment could be achieved. With regard to the VLIR projects attempts were made to explore how specific questions relevant for the researches on sexuality on adolescents and on food, nutrition and health could be included in the surveys that would be conducted by the migration project. Methodological and operational issues hampered such an integration. With regard to research on aspects of the migration phenomenon conducted by other faculties of the university the group was confronted with several bottlenecks such as, the lack of willingness of other faculties to collaborate, lack of interest in scientific research by other faculties, the heavy workload of all researchers hampering additional time investment and the difficult start of the project with the faculty of economy. The research group could not benefit from the expertise on statistics, acquired by one PhD student within the transversal project. The research group is not involved in other VLIR projects. The project benefited from the Vanguardia project as two Vanguardia students have joined the research group and one of them has become a teacher in the Vanguardia programme.

The intervention logic for the second phase of the project is clear and coherent and includes a relevant set of activities: investing in research, training of people and extension services. It is not clear what strategy would be applied to achieve the integration of results of the migration studies in undergraduate and master curricula at the Cuenca university. Good identification of assumptions but not clear to what extent effective risk management was conducted.

Effectiveness	
2.1 Academic Score: **Good**	- From the initial group (first phase) 2 tenured professors followed the masters at IOB in Antwerp and one completed a PhD in Mexico. None of the original team members is still part of the research group. - During the second phase two contracted lecturers followed the master at IOB in Antwerp and one contracted lecturer is currently finishing her PhD. - Research group created in the second phase but fragile - The Faculty of Economics has a professional master on human mobility and rights but no collaboration and no integration of research results in the master curriculum - Research results are being integrated in the courses given by the contracted lecturers in the faculties of psychology and philosophy. - 1 paper accepted for publication in a national peer reviewed journal; five papers are in the pipeline for publication in international journals. 2 articles are under internal revision to be submitted to international journals.
2.2 Development	- Research conducted in two communities (Sigsigs and Biblián).

Score: **Good**	- The community based monitoring system -CBMS (approach and tools) were shared with the city of Cuenca with the purpose to replicate this kind of monitoring surveys. Interest but no commitment yet by the city Cuenca (lack of budget and prioritization) - Collaboration with ministry of education, ministry of human mobility and OIM - Initiative taken to create an observatory on migration, very much welcomed by the ministry of human mobility and the city of Cuenca: signing of a MoU but no financial commitment yet - Educational material developed to address impact of migration in schools.
2.3 Scientific quality Score**: Low**	- No articles yet in Scopus (but in the pipeline) - Presentation of papers at international conferences o Paper on study of remittances presented at an international conference in Sevilla (2012) o Paper on global care chains in international conference Floreanópolis (2012) o Two papers on human mobility accepted for a peer-reviewed international conference in Quito (2017)

Final judgement/comments

The academic objective has almost been fully achieved. A specific methodology of a Community Based Monitoring System (CBMS) was developed (adapted from the instrument developed by La Salle Institute in the Philippines and applied in 15 countries including Peru and Argentina) and applied for generating systematic data on the impact of migration on factors such as well-being, poverty, social development, etc. Two lecturers acquired a master degree and one PhD study is about to finalise. Less PhD have been formed according to planning. Several publications are in the pipeline. There is an operational multi-disciplinary research group, though limited in number. The creation of a research group however was not included an intermediate result in the logframe. Only to a limited extent results of research can be included in existing undergraduate and master curricula. This integration is mainly dependent on the teaching assignments of the researchers that are part of the research group and that integrate results from research in their own respective classes.

It is too early to assess the scientific quality of the project results as the group is still young and PhD research still needs to be finalized (expected in 2017). Based on the current evidence the scientific quality is rather low, with a limited number of publications and none yet in an international peer reviewed journal. The research groups has started to profile itself at international conferences. Participation in international academic networks is limited and still dependent on the IOB network.

Also the development objective has been almost fully achieved. Several instruments have been applied and tested and made available to policy makers to conduct monitoring of policies related to migration such as the community based monitoring system but also tools to monitor entrepreneurship of returnees and refugees' labour situation. Not included in the logframe but an important achievement is the proposal to install an observatory on migration at the university of Cuenca, which will guarantee on-going research and strengthen the collaboration between different stakeholders involved in migration studies. A MoU was signed with the ministry of human mobility but

no financial commitments have been taken, not by the ministry or the municipality of Cuenca or the provincial authorities. Only to a limited extent community outreach programmes have been developed, which entail mainly the development of booklets to be used by schoolteachers to address issues of migration in the classrooms.

Explanatory factors:

- Committed and dedicated team
- Close collaboration between the two project leaders
- Combination of master and PhD training and established linkages between the research group, the IOB master course on globalisation and other international partners collaborating with IOB Antwerp
- Participation of IOB researchers and students in the field work conducted in Sigsigs and Biblián
- Lack of access to official database of public institutions. The transition of the national secretariat for migrants into the vice ministry of human mobility which was accompanied with a significant loss of information
- Lack of financial commitment of institutional stakeholders
- Lack of sufficient resources for several interventions, such as development of community outreach interventions, participation of institutional stakeholders in research conferences, application of the CBMS in larger communities or at city level
- Rigid structure at the Cuenca university hampering the swift integration of new subjects in existing curricula
- Existence of more than one research group that study migration at the Cuenca university that are more competing than collaborating
- The research group is not embedded within a specific faculty. The faculty of psychology is showing interest.

Efficiency	
3.1 Intermediate results Score: **Good**	R1: Migration Impact Monitoring Mechanism implemented in two communities (Sigsig and Biblian) R2: Study on the impact of remittances R3: Study on social implication of human mobility R4: Formation of PhDs and masters: 1 joint PhD (in Antwerp and KU Leuven); 2 master students in development (IOB Antwerp); 2 master students finished at KU Leuven R5: Training on the implementation and use of MIMM in local development planning (Sigsigs and Biblian) R6: Community related development programmes related to the social impacts of migration in the Austro
JC. 3.2 relationship input-output Score: **Good**	- Reasonable division over different project posts, no investment required in lab equipment - Underspending in scholarships - Relatively high share of participation in conferences - Good combination of master and PhD studies

	- Attempts to make use of existing database but appeared not being useful - Exchange of knowledge and monitoring tools developed by IOB Antwerp and the university in the Philippines - Didactic material to discuss migration issues integrated in the seminars for teachers, organised by the faculty of psychology
JC. 3.3 Project management Score:	- Improved planning and M&E capacities - Good academic and financial support received from the PSU - Transparency in decision taking process - Good working relations in current project team - Good collaboration with project leader in Belgium

Final judgement/comments

The *intermediary results* are almost fully realised and contribute to the realisation of the specific objectives. The PhD is about to be finalised and publications are being prepared. Not much resources were available to effectively develop community related development programmes, which were limited to the development of didactic material to discuss the social impacts of migration at schools. The project also started to focus more on public policy development. The project had suffered from a delay in the starting up phase but eventually could take of in the second phase of the project.

Input-Output: there is a reasonable division over the different project posts, in line with the overall programme logic. There was an underspending in the scholarships. Not sufficient resources were available to conduct surveys in larger communities or at city level. As such, the monitoring tools were applied on rather smaller communities. Cost-effectiveness was looked for. To the extent possible collaboration with other actors and alignment with other initiatives was looked for (not always achieved though). The participation in a high number of international conferences by the same researcher can be questioned. The outreach interventions could only be partially implemented after the first group of researchers left and no hours were assigned for outreach activities. The intervention was replaced by a study of refugees and human rights.

Project management was assessed as excellent. Contributing factors were the availability of clear procedures and transparency in decision taking; the excellent capacity of the PSU in Cuenca. Communication between project leaders had improved since the replacement of the project leader in Belgium. The team stressed the importance of having acquired specific planning, monitoring and evaluation skills.

Sustainability	
4.1 institutional Score: **Poor**	- Research group newly created but not included yet in a research department of a faculty (the group currently is part of the center of research and postgraduate studies of the faculty of psychology). The group is rather small and all staff are working on contract base

	- No policy at the involved faculties to assign sufficient hours for research. Research threatened by other tasks (teaching and administration). - Most of the contracted lecturers have not yet completed the maximum four years of the of service contract and depending on the decision of each of the faculties involved they can continue working for the research group for another one or two years. However, assigned research hours are limited (not more than 10 hours) and depend on the policy and decisions taken by each of the faculties, which can vary from year to year.
4.2 Financial Score: **Low**	- As no tenured professor is working in the research group, the group cannot apply for research funding at DIUC. - After the evaluation visit the DIUC and the rector supported the research group to attract external funding (e.g. agreement with the ministry of human mobility) - There is currently no financial commitment by the city of Cuenca, the provincial governments of Azuay or Cañar or of the ministry of human mobility. OIM transfers funding through the ministry. OIM could become a strategic partner but negotiations are ongoing.

Final judgement/comments

Institutional and financial sustainability of the research group is at risk. The newly created research group is not yet embraced by a specific faculty and not embedded in a research group. Lots of efforts were spent by the project leader to look for alignment with other research groups on migration at the Cuenca university but due to internal competition and lack of policy on the formation of research departments no results could be achieved. Integration in the existing research department on population studies appeared not feasible as this department is weak in itself. Currently there is interest from the faculty of psychology to form a research department based upon the research group on migration and development and the CIFSEX group. But the dean appears to be waiting for policy guidelines regarding research, which is depending on the initiative taken by the rector. The dean of the faculty of philosophy also has to support this policy decision as the group belongs to both faculties.

The group is rather small and cannot rely on a tenured professor. Job security of all researchers is not guaranteed. The group is not mandated to apply for research funding from DIUC and has not taken initiative yet to develop research proposals that can be presented at international donors. The group is hoping to attract funding for the observatory on migration. Sustainability is at risk when no external funding will be attracted.

Impact	
5.1 academic level Score **Poor**	- Collaboration looked for with different faculties. Not much interest from the faculty of economy (as theme changed). Mainly interest by the faculty of psychology. Not by the research department on population studies (which would be the most genuine option). - Several faculties are involved in migration related research (e.g. migration and sexuality) but garmented approaches and lot of competition - Not much collaboration with other universities studying migration, except with COLEF
5.2 Development Score: **Low**	- No influence yet on public policies or interventions based on research results provided - City of Cuenca not having the capacity (technical and financial) to replicate (and update) the monitoring surveys - Teachers have received educational materials but not clear how these are used and its effect on well-being of children of migrants
Final judgement/comments	
Academic: The project had not much impact on the other faculties within the university of Cuenca or on the university policy in general. The research group operates as a rather isolated group within the university although many attempts were made to strengthen collaboration with other faculties such as economy, philosophy, psychology. There are several groups operating at the Cuenca university involved in migration related subjects but according to internal and external stakeholders interviewed none of them achieved to deliver high quality scientific research that is also recognised at international level and none of them was able to provide rigorous data that can be used for policy development. As such the ministry of human mobility is very much interested in the observatory and expects that the observatory will provide and collect relevant data based on scientific research. It sees a coordination role for the migration and development research group. *Development*: the research group has developed monitoring tools that can be used by institutional actors to be up-scaled and used for knowledge based policy development. However, absorption capacity at municipal level (lack of financial resources, frequent changes in staff and leadership at public administration) is rather weak and no evidence was found of clear commitments to make use of developed tools. Information on research results was shared with different stakeholders but not used yet for policy development. The research group contributed to the debate on the impact of migration on different factors such as well-being, socio-economic development, education, etc. Teachers have been provided with booklets and didactic materials to discuss effects of migration in the classroom but no evaluation of the impact has been done so far.	

3. Conclusions and Recommendations

3.1. Very relevant programme but project design could be improved

The IUC programme implemented with the University of Cuenca is a very relevant programme, responding to the university needs as formulated in their consecutive strategic plans and the needs and interest of the different faculties involved in the projects. Evidently the stronger faculties showing interest in enhancing their research capacity have taken advantage of this programme. Relevance and achievements have to be seen in the national context. With the approval of the new law on higher education (LOES) in 2010, and implemented from 2012 onwards, national conditions were created to support further implementation of the IUC programme. The IUC programme supported the University of Cuenca in evolving in the right direction as demanded by the LOES, by stimulating research, building up high profile professionals and promoting institutional modernisation. The VLIR investments experienced a multiplying effect because of the resources that became available for the implementation of the LOES.

Within the LOES the connection of universities with the community was reconfirmed, which further stressed the importance of conducting research that needed to be of interest of the wider society. The university always had established good working relations with different public and private external stakeholders, which was even enhanced by the IUC programme. Evidently the projects responded to specific societal needs and had potential to contribute to the development of the region within the framework of the “National Plan of Good Living”.

The majority of the projects were well designed, which was -among others- the result of the time given for the formulation of the different projects (year 0). However, several projects also suffered from an initial mismatch between the project leaders in Cuenca and Belgium and/or suffered from a weak initial design or project proposal formulation, which could not be solved in the formulation period.

In all projects the hypotheses were not well identified and there was a lack of appropriate risk and opportunity management. This was the most evident in the institutional project. The intervention strategy of this project was based on a good analysis of the problems and challenges at stake but lacked an analysis of the conditions that needed to be in place as a leverage for obtaining clear results.

Recommendations for VLIR-UOS:

Recommendation 1: Based on the lessons learned in this IUC programme, it appears that more time is needed to facilitate a genuine matchmaking process in order to explore different collaboration opportunities with different research groups active in Belgium.

Recommendation 2: Analysing risk and opportunities and identifying assumptions is not evident in project and programme planning. These analyses, however, require sufficient attention during programme and project formulation (year 0). This also requires knowledge on how to support capacity development processes aimed at organisational and institutional change (taking into account the current cooperation modalities that rely very much on voluntary engagement of project leaders in the North). This knowledge needs to be built or consolidated at the level of VLIR-UOS and shared with project leaders interested in IUC projects. Joint training to that end could be included in the formulation phase.

3.2. IUC investing in a long term cooperation programme has clear added value

The added value of implementing a programme is not evident in this IUC programme as it was built out of a combination of isolated projects of a very different nature, which made it difficult to look for synergy between the different projects. Several attempts were made to look for synergy between the projects but this was severely hampered by the lack of a collaborative culture at the University of Cuenca, lack of exchange between project leaders and -staff and the heavy workload and requirements to deliver within each of the projects. As such, the combination of projects was not a leverage for increasing the level of effectiveness and efficiency. However, the intention to look for synergy within the IUC programme contributed to getting to know each other, which is not evident in a university culture where every faculty is operating on its own. This resulted, for example, in the engagement of professors of the chemistry faculty in the master in water resources.

However, the fact of implementing a programme creates the opportunity for a transversal project focusing on institutional change. The IUC programme with Cuenca has demonstrated that transversal interventions can contribute to strengthening a research friendly environment, if well designed. Due to the problems in the design of the transversal project and the lack of commitment at the University of Cuenca, the added value of the transversal project was limited to the improvement of the library and ICT infrastructure. The experiment in implementing a honours programme appeared relevant and successful but did not trigger yet the policy debate regarding the institutionalisation of scientific research within the university.

The biggest added value of the IUC programme is the fact that, due to the long-term collaboration of 10 years, a critical mass of researchers was trained, research groups have been formed and lab infrastructure and equipment significantly have improved. This is visible at the entire university and triggered the debate on the evolution towards a university involved in teaching combined with scientific research. A momentum has been created, which requires follow-up initiatives at the level of the University of Cuenca.

Recommendations for VLIR-UOS:

*Recommendation 3: A*lthough the transversal project in this IUC has not been very successful, the fact that a transversal project can be created is a clear added value of the IUC programmes. It creates the opportunities to invest in transversal organisational change processes. “Low hanging fruit” is related to investments in library and ICT infrastructure, but also these investments are of utmost importance. The challenge will be to realise higher ambitions, related to changes at policy and management level, which is not evident. Every IUC programme will be implemented in a difficult context. It is recommended to keep on exploring what realistic ambitions can be formulated in each of the contexts (see also recommendation 2).

Recommendations 4: It is not realistic to expect synergy between projects of a very different nature. But a minimum of exchange between project leaders but also between project staff needs to be stimulated.

Recommendations for the University of Cuenca:

Recommendation 5: A momentum is created with the presence of different research groups that also have gained international recognition. It is needed to at least develop a policy on the institutionalisation of research departments and on human talent management. In the short term, researchers need to be informed on the prospects of their work. For example, because of the recognition of the VLIR project as an investment projects, contracts can be guaranteed till the end of 2018. This information needs to be

shared among all people involved. Further, research groups need to be supported in the development of strategies to become auto-sustainable.

3.3. High level of effectiveness

The IUC programme has almost fully realised all academic and development objectives. As stated in the above a critical mass of researchers is trained, research groups are formed and lab infrastructure and equipment significantly has improved. Almost all projects produce high level of scientific quality, evidenced by the number of international publications, the active participation in international conferences, the involvement in international academic networks and the international recognition of the expertise built. Although the number of scientific papers published in internationally peer reviewed journals is not very high, the total number is very justifiable based on the number of PhD students graduated. In all projects, the link was strengthened between research and teaching. Although there are indications of new ways of teaching being applied, the opportunities to experiment with blended learning or problem oriented teaching were not fully explored.

Contributing factors are the commitment of the people involved (in Belgium and in Cuenca), the support provided by the respective faculties, the level of accompaniment and coaching of the Flemish project leaders, the leadership style in the research groups and the manner in which a possible clash between old and new culture (or between generations) was managed. Level of effectiveness was lower in those faculties where there was no real commitment to support PhD students involved in research.

Recommendations to VLIR-UOS

Recommendation 6: The commitment from the hosting university needs to be clear. It appeared that several faculties did not understand the consequences of sandwich scholarships, resulting in situations within which PhD researchers were assigned with many other tasks besides conducting research (even contracted staff not having to fulfil the requirements of a tenured professor to spend a minimum amount of hours on teaching). It could be explored how this commitment could be jointly monitored and maybe enforced (maybe several scenarios could be explored).

Recommendation 7: High emphasis is given to the publication of scientific research papers in internationally peer reviewed journals. This is a good indicator for obtaining and monitoring the level of scientific research being conducted. However, it needs to be taken into consideration how much pressure can imposed on the researchers to that end (but respecting the minimum requirements to obtain a PhD degree).

Recommendation to the University of Cuenca

Recommendation 8: A human talent policy needs to be developed regarding the reinsertion of PhD students. As the university still needs to enhance its number of tenured professors with PhD, the U Cuenca needs to develop a policy to maintain the PhD graduates at the university (as was foreseen in the transversal project). The initiative of the current rector to demand each faculty to develop a strategic plan, including the short and long term planning of its human resources, is a relevant and valuable initiative to that end. It will trigger the discussion of the reinsertion of PhD graduates. It is recommended to launch as soon as possible new vacancies in order to create job security of PhD researchers having an interest to remain at the university.

3.4. Excellent programme and project management

All stakeholders agreed on the excellent quality of the programme and project management. The IUC programme demonstrates the added value of having a separate programme support unit at the hosting university and an ICOS at the Flemish university; and demonstrates the importance of a good selection of the programme managers, which require sufficient management skills, and the added value of continuity in programme managers. This contributed to the swift communication between the programme managers in Belgium and Cuenca and with the projects. Overall programme and project management were assessed as excellent.

Management tools are well developed and well applied. The procedure manual contributed to transparency and good understanding of the guidelines and requirements. A lean monitoring and evaluation system is developed by VLIR-UOS, supported by practical and user-friendly tools (reporting formats, self-assessments formats). The set of indicators to be monitored, in particular the key performance indicators are relevant, SMART and conducive for effective monitoring of the projects. There are some problems in the correct understanding or interpretation of several of the key performance indicators for each of the key result areas but this has not hampered the monitoring of the projects (mainly complicating the accountability requirements).

Recommendations to VLIR-UOS

Recommendation 9: Maintain the set-up with a programme support unit and the financing of the PSU as was practiced in this IUC programme. The training on result based management as provided at the start of the programme needs to be maintained as well and replicated when programme managers change.

3.5. Efficient implementation of the programme but hampered by several delays

The choice of activities and financial inputs was justified taking into account the nature of the IUC programme, with a dominance of investment costs and scholarships. Cost-effectiveness in several projects was enhanced by the mobilisation of complementary resources, enabling the expansion of the group of researchers or adding research activities. A combination of long term training and short term technical training was also conducive for enhancing skills of the entire research group (not only the PhD students).

Project implementation was delayed because of institutional factors in Belgium and Ecuador and operational issues at project level. VLIR-UOS and the University of Cuenca have successfully looked for creative solutions to address the problems encountered related to the management of the programme. Flexibility of the ICOS unit was very much appreciated to that end. At operational level, there have been problems in mobilising students or professors to become engaged in PhD studies abroad.

The commitment of the University of Cuenca was only described in a general manner in the cooperation contract, which resulted in the fact that there was a lack of commitment of the University of Cuenca during the second phase in providing sufficient resources for programme management, service contracts and the reinsertion of PhD students.

Recommendations to VLIR-UOS

*Recommendation 10***:** A good analysis of the context within which the local university is operating is needed. When institutional problems and specific government regulations might hamper swift programme implementation alternative solutions regarding programme management, in particular regarding public procurement, need to be taken into consideration.

Recommendation 11: It can be taken into consideration to quantify the contribution of the University of Cuenca, both in-kind as financially, that can be clearly described in the cooperation contract. This will contribute to transparency and enables monitoring of the commitments taken.

Recommendation to the University of Cuenca

*Recommendation 12***: I**t is recommended to institutionalize the PSU unit (maybe it can be embedded within the department for international relations) to not lose the capacity regarding research project management. The capacity can be used for managing other externally funded donor projects.

3.6. Sustainability of the project results at risk

The academic and institutional sustainability of the results achieved, and in particular of the research groups created, is varying and depended on the level of maturity, strength and initiative taken by each of the research groups to secure its sustainability as an overall policy at university level regarding the embedment of research groups, the institutionalisation of research and an appropriate human resource policy are currently lacking.

Financial sustainability is hampered by the decreasing amount of government funding becoming available for the universities. Financial sustainability is guaranteed for three research groups, which have demonstrated the capacity to develop good research proposal and to attract local, regional and/or international funding. These research groups also have established relationships with a variety of academic actors and are involved in international networks. The other research groups depend mainly on the existing collaboration with the Flemish partner and the access they might have to other VLIR projects.

The phasing-out phase is focusing above all on the consolidation of the knowledge built, research conducted and the dissemination of the results within the university and among external stakeholders. The phasing-out programme does not include a strategy to strengthen institutional and financial sustainability of the project results.

Recommendation for VLIR-UOS:

Recommendation 13: Sustainability strategies need to be included in an earlier stage of the projects, and at least at the start of the second phase of the IUC programme. Several scenarios need to be foreseen, taking into account possible evolutions in the institutional context at the local university. To enhance financial sustainability, sustainability strategies can include the provision of support to enhance capacity in project proposal writing as well as a strategy to link research groups with international networks. As such the participation in international conferences is important. A policy regarding the participation in international conferences can be developed (how many, what kind of conference, selection criteria, etc.).

Recommendations for the university of Cuenca:

Recommendation 14: The current rector of the university stresses the importance of research groups being able to attract external funding and to become auto-sustainable. This principle needs to be clearly communicated with the research groups and support needs be attracted to assist research groups in developing a strategy to become auto-sustainable.

ANNEXES

Annex 1: Terms of Reference (extract from the ToR)

Purposes of the evaluation

A final evaluation has 3 different standard purposes:

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

Specific evaluation objectives

The evaluation's primary objective is to evaluate the performance of the IUC (programme level and project level). This is the basis of every IUC evaluation. Next to this objective, final IUC evaluations also analyse the prospects for the post-IUC period:

A. The performance of the IUC needs to be evaluated on the basis of the OECD-DAC criteria for development evaluation (+ one additional criterion): **scientific quality, relevance, efficiency, effectiveness, impact,** and **sustainability**. For final evaluations, a particular focus needs to be given to **sustainability** and **effectiveness** (progress towards the achievement of the specific objectives). Cf. evaluation criteria below.
B. The follow-up plan of the programme for the post-IUC period (cf. self-assessments) is also evaluated. The follow-up plan needs to further guarantee sustainability at institutional level (and research groups), and the impact of the university on development processes in the surrounding community, province and eventually in the country

Evaluation criteria

As mentioned, the evaluation will use the OECD-DAC criteria (+ a criteria on scientific quality) as criteria to evaluate the IUC: **scientific quality, relevance, efficiency, effectiveness, impact,** and **sustainability**. Any priorities regarding criteria are mentioned in 3.2.

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

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

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

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

Programme level

Criterion	***Descriptors***
1. Relevance	*"The extent to which the objectives of a programme are consistent with beneficiaries' requirements, country needs, global priorities and partners' and donors' policies."* The extent to which the programme is addressing immediate and significant problems and needs of the concerned partners (institutional) as well as regional and national policy makers, with reference to the MDGs, PRSP and other multilateral policy documents.

2. Efficiency	"*A measure of how economically resources/inputs (funds, expertise, time, etc.) are converted to results.*"
	
	• Sufficient "economy" considerations by the programme
	• The use and application of the means earmarked for collaboration.
	• The **management** of the programme both in Flanders and locally:
	  ○ results-orientation of management
	  ○ cooperation between all parties involved (between projects and programme level, between projects, within projects, between programme and local university)
	  ○ quality of communication between all parties involved (between projects and programme level, between projects, within projects, between programme and local university)
	  ○ External communication

3. Effectiveness	*"The extent to which the programme' s objectives are expected to be achieved, taking into account their relative importance."* • Overall effectiveness of the programme, taking into account the attainment of specific objectives at project level • changes in awareness, knowledge, skills at institutional level • changes in organisational capacity (skills, structures, resources)
4. Impact	"*Potential positive and negative, primary and secondary long-term effects produced by the programme, directly or indirectly, intended or unintended.*" Not just actual but also (given time limitations) potential impact. ▪ Added value of the IUC programme for the institutional performance of the university ▪ Policy changes at institutional level? Changes in behaviour at institutional level? ▪ Added value of the IUC programme for the role of the university as a development actor ▪ the extent to which the collaboration has sparked other departments to initiate interuniversity collaboration, joint capacity building, fund raising etc.

	▪ the extent to which the collaboration has led to joint developmental activities or similar collaborative models at the regional level ▪ the extent to which the collaboration has raised interest of policy makers and academics, and how the partner university is called upon or is pro-actively developing collaboration models that could be fed into policy advice
5. Sustainability	*"The continuation of benefits after the programme have been completed."* Financial, institutional and academic sustainability: • co-funding by the partner university (matching funds) • incorporation of costs into the budget of the partner university • the partner university sets aside funds for operations and maintenance of physical infrastructure • Ability to attract external funds • Ability for full financing or co-financing events, workshops, congresses, mobility, grants, investments, infrastructure • Strengths and weaknesses of the institution in terms of institutionalising the collaboration • Intensification and/or formalisation of interuniversity consultations (North-South and South-South) • Ability to produce joint proposals (fund raising, research) • Collaboration and exchanges outside of VLIR-UOS-programme • Curbing brain drain into sustainable brain circulation, installing incentives, "pull factors" against "push factors"

Project level

Criterion	***Descriptors***
1. Scientific quality	*"The extent to which a project has a ground-breaking nature and ambition (excellence)."* ▪ quality of **research** : the extent to which research - sufficiently involving stakeholders - is cutting edge; Extent to which the results have been incorporated in local or international refereed journals ▪ quality of **education** : the extent to which new education practices – developed while sufficiently involving stakeholders - are cutting edge; Extent to which alumni easily get a job which fits their education profile; the number of fellowships acquired from foundations
2. Relevance	*"The extent to which the objectives of a project are consistent with beneficiaries' requirements, country needs, global priorities and partners' and donors' policies."* The extent to which the project addresses immediate and significant problems of the community, looking at the amount of self-finance, demand from state and private actors, the level of transfer of know-how and technology. Synergy and complementarity with other (Belgian) actors.
3. Efficiency	"*A measure of how economically resources/inputs (funds, expertise, time, etc.) are converted to results.*" • The extent to which intermediate results (outputs) have been delivered

	• The relationship between the intermediate results and the means used to reach the intermediate results. • The relationship between the objectives and the means used to reach the objectives. • Efficiency of project management (e.g. the extent of flexibility during implementation)
4. Effectiveness	*"The extent to which the programme' s objectives are expected to be achieved, taking into account their relative importance."* • the degree to which the specific objectives have been achieved • the "use of outputs" • changes in behaviour • the extent to which the university/faculty/department has created the conditions for impact (e.g. by facilitating uptake)
5. Impact	"*Potential positive and negative, primary and secondary long-term effects produced by the project, directly or indirectly, intended or unintended.*" Not just actual but also (given time limitations) potential impact: ▪ Upscaling of new knowledge/applications/services by communities/governments/organisations ▪ Impact on internal performance of involved academics/departments - renewed curriculum functions as example for other universities/departments - the new style of teaching has become a model for teaching (e.g. the systematic use of teaching in combination with laboratory work) - the library has experienced a clear increase in number of visitors ▪ impact at the level of the private sector : the amount of money earned on the market ▪ the extent to which academics, involved in the project, are called upon by the government for policy advice
6. Sustainability	*"The continuation of benefits after the programme have been completed."* Especially financial and institutional sustainability: ▪ Measures for staff retention of trained staff ▪ (potential) synergy and complementarity with other actors (e.g. in extension), local and Belgian actors in particular ▪ do the Flemish universities commit their own university funds to the programme, for instance by giving fellowships or by allowing academics to go to the field ? ▪ personal commitment of academia? ▪ availability funds for operations and maintenance of physical infrastructure ▪ are there joint research projects which are interesting both to the Northern and Southern academics involved ? ▪ do the partner universities also commit their own funds to the programme (matching funds)?

Actors involved

The following actors will be involved in the evaluation :

- the VLIR-UOS secretariat;
- the stakeholders (both in Flanders and in the partner country) involved in the ongoing IUC co-operation programmes;
- the members of the evaluation team;
- the Direction General for Development Cooperation (DGD), i.e. the Belgian government administration for international cooperation
- other relevant stakeholders

1. **The evaluation team -** *Expertise in management, academic content and country context*
   The following expertise need to be represented in the evaluation team:

- International development management expertise: knowledge of and experience with processes of institutional/organisational development, capacity building and methodological issues in general and in higher education in particular;
- Academic expertise regarding the core theme(s) of the partner programme such that the academic quality may be assessed;
- Country expertise: knowledge of and experience in the national issues at hand in terms of higher education and research in the country concerned.

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

The experts should have a proven experience and expertise with evaluation in a development context.

The executive board of VLIR-UOS will decide on the composition of the evaluation team, based on the analysis and assessment of offers by the VLIR-UOS-secretariat .

Division of tasks among the members of the evaluation team

The evaluation is to be undertaken by both members of the evaluation team.

One expert will act as team leader (chairman). In this capacity he/she will lead the meetings that have been programmed and will coordinate the report drafting. He/she will be invited to use his/her experience with international cooperation in the field of higher education and research as reference for the evaluation, especially when formulating recommendations for improvement of the global set-up and management of the programme. A second expert, country expert, will be invited to situate the partner university and its IUC Programme in its larger national context, taking into account local legislation relating to higher education, etc.

2. **The Northern stakeholders involved in the ongoing IUC cooperation programmes**

What is meant by the Northern stakeholders is : all persons from the Flemish universities who are involved in one of the ongoing IUC cooperation programme. This means: the top management of the

Flemish coordinating university, the Flemish coordinator, the Flemish project leaders and team members, Ph.D. student promoters, the Institutional coordinator for University Development Cooperation of the Flemish coordinating university (the so-called ICOS), the financial officer(s) of the Flemish coordinating university, VLIR-UOS programme officer, students, Belgian development actors, etc.

3. The Southern stakeholders involved in the ongoing IUC cooperation programmes

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

- the top management of the partner university, the authorities at faculty level, the local coordinator, the programme manager, the local project leaders, their deputies (if applicable) and team members, the staff of the local coordinating unit of the IUC programme (secretaries, accountants, …), the students funded by the programme, the student supervisors and/or promoters, technicians, staff from other donor-sponsored cooperation programmes being implemented at the partner university, etc.;

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

4. The VLIR-UOS-secretariat

The VLIR-UOS-secretariat will function as organiser of the evaluation, as well as resource centre for the evaluation team. The evaluation team will be closely assisted by the programme officer of the respective IUC programme within VLIR-UOS.

5.DGD

The Directorate General for Development Cooperation, will be invited to have a separate discussion with the evaluation team, if so desired, and to participate in debriefing meetings with the evaluation team.

Methodology

The evaluators are expected to detail an overall methodology for the evaluation in their offers (methodology ≠ data collection method). This methodology needs to be in accordance with the evaluation objectives, taking into account the context of the intervention and the budget of the evaluation.

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

Information sources/methods

- Programme documents
- Focused interviews with all stakeholders
- Visits

The evaluation team members will visit the partner university where they will have focused discussions with all stakeholders of the IUC partnership, both the Southern and Northern ones.

The interviews will be preferentially face-to-face but classical (group) interviews (e.g. students, authorities,…) are possible as well. Exceptionally, unavailable persons may be interviewed by telephone, E-mail, or by sending a questionnaire.

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

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

In the context of the evaluation methodology for the IUC evaluations a separate meeting will be held in Brussels with the international expert in order (i) to brief on VLIR-UOS, its programmes on university development cooperation, and the respective IUC partnerships and (ii) to allow discussions with the respective Northern stakeholders who cannot be present in the South at the time of the mission (e.g; in case there is no joint steering committee in that particular period).

Organisation of the evaluation

1. The evaluation team will be composed by the executive board of VLIR-UOS called Bureau UOS (BUOS), based on suggestions from the Flemish and the partner universities, submitted proposal by the international expert (concerning the local expert), as well as of VLIR-UOS-secretariat and on the basis of the submissions following a tender procedure.
2. The evaluation team will receive from VLIR-UOS, apart from basic information on the IUC Programme, a set of documents relating to the respective IUC partnership for the desk study.
3. The Northern and Southern stakeholders of the ongoing IUC cooperation programme received the formats for the self-assessment reports in November 2016. The reports will have to be submitted to VLIR-UOS-secretariat before the end of January (depending on final planning).
4. The partner university will be invited to draft the programme of the evaluation mission, taking into account the possible requests formulated by the resp. evaluation team.
5. The evaluation team (or one of the experts) will conduct interviews in Flanders. The methodology of the evaluation will be refined in consultation with the VLIR-UOS-secretariat
6. The evaluation mission will be organized in consultation with the main stakeholders during the April 2017 period, lasting about one week.
7. At the very end of the mission, the evaluation team will discuss its preliminary conclusions and recommendations at length with the Southern and the present Northern stakeholders. It is advised that this debriefing meeting be followed by a local steering committee meeting. The evaluators are not supposed to participate in this local steering committee meeting, except for a debriefing session.
8. The evaluation team members will submit a draft report **within three weeks after their return from the mission**. Afterwards, a debriefing in Brussels is organized during which the highlights of the evaluation report are presented. The draft report will be submitted, for comments, via VLIR-UOS, to the resp. Flemish and local coordinator. It will be up to the two coordinators to coordinate the reactions to this draft report. The evaluation team will decide, given its autonomy, whether or not to take into account the comments received (if major comments are not integrated, this needs to be explained).

Timing of the evaluation

Action	Actor	Timing
Decision start-up procedure	VLIR-UOS (Bureau UOS)	14 October 2016
Mailing of the formats for the self-assessment reports to the stakeholders	VLIR-UOS secretariat	November 2016
Tendering process for hiring the international consultant(s)	VLIR-UOS	End December 2016 – 20 January 2017
Selection of the International consultant and proposal of local consultant on advice of partner universities and international consultant	VLIR-UOS, Bureau-UOS	24 January 2017
Negotiations on TOR and contracting	VLIR-UOS and international consultant	End of January – early February 2017
Final timing of evaluation missions to be planned with appointed experts	VLIR-UOS secretariat	Early February 2017
Deadline for submission of the self-assessment reports to VLIR-UOS-secretariat	to be submitted by the Flemish and local coordinators to VLIR-UOS secretariat	31 January 2017
Preparation of the missions of the evaluation team	VLIR-UOS secretariat + partner universities	February – mid- March 2017
Drafting of the programme for the evaluation	Evaluation team (in consultation with VLIR-UOS secretariat + partner universities)	February – mid-March 2017
Interview session North	▪ the evaluation team ▪ the Northern stakeholders ▪ VLIR-UOS and DGD	February - March 2017
Evaluation missions	▪ evaluation team ▪ the Southern stakeholders ▪ the Northern stakeholders ▪ VLIR-UOS and DGD	Indicatively 1 week preferably in the second half of March or if in April 2017 avoiding 'Semana Santa' 8-16 April 2017
Submission of the draft evaluation reports to the Flemish and local coordinators	Evaluation team, via VLIR-UOS secretariat	within three weeks after the mission
Debriefing + comments on the draft evaluation report	▪ the Northern stakeholders, under the coordinatorship of the Flemish coordinator ▪ the Southern stakeholders, under the coordinatorship of the local coordinator ▪ VLIR-UOS	Within one month after the end of the mission
Final evaluation report	the evaluation team	Within 8 weeks after the end of the mission

Annex 2: Evaluation framework

<table>
<tr><td colspan="3">EQ 1 – To what extent is the project relevant?</td></tr>
<tr><td colspan="3"><u>Rationale:</u>

From the study of documents and interviews it has already become clear that the IUC programme fits within the national policy “Buen Vivir” and within the national educational reform processes for higher education. During the evaluation it will be above examined to what extent the alignment with these national policies was conducive for obtaining the results.

It must be noted that at the moment of the design and the start of the IUC programme in 2007 the VLIR-UOS had no elaborated country strategy. The evaluation will assess to what extent the programme was aligned to the strategies of VLIR-UOS at the start of the programme, but will also pay attention to the extent there is alignment with the current country strategy and to what extent this has had an influence on programme implementation.

Under this evaluation criteria it is also important to assess the level of coherence in the intervention logic, which can have an influence on effective and efficient project implementation. This was not explicitly asked in the ToR but added by ACE Europe.</td></tr>
<tr><td colspan="2">Judgment criteria</td><td>Guiding questions/indicators</td></tr>
<tr><td colspan="2">1.1. The objectives of the project are consistent with the needs of the University of Cuenca, the country/local needs, country educational policies, partner and donor’s policies</td><td>• The project is addressing clear demand and specific needs/problems expressed by the University of Cuenca
• The project is aligned to the new educational reform and policies for higher education in Ecuador
• The project is coherent to the overall policy “Buen Vivir”
• The project has the potential to develop outreach activities and to provide services that are relevant for local and regional development
• The project is aligned to the objectives identified in the VLIR-UOS country strategy for Ecuador</td></tr>
<tr><td colspan="3">Judgement scales</td></tr>
<tr><td>Excellent</td><td colspan="2">The project is an appropriate answer to key needs and issues identified by the university of Cuenca, and is in line with the educational reform processes in Ecuador. The project delivers adequate responses to development needs in the region/locally.</td></tr>
<tr><td>Sufficient/Good</td><td colspan="2">The project is an appropriate answer to some of the key needs and issues identified by the university of Cuenca and is in line with the educational reform processes in Ecuador. The project delivers to a certain extent responses to the development needs in the region/locally</td></tr>
<tr><td>Insufficient/low</td><td colspan="2">The project responds to some of the key needs and issues identified by the university of Cuenca but the content/strategy is not fully what was expected by the university of Cuenca. The project is in line with the educational reform processes in Ecuador. The projects is not relevant for the development needs in the region/locally.</td></tr>
<tr><td>(very) Poor</td><td colspan="2">The project does not provide an appropriate answer to the key needs and issues identified by the university of Cuenca and does not deliver adequate responses to the development needs in the region/locally.</td></tr>
</table>

1.2. The project has looked for synergy[9] with other projects aimed at capacity development and institutional strengthening of the University of Cuenca	• The project has looked for synergy with other IUC projects • The project has looked for synergy with other VLIR-UOS interventions in the country or at regional level • The project has looked for synergy with projects supported by other donors • The project has looked for synergy with endogenous capacity development interventions (initiated, executed and managed by UCuenca)
Excellent	The project has pro-actively looked for synergy with a variety of other projects supported by VLIR and other donors to the extent possible; took actions for alignment with these projects; and is aligned to endogenous capacity development interventions.
Sufficient/Good	The project has looked for synergy with VLIR and other donor projects and looked for possible alignment/exchange of information with these projects. The project is aware of endogenous capacity development interventions and looked for possible alignment with these interventions.
Insufficient/low	The project is aware of other donor projects supporting capacity development but did not look for alignment, synergy or complementarity
(very) Poor	The project is not aware of other donor projects supporting capacity development and does not align to endogenous capacity development processes
1.3. The intervention logic of the project is coherent	• Coherence between expected results and specific objective • Choice of activities is relevant for obtaining the results and objectives • Sufficient insight in the assumptions behind the intervention logic • Intervention can be flexibly adapted to changes in the context when needed in order to remain relevant
Excellent	The choice of all activities is appropriate to realise the expected results and to contribute to the specific objective. The project builds on realistic assumptions and is sensitive to changes in the context.
Sufficient/Good	The majority of activities is appropriate to realise the expected results and to contribute to the specific objective. The project is based implicitly on a number of assumptions that have been monitored and is sensitive to changes in the context.
Insufficient/low	The majority of activities is appropriate to realise the expected results; but the expected results are not appropriate to contribute to the specific objective. Assumptions behind the intervention logic appeared not always realistic. The project is monitoring changes in the context but does not responded adequately to these changes.
(very) Poor	The choice of activities is not appropriate to realise the expected results and to contribute to the specific objective. The projects has not taken into account assumptions and is not sensitive to changes in the context.
Sources of verification: - Self-assessment reports - Programme and project documents, design and annual plans - Policy documents of national government, university, VLIR-UOS - Interviews with programme managers and project leaders - Interviews with current and former rector and vice-rector and deans	

[9] We will use the word 'synergy' but this will cover synergy, complementarity and/or alignment

EQ 2. To what extent the project's specific objectives have been achieved (effectiveness)?	
Rationale Following the approach in the self-assessment reports and the ToR a distinction has been made to the specific objective at academic level and the development objective. Academic objective: after 10 years of implementation several of the expected results must become visible. Some results are only visible at longer term, such as the finalisation of PhD and use of research, the publication of article in peer reviewed journals, and alike. The evaluation will assess what has been achieved so far but also whether there are indications of achievements that will become visible beyond the programme period. Development: as this is the final evaluation, specific attention will be paid to the contribution of the programme to local, regional and national development. To that end, several external stakeholders will also be interviewed. The ToR added an additional evaluation criteria, namely "scientific quality". ACE Europe has included this criteria under the evaluation question on effectiveness.	
Judgment criteria	**Guiding questions/indicators**
1.1. The specific academic objectives have been realised	• Enhanced teaching and research capacity - the indicators as developed for the specific academic objective at project level have been achieved • There is an operational research group, fully staffed and conducting relevant scientific research • The project has contributed to enhanced knowledge on the project subject(s), that is being used as well in the educational programmes (updated or new curricula, textbooks, learning packages, etc.) • Non-expected results • Factors contributing to the level of achievements
Judgement scales	
Excellent	The specific objectives have been fully achieved. There is a fully operational research group and a link between research and education has been established.
Sufficient/Good	The specific objectives have been partially achieved, with a majority of the indicators being realised. There is an almost fully operational research group and link between research and education is looked for.
Insufficient/low	The specific objectives have been partially achieved with a minority of the indicators being realised. The research group is not fully operational. There are difficulties in integrating research findings in education.
(very) Poor	The specific objectives have not been realised. There is no operational research group
1.2. The specific development objectives have been realised	• Enhanced outreach activities and service provision to contribute to local and regional development - the indicators as developed for the specific objectives at project level have been achieved • Developed knowledge is accessible and being used by a variety of external stakeholders • Non-expected results • Factors contributing to the level of achievements
Excellent	The specific objectives have been fully achieved. All indicators have been realised. The society has access to and is making use of the developed knowledge.
Sufficient/Good	The specific objectives have been partially achieved, with a majority of the indicators being realised. The society has access to and is making use of the developed knowledge.

Insufficient/low	The specific objectives have been partially achieved with a minority of the indicators being realised. Developed knowledge is not yet accessible for the society.
(very) Poor	The specific objectives have not been realised. There is no relevant knowledge developed to be used by society

1.3. The project has ground-breaking nature and ambition (scientific quality)	• The research conducted is cutting edge and delivered scientific articles that have been published in international peer reviewed journals. • Research findings have been presented at international conferences • The education provided is cutting edge demonstrated by a growing number of students, high rating of the quality of education by the students, integration of research findings in educational programmes, accreditation. • Clear evolution regarding a growing number of PhD courses and the development of master in science programmes, linked to the undergraduate programmes.
Excellent	The number of articles in international peer reviewed journals has substantially increased since 2012, research was presented at least at one international conference. Research is linked to PhD and master of science programmes.
Sufficient/Good	The number of articles in international peer reviewed journals has increased and research was presented at national conference(s) and/or at least one international conference. Research is not yet fully linked to PhD and master of science programmes but action is taken towards this goal.
Insufficient/low	The number of articles in international peer reviewed journals has increased to a limited extent and research was presented in at least one conference (national or international). The project contributed to a professional master but not yet to a master in science.
(very) Poor	The number of articles in international peer reviewed journals did not increase or no articles were published in international peer reviewed journals. The project did not contribute to adapting or developing a master (professional or science).

Sources of verification:

- Scopus database
- Articles, conference abstracts, chapters in books, conference contributions, etc.
- Master of in Science programs: curricula; interviews with teachers and students
- PhD programs: interviews PhD promoters and students
- Textbooks, laboratory manuals, learning packages, excursion guides
- Accreditation reports
- Self-assessments reports and KRA indicators
- Interviews with staff and researchers involved
- Interviews with external stakeholders

EQ 3. What is the level of efficiency in the projects ?

Rationale

Efficiency refers to the manner in which inputs are processed for the delivery of the expected outputs in a timely and cost-efficient manner. Efficiency therefor relates to the processes, to the activities executed for the production of the planned results in the pursuit of higher level objectives. The ToR refer to efficiency as "*a measure of how economically resources/input (funds, expertise, time, etc.) are converted to results*." The ToR do not request a quantifiable cost-effectiveness assessment but rather a qualitative appreciation of the relation between inputs and outputs. This

also includes an analysis of the factors that have strengthened or hampered efficient programme implementation. As the VLIR-UOS also includes the realisation of the intermediate results under efficiency in the self-assessment reports ACE Europe has followed the same logic (see first judgment criteria). The level of efficiency is also influenced by the presence and application of the systems and procedures for programme management. This is captured in the third judgment criterion.	
Judgment criteria	**Guiding questions/indicators**
3.1. **Intermediate results have been delivered.**	• Level of realisation of intermediate results (related to research and education and/or outreach services) according to indicators formulated • Level of attainment of the KRA • Factors contributing to the level of achievements
Judgement scales	
Excellent	The intermediate results have been fully achieved.
Sufficient/Good	The intermediate results have been partially achieved, with a majority of the indicators being realised.
Insufficient/low	The intermediate results have been partially achieved with a minority of the indicators being realised.
(very) Poor	The intermediate results have not been realised.
3.2. Relationship between means and results achieved and objectives (qualitative assessment)	• Share of advisory support missions, scholarships, investment costs and operational costs is reasonable in relation to the realisation of the intermediate results • Rate of over- and/or underspending • Choice of activities: cost-effectiveness is being pursued in programme design and management
Excellent	Resources and capacity requirements are clear in project design and well monitored. All costs made are justifiable taking into account the output delivered (PhD and Msc, publications, conferences, course development, outreach activities, infrastructure, etc.). Clear evidence of cost-considerations.
Sufficient/Good	Resources and capacity requirements are clear in project design and well monitored. The majority of costs are justifiable taking into account the output delivered. There are systems/procedures in place to support cost-considerations.
Insufficient/low	Resources and capacity requirements are only partially clear in project design, hampering good monitoring of the resources. Costs made are often not sufficiently justifiable taking into account the output delivered. Systems/procedures in place to enable cost-considerations are most often not respected or there are no systems/procedures in place.
(very) Poor	Resources and capacity requirements are not clear in project design, hampering good monitoring of the resources. The majority of the costs cannot be justified taking into account the output delivered. No evidence of cost-considerations.
3.3. **Project management is conducive for efficient and effective project implementation**	• Good working relation between the project leader and the programme support unit (clear guidelines, transparency, timeliness, etc.) • Appropriate planning, monitoring and reporting system in place • M&E data are used to inform and review strategies • Guidelines for project management as described in the management manual have been respected and have

	contributed to efficient and effective project implementation • Factors hampering efficient management have been managed well • Good quality of communication within the partnership
Excellent	Management roles, tools, procedures and systems were clear to and respected by all stakeholders involved, and helpful for monitoring and managing the project. When needed appropriate measures were taken to improve project management.
Sufficient	Management roles, tools, procedures and systems were clear and respected by the majority of the stakeholders, and helpful for monitoring and managing the project. When needed appropriate measures were taken to improve project management.
Insufficient/low	Management roles, tools, procedures and systems were not clear and/or often not respected by all stakeholders and hampered smooth project management. Measure taken to improve project management were not appropriate.
(very) Poor	Management roles, tools, procedures and systems were not clear and/or not respected by all stakeholders. No initiative was taken to solve difficulties in project management.

Sources of verification:

- Self-assessment reports
- Interviews with PSU, programme managers and project leaders in North and South, and ICOS Leuven
- Interviews project teams
- Annual financial plans and reports
- Annual narrative plans and reports
- Management manual
- Sample of reports: quarterly reports, mission reports, minutes of the steering committee meetings,

EQ 4. To what extent the project results will continue after the IUC programme is completed?	
Rationale: As this is a final evaluation, specific attention will be given to the level of sustainability, the measures taken to enhance sustainability and whether there are indications that sustainability will be guaranteed. A distinction is made between institutional and financial sustainability. Focus here is at sustainability at project level. Evidently factors facilitating or hampering sustainability at programme level will have an influence on the sustainability at project level.	
Judgment criteria	**Guiding questions/indicators**
4.1. **Level of academics and institutional sustainability**	• Research group is integrated in the university or convincing measures are being taken to fully integrate the research group in the university. • Conditions are in place to support scientific research: research friendly environment (research policy, research culture), equipped labs, research lines developed, preparation of students to become involved in research (e.g. through master of science programme, pre-doc programmes) • Enhanced link between education and research (master of science programmes, pre-doc programmes, time dedicated to teaching versus research, etc.) • Collaboration with other national institutions • Measures taken for retention of trained staff
Judgement scales	

Excellent	Institutional sustainability is fully guaranteed
Sufficient/Good	Sustainability is explicitly addressed and explicit measures are being taken
Insufficient/low	Sustainability is not explicitly addressed, but deliberate attention is given to ascertain ownership and to create conditions to create a research friendly environment and conditions
(very) Poor	No deliberate efforts are made to secure sustainability

4.2. **Level of financial sustainability**	• Availability of funds for operations and maintenance of physical infrastructure • Availability of own funds for continuing project results • Enhanced efforts to attract external funding, like enhanced credibility, presence of track record, involvement in networks or joint cooperation with a variety of stakeholders • Presence of measures to enhance financial sustainability • Opportunities to attract funding from private sector
Excellent	Financial sustainability is fully guaranteed
Sufficient/Good	Sustainability is explicitly addressed and recognisable explicit measures are being taken
Insufficient/low	Sustainability is not explicitly addressed, but deliberate attention is given to attract external funding
(very) Poor	No deliberate efforts are made to secure sustainability

Sources of verification:

- Strategy documents related to external relations, collaboration and fundraising
- Self-assessment reports
- Interviews with project teams and with external stakeholders
- Interviews with DIUC, deans of faculties, rector and vice-rector, director of department international relations, director human resource management, director planning department, director post-grado and programme coordinator

EQ 5. What are the indications of impact (long-term effects) of the project?

Rationale

The ToR refer to impact as "*potential positive and negative, primary and secondary long-term effects produced by the project, directly or indirectly, intended or unintended*". The evaluation budget however does not allow an extensive impact assessment, in particularly not related to impact at development level. For example, it is not possible to do an extensive alumni survey measuring to what extent alumni have entered the labour market and are able to apply the gained knowledge and contribute to development. It is not possible to measure development impacts through quantitative and qualitative surveys, with pre- and post-testing or control groups. To the extent possible, existing data will be used.

It has been agreed with VLIR-UOS that the evaluators will assess whether there are 'indications' of impact at academic level and within the society, under the programme philosophy "Sharing minds, changing lives". To that end intevreiws with external stakeholders are planned.

Judgment criteria	**Guiding questions/indicators**
5.1. **Indications of impact at academic level**	• New style of teaching becoming a model for teaching for other departments/faculties/universities (curriculum reform, international certifications) • Organisation of the research group becoming a model for research groups to be established at other departments/faculties/universities

	• Newly developed curricula or teaching modules seen as good examples by other departments/faculties/universities • Research groups taking a leading role in national and/or international networks • Evidence of other academic institutions adopting new practices and approaches
Judgement scales	
Excellent	The project has a multiplier effect of the new and/or good practices within the university of Cuenca and abroad
Sufficient/Good	The project has a multiplier effect of the new and/or good practices on some other departments or faculties of the university of Cuenca
Insufficient/low	The project only triggered interest of other departments/faculties/universities to adopt certain approaches but no real action was taken yet.
(very) Poor	The project had no multiplier effect at all
5.2. Indications of impact on local, regional or national development processes	• Project has provided (or has the potential to provide) input in public policy development and/or government has called the university/departments for policy advice • Up-scaling of new knowledge/applications/services by external stakeholders such as government, NGOs, communities • And/or contribution of new knowledge/applications/services to improved performance of external stakeholders and/or to the realisation of development objectives at local, regional or national level • Provision of consultancy services to public and private sector actors (and as such amount of money earned on the market)
Excellent	There is evidence of policy development at national, regional of local level based on project results and/or external stakeholders have improved their performance applying new knowledge, application or services provided by the project, in a sustainable manner.
Sufficient/Good	There is evidence of contribution of the project team members to policy development at national, regional of local level and/or external stakeholders have adapted their approaches based on the knowledge resulting from the project.
Insufficient/low	The project team is not called by the government for policy advise and/or external stakeholders have only made use of services, outreach activities, new knowledge to a limited extent and not in a sustainable way.
(very) Poor	The project did not contribute to local, regional or national development objectives yet
Sources of verification: - Interviews with partners (educational institutes) in national and international networks - Self-assessment reports - Interviews with government officials involved in educational reform processes - Interviews with educational institutes in national and international networks - Interviews with external stakeholders (other than mentioned in the above) relevant for the porject - Interviews with project leaders - Interviews with DIUC, deans of faculties, rector and vice-rector, director of department international relations, director human resource management, director planning department, director post-grado and programme coordinator	

2.2. Five evaluation questions at programme level

<table>
<tr><td colspan="3">EQ 1 – To what extent is the project relevant?</td></tr>
<tr><td colspan="3">Rationale:

Focus here will be on the relevance of the institutional project (same judgment criteria being used as at project level) and in particular on the assessment of the added value of implementing a IUC programme that includes a combination of projects situated in different thematic domains of expertise.</td></tr>
<tr><td colspan="2">Judgment criteria</td><td>Guiding questions/indicators</td></tr>
<tr><td colspan="2">1.1. The objectives of the institutional project respond to the needs of the University of Cuenca and are aligned to the country educational reform process.</td><td>• The project is addressing clear demand and specific needs/problems expressed by the University of Cuenca
• The project is aligned to the new educational reform and policies for higher education in Ecuador
• The project is aligned to the objectives identified in the VLIR-UOS country strategy for Ecuador</td></tr>
<tr><td colspan="3">Judgement scales</td></tr>
<tr><td>Excellent</td><td colspan="2">The project is an appropriate answer to key needs and issues identified by the university of Cuenca, and is in line with the educational reform processes in Ecuador.</td></tr>
<tr><td>Sufficient/Good</td><td colspan="2">The project is an appropriate answer to some of the key needs and issues identified by the university of Cuenca and is in line with the educational reform processes in Ecuador.</td></tr>
<tr><td>Insufficient/low</td><td colspan="2">The project responds to some of the key needs and issues identified by the university of Cuenca but the content/strategy is not fully what was expected by the university of Cuenca. The project is in line with the educational reform processes in Ecuador.</td></tr>
<tr><td>(very) Poor</td><td colspan="2">The project does not provide an appropriate answer to the key needs and issues identified by the university of Cuenca and/or is not in line with the educational reform processes in Ecuador.</td></tr>
<tr><td colspan="2">1.2. The combination of the different IUC projects has an added value for institutional strengthening of the University of Cuenca</td><td>• See assessment synergy with the other IUC projects
• The combination of IUC projects contributes to cost-effectiveness
• Presence of different IUC projects was conducive for institutional change processes at university level (as changes were brought to several departments and faculties at the same time)</td></tr>
<tr><td>Excellent</td><td colspan="2">There is clear evidence that changes realised in the different research groups and departments have supported changes at institutional level, in terms of further policy and strategy development and installing a research culture.</td></tr>
<tr><td>Sufficient/Good</td><td colspan="2">Most but not all projects were important for contributing to changes at institutional level</td></tr>
<tr><td>Insufficient/low</td><td colspan="2">One project in particular was important for contributing to changes at institutional level</td></tr>
<tr><td>(very) Poor</td><td colspan="2">The project has little contributed to institutional strengthening of the university of Cuenca</td></tr>
</table>

1.3. The intervention logic of the institutional project is coherent	• Coherence between expected results and specific objective • Choice of activities is relevant for obtaining the results and objectives • Sufficient insight in the assumptions behind the intervention logic • Intervention can be flexibly adapted to changes in the context when needed in order to remain relevant
Excellent	The choice of activities is appropriate to realise the expected results and to contribute to the specific objective. The project builds on realistic assumptions and is sensitive to changes in the context.
Sufficient/Good	The majority of activities is appropriate to realise the expected results and to contribute to the specific objective. The project has some ideas of assumptions behind the intervention logic and is sensitive to changes in the context.
Insufficient/low	The majority of activities is appropriate to realise the expected results; but the expected results are not appropriate to contribute to the specific objective.
(very) Poor	The choice of activities is not appropriate to realise the expected results and to contribute to the specific objective. The projects has not taken into account assumptions and is not sensitive to changes in the context.
Sources of verification: - Strategy and policy documents of University of Cuenca and VLIR)UOS - Self-assessment reports - Interviews with project teams - Interviews with DIUC, deans of faculties, rector and vice-rector, director of department international relations, director human resource management, director planning department, director post-grado and programme coordinator	

EQ 2. To what extent the programme objectives have been achieved (effectiveness)?	
Rationale The same judgment criteria are being used as at project level, but focus here will be on the extent the combination of the projects, including the institutional project, has contributed to the academic and development objectives. This assessment evidently is based on the assessments at project level.	
Judgment criteria	**Guiding questions/indicators**
2.1. The specific academic objectives have been realised	• See also assessments of the enhanced academic capacity for research, better teaching and Msc-programmes of the different vertical projects. • The indicators as developed for the specific academic objective of the institutional project have been achieved • Contribution of improved ICT and improved library services to the quality of research and teaching • Presence of organisational structure and processes that promote high quality standards in teaching and research (human resource policy, career planning, Vanguardia programme, creditation system, research policy, etc.)

	• Contribution of institutional change project and cross-cutting activities to more effective time for research and higher academic level of teaching • Non-expected results • Factors contributing to the level of achievements
Judgement scales	
Excellent	The specific objectives have been fully achieved. There is more effective time for research and a higher academic level of teaching. The improved ICT and library, organisational structure and processes effectively support high quality research and teaching
Sufficient/Good	The specific objectives have been partially achieved, with a majority of the indicators being realised. There is a positive evolution towards more effective time for research and towards a higher academic level of teaching, which is supported by improvements in ICT, library and new or adapted organisational structures and processes.
Insufficient/low	The specific objectives have been partially achieved with a minority of the indicators being realised. Time for quality research and higher academic level of teaching depend on individual initiative and is not yet supported by institutional changes.
(very) Poor	The specific objectives have not been realised.
2.2. The specific development objectives have been realised	• See also assessments vertical projects • Recommendations and advice for regional development based on research findings is available • Non-expected results • Factors contributing to the level of achievements
Excellent	The specific objectives have been fully achieved. All indicators have been realised. The society has access to and is making use of the developed knowledge.
Sufficient/Good	The specific objectives have been partially achieved, with a majority of the indicators being realised. The society has access to and is making use of the developed knowledge.
Insufficient/low	The specific objectives have been partially achieved with a minority of the indicators being realised. Developed knowledge is not yet accessible for the society.
(very) Poor	The specific objectives have not been realised. There is no relevant knowledge developed to be used by society
Sources of verification: - Strategy and policy documents of University of Cuenca - Self-assessments reports and KRA indicators - Interviews with staff and researchers involved - Interviews with external stakeholders - Interviews with DIUC, deans of faculties, rector and vice-rector, director of department international relations, director human resource management, director planning department, director post-grado and programme coordinator	

EQ 3. What is the level of efficiency in the projects ?	
Rationale Efficiency will be above all assessed at project level. At programme level it is relevant to focus on the programme management and the extent this programme management was conducive for efficient and effective project implementation.	
Judgment criteria	**Guiding questions/indicators**

3.1. **Programme management is conducive for efficient and effective project implementation**	• Different stakeholders involved in management have taken up their respective roles (PSU, programme management in Flanders and Cuenca, project leaders) • Good working relation with the programme support unit (clear guidelines, transparency, timeliness, etc.) • Good cooperation between projects, within projects and between the programme and the university • Appropriate result based planning, monitoring and reporting system in place • M&E data are used to inform and review strategies • The set-up and use of the financial management system enables the follow-up of expenditures, including adequate and transparent financial management • Factors hampering efficient management have been managed well • IUC support and funding is flexible • Good quality of communication within the partnership • Quality of external communication
Excellent	Management roles, tools, procedures and systems were clear to and respected by all stakeholders involved, and helpful for monitoring and managing the project. When needed appropriate measures were taken to improve project management.
sufficient	Management roles, tools, procedures and systems were clear to and respected by the majority of the stakeholders, and helpful for monitoring and managing the project. When needed appropriate measures were taken to improve project management in most cases.
Insufficient/low	Management roles, tools, procedures and systems were not clear and/or often not respected by stakeholders, which hampered smooth project management.
(very) Poor	Management roles, tools, procedures and systems were not clear and/or not respected by all stakeholders. There were difficulties in project management and no intervention was taken to solve these problems.
Sources of verification: - Self-assessment reports - Interviews with PSU, programme managers and project leaders in North and South, and ICOS Leuven - Interviews project teams - Annual financial plans and reports - Annual narrative plans and reports - Management manual - Sample of reports: quarterly reports, mission reports, minutes of the steering committee meetings,	

EQ 4. To what extent the project results will continue after the IUC programme is completed (sustainability)?	
Rationale: Also at programme level a distinction is made between institutional and financial sustainability. At programme level focus will be put on the university as a whole and on the extent changes at institutional level will be sustainable. As described for the assessment at project level, there is a strong link between sustainability at institutional level at sustainability at project level.	
Judgment criteria	**Guiding questions/indicators**

4.1. **Level of academic and institutional sustainability**	• Conditions are in place to support scientific research: research friendly environment (research policy, research culture), equipped labs, research lines developed, preparation of students to become involved in research (e.g. through master of science programme, pre-doc programmes, Vanguardia programme) • Measures to prevent brain drain, installing incentives (pull factors against push factors) • Intensification and/or formalisation of interuniversity consultations (north-South, south-south) • Collaboration and exchange outside of VLIR-UOS programme • Other factors enhancing institutional sustainability
Judgement scales	
Excellent	Institutional sustainability is fully guaranteed
Sufficient/Good	Institutional sustainability is explicitly addressed and explicit measures are being taken
Insufficient/low	Institutional sustainability is not explicitly addressed, but deliberate attention is given to create conditions enabling a research friendly environment
(very) Poor	No deliberate efforts are made to secure sustainability
4.2. **Level of financial sustainability**	• Incorporation of costs (own and external funding) into budget of the University of Cuenca for continuing project results (purchase of scientific journals, running costs for (new) infrastructure), staff salaries, congresses, mobility, etc.) • Enhanced ability to attract external funding, like enhanced credibility, presence of track record, ability to produce joint proposals, involvement in networks or joint cooperation with a variety of stakeholders • Presence of measures to enhance financial sustainability • Opportunities to attract funding from private sector
Excellent	Financial sustainability is fully guaranteed
Sufficient/Good	Financial sustainability is explicitly addressed and explicit measures are being taken
Insufficient/low	Financial sustainability is not explicitly addressed, but deliberate attention is given to attract external funding
(very) Poor	No deliberate efforts are made to secure sustainability
Sources of verification: - Strategy documents related to external relations, collaboration and fundraising - Self-assessment reports - Interviews with project leaders and with external stakeholders - Interviews with DIUC, deans of faculties, rector and vice-rector, director of department international relations, director human resource management, director planning department, director post-grado and programme coordinator	

EQ 5. What are the indications of impact (long-term effects) of the project?
Rationale

See comments at project level. It is difficult to make a distinction between impact at project level and at programme level. ACE Europe has integrated here specific indicators that were also used in the self-assessment reports. At programme level focus seem to be above all on the extent the form of IUC collaboration has inspired other departments, other universities and government to develop similar forms of collaboration.	
Judgment criteria	**Guiding questions/indicators**
5.1**. Indications of impact at academic level**	• See assessments vertical projects • Evidence of institutional reform procedures covering the whole university, influenced by the projects (incl. the institutional project) • The IUC programme has sparked other departments to initiate interuniversity collaboration, joint capacity building, fund raising, etc.
Judgement scales	
Excellent	Evidence of institutional reform processes covering the whole university
Sufficient/Good	Institutional reform processes are being implemented and are having already an effect on some faculties
Insufficient/low	Institutional reform processes are being implemented but confronted with severe resistance from several faculties
(very) Poor	No evidence of institutional reform processes
5.2. Indications of impact on local, regional or national development processes	• The interuniversity collaboration (north-south, south-south or in-country) has raised interest from policy makers and is informing educational policy development at national level • The IUC programme has influenced/contributed to joint development activities or similar collaborative models at regional level (outside VLIR-UOS)
Excellent	There is evidence of policy development at national level based on the IUC experiences and results and of similar collaborative models at regional level.
Sufficient/Good	The national government has shown interest in the experiences and change processes of the university of Cuenca but has not included these experiences yet in further policy development and the experience of the IUC in Cuenca has inspired the university of Cuenca and other universities to set up similar collaborations.
Insufficient/low	The experience of the IUC programme in Cuenca has not been taken up by the national government but the university of Cuenca and other universities consider setting-up similar collaborations
(very) Poor	The experience of the IUC programme in Cuenca has not been taken up by the national government and no other forms of collaboration have been set up yet.
Sources of verification: - Self-assessment reports - Interviews with government officials involved in educational reform processes - Interviews with educational institutes in national and international networks - Interviews with project leaders - Interviews with DIUC, deans of faculties, rector and vice-rector, director of department international relations, director human resource management, director planning department, director post-grado and programme coordinator	

Annex 3: Mission programme

Day	Morning	Afternoon
Monday 17/04	- Briefing meeting with PSU; programme manager and programme coordinator - Interview head of library and visit to the library - First short interview with rector - Interview ICT department	- Group session (timeline exercise to discuss institutional evolutions in general): rector and vice rector, director of DIUC, director planning department, director postgrados, programme manager and programme coordinator - Individual interview programme coordinator
Tuesday 18/04	- Group interview research team **pharmacological characterization of medicinal plants** - Visit to lab - Interview dean chemistry faculty	- Group interview **MigDev** - Interview dean faculty of psychology - Interviews two Vanguardia alumni
Wednesday 19/04	- Interview former rector (and vice rector) - Interview PhD transversal project (library) - Group interview **Food, nutrition, health** - Visit to lab	- Interviews **external stakeholders food, nutrition, health** o Dirección de Control Urbano Municipal o Funcionoraio Municipal de Control Urano o Ministeria de Salud Pública - Interviews **external stakeholders MigDev project** o Casa del Migrante o Vice-ministry of human mobility (Azogues)
Thursday 20/04	- Interview PhD transversal project (organisational change and university management) - Group interview **CPM project** - Visit to lab - Interview dean faculty of architecture	- Interviews **external stakeholders integrated water quality management** o ETAPA o Hydro-Paute o Municipality of Cuenca - Interviews students and external stakeholders **CPM project** o Group interview with 9 current master students o National heritage institute o ETAPA o Alcaldesa Oña o Municipality of Cuenca - Meeting with a delegation from San Roque Neighbourhood
Friday 21/04	- Group interview **Integrated water quality management** – group PROMAS - Visit to lab - Interview dean engineering faculty	- Group interviews **HumSex project** - Interview dean faculty of philosophy - Interview external stakeholders o Exdirectora de Educación del Azuay - Interview VLIR-IUC programme coordinator

Saturday 22/04	- Analytical work for the evaluation team	
Monday 24/04	- Interview PhD graduate of the Medplan project now working at faculty of Medicine - Interviews **students and external stakeholders HumSex project** o Red Sex: representatives of Sendas and the municipality of Cuenca o Mesa Cantonal para la eradicación de la violencia o Municipality of Cuenca, departemento de planificación por la equidad social y genero o Vice prefecta del Azuay, gestora de la red de sexualidad - Group interview with master students sexuality and sex education	- Individual interviews **transversal project** o Interview with rector o Interview coordinator transversal project o Interview vice-rector o Interview director DIUC o Interview director postgrados - Group interview professors involved in Vanguardia programme - Group interview with students participating in the Vanguardia programme
Tuesday 25/04	- **Restitution meeting** involving rector and vice rector, PSU, project leaders of the several projects, administrative staff and deans of the university other staff	Departure to Quito
Wed-nesday 26/04 – Quito	- Interview external stakeholder involved in Food, nutrition and health project – Universidad San Francisco de Quito, Instituto de Investigación en Salud y Nutrición	Departure for Belgium

Annex 4 List of people consulted

People consulted in Belgium

Peter De Lannoy	Programme coordinator at VLIR-UOS
Guido Wyseure	IUC Programme coordinator
Patrick Kolsteren	IUC Project leader Food, Nutrition and Health
Willy Bauwens	IUC Project leader Integrated water quality management
Boud Verbeiren	Researcher at VUB, project on Integrated Water Quality Management
Yvan Vander Heyden	IUC Project leader Pharmalogical Characterization of Medicinal Plants
Paul Enzlin	IUC Project leader Human Sexuality
Hanna Van Parys	Co-promotor in project human sexuality
Koen Van Balen	IUC Project leader City Preservation Management
German Calfat	IUC Project leader Migration and Development
Piet Vanden Abeele	Advisor in transversal project - Vanguardia
Tupac Calfat	ICOS at KU Leuven (general and technical support)
Anne Hasendonckx	ICOS at KU Leuven (financial)

People consulted in Ecuador

Administration Cuenca university

Pablo Vanegas	Rector
Catalina León	Vice Rectora y directora reclaciones internacionales
Mauricio Espinoza	Director DIUC
Jaime Patricio Diaz	Director de Planificanción
Estaban Pachecho	Director de Posgrados
Fabian Leon	Coordinador del programa VLIR
Miguel Cordero	Generte del programa VLIR

Institutional project

Fabián Carrasco	Ex rector and ex vice rector
Rocío Campoverde	Coordinadora de la biblioteca
Guillermo Pacheco	Former transversal project leader-coordinator
Pablo Palacios	ICT Department
Luis Espinoza	ICT Department
Rodrigo Padilla	ICT Department
Lorena Siguenza	Former transversal PhD scholar

Dolores Sucoshanay	Former transversal PhD scholar
Luis Macias	Coordinador Vanguardia

Focus group with students of Vanguardia: Bryam Xavier Astudillo Carpio, Adriana Lorena Abril Ortiz, Atila Sebastian Avila Argudo, Itali Monserrat Ortiz Nunez, Jorge Luis Barrera Zuniga, Paul Sebastian Pozo Ocampo, David Santiago Pulla Alvarado, Ronny Rafael, Zegarra Pena, Joen Carlos Lopez Criollo

Focus group with lecturers Vanguardia: Luis Macías (coordinador), Johana Oritz, Angélica Ochoa, Susana Andrade, Christian Mejía, Eduardo Chica, Willian Paúl Arias

Medicinal plants

Silvana Larriva	Dean of Faculty of Chemistry and ex vice-rectora
Isabel Wilches	Project leader, professor titular
Mariana Saa	Researcher
Vladimiro Tobar	Researcher
Nancy Cuzco	Lab assistant
Lourdes Jerves	Researcher
Cristian Mejía	Lab, professor titular
Eugenia Peña	Lab assistant
Fabian Leon	Researcher, professor titular
Cecilia Carrasco	Researcher, Intellectual property
Andrea Orellana	PhD, ex member research group (now faculty of medicine)

Migration

William Ortiz	Dean of of Faculty of Psychology
Andrea Neira	Project leader
María José Rivera	Adjunct project leader and lecturer in Vanguardia
Blanca Pesantes	Researcher
Paul Arias	Researcher and lecturer in Vanguardia
Mario Donoso	Researcher
Ivan Abril	Researcher
Maria Augusta Barrezueta Gonzalez	Secretariat proyecto VLIR
Cecilia Ordoñez	Coordinadora de la cas del migrante
	Vice-ministerio de movilidad humana
	Vice-ministerio de movilidad humana

Nutrition

Angélica Ochoa	Reseacher, professor titular
Alejandra Neira	Researcher, professor titular
Silvana Donoso	Researcher, professor titular
Gabriela Astudillo	Lab assistant
Diana Andrade	Research assistant
Paulina Escobar	Researcher
Susana Andrade	Researcher
Johana Ortiz	Researcher and coordinador Msc Biosciencias
Mishel Castro	Research assistant
Diana Murillo	Research assistant
Gabriela Zúñiga	Researcher
Paulo Romo	Research assistant
Ana García	Research assistant
Cristian Mejía	Researcher

Carlos Alvarez	Dirección de Control Urbana Municipal
María Augusta Idrovo	Funcionaria municipal de control urbano
Gabriela Rivas Mariño	Ministeria de salud pública – Coordinadora de nutrición, seguridad y soberanía alimentaria
Wilma Freire	Professor at Universidad San Fransicso Quito

Water Quality

Hulber Pino	Dean Faculty Engineering
Lizandro Solano	Vice Dean Faculty Engineering
Felipe Cisneros	Project leader and director PROMAS
Diego Mora	Researcher
Andrés Alvarado	Researcher
Oscar Morales	Researcher
Guillermina Pauta	Coordinator sanitary laboratorium

Antonio Barrero	Elec Austro
Esteban León	SENAGUA
Diego Berrezueta	SENAGUA
Javier Fernández de Córdova	ETAPA
Catalina Díaz	ETAPA
Paul Vintimilla	ETAPA
Daniel Ziguenza	Emapal-Azogues

Human Sexuality

Humberto Chacón	Dean of the Faculty of Philosophy
Bernardo Vega	Dean of Faculty of Medicine
Manuel Villvicencio	Director de investigaciones
Monserrat Jerves	Project leader and vice-dean faculty philosophy
Silvia López	Researcher
Jessica Castillo	Researcher, professor titular
Ana Cristina Cevallos	Research assistant and student master sex education
Mireya Palacions	Coordinadora master sexual eduaction
Nancy Aupi	Coordinaro relaciones externos
Adriana Ochoa	Secretariat
María Dolores Palacios	Researcher, professor titular
Elizabeth Peñaherrera	ex-Director of Education of Azuay
Carmen Ortiz	NGO SENDAS, members REDSEX
Jorge Astudillo	City of Cuenca, members REDSEX
María Cecilia Alvarado	Vice- prefecta de la provincia del Azuay
Juanita Bersosa	Mesa Cantonal para la eradicacion de la violencia
Maria José Machado	Jefe del departemento de planificacion por a equidad social y el genero

Group interview with students of the professional master on human sexuality: Natasha Peralta (Ministry of health), Gabriela Espinoza (Educator Psychologist for children under 12), Juan Diego Carpio (Ministry of health), Carla Pazmiño (Psychologist), Valeria Illescas (Senescyt), Andrés Cabrera (ONG Hayas, Migration and sexuality).

City Preservation Management

Fernando Pauta Calle	Dean of Faculty of Architecture
Adrian Orellana	Vice Dean Faculty of Architecture
Fausto Cardoso	Project leader, professor titular
Verónica Heras	Researcher
Gabriela García	Researcher
Sebastian Astudillo	Researcher, professor titular
Jorge Amaya	Researcher
Catalina Rodas	Researcher
Edison Sinchi	Lab assistant
Paula Rodas	National Heritage Institute
Juan Carlos Quezada	Etapa

Germania Ullauri	Alcaldesa de Oña
Silvana Araujo	City of Cuenca
Catalina Solano	Visit to San Roque
Isabel Muñoz	Visit to San Roque

Focus group with students master in city preservation management: Soledad Moscoso (coordinadora), Gabriela Barzallo, Tatiana Rodas, David Jara, Silvia Auquilla, Silvana Vintimilla, Rutch Ordoñez, Romulo Cabrera, Erika Carvajal

Participants at restitution in Cuenca

Silvana Donoso	Project leader Food, Nutrition and Health
Fausto Cardoso	Project leader City Preservation Management
Maria José Rivera	Adjunct project leader Migration
Andrea Neira	Project leader Migration (by skype)
Montserrat Jerves	Project leader Human Sexuality
Felipe Cisneros	Project leader Water Quality
Isabel Wilches	Project leader Medicinal Plants
Louis Macias	Coordinator transversal project
Fabian Leon	Coordinator VLIR-IUC programme
Patricio Diaz	Director Planning
Catalina Rivera	Director Finances
Jorge Luis Palacios	Direct Human Resources
Silvana Larriva	Dean Faculty of Chemistry
Humberto Chacon	Dean Faculty of Philosophy
Bernardo Vega	Dean Faculty of Medicine
Fernando Pauta	Dean Faculty Architecture
Rodrigo Mendieta	Dean Faculty of Economy
Huber Pino	Dean Faculty of Engineering
Catalina Leon	Vice Rector
Pablo Vanegas	Rector

Annex 5 List of documents consulted

- Project proposals for the second phase (technical and financial) – all projects
- Annual plans (technical and financial) 2012, 2013, 2014, 2015 and 2016 – all projects
- Annual reports (technical and financial) 2012, 2013, 2014, 2015 – all projects
- Proposal of an IUC Phasing Out Programme with 'Universidad de Cuenca' 2017-2018
- Self-assessment report of all projects, of the programme coordinator south and of the programme coordinator north

- García Vélez, G. (2012) *Memorias Plan Piloto de Mantenimiento aplicado en las viviendas de Susudel*. Cuenca: Instituto Nacional de Patrimonio Cultural y Proyecto VLIR CPM Universidad de Cuenca.
- Ojeda, S. (2015) Incidencia en la agenda local para la contucción de políticas públicas en derechos sexuales y derechos reproductivos en el cantón de Cuenca. Sistematización de la experiencia. Cuenca: Sendas.
- Universidad de Cuena: Strategic plan 2006-2010
- Vaes, R. & Delvaux, B. (2011) *Mid-Term evaluation of the IUC partnership with the Universidad de Cuenca, Ecuador*. Evaluation report.

- Official letter from the Ministry of Work (Ministerio de Relaciones Laborales), date 7/05/2014 regarding the regulation of the service contracts of staff involved in the VLIR projects

- Website University of Cuenca on https://www.ucuenca.edu.ec (consulted various times in the period April-May 2017)

ABOUT VLIR-UOS

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

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

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

More information: **www.vliruos.be**

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Front cover: Peter De Lannoy

D/2017/10.960/2

Evaluation Management Response

General

Name of programme:	VLIR Institutional University Cooperation (IUC) programme with the University of Cuenca, Ecuador
Evaluation title:	**Final evaluation of the Institutional University Cooperation with Cuenca**
Evaluation year:	2017
Authors management response:	Fabian León (Programme Coordinator) – Pablo Vanegas (Rector of University of Cuenca)
How was this management response developed and validated?	After the development of the final evaluation visit, and the presentation of the report, the Management letter-end term evaluation (VLIR reference VLIR-UOS/2016-073 – 76320) was discussed at local steering committee level and during the final Joint steering committee meeting. Final discussion was developed with the Rector of the University in order to present local VLIR opinion about VLIR letter and to know the position and actions of University about it. The results of those actions are reported in this format

Appreciation of evaluation

How has the evaluation report been discussed and used in the programme and the university?
What is your general appreciation of the evaluation report? **Were there shortfalls or limitations in the evaluation process? Are there any additional insights not articulated in the recommendations?**
The report is clear and useful as support document for university management. It defines the strengths and weaknesses not only at research group level but also at university level. This result shows the advantage of being developed by professionals who know Ecuadorian reality, international cooperation, and university environment. Time might always be identify as a limitation (one week for the visit in situ); however, the long term cooperation model developed by VLIR compensate that limitation because of the fact that allows different cooperation actors to get to know each other and therefore fulfill their roles more efficiently (includ-

ing the evaluation process).

Management response to recommendations of the evaluation

For every recommendation, please fill out a table:

Recommendation 1:	A momentum is created with the presence of different research groups that also have gained international recognition. It is needed to at least develop a policy on the institutionalization of research departments and on human talent management. In the short term, researchers need to be informed on the prospects of their work. For example, because of the recognition of the VLIR project as an investment projects, contracts can be guaranteed till the end of 2018. This information needs to be shared among all people involved. Further, research groups need to be supported in the development of strategies to become auto-sustainable.	
Management Response (Agree, partially agree, disagree)**:**	Agree	
If recommendation is rejected or partially accepted, report reasons:		
Actions Planned	**Implementation stage** (not started, underway, completed, cancelled) **+ timeframe** (e.g. Q4 2018)**:**	**Actions taken**
Reorganization of administrative staff and administration process at UCuenca	ongoing	A consultancy analysis was developed at UCuenca in order to identify critical points at administrative level, and to establish real administrative support necessities at different units
Internal policies for organization and support of research and postgraduate	ongoing	Common proposal to be presented to University council at first trimester of 2018 (organization of research groups, departments, etc)
VLIR-IUC Programme support	ongoing	VLIR-IUC programme will receive the economic support of UCuenca at 2018. The budget for contracting personnel during 2018 has been already allocated

Recommendation 2:	A human talent policy needs to be developed regarding the reinsertion of PhD students. As the university still needs to enhance its number of tenured professors with PhD, the UCuenca needs to develop a policy to maintain the PhD graduates at the university (as was foreseen in the transversal project). The initiative of the current rector to demand each faculty to develop a strategic plan, including the short and long term planning of its human resources, is a relevant and valuable initiative to that end. It will trigger the discussion of the reinsertion of PhD graduates. It is recommended to launch as soon as possible new vacancies in order to create job security of PhD researchers having an interest to remain at the university.	
Management Response (Agree, partially agree, disagree)**:**	Agree	
If recommendation is rejected or partially accepted, report reasons:		
Actions Planned	**Implementation stage** (not started, underway, completed, cancelled) **+ timeframe** (e.g. Q4 2018)**:**	**Actions taken**
Public contest opportunities for becoming staff member are restricted for the moment	ongoing	Faculties must clearly define and justify their staff necessities
Annual planning	ongoing	Faculties and other academic units must present an annual planning document for discussion (including economic, academic and human talent necessities)
Vanguardia Programme	ongoing	Faculties are motivated to develop a clear approach to their best students (human talent) in order to identify possible future staff members. Identification of research or action lines at some faculties is still difficult

Recommendation 3:	It is recommended to institutionalize the PSU unit (maybe it can be embedded within the department for international relations) to not lose the capacity regarding research project management. The capacity can be used for managing other externally funded donor projects.
Management Response (Agree, partially agree, disagree)**:**	Partially agree
If recommendation is rejected or partially accepted, report reasons:	VLIR-IUC/UCuenca PSU model has been recognized as a very efficient management strategy for international cooperation programs; they were able to find their way for the tackling of prob-

	lems related to the LOES and governmental regulations and international funds. However, at local public level, extra regulations and restrictions are “regularly” implemented. Then, complementary actions are needed for research support and management at UCuenca.	
Actions Planned	**Implementation stage** (not started, underway, completed, cancelled) **+ timeframe** (e.g. Q4 2018)**:**	**Actions taken**
Exchange of experiences VLIR-PSU and DIUC	Ongoing	Discussion between VLIR-PSU and DIUC (Research Directorate UCuenca)
Document with proposal	January 2018	Meeting with Rector planned for January 2018
Discussion with UCuenca Public enterprise (UCuenca EP)	February 2018	Meeting with Rector and UCuenca EP planned for February 2018

Recommendation 4:	The current rector of the university stresses the importance of research groups being able to attract external funding and to become auto-sustainable. This principle needs to be clearly communicated with the research groups and support needs be attracted to assist research groups in developing a strategy to become auto-sustainable.	
Management Response (Agree, partially agree, disagree)**:**	Agree	
If recommendation is rejected or partially accepted, report reasons:		
Actions Planned	**Implementation stage** (not started, underway, completed, cancelled) **+ timeframe** (e.g. Q4 2018)**:**	**Actions taken**
Identification of critical points on University management and development	Discussion groups implemented	Proposal to be presented at January 2018
Internal policies for organization and support of research and postgraduate	ongoing	Common proposal to be presented to University council at first trimester of 2018