

Mid-term Evaluation of the Institutional University Cooperation with Hué University in Vietnam



# **Table of contents**

ACRO	NYMS	4
PREF	ACE	5
EXEC	UTIVE SUMMARY	6
1 Int	roduction	20
1.1. Ba	ackground	20
1.1.1.	General Objectives and guiding principles of IUC	20
1.1.3.	Subject of the evaluation – Theory of Change of an IUC programme	21
1.1.4.	Objectives of the Evaluation	24
1.2. Co		25
	valuation Methodology and Process	27
	Evaluation Framework	27
1.3.2.	6,	28
1.3.3.		28
	ructure of the evaluation report nort Description of the Partner and IUC programme	29 29
1.5.1.	The Partner: HU	29
1.5.2.		30
2 Ev	aluation	33
2.1. Ev	aluation per project	33
2.1.1	Project 1: Institutional Strengthening	33
2.1.2	Project 2 Developing and improving sustainable aquaculture, livestock	k
produc	ction and crop protection	41
2.1.3	Project 3 Coastal ecosystems and natural resources management	51
2.1.4	Project 4 Strengthening training and services at primary level to impro	
health		61
	valuation of the programme level	70
2.2.1	Relevance	70
2.2.2	Efficiency	73 74
2.2.3	Effectiveness	74 75
2.2.4 2.2.5	Impact Sustainability	75 76
3 Ma	in Lessons Learned	78
4 Re	commendations	79

5 Annexes 81		
5.1.	Methodology (scoring)	81
5.2.	Mission Programme & List of People consulted	97
5.3.	List of documents consulted	99
5.4.	KRA – Projects	100

# **ACRONYMS**

CHC Community Health Centre

DARD Department of Agriculture and Rural Development
DONRE Department of Natural Resources and Environment

EHR Electronic Health Record
FMC Family Medicine Centre
FPL Flemish Project leader
FTM Flemish Team Member
HEI Higher Education Institutes

HPET World Bank Health Professions Education & Training

HU Hue University

ICD International Statistical Classification of Diseases and Related Health Problems

ICP International Master Programme, funded by VLIR-UOS
ICPC-2 International Classification of Primary Care, Second edition
ITP International Training Programme, funded by VLIR-UOS

IUC Institutional University Cooperation
JSCM Joint Steering Committee Meeting

KRA Key Results Area
LTM Local Team Member
LPL Local project leader
PP Partner Programme
QA Quality Assurance

MOET Ministry of Education and Training

MOH Ministry of Health
TM Team Member
ToC Theory of Change
ToR Terms of Reference

VLIR-UOS Vlaamse Interuniversitaire Raad – Universitaire Ontwikkelingssamenwerking

# **PREFACE**

We wish to thank each of the project leaders, team members, programme managers and members of the PSU who spent many hours to deliver input for this mid-term evaluation. We also want to give special thanks to all students involved in this project and evaluation for sharing their ideas and concerns. We were overwhelmed by the commitment, engagement and passion for academic work by all Vietnamese and Flemish stakeholders. It is our sincere wish that this evaluation will be of help to all stakeholders as to create sustainable impact at individual, institutional and societal level.

FocusUP Evaluation Team, Antwerp, Belgium, 2018

### **Disclaimer**

This report represents the views of the members of the evaluation team. It does not necessarily reflect the opinions of the VLIR-UOS. The evaluation team bears the sole responsibility for the report in terms of content, as well as for its structure.

# **EXECUTIVE SUMMARY**

- **S1**. The **objective of the mid-term evaluation** is to assess the scientific quality, relevance, efficiency, effectiveness, impact, and sustainability (DAC-criteria) of the Institutional University Cooperation between HU (Hué University) and Flemish Universities. The follow-up plan of the programme for the second phase (cf. self-assessments) is also evaluated. Finally, the synergy (and overlap) between the IUC and the Network Vietnam programme has been a major point of attention within the framework of the IUC evaluation.
- **S2.** For each of the evaluation criteria, sub-criteria have been developed. A **scoring system** for the sub-criteria has been developed at four levels. The generic model can be described as follows:
  - 4 Excellent: the overall (criterion) is of excellent quality. Additional measures are not needed.
  - 3 Good: Minor room for improvement exists, however with minor effect on (criterion); See recommendations No`s:
  - 2 Low: Major room for improvement exists, with a potential of major effects on (criterion) of the programme/project. See recommendation No`s:
  - 1 Poor: The (criterion) is of poor quality and extra necessary measures are urgently need to realise the (criterion). See recommendation No's:

The scores are directly linked to the recommendations. The lower the quality, the lower the score, the more important the recommendations. For each of the criteria, the number of the recommendation refers to the recommendation formulated at the beginning of the report. This allows us to demonstrate the direct link between the analysis, the scoring and the recommendations.

A detailed description of the score for each of the criteria can be found in Annex 4.1.

## **Summary: Programme level**



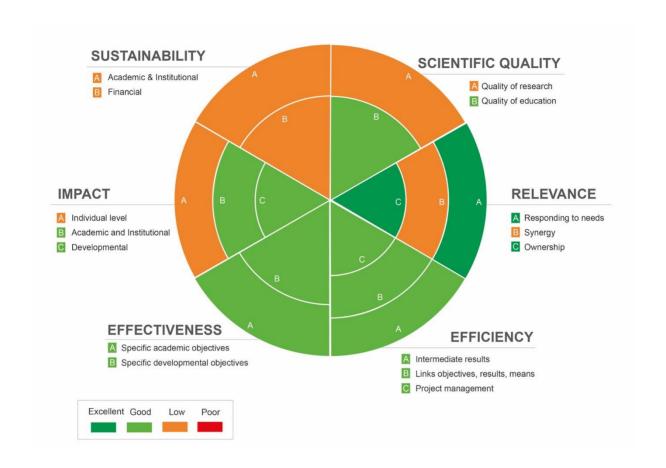
- **S3. Needs.** The programme objectives are still highly relevant. The programme and project objectives are in line with the HU's overall strategy, the VLIR-UOS country strategy paper and the central and local government priorities.
- **S4. Synergy**. External synergies with other stakeholders are established at a limited scale. Synergies with other projects like Lotus, MOET 911, Nutrisea, Asian-EU Share, VLIR-NSS projects have contributed to the objectives of the IUC programme.
- **S5. Transversal Themes**. Environmental sustainability is the focus of all six PhD students in P2 and P3. New initiatives have been taken on e-learning in P4 and plans to continue do exist with a clear link between P1 and P4.
- **S6. Ownership**: At programme level, there is a strong commitment of the HU leadership and management to improve the quality of research and education, to introduce innovative practices and to improve university governance. This high commitment is demonstrated by adding HU budget to contribute to the achievement of some of the objectives of the IUC. The commitment has been reconfirmed during the mid-term evaluation.

- **S7. Efficiency. Delays.** Most of the activities are implemented as planned. The most significant delays have been identified in the several PhD research projects. Up until now, only one PhD student has graduated (Planned number of PhD students: eleven VLIR scholarships and one co-financing 911). Besides the mismatch of PhD students (see S7), other delays can be characterised by elements which are typical for PhD research. One element which has been mentioned by PhD students is the fact that they have other duties to fulfil when they are in Vietnam. They appreciated the fact that they could focus exclusively on their research when they were in Belgium.
- **S8.** Efficiency. Programme management. Programme management from Vietnamese and Flemish side has been evaluated positively. Minor management issues have been solved accurately. It has been observed that during the programme implementation, stronger coordination and cooperation between Flemish and Vietnamese partners has been realised. The reporting requirements are considered time-consuming and not efficient.
- **S9. Effectiveness.** It is important to mention that the programme-specific objectives are formulated to be achieved after ten years (total duration) of the implementation of the programme. The latter is strongly based on PhD research and increasing capacities of PhD students, staff members and Master/Bachelor students. Eleven PhD scholarships have been given of which one PhD student already graduated (P2). Seven other PhD students are making significant progress and both Vietnamese and Flemish stakeholders have reported that sufficient progress has been made and that they will be able to graduate very soon. Equipment has been provided to the member universities and faculties in project 2, 3 and 4. The equipment is not only used by the PhD researchers, but also by MSc/BSc students and other staff members of the university. In most cases, a maintenance plan and budget is in place. In general terms, there is room for progress in achieving developmental objectives.
- \$10. Impact. The programme achieved an increased academic impact by upgrading the research and teaching capacities of staff members. In the second phase of the programme, the academic impact will be speeded up once most of the PhD students will have graduated and have published their research results in international peer reviewed journals. Equipment has been provided to member universities and faculties and maintenance plans and budgets seem to be available. The institutional impact is still limited as policy changes at the institutional level (central university and member universities) are absent with the exception of the establishment of a Quality Assurance unit, the development of a QA strategy and regulations at central level and the increased capacity of the Family Medicine centre in a very short time. The developmental impact (impact on society) has been excellent for some of the projects and is absent for other projects. The impact of project 4 and to a lesser extent of project 1 and 2 is obvious. The Family Medicine centre became a flagship and a good practice for the Family Medicine approach at national level. The results of the research project on rabbit fish are of such high quality that ideas to commercialise the results are being developed rapidly. As mentioned before, project 1 contributed to a large extent, through the organisation of a yearly international conference, to the national discussion on university governance. A government decision on the autonomy of universities is expected to be approved during 2018.

It is clear HU and IUC contributed significantly to this debate. It has been reported that the impact on these three levels – academic, institutional and developmental - has boosted the international character of HU and that its increased visibility has been achieved in line with the strategic choices made by the HU management.

**S11. Sustainability.** The sustainability of the programme has been evaluated as 'low'. This is nothing out of the ordinary, since the programme is just halfway its implementation. Sustainability should be a major point of attention during the second phase of the programme. Except for project 4, all projects have major points to consider during the second phase. Project 4 can be considered a textbook example of sustainability as described below (see project 4). The project reached a high level of academic, institutional and financial sustainability (see project 4). What the other projects (P2 and P3) have in common is the lack of institutional coherence and synergy. The same risk does exist within the new strategic research line in P3. Although most of the PhD candidates are staff members (lecturers) at the university, they implement their research almost isolated from each other. There is a high risk that once the PhD students have graduated they go back to their position within their own faculty or department without keeping a link to other PhD students or departments. The PhD scholarships have been almost equally divided among faculties and departments within a member university. Although external funds have been attracted, more specifically at central university level (as mentioned above) and within the framework of P4 (see project description), sufficient external funding is lacking for project 2 and project 3. Joint and new research proposals have not (yet) been written.

#### Summary Project 1 - Institutional Strengthening



**S12. Needs.** The project objectives are still highly relevant. The programme and project objectives are in line with the HU overall strategy, the VLIR-UOS country strategy paper and the central and local government priorities.

**S13. Synergy.** The internal synergy and complementary between projects is very limited. The activities and results from P1 (workshops, conferences) have not yet been transferred to the projects. The innovation fund has been a good example of synergy as it strengthened the existing educational innovation initiatives in some member universities. The innovation fund delivered grants (1000 EUR) to individual lecturers to develop their ideas on educational innovation. The grants were awarded based on competitive calls.

**S14.** Efficiency. The three PhD students selected for the topics on quality assurance, curriculum development and governance have stopped their PhD research. The selection of these candidates has been wrongly managed. The team could learn from this experience and decided to form a joint selection commission (Vietnamese-Flemish) to select new PhD students. The new PhD students are staff members of member universities in order to create direct links between the central level and the level of the member universities, which was not the case with the three initial PhD students. Despite the failure of the PhD research projects, significant progress has been made towards the achievement of the intermediate results.

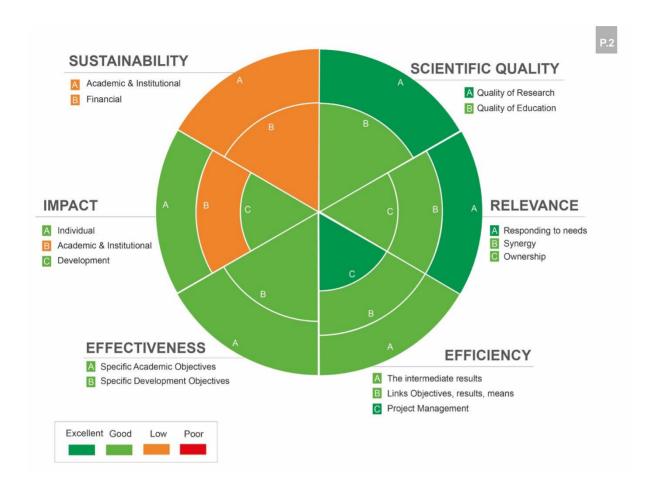
On the governance level, HU played an important catalyst role in the national discussions on governance university issues, which is a result that goes far beyond the initial results formulated in the programme document. Awareness has been created on the nature and quality of curriculum development among staff members of the member universities. Finally, a quality assurance unit has been established that will develop a QA framework by the end of 2018. The programme has been very successful in linking up with the Asian-EU Share project which has been an excellent exercise to get acquainted with the ASEAN QA framework and external QA approaches and external QA visits.

**S15.** Effectiveness. Three PhD projects from project 1 have been stopped after an investment of two years. Three new PhD students will replace them. Although a lot of workshops have been organised for staff members of the HU and the member universities, it was not possible to observe whether these workshop had a direct effect on improving research based education in the member universities.

**S16.** Impact. The institutional impact is still limited as policy changes at the institutional level (central university and member universities) are absent with the exception of the establishment of a Quality Assurance unit, the development of a QA strategy and regulations at central level. project 1 contributed to a large extent, through the organisation of a yearly international conference, to the national discussion on university governance. A government decision on the autonomy of universities is expected to be approved during 2018. It is clear HU and IUC contributed significantly to this debate. It has been reported that the impact on these three levels – academic, institutional and developmental - has boosted the international character of HU and that its increased visibility has been achieved in line with the strategic choices made by the HU management.

**S17.** Sustainability. The sustainability of the programme has been evaluated as low. This is nothing out of the ordinary since the programme is just halfway of its implementation. On the one hand, sustainability should be a major point of attention during the second phase of the programme. The establishment of a QA unit, on the other hand, is a very good example of institutional sustainability. A budget for the QA unit is embedded in the central university budget. It has been reported that a QA unit will continue to exist after the end of the programme.

# Summary Project 2 - Developing and improving sustainable aquaculture, livestock production and crop protection



**S18.** Quality of Research. The three PhD research scholarships are at the centre of project 2. The three PhD research topics can be considered of high academic value from an international and national point of view. Two international peer reviewed articles have been accepted and two others have been submitted. One PhD student defended his PhD research successfully at the end of 2017 and has graduated from Ghent University. The member university has been provided with equipment which allows it to implement research which was not possible before the project implementation. The equipment was in line with the research needs of the PhD researchers.

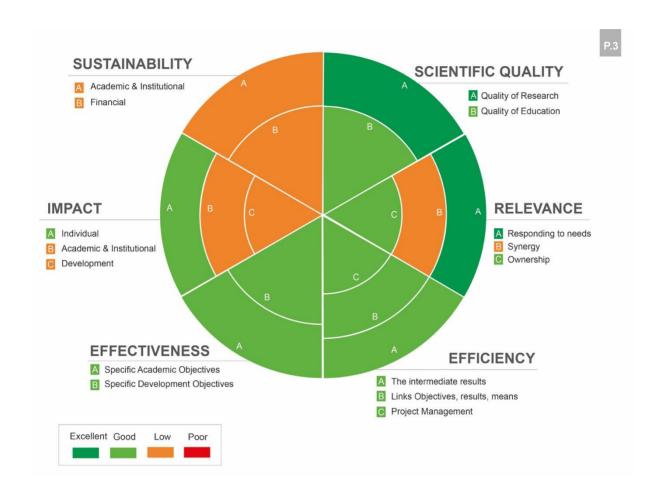
**S19. Quality of Education.** Equipment can be used by all lecturers of the member university. Bachelor and master students used the equipment to prepare their thesis (within the framework of the PhD research). Linking the PhD research with Bachelor and Master thesis research is a textbook example of linking education with research. Some lecturers of the member university have been involved in the International English Master programme in aquaculture (organised within the Framework of VLIRUOS Network Vietnam). They had the opportunity to upgrade their teaching skills during their visits to Belgium. The increased quality of education has been achieved at individual level. Evidence of updated curricula or innovative teaching at institutional level could not be found.

- **S20.** Responding to the needs. Current agriculture and aquaculture production are characterised by increasing productivity. The increased productivity goes together with large environmental pollution and production diseases. Efforts currently taken to minimise environmental pollution from primary production are mainly end of the pipe-approaches. In general, this approach is costly and prone to malfunction. Scientists and professionals in the primary production sector are aware of the environmental consequences of their activities. This project wants to stimulate research approaches to investigate possible bottom-up solutions, in other words "research towards source solutions".
- **S21. Synergy**. Strong external synergies have been created through additional scholarships (like 911, Lotus and Global Minds-scholarships). Synergies have been established with the VLIR-UOS ICP programme and the Network programme Vietnam. The low internal synergy between the three different PhD programmes remains a major point of concern. It has not yet been defined how the multidisciplinary approach and PhD research will be integrated into the member university after graduation of the students.
- **S22.** High levels of commitment and **ownership** have been identified. All team members, project leaders and PhD students & supervisors have shown a high commitment to the implementation of the project activities.
- **S23. IR's have been achieved?** Project 2 is mainly a PhD research project with supporting activities to the PhD candidates and bachelor and master students. Workshops have been organised to upgrade capacities of staff members of the faculties involved in the project. Overall, the IR's have been achieved or important progress is made to achieve the IR's in the short term, with the exception of IR3. The non-achievement of IR3 can be explained by the fact that 911 Vietnamese scholarship has not been awarded. Since this result has been directly linked with external funding, the non-achievement of IR3 did not cause any waste of investments or VLIR-UOS funding.
- **S24.** Relationship between objectives, results and means. All IR's allowed to contribute to specific objectives. IR1-5 in particular contributed to the specific academic objective, whereas IR6-7 contributed more to the specific developmental objective. Nevertheless, information obtained during research in IR1-4 was important input for dissemination activities of IR6, whereas input from stakeholders to 'translate research results to practice' (IR6) and from the training (IR7) also contributed to the improvement of the specific academic objective.
- **S25. Project management.** The project management is evaluated as very good. Internal and external communication and coordination is well appreciated by both Flemish and Vietnamese partners. The involvement of PhD students in financial, project and strategic planning is considered to be highly efficient and educative.
- **S26.** Effectiveness: achievement of objectives. Most of the objectives have been partly achieved and will be achieved in the second phase if research activities will proceed as foreseen. One element of the objective onlivestock and crop component of the specific objective is not achieved since an additional 911 scholarship has not been awarded. Four workshops have been organised for stakeholders from universities, policy makers and private sector. As the PhD research will be advanced, more extension activities could be organised in the second phase.

**S27.** Impact. The individual and developmental impact results of this project are very high and can be considered as a direct effect (result) of this project and the VLIRUOS funding. The academic and institutional impact is still rather limited and should be a major point of attention during the second phase. Within the framework of this project, three PhD students, 27 bachelor students and two Master students could increase their knowledge and skills as a result of this project. These results were directly caused by the project activities and would not have the same high-quality level without the support of the project. It is obvious that the project strengthened not only the individual capacities of staff members, but also academic and teaching performance of the faculty. But it remains to be seen how the current PhD research will be integrated in the curricula of the faculties. The PhD research projects are based on the needs of each of the faculties involved. There is a risk that PhD researchers, after graduation, just join the existing staff. The developmental impact has been enormous for IR1 (research on the Rabbit Fish). The results of this research have high commercial value. The PhD researcher, together with other stakeholders, is exploring the possibilities of commercialising the result of his research. A plot has been rented (from the university) to explore the possibilities of commercialising the Rabbit fish aquaculture and implementing polyculture (rabbit fish and shrimps) in order to decrease diseases and the use of antibiotics. Although this process of commercialisation has been evaluated as very positive, it is not clear how the university will benefit from the results. Of course, the increased knowledge of the lecturer-PhD student will be used in his teaching classes, but it remains uncertain whether a legal framework does exist to set up a spin-off within the university framework (which could contribute to the institutional impact of the project).

**S28.** Sustainability. Although the impact of the project has been evaluated as very high, the academic sustainability of the project is not (yet) guaranteed: no guarantees that PhD holders will keep their engagement, no plans for new curricula development, isolated research projects, no new research proposals. Finally, the financial sustainability of the existing research lines is not (yet) achieved.

### Summary Project 3. Coastal ecosystems and natural resources management



**S29. Quality of Research.** The three PhD research scholarships are at the centre of project 3. The three PhD research topics can be considered of high academic value from an international and national point of view. One international peer reviewed article has been accepted and four others are submitted or in preparation for submission. The acquired equipment was in line with the research needs of the PhD researchers. The results of the research are, at this stage, still limited. The reason given by the team members is that during the first years, the PhD students mainly focused on longitudinal data collection. As the nature of the data is longitudinal, analysis of data could only start after 2-3 years.

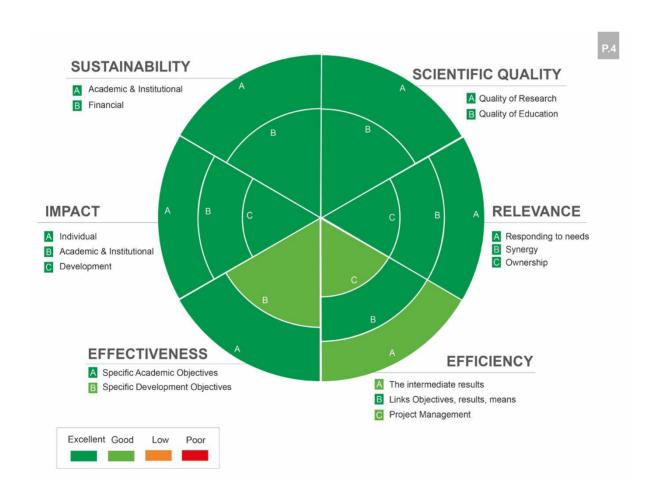
**S30. Quality of teaching.** The PhD students are focusing on their research and have limited teaching responsibilities. They are relieved from major teaching duties. All three PhD students are staff members of the university and will return to their departments and have teaching responsibilities. The team members are hoping that the graduated PhD students will integrate their research in their teaching, but no specific actions are taken to guarantee the integration. The North team hopes that integration of research and education will take place during the second phase of the project. Several specific workshops have been organised with the objective of increasing the research capacity of staff members and students.

- **S31.** Responding to the needs. The research topics are based on the problem and solution as defined during the match-making progress and are in line with the university strategy, the VLIR-UOS country strategy and national/regional policies.
- **S32.** Synergy. The synergy is scored as low: no evidence could be found of internal programme and external synergies. Common activities with P1, P2 and the VLIR-Network are absent. External synergies (with other funding agents) were not (yet) identified.
- **S33.** Ownership. The three PhD students showed a high commitment and engagement to their research topics. PhD students are highly motivated to complete their PhD research successfully. The team members are mainly relying on the PhD researchers in terms of success of the project. The second phase is not yet prepared in terms of integration of PhD students and PhD research in the different departments.
- **S34.** Intermediate Results have been delivered? The three PhD projects are the centre of the three first IR's. Delays in the research project have been identified but are justified as inherent to the methodology of the PhD research. The PhD within the framework of IR4 has been cancelled and replaced by other activities which benefited the university of sciences. Staff members as well as MSc/BSc-student could benefit from the trainings and workshops and were able to upgrade their skills (IR5). The dissemination and outreach activities are still limited and should be given major attention during the second phase of the project.
- **S35.** Links between objectives, results and means. The links between inputs (means), results and objectives are evaluated as 'good'. Investments in research equipment and providing scholarships and trainings/workshop are considered a standard approach within a research-based project.
- **S36. Ownership**. The three PhD students are highly committed to their PhD research. The Vietnamese team is relying to a large extent on the results of the PhD research. The team should consider an increased number of information activities between the different projects of the programme and extended communication with external actors.
- **S37. Effectiveness.** As the specific objectives are the sum of the intermediate results, the conclusion on efficiency and effectiveness are partly the same. On the academic objectives, progress has been made through the PhD research, workshops, trainings and investment in equipment. The progress made on the extension objectives are rather limited and should be a major point of attention during the second phase of the project.
- **S38.** Impact. The reported research progress made by the PhD students should be considered a direct impact of the project. As the PhD students are lecturers at three different departments of HUScience, they contributed to building up capacities of Bachelor and Masters students who did their thesis research within the broader framework of the PhD research. Thanks to the project, these students could use new and modern equipment which was not available before the project started. The potential impact may increase during the second phase, once the PhD students have graduated. It has been a very good choice to select lecturers as PhD students, as it increases the chance of involving the graduated PhD students in research and teaching tasks of the existing departments. Since the PhD students have not yet graduated, the direct impact at the academic and institutional level of the HU Science is not yet achieved.

There are some major concerns about the potential impact of this project in the second phase (and after the closing of the project). The policy of the HU Science and of the several departments has not changed. The PhD scholarships are distributed among three different departments. A close research collaboration (with explicit joint research agenda) among these three departments is not developed. Except for one workshop where the first results of the PhD research have been shared with local authorities, no direct impact could be identified on the broader society.

**S39.** Sustainability. The sustainability of the project is assessed as very low. Although PhD students will be integrated in the involved departments, there is no policy to retain PhD students after graduation. A new research agenda, including the future PhD graduates, is lacking. It has been a very good choice to select PhD students among the existing staff as this will increase the possibilities of keeping staff members at the university once they have graduated. New research lines at institutional level are lacking, no new research proposals have been developed and no extra and additional funding has been prospected.

# Summary Project 4: Strengthening training and services at primary level to improve rural health care



- **S40.** Quality of Research and education. Three PhD students have made significant research progress. PhD students were recruited gradually, which has been evaluated as very good, considering the establishment of a new FMC. Many innovation initiatives have been taken, e.g. new text books, e-learning, development of guidelines and training, curriculum revision.
- **S41. Needs**. Building on the situation analysis, and especially on the demands of the region, the development of training and service delivery in Family Medicine as the core specialty for primary care within this project was coupled with national policy reforms to reduce hospital overcrowding, to improve population health and to improve health system cost efficiency. Since the establishment of the FMC, the subject of the project has become even more relevant, as the FMC has become a Flagship centre for Family Medicine in Vietnam. The dynamics and competences of the FMC became an input for the national discussion on primary care. The FMC is considered a reference centre for innovation and policymaking.
- **S42. Synergy.** High external synergy has been created with other funding agents like: Boston University, Atlantic Philanthropies, Liège University, World Bank. A high internal synergy has been created through this project with a lot of complementary activities, like curriculum revision, production of text-books, e-learning modules, development of trainings and guidelines and PhD research. All these activities have been strongly linked to building up capacity and outreach on family medicine.
- **S43. Ownership**. A very high commitment and engagement has been reported, demonstrated by the numerous results of this project.
- **S44. IR achieved**. Overall, the IRs constitute a remarkably successful outcome, certainly beyond the initial hopes and scope of the project. Transfer of knowledge and skills to CHC can be improved.
- **S45.** Links between objectives, results and means. The logical framework is well-developed and embedded in an overall FMC strategy. The PhD project serves the needs of the FMC and the projects. The PhD projects are not stand-alone projects (as e.g. in project 3) but integrated in other activities and outputs of the projects. The activities and outputs should be considered key pieces of the FMC puzzle.
- **S46. Project Management.** Project management has been evaluated as 'good'. Communication between PhD students and supervisors can be improved.
- **S47.** Effectiveness. The Specific Academic Objective 1 to identify current common health problems presented at primary care level and the needs of community and health staff on primary/rural care was successfully achieved. The Specific Academic Objective 2 to improve capacity of staff and the training programme was successful with three staff members receiving PhD training in Belgium, and two staff members receiving MSc training in Vietnam. Within this objective, the success includes: the development of one undergraduate curriculum, one revised curriculum for specialist level I, one 3-month CME programme in Family Medicine and one e-learning course in FM for undergraduate training. In addition, three textbooks in FM training programme and three FM reference books were published. The specific developmental objective was exceedingly successful with the newly operational Hue FM Centre as a flagship state-of-the-art primary care training and service delivery model.
- **S48.** Impact. The impact at institutional level has been enormous. The Family Medicine Centre has been established in 2015. Although the establishment should not be seen as a direct causal result of

the project, the project did contribute to the rapid development of expertise, knowledge and a number of activities. The major achievement of the project is that all activities and results are directly linked to the development of the FMC. The major consequence of this approach is that all results are embedded in the FMC and causes multiple effects within the institute and the broader society. The Family Medicine centre could raise awareness for family medicine and primary care among policy makers and other universities, in the sense that FMC became a reference point for other universities and policy makers. The FMC was able to influence at least four policy decisions. Finally, a network between the FMC and CHC has been established and trainings to staff members of CHC are provided. CHC centres are intensively trained during a 3-month training session at the FMC. Besides that, the Vietnamese government used this model to upscale this training programmes to more CHC (with the support of World Bank loan, World Bank Health Professions Education & Training (HPET)). In the end, patients will be better served visiting the CHC.

**S49. Sustainability**. Within a very short period of time, Project 4 has achieved a high degree of academic, institutional and financial sustainability. The FMC has been able to attract funding from other agencies such as the World Bank, Vietnamese government (through the Family Medicine Clinic) and by financial input from the university. The foundations have been laid to attract more funding for other (research) projects. The creation of the institutional sustainability is remarkable: more than 20 staff members are employed since the establishment in 2015, curriculum revision at national level, four policy regulations approved at national level, many successful advocacy activities.

# 1 Introduction

# 1.1. Background

## 1.1.1. General Objectives and guiding principles of IUC1

An Institutional University Cooperation (IUC) programme is a long-term (twelve years) institutional partner-ship between a university in the South and Flemish universities and university colleges. The programme supports the partner university in its triple function as provider of educational, research-related and societal services. It aims at empowering the local university as to better fulfil its role as development actor in society.

The objectives and content of an IUC partnership between one partner institution in the South and Flemish universities and university colleges are outlined in a *partner programme* (sort of technical and financial file)<sup>1</sup>. All IUC programmes combine objectives of institutional strengthening and strategic thematic capacity building (linked to both institutional priorities and developmental priorities in a specific country). Each partnership consists of a coherent set of interventions (projects) geared towards the development of the teaching and research capacity of the university, as well as its institutional management. The IUC programme is demand-oriented, and seeks to promote local ownership through the full involvement of the partner both in the design and implementation of the programme. At the level of change, the concept is such that through a programme approach greater synergy, added value and institutional impact can be achieved than through a set of individual different IUC projects. Apart from internal synergy, the IUC programme is also looking at synergies and complementarities with other local development initiatives. Although the identification of the fields of cooperation is demand-initiated, as it concerns a partnership, the match with the available interest and expertise for cooperation at the Flemish side is crucial.

The IUC cooperation with a partner institution covers a period of approximately twelve years with two main programme phases – Phase I and Phase II - covering a combined ten years of project execution time. These phases are preceded by a Phase In and followed by a Phase out.

The IUC partner programme is subdivided in several constituting projects (research, capacity building and extension related) which are composed of several interlinked activities to be realised in the framework of a partner programme phase (in the IUC programmes under evaluation it concerns a Phase 1 of six years). At programme level the IUCs are coordinated by a local academic coordinator —with the support of top university management- and a Flemish coordinator, appointed by VLIR-UOS, and with him a coordinating Flemish university. The identification, formulation and implementation of each project is managed by project leaders: academics from both the Southern and Flemish Higher Education Institutions. Flemish project leaders are designated by VLIR-UOS on the basis of an open competition.

1

<sup>&</sup>lt;sup>1</sup> Based on ToR, p.2-3

## 1.1.3. Subject of the evaluation – Theory of Change of an IUC programme<sup>2</sup>

Every Institutional University Cooperation (IUC) programme is subdivided into several synergetic/complementary projects (research, capacity building and extension related) which are composed of a number of interlinked activities to be realised in the framework of a partner programme phase. These different projects all have their individual results framework and underlying Theory of Change. An IUC is more than the sum of its projects: an IUC has the potential to empower the local university as a whole to better fulfil its role as development actor in society through programme level management, the scale of the total programme, transversal (institutional strengthening) projects, the interlinkages between the different projects, the support given by the programme support unit and the critical mass of capacity created.

#### **Project level Theory of Change**

Every Institutional University Cooperation (IUC) programme consists of several 'classic' projects and one or two 'transversal' projects. The classic projects primarily contribute to development changes at impact level, and indirectly also contribute to the institutional performance of the Higher Education Institutes (HEI) and the role of the HEI as a development actor. The transversal projects aim at improving internal services or systems of HEI. This can be in various areas: ICT services, e-learning, library services, research management, etc. This not only contributes to the different ('classic') projects but also strongly contributes to an improved institutional performance of the HEI.

#### Classic projects

At the **output level** VLIR-UOS supports interventions producing different types of deliverables (e.g. deliverables related to education improvement, research deliverables, strengthening research or education capacities, infrastructure and equipment, deliverables related to extension). All these deliverables are achieved in partnership with HEI in Flanders and a partner country. These outputs are considered as being within the sphere of control of the project.

At **outcome level** (specific objective) we can identify three typical outcomes (Improved research practices, Improved education practices and New knowledge, applications or services are created + uptake by relevant stakeholders). These outcomes are *identified as specific objectives* and can be considered as "use of outputs": They imply changes in performance, behavior, etc. These outcomes are no longer within the sphere of control but are within the sphere of influence of the project.

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<sup>&</sup>lt;sup>2</sup> Based on ToR, p.4-8.

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

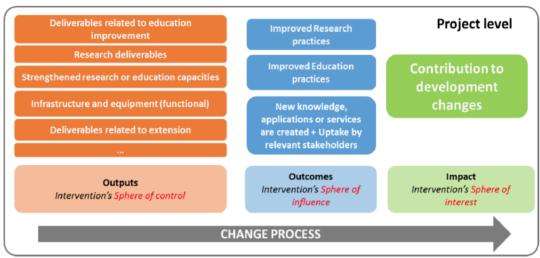


Figure 1 - Theory of Change IUC project

#### Transversal Projects

In an IUC programme, there is always one or more 'transversal' project. These are projects that have a slightly different Theory of Change. Transversal projects always focus on strengthening organisational capacities in areas such as internal service delivery (e.g. ICT services, library services, etc.), external service delivery (e.g. extension services) and managerial capacity. These projects realise several outputs with the aim to improve internal performance. This improved internal performance will contribute to institutional changes, and will also contribute to the other projects of the IUC (e.g. improved internal ICT performance will also benefit the other projects. A simplified illustration of possible ToCs of transversal projects is provided below.

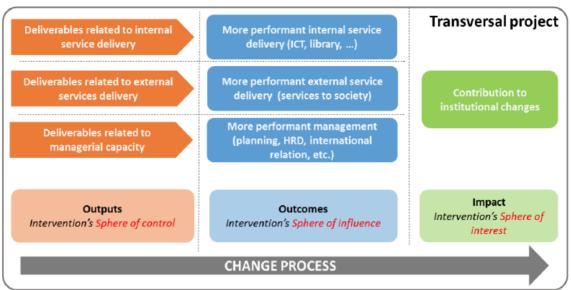


Figure 2 - Theory of Change IUC transversal project

### **Programme level Theory of Change**

The primary impact envisaged by an IUC is to contribute to development changes through the development results of the different projects. A second intended impact is (a) the contribution to an improved performance of the HEI and (b) a changed role of the university as a development actor (strongly related to development changes). This is the programme level impact sought for. A generic and simplified ToC for an IUC programme as a whole is presented below.

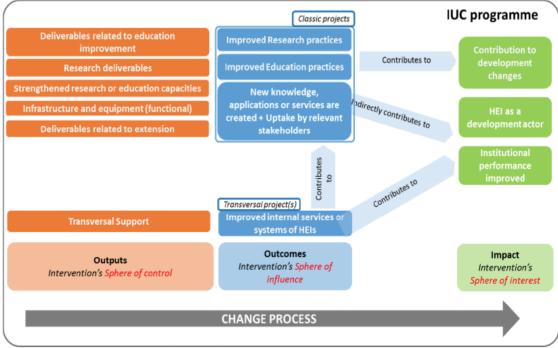


Figure 3 - Theory of Change IUC programme

## 1.1.4. Objectives of the Evaluation<sup>3</sup>

In the ToR the purpose of the Mid-term evaluation (see Annex 4.5) has been formulated as follows:

- Learning: based on the analyses made by the evaluation team, lessons can be learned about what worked well, what did not 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: based on the analyses made by the evaluation team, recommendations will be formulated to support decision making processes of the IUC (at different levels). For a mid-term evaluation, specifically: the evaluation will be used to decide about and as an input for the formulation of a second phase.
- 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.

The evaluation's primary objective is to evaluate the performance of the IUC at 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:

- 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 mid-term evaluations, a particular focus needs to be given to efficiency and effectiveness.
- 2. The follow-up plan of the programme for the second phase (cf. self-assessments) is also evaluated. The follow-up plan needs to further guarantee capitalisation, exploitation and vulgarisation of achievements of the first phase, sustainability at institutional level (and research groups), and the impact of the university on development processes in the surrounding community, province and eventually in the country.
- 3. Assessment of the influence of HU as a regional university on the actual implementation of the IUC programme.
- 4. Identify overlaps between the IUC and the "NETWORK Vietnam programme" of which HU is a member (practically and financially; Project 2 and Project 3 in particular).

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<sup>&</sup>lt;sup>3</sup> Based on ToR, p.15-16.

# 1.2. Context

Vietnam's transition from a centrally planned economy to a market economy has started since 1986. The economic reform has been carried out actively with strong liberalisation of trade, opening of the economy, recognition of the role of the private sector in the country development and use of market-based instruments for the state management. As a result of the economic reform, Vietnam has gained quite significant achievements in economic growth and poverty reduction. Vietnam has become a middle income country since 2010. With the transition into a market economy, Vietnam has gained significant achievements in socio-economic development as well. The continuous increase of GDP is one of the factors, which has led to the rise of GDP per capita from USD98.00 in 1990 to USD 1168 in 2010 and USD 2,215 in 2016. The extreme poverty rate has been reduced from 60% in 1990 to a low of 3% in 2016<sup>4</sup>.

Although the average economic growth rate for the last eleven years (2006-2017) has been much lower than the one for the period 2000-2005 (around 6% compared to the more than 9%), Vietnam's growth rate is still considered high in comparison with the one of many countries in the region and in the world. For 2017, Vietnam's growth rate has gone up to 6.81% from 6.21% in 2016. Agriculture is one of the three key economic sectors in Vietnam, accounting for 25-30% of total GDP for a quite long time. However, in the 2011-2016 period the growth rate of agriculture has been declining strongly, from 4.02% in 2011 to 1.36% in 2016, causing the reduction of the agriculture proportion in the GDP to 16.32% in 2016.

The climate change has made negative impacts on agriculture sector growth in the country, especially the agriculture in Mekong Delta. Because of strong drought and widely salinisation, many coastal provinces have made their efforts to move from rice planting to salt tolerant crops or aquaculture. Aquaculture become more and more important to farmers. In 2017, in the agriculture sector, the growth rate of fisheries was highest, at 5.45% in 2016 (compared to 2.9% as for the whole agriculture sector).

Vietnam is the country with the fourteenth largest population in the world with 93.7 million inhabitants in 2017. The average growth rate of the population has been 1.06% for the period 2009-2014, and raised a little bit to 1.07% for 2015-2016. 65.4% of the population is living in rural areas. 42.2% of the total labor force has been working in agriculture, forestry and fishery sector; 24.4% in industry and construction, and 33.4% in service and trade sector.

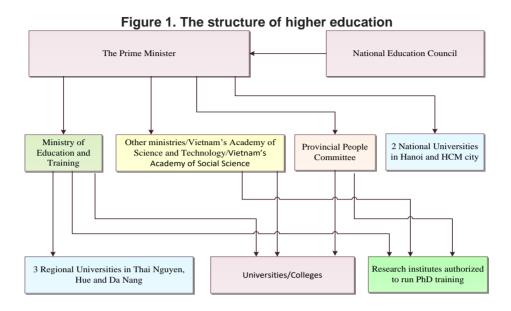
Vietnam's golden population stage has started since 2007 with a percentage of people at working age that is the double of the percentage of dependent people. However, signs of ageing population have been emerging since 2011. According to World Bank (WB), the stage of golden population of Vietnam will be gone out soon, in 18-20 years. This has imposed a strong pressure on Vietnam to make more efforts for improving the quality of the human resources and increasing the labor productivity. Which on its turn has imposed strong pressure to reform the education system in Vietnam, especially the high education system.

By management modality, there are three key types of universities in Vietnam: National universities, regional universities and normal universities/colleges. two national universities in Hanoi and HCM city are under direct management of the Prime Minister, under which there are a number of universities, colleges, service delivery institutions and research institutes. three regional universities in Thai Nguyen, Hue and Da Nang cities are under MOET (Ministry of Education and Training), under which there are also a number of universities, colleges and research institutes, as under the national universities. Normal

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<sup>&</sup>lt;sup>4</sup> Vietnam 2035, MPI-WB, 2015

universities/colleges may be established under MOET or other ministries, or Vietnam's Academies of Science and Technology and Social Science, or under provincial People Committees (See the Figure 1).



In terms of ownership there are government and private universities/colleges, of which some are 100% foreign-owned, and others are joint ventures between foreign and domestic investors (Article 7, Law on High Education 2012).

The key different feature of government and private universities is that private universities are managed by their Board of Directors, which is the sole representative of the owners, while government universities are managed by their University Council, whose ownership representativeness is not very clear. The Government has made big efforts to give more autonomy to government universities. At present, government education institutions are regulated by the Decree 16/2015/ND-CP, which gives them an autonomy in using their revenues for education and training activities. However, the ceiling for tuition fees is too low to cover the training costs, and the grant from the government is not adequate to compensate these costs. The Decree 16/2015/ND-CP gives a road map to ensure that the whole costs are included in the price of public services, including education service as follows: salary, direct expenses and management costs are to be included by 2018; and salary, direct expenses, management cost and depreciation are to be included by 2020.

# 1.3. Evaluation Methodology and Process

## 1.3.1. Evaluation Framework

According to the ToR the following criteria must be evaluated at programme level as well as at project level: scientific quality, relevance, efficiency, effectiveness and sustainability. We have decided to subdivide each of these criteria as follows:

Criteria	Sub-criteria
Scientific Quality (project level)	Quality of Research
	Quality of Education
Relevance (programme & project level)	Responding to needs
	Synergy & complementary
	Transversal Themes
	Ownership
Efficiency (programme level)	Link between inputs and outputs
	Delays
	Programme management
F#: sian and (a ratio at law)	The leterate distance like here here delivered
Efficiency (project level)	The Intermediate results have been delivered
	Relationship between objectives, results and
	means
	Project management
Effectiveness (programme and project level)	Specific Academic Objectives
	Specific Development Objectives
Impact (programme level)	Academic Impact
	Institutional Impact
	Development Impact (impact on society)
	In P. St. all to and
Impact (project level)	Individual Impact
	Academic & Institutional impact
	Developmental Impact (impact on society)
Sustainability (programme and project level)	Academic & Institutional sustainability
7 11 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Financial Sustainability

According the ToR each of the (sub-) criteria should be scored using the scores: excellent, good, low, and poor. We developed a generic scoring system which can be found in the table below. A full description of the criteria can be found in annex. In the table below, it is shown that the scores are directly linked to recommendations. The lower the quality, the lower the score, and the more important the related recommendations are. For each of the criteria, the number of the recommendations refers to the recommendation formulated at the beginning of the report. This allows us to demonstrate directly the link between the analysis, the scoring and the recommendations.

Scores Definition Scores	
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4-Excellent	The overall (Criterion) is of excellent quality. Additional measures are not needed
3-Good	Minor room for improvement exists, however with minor effect on (Criterion); See recommendations No's:
2-Low	Major room for improvement exists, with a potential of major effects on (Criterion) of the Programme/project. See recommendation No's:
1-Poor	The (Criterion) is of poor quality and extra necessary measures are urgently need to realize the (Criterion). See recommendation No's:

## 1.3.2. Methodology

The following phases in the methodology can be distinguished:

- 1. Desk research: Analysis of programme and project documents like annual reports, planning documents and formulation documents, self-assessment reports. Based on these reports, vital questions have been formulated.
- 2. Interviews with Flemish stakeholders: Flemish programme coordinator and Flemish project leaders and other stakeholders have been interviewed in Belgium.
- 3. Field mission: interviews and focus groups with Vietnamese programme coordinator, project leaders, PSU, PhD students, and Master and Bachelor students have been organised. Also a limited number of interviews with external stakeholders have been organised. Additional documents have been requested and delivered by the partners.
- 4. Report writing: data from documents, interviews and focus groups have been triangulated. Interpretation has been made by the evaluators.

A detailed agenda of activities can be found in annex

#### 1.3.3. Limitations of the evaluation

- The number of mission days has been limited. As a consequence the number of interviews and
  focus groups were carefully planned. The most important consequence is that external stakeholders could not be interviewed at a large scale. This could be important to identify impact on
  society and to identify potential opportunities of developmental impact in the second phase.
- 2. A couple of data collection techniques could not be implemented due to the fact that systematic data was absent. For example, not all contact details of students who participated in workshops were available. As a consequence, it was not possible to organise a survey among those stakeholders. This did not have a major impact on the results of the assessment, as students could be interviewed during group discussions.
- Not all details of the self-assessment reports could be double checked. In particular on the KRA's we were not able to find hard data to confirm the reported results. In general terms, we did not find any indication that the reported KRA's were not correct.
- 4. The Theory of Change (ToC) of VLIR-UOS has been developed after the formulation process of the programme. As a consequence, the logical frameworks of the programme do not match perfectly with the ToC. According to ToC, outcomes are identified as specific objectives and can be considered as "use of outputs": They imply changes in performance, behaviour, etc. At impact level the main change envisaged is always a developmental objective (long term). Implicitly

it is also about contributing to a changed role of the local partner as an actor of change (medium-term). In many cases the formulated specific objectives in the log-frame are the sum of the intermediate results and are not describing the objectives at outcome level. It has been challenging for the evaluation team to take into account the log-frames and the ToC at the same time. In most of the effectiveness paragraphs, we followed the log-frames (as ToC did not exist during programme formulation), which often resulted in a summary of the intermediate results. Outcome level has been described in the impact level paragraphs. The impact level (developmental impact) has been limited as this evaluation is a mid-term evaluation and real impact can be expected during the second phase. That is the main reason why often the potential (developmental and institutional) impact of the programme and projects has been described.

5. In this Network programme, it has been very difficult to distinguish programme level and project level. The programme level has been formulated as the sum of the projects. The logical framework at programme level and project level are identical. Consequently, it has been very difficult to distinguish and evaluate both levels separately.

# 1.4. Structure of the evaluation report

The evaluation report is subdivided in two chapters – the introduction and the evaluation chapters. In the introduction chapter the background, objectives, subject and methodology are described. In the subsequent paragraphs a short description of Hue University and the IUC is presented. In the second chapter the results at programme level and project level (3 projects) are presented. The first project (P1, institutional project) and the fifth project (P5, PSU) are evaluated at programme level, as these projects explicitly refer to university broad and programmatic topics.

# 1.5. Short Description of the Partner and IUC programme

### 1.5.1. The Partner: HU

Formerly known as the University of Hue, Hue University was initially established in March 1957. After the reunification of the country in 1975, independent universities were established in Hue on the basis of the existing faculties of The University of Hue. According to the Government decree No. 330/ND-CP dated 4 April 1994, Hue University has been re-established by reorganising all Hue-based universities. Hue University is responsible for training students at undergraduate and postgraduate levels, conducting research and applying science and technology in a multitude of disciplines. One of the main objectives of the Hue University is to serve the construction and development of Vietnam in general and Central and Highlands in particular. Hue University is a regional university serving Central Vietnam. Hue University is considered a two-level university: one central level with administrative departments and a second level that is called the level of the member universities (commonly known as faculties). Within the Framework of the IUC HU, three member universities are involved: the University of Sciences, the University of Medicine and Pharmacy; and the University of Agriculture and Forestry. The other five faculties (five member universities) are: University of Education; University of Arts; University of Economics; University of Foreign Languages; and University of Law. Each of these member universities has its own faculties and/or departments. Besides the three member universities, also the central level is directly involved in the IUC.

The Hue Universities has more than 45.000 full time students and provides more than 110 Bachelor programmes, 82 Master programmes and 51 doctoral programmes. More than 3500 staff members are on the payroll of the university.

## 1.5.2. The Programme

The VLIR-IUC programme with Hue University (VLIR-IUC-HU) focuses on one mandatory project and three thematic projects which are main focal areas of Hue University. The institutional strengthening project (P1) supports institutional management and transversal issues in VLIR-IUC-HU.

Three thematic projects focus on:

- Aquaculture and crop production (P2),
- Ecosystems (P3), and
- Rural health development (P4).

During the programme and project formulation all projects would have as an objective to focus on education and training, research, infrastructure and institutional issues.

P1 sets up a framework for research-based education and university governance through seminars, workshops, conferences, visits and short training courses with PhD training; P2-3-4 focus more on PhD research and training.

**The Academic objectives** of the programme have been formulated as follows:

- To create and/or support an enabling institutional environment for research-based education, joint education and research at the south university.
- To strengthen the institutional capabilities in terms of the university management and governance, curriculum development, and educational quality assurance.

The academic objectives of the programme are to create an enabling environment for research-based education and strengthen the institutional capabilities. These are vital as the research can be integrated into the curricula, and makes sure the education is oriented to the actual needs of the society. Furthermore, curriculum development is bound to be supported or enabled by the partner's central administration. In the programme formulation document, the involvement of Hue central administration has been identified as crucial: "Therefore, the involvement of the partner's central administration will be paramount to the success of the programme. For the Flemish-Vietnamese partnership to be mutually beneficial, the objectives are also to establish of joint education programmes and joint research projects. In order to make this happen, the human resource development plays a crucial role as they are part of the success of the implementation curricula into the community."

## The Developmental objectives of the programme have been formulated as follows:

- To transfer research results on aquaculture, environmental science, and health care into the society by new forms of education and training.
- To improve the infrastructure for development needs of research sites in the context of the programme.

The programme formulation document describes the importance of the developmental objectives as vital to the programme: "The programme's developmental objectives align with the third pillar of higher education: service to society. Besides technology transfer centres, these developmental objectives include English training courses, vocational and entrepreneurial lifelong learning needs to be stressed in the context of higher education cooperation. Infrastructure improvement is also focused as we would like to promote distance and e-education to help faster implementation of the research results into the community especially in the rural and mountainous areas. Within this context the importance of involving Flemish university colleges was raised since they have more practical expertise to offer."

In the table below we present for the programme and each of the projects the specific objectives:

Programme level	Specific Academic Objective:
	Reinforce research-based education on primary pro-
	duction, ecosystem management and rural medicine
	at HU.
	Specific Developmental objective:
	To service local stakeholders with societal relevant
	applications/solutions related to primary production,
	ecosystem management and rural medicine
Project 1 (P1): Institutional Strengthening	Specific Academic Objective:
	Developing the capacities, structure and organisation
	of Hue University as to (1) Governance, (2) Curricu-
	lum development, and (3) Quality Assurance
Project 2 (P2): Developing and improving	Specific Academic Objective:
sustainable aquaculture, livestock produc-	Capacity building is enhanced through research and
tion and crop protection with emphasis on	training on aquaculture, livestock production and
bottom-up solutions for environmental pollu-	crop protection by means of integrating applied ani-
tion	mal and crop sciences as well as environmental sci-
	ences
	Specific Developmental objective:
	Essential information is supplied to stakeholders
	about sustainable aquaculture and livestock systems
	as well as biological crop production techniques.
Project 3 (P3): Preservation of the coastal	Specific Academic Objective:
ecosystems and natural resources under	Capacity building is enhanced through research and
the effects of development activities	training on the unique lagoon ecosystem by means
	of integrating Biological, Chemical and Geographical
	Sciences
	Specific Developmental objective:

Essential information is supplied to stakeholders
about the lagoon ecosystem properties, functions
and potential for sustainable use

Project 4 (P4): Strengthening training and services at primary level to improve rural health care: a pilot intervention in the central Vietnam	Specific Academic Objective:  Current common health problems presented at primary care level and the needs of community and health staff on primary/rural care are identified  Capacity of staff of Hue UMP who are responsible for teaching primary/rural health (Family Medicine) and the training programme (pre service and in service) on Family Medicine will be improved to meet the needs of the system
	and the community  Specific Developmental objective: Health care services at primary level will be improved through training in Family Medicine and the establishment and maintaining contact and exchange amongst Hue UMP, Thua Thien Hue Health Services, The Centre for Primary/Rural Health Care Training and Practice at Phu Loc District Hospital and the network of participating CHCs.

# 2 Evaluation

# 2.1. Evaluation per project

## 2.1.1 Project 1: Institutional Strengthening

#### 2.1.1.1 Short description of the member university and faculties/main activities

Project 1 is mainly implemented by the Central University office. Formerly known as the University of Hue, Hue University was initially established in March 1957. After the reunification of the country in 1975, independent universities were established in Hue on the basis of the existing faculties of The University of Hue. According to the Government decree No. 330/ND-CP dated 4 April 1994, Hue University has been re-established by reorganising all Hue-based universities. Hue University is responsible for training students at undergraduate and postgraduate levels, conducting research and applying science and technology in a multitude of disciplines. One of the main objectives of the Hue University is to serve the construction and development of Vietnam in general and Central and Highlands in particular. Hue University is a regional university serving Central Vietnam. Hue University is considered a two-level university: one central level with administrative departments and a second level that is called the level of the member universities (commonly known as faculties). Within the Framework of the IUC HU, three member universities are involved: the University of Sciences, the University of Medicine and Pharmacy; and the University of Agriculture and Forestry.

The other five faculties (five member universities) are: University of Education; University of Arts; University of Economics; University of Foreign Languages; and University of Law. Each of these member universities has its own faculties and/or departments. Besides the three member universities, also the central level is directly involved in the IUC.

The Hue Universities has more than 45.000 full time students and provides more than 110 Bachelor programmes, 82 Master programmes and 51 doctoral programmes. More than 3500 staff members are on the payroll of the university.

### Main activities of the project:

- Three PhD research projects
- Organisation of workshops and international conferences
- · Development of QA handbook and tool
- Stimulating Curriculum innovation

#### 2.1.1.2 Assessment of the Evaluation Criteria

Looking into the project details of project 1 (P1), it has become obvious that project 1 (Institutional strengthening) can be considered as the project that inspires/delivers input to the other three projects (P2,P3,P4). Besides delivering input, P1 has its own rationale in increasing capacity at the central level of Hue University.

Scientific Quality		
P.1.1.	- Three PhD students were recruited but stopped their PhD Research.	
Quality of research		
Score: Low		
P.1.2	- Awareness has been created	
Quality of Education	- Innovation funds stimulated new initiative but are not (yet) broadly inte-	
Score: Good	grated at member university and faculty level.	
Recommendations:		
R5 & R8		
Final judgement/comments		

### **Quality of Research**

Within each of the three IR's, a PhD candidate was selected and given a scholarship. Unfortunately, the three candidates did not have the right skills for PhD research. They have been assigned to each of the three focuses of P1. However, while all have Master degrees, they are administrative staff members and have no link either with education or research. As, despite of investments both in language upgrade and in longer stay in Flanders (with funds external to the VLIR-IUC project), those candidates are considered not able to pursue towards a doctoral degree, according to Flemish norms, and their scholarships have been stopped. Stakeholders reported that the selection of candidates should have been better organised and that it should be a result of a joint process between Vietnamese and Flemish stakeholders. After a process of two years the scholarships have been stopped and the strategy has changed towards attracting lecturers from different colleges or faculties for obtaining a PhD. It has been decided to recruit three new PhD students: two in the field of curriculum development and one in the field of quality assurance. The new PhD students are recruited from the several member universities in order to create more synergies between P1 (and programme level) and the member universities. One PhD student from the Education Faculty and one of the Family Medicine Centre are recruited to strengthen the curriculum capacities. A third PhD student will be recruited from the central level university.

#### Quality of Education.

The main achievement of the *curriculum development* has been the creation of awareness among staff member of the member state universities about the nature and quality of curriculum development approaches. Hands-on workshops with large numbers of participants (up to 150 staff members) have been organised. Several approaches, like research based learning, innovative assessment approaches and active teaching approaches have been introduced. The set-up of the education innovation fund has been very successful and more than twenty initiatives from individual staff members have been awarded. The number of proposals increased significantly since the start-up in 2014, showing that the innovation fund mobilised staff member to formulate projects to implement innovative approaches.

Relevance		
P.2.1. Responds to	-Quality assurance, curriculum development and university governance	
needs	are at the core of the policy priorities of HU	
Score: Excellent		
P.2.2. Synergy & Com-	- The synergy of project 1 with the other projects is rather limited as three	
plementary	PhD researcher have stopped their PhD research;	
Score: Low	- The transmission of results of P1 to the other projects is (still) very lim-	
Recommendation: R1	ited.	
& R5		
P.2.4. Ownership	-Strong ownership by president of HU and management staff.	
Score: Good		
Final judgement/comments		

#### Needs:

Project 1, which is focusing on quality assurance, curriculum development (educational innovation) and university governance (management) is also in line with the VLIR country strategy paper and with the priorities of the HU management. In particular university governance is very important aspect of the programme. HU is looking for appropriate management model to the complex two-level university structure with on the on hand a central level and on the other hand with member universities (faculties) with high governance autonomy. Increasing quality, linking research and education and developing new educational methodologies are at the core of achieving the strategic goal of the University. One of the implicit objectives of this programme is to increase the multidisciplinary approach and to stimulate cooperation between member universities. As described in the following paragraphs, the first steps have been taken to achieve these goals, but a lot of additional steps should be taken in the second phase. In general terms, the objectives of the programme are still highly relevant and can be used as a basis for the second phase.

## Synergy

The *internal synergy and complementary* between projects is very limited. The activities and results from P1 (workshops, conferences) have not yet been transferred to the projects. Although members of the project did participate at the some of the P1 activities, a real change on curriculum development, educational innovation, quality assurance and governance could not been observed. Cooperation between projects has been largely absent in terms of joint activities, academic and educational coordination and policies. One of the main reasons for the lack of knowledge transfer and lack of change is the fact that three PhD students failed to reach the high quality requirements for PhD research on each of the IR's. After two years it has been decided to stop their scholarships. On the other hand, stakeholders learnt that the integration with other projects is a requirement for success. So in the next phase two PhD students on quality assurance and educational innovation will be directly linked to projects and member universities.

The innovation fund is a good example of synergies between the VLIR-UOS-IUC and existing initiatives at member university level. The fund granted innovative ideas from individual lecturers from all member universities. Based on competitive calls, individual projects on educational innovation have been developed. This type of initiative did exist in some of the member universities but the scope has

been enlarged thanks to the IUC-programme. Unfortunately, not one project funded by the innovation fund has been used for broader implementation at institutional level. During the second phase this should be considered as a possibility.

The Central university level has been very successful to align the VLIR-UOS-IUC programme with other international projects and programmes which support the objectives of P1:

- ASEAN-EU SHARE (<a href="http://www.share-asean.eu">http://www.share-asean.eu</a>) project which is linked with the quality assurance activities of P1. Additional experience on how to increase the quality of education has been achieved through ASEAN-EU share.
- Nutrisea (<a href="http://www.nutrisea.eu">http://www.nutrisea.eu</a>): This project has been linked to curriculum development activities of VLIR-UOS-IUC. Although food technology is the focus of this programme, curriculum development issues have been introduced in this programme as well, e.g. tech-transfer, entrepreneurship based education.

#### Ownership:

The central university leadership has shown a high commitment to the programme. Right from the formulation stage of the programme, project objectives were strongly demand-driven. The commitment to the initial objectives have been confirmed during this mid-term evaluation. At programme level, the presidency of HU has emphasised again the importance of the IUC for increasing the management capacity, educational innovation and quality assurance. The IUC is being used to increase visibility at national fora and to influence the policy. The IUC seems to be vital as a lever to generate other projects at central university level. Further evidence of ownership at institutional level could be found in the creation of quality assurance unit which is funded from HU own budget.

Efficiency		
P.3.1.Intermediate Results have been deliv-	-Three PhD students has stopped their research and	
ered	will be replaced by new research projects	
Score: Good	- Other IR`s have been delivered beyond expecta-	
	tions	
P.3.2.Relationship between objectives, re-	- Three PhD students stopped	
sults and means	- Hue as catalyst in national discussions on university	
Score: Good	governance.	
Recommendation: R1 & R5	- Awareness on nature and quality of curriculum de-	
	velopment has been made.	
	- Establishment of QA-unit	

# P.3.3. Project management Score: Good Strong PSU leadership Strong coordination between Flemish and Vietnamese partners Minor management issues have been solved accurately No major budget issues Reporting requirements are considered as very demanding and time consuming.

#### Final judgement/comments

IR1: Improvement of the governance expertise, governance tools and instruments at Hue University IR2: Improvement of the curriculum development expertise, practices and research evidence at Hue University

IR3: Improvement of the Quality Assurance expertise, models and practices at Hue University

#### Intermediate results have been delivered?

Within each of the three IR's, a PhD candidate was selected and given a scholarship. Unfortunately, the three candidates did not have the right skills for PhD research. They have been assigned to each of the three focuses of P1. However, while all have Master degrees, they are administrative staff members and have no link either with education or research. As, despite of investments both in language upgrade and in longer stay in Flanders (with funds external to the VLIR-IUC project), those candidates are considered not able to pursue towards a doctoral degree, according to Flemish norms, and their scholarships have been stopped. Stakeholders reported that the selection of candidates should have been better organised and that it should be a result of a joint process between Vietnamese and Flemish stakeholders. After a process of two years the scholarships have been stopped and the strategy has changed towards attracting lecturers from different colleges or faculties for obtaining a PhD. It has been decided to recruit three new PhD students: two in the field of curriculum development and one in the field of quality assurance. The new PhD students are recruited from the several member universities in order to create more synergies between P1 (and programme level) and the member universities. One PhD student from the Education Faculty and one of the Family Medicine Centre are recruited to strengthen the curriculum capacities. A third PhD student will be recruited from the central level university.

The complexity of Hue University structure and the difficulties to manage such a complex university have been reported by all stakeholders. A merging of different independent universities (now called member universities, colleges or faculties) had important consequences on the governance structure of the university. Hue University served as one of the examples of such type of universities in Vietnam. Including this 'governance' topic into the IUC has resulted in high involvement of Hue University in national discussion on university governance. The yearly national conference (funded by VLIRUOS) resulted in internal discussion at institutional level but also at national level on governance structures of universities in Vietnam. In this sense the results of this IR are far beyond the initial results formulated in the project and programme document. The participation of other universities and government officials in this national conferences delivers evidence for the catalyst role Hue University played with the support of IUC.

The main achievement of the *curriculum development* has been the creation of awareness among staff member of the member state universities about the nature and quality of curriculum development approaches. Hands-on workshops with large numbers of participants (up to 150 staff members) have been organised. Several approaches, like research based learning, innovative assessment approaches and active teaching approaches have been introduced. The set-up of the education innovation fund has been very successful and more than twenty initiatives from individual staff members have been awarded. The number of proposals increased significantly since the start-up in 2014, showing that the innovation fund mobilised staff member to formulate projects to implement innovative approaches.

A lot of progress has been made on the improvement of quality assurance: Quality Assurance Unit has been established and five staff members were recruited and paid from the central university budget. The first appointed director has left HU, and was recently replaced by a new director. The programme suffered from the resignation of the first director as a lot of capacity development activities have been lost. Nevertheless, the replacement of director did not hinder the programme of developing a QA handbook. Progress has also been made to develop QA tools. It has been reported that the QA framework should be finalised by the end of 2018. Besides the establishment of a QA unit group, key staff members have been introduced to state of the art approaches in European Universities and to the ASEAN context. The project successfully linked up with the SHARE project – set up in a collaboration between ASEAN and the EU – to develop QA approaches in the ASEAN countries. This allowed convergence of activities and outcomes. Next to the development of Internal QA approaches, also External QA approaches have been achieved. In August 2017, this has resulted in the collaborative development of an internal quality assessment report based on the ASEAN QA Framework and this in view of an external QA visit by ASEAN partners.

#### Relationship between objectives, results and means

The relationship between objectives, results and means are evaluated as good, as more results than expected were achieved with the same budget as planned.

The evaluation team considers the mismatch of PhD students in Project 1 as a failure but important lessons have been learnt by all stakeholders and joint actions have been taking to redirect the research to a new direction in the second phase.

#### **Project Management**

The overall satisfaction with the programme management is very high. Strong leadership has been appreciated by all stakeholders. It has been reported that at the beginning of the IUC some coordination problems occurred but that during the programme implementation, these issues have been solved easily. The steering committees are appreciated as very useful. From the Flemish side, support in terms of organisation of missions, financial and administrative statements are very positively appreciated.

#### **Effectiveness**

P.4.1. Specific academic objective	All IR's have been achieved to a certain extent:
Score: Good	see paragraph on efficiency for detailed explana-
	tion.
P.4.2. Specific development objective	Achieved by the organisation of four workshops
Score: Good	sharing the research results with stakeholders
Recommendation: R4 & R7	

Final judgement/comments

It should be noted as well that the specific objectives of the project 1, which is an institutional transversal project are the sum of the three intermediate results. Therefore, many of the evaluation results are presented as equal to the results of the evaluation criterion efficiency (see limitation no 4 & 5). It is important to mention that for project 1 only one academic specific objective has been formulated and that a developmental specific objective is absent. Although no development objectives has been formulated, developmental result could be identified: the conferences on university governance influenced governmental policy and other university management bodies.

Impact	
5.1.Individual impact Level	- All three PhD students failed in their PhD research
Score: Low	
1.2. Academic and Institutional impact	- PhD research failed
Score: Low	- New initiatives have been taken like e.g. Asian-EU
Recommendations: P1 & P5	SHARE project
	- Establishment of Quality Assurance Unit
	- Awareness has been created on curriculum devel-
	opment issues but not yet implemented and internal-
	ised by the member universities.
5.3.Developmental impact (impact on soci-	- Significant contribution to the national discussion on
ety)	university governance with involvement of policy
Score: good	makers
	- Increased visibility of HU
Final judgement/comments	

The individual impact of project 1 should be considered as weak as three PhD students stopped their research.

A Quality Assurance unit has been developed at central level. The QA unit is taking up the responsibilities to develop a Quality Assurance handbook and tools. The first phase was important to increase awareness on the nature and quality of curriculum development, research based education, multidisciplinary research. The awareness establishing activities, have not yet resulted in new policies neither at central level nor at the level of the member universities.

As mentioned before, project 1 contributed, to a large extent through the organisation of a yearly international conference, to the national discussion on university governance. A government decision on the autonomy of universities is expected to be approved in the course of 2018. It is clear that HU and IUC contributed significantly to this debate.

It has been reported that the impact has boosted the international character of HU and that an increased visibility has been achieved in line with the strategic choices made by the HU management.

#### Sustainability 6.1. Academic and Institutional sustainability - Academic sustainability is absent as 3 PhD stu-Score: Low dents stopped their research. Academic sustainability Recommendation: R1, R4, R5, R7 & R8 can be expected in the second phase. - The creation of QA unit is part of the strategic choices made by university management and will continue to exist after the end of the programme. - Not yet determined how curriculum innovation will be organised between the central level and the member universities. 6.2. Financial Sustainability - IUC has been used to attract additional funds (Nu-Score: Low triSEA, Asian-EU-Share) - Quality assurance unit will be embedded in the Recommendation: R1, R4, R5, R7 & R8 Central University budget Final judgement/comments

The sustainability of the programme has been evaluated as low. This is nothing out of the ordinary considering that the programme is just halfway of its implementation. Sustainability should be a major point of attention during the second phase of the programme. Within P1, there is a lack of institutional coherence and synergy. The same risk does exist within the new strategic research lines. Although most of the PhD candidates are staff members (lecturers) at the university, they implement their research almost isolated from each other. There is a high risk within P1 that the new PhD-researchers won't be integrated at central level: one PhD student at the Family Medicine Centre, one at the school of education and one at the central university level. It remains to be seen whether a structural and institutional cooperation after the completion of the PhD research will be implemented. The establishment of QA unit on the other hand, is a very good example of institutional sustainability. Although the first director of the unit resigned, a new director has been appointed. The budget for the QA unit is embedded in the central university budget. It has been reported that QA unit will continue to exist after the end of the programme. Evidence was delivered of the added value of QA unit and the strategic importance of the unit in order to achieve the objectives of HU (being recognised as international university and accredited accordingly).

Although external funds have been attracted, it remains to be seen whether all new initiatives taken will be integrated at member university level once the VLIR-Funding has been phased out. No evidence could be found whether structural funding will be available.

# 2.1.2 Project 2 Developing and improving sustainable aquaculture, livestock production and crop protection

#### 2.1.2.1 Short description of the member university and faculties / main activities

**Member University and faculties:** University of Agriculture and Forestry, eight Faculties. The university of Agriculture and Forestry has around 9000 students and 440 staff members, of which 300 are teaching staff.

Three faculties are involved in VLIR-IUC:

- Faculty of Animal Sciences (FAS), six departments, 35 teaching staff members (60% PhD holders) and +/- 1600 students;
- Faculty of Agronomy (FOA): seven departments and 47 teaching staff members (50% PhD holders), and+/- 900 students;
- Faculty of Fisheries (FOF): four departments, 35 teaching staff members (20% PhD holders) and +/- 1000 students.

#### Main activities of the project:

- Three PhD research projects;
- Involvement of BSc and MSc students within the framework of the PhD research;
- Workshop/training of staff member of the faculties:
- Equipment investment.

#### 2.1.2.2 Assessment of evaluation criteria

Scientific Quality	
P.1.1.	The quality of the PhD research is outstanding. One PhD candidate de-
Quality of research	fended his PhD successfully at the end of 2017.
Score: Excellent	The research topics of the PhD researchers can be considered as cutting
	edge and new within the Vietnamese context.
	The faculties have been provided with equipment
P.1.2	Equipment has been used by lecturers and students
Quality of Education	Master and Bachelor students have been included in the PhD research,
Score: Good	linking research and education.
Recommendations:	Workshop for staff members of the faculties have been organised; lec-
R5 & R8	turers reported to feel more confident.
	Lecturers have been involved in the VLIR-Network activities.
Final judgement/comm	nents

#### **Quality of Research**

The three PhD research projects are the centre of Project 2. A first PhD is focusing on "Poly-culture systems as a complete approach to enhance productivity and improve the ecological environment of aquaculture". The objective of the second PhD is "to decrease ammonia emission from growing pig's manure by inclusion fiber-rich feedstuffs in diets without impairing animal performance" and a third PhD aims to close the life cycle of rabbit fish in captivity allowing for the production of fingerlings at commercial level (PhD already completed).

The three PhD research topics can be considered of high academic value from both international and national point of view. Two international peer reviewed articles have been accepted and two other are submitted. One PhD student defended his PhD research successfully at the end of 2017 and has graduated from Ghent University. The graduated student received a global minds grant for post-doc research, which can be considered as evidence for his outstanding research. The other two PhD students have made significant progress and it has been reported by Flemish as well as Vietnamese project leaders that they will complete their research very soon. The member university has been provided with equipment which allowed them to implement research which was not possible before the project implementation. The equipment was in line with the research needs of the PhD researchers.

#### Quality of Education.

Equipment can be used by all lecturers of the member university. Bachelor and master students used the equipment to prepare their thesis (within the framework of the PhD research). Linking the PhD research with Bachelor and Master thesis research is a textbook example of linking education with research. The quality of education has been increased as a result of this project. PhD students and lecturers reported that they feel more confident in their teaching because they have acquired additional skills (workshops/trainings) and they could use their research in their educational activities, increasing the quality of teaching. Finally, some lecturers of the member university have been involved in the International English Master programme in aquaculture (organised within the Framework of VLIRUOS Network Vietnam). They had the opportunity to upgrade their teaching skills during visits to Belgium. Master and Bachelors students could use the research facilities of the other universities in the network. The increased quality of education has been achieved at individual level. Evidence of updated curricula or innovative teaching at institutional level could not be found.

Relevance	
P.2.1. Responds to	Project responds largely to the needs of society in terms of finding
needs	environmental friendly solutions in agriculture and aquaculture pro-
Score: Excellent	duction.
	The three PhD research topics align with the identified academic and
	societal needs
P.2.2. Synergy & Com-	Synergy with IR3 has been identified but no joint activities have been
plementary	organised in the first phase
Score: Good	Synergy with ITP in Belgium.
Recommendation: R1	Synergy with VLIRUOS Network programme Vietnam
& R5	Complementary funds were available (Lotus, 911 scholarship,)
	Internal coherence and synergy is lacking
P.2.3. Transversal	Environmental sustainability is at the core of this project.
Themes	
Score: N/A	
P.2.4. Ownership	Strong ownership of the project by the PhD students
Score: Good	Strong ownership of the project by the Flemish and Vietnamese project
	leaders

#### Final judgement/comments

#### Needs:

Agricultural production plays an important role in Vietnamese livelihoods. It contributes about 35% of the total GDP and about 60% of Vietnamese inhabitants are involved in agricultural activities. Livestock production occupies about 38% of the agricultural production GDP and is expected to occupy about 45% by 2020. Pig production dominates livestock production, occupying about 71% livestock production outputs. Aquaculture production occupies about 4% of the GDP, with an export value of aquaculture products of up to 4 billion US\$ in 2010. Vietnam is a famous shrimp and catfish exporter, but these are mainly produced in the south of Vietnam. Meanwhile, the central region of Vietnam is famous for indigenous aquaculture breeds such as rabbit fish that is considered as one of the competitive strengths of aquaculture production in this region.

The main purpose of agriculture and aquaculture intensification is productivity improvement, which is also the main research focus. In livestock production, this is achieved by large inputs of purchased compound feed. However, providing nutrients to maximise livestock production does not necessarily means that diets are well balanced. Often nutrients, especially protein, might be oversupplied. The surplus nutrients are the precursors for environmental pollution, such as acidification (through ammonia), nitrate leaching and greenhouse gas emission (through methane and nitrous oxide), which might be a concern for human well-being. In aquaculture production, poly-culture was used to be considered as environmental friendly production systems, although economic productivity – in the short term at least - might be lower than the one of monoculture. Typically, intensive production systems are more monoculture based, with poly-culture systems being neglected to a large extent. Rabbit fish is an excellent candidate for polyculture, but its larviculture has not yet been possible. As a result, aquaculture of rabbit fish relies on harvesting of large amounts of fingerlings, which obviously leads to an unsustainable production system. In crop production, minimising losses from pests and diseases mainly relies on pesticides and chemical fertilizers, which are not always adequately used in combination with manure spreading. Biological control, which is considered an environmentally friendly

plant protection practice, is not well developed or studied. Inversely, environmental pollution may cause serious loses due to livestock, aquaculture and crop diseases. Briefly, the limited awareness of environmental pollution caused by agricultural and aquaculture practices largely limits a sustainable intensification of the systems and should be considered as one of the most serious challenges threatening sustainable development of intensive agriculture and aquaculture production.

Efforts currently taken to minimise environmental pollution from primary production are mainly end of the pipe approaches. In general, this approach is costly and prone to malfunction. Scientists and professionals in the primary production sector are aware of environmental consequences of their activities. This project wants to stimulate research approaches to investigate possible bottom-up solutions, in other words "research towards at the source solutions".

#### Synergy:

Although synergy between P2 and P3 has been explored, no joint activities have been organised during the first phase of the projects. It has been reported by members of P2 and P3 that joint research will be integrated in the second phase (idea: Life Cycle Analysis), which is an excellent idea to create more synergy between both projects Synergy has been created with the VLIRUOS sponsored ITP courses (ITP Dairy Nutrition) in Belgium. One trainee of this ITP course organised a light ITP course at HU. Collaboration has been achieved with the VLIR-UOS Network Vietnam. Teaching staff from the aquaculture department of HUAF spent two months at Ghent University to improve didactic skills and upgrade specialised knowledge. HUAF teaching staff is actively involved in the English Master programme on Aquaculture. Bachelor and Master students were involved in the exchange activities for thesis research. The links between the Network and IUC project 2 are of an indirect nature, as the involved staff members are not the same as the project team members. The reason given for the indirect links between the two programmes is that the Network programme is focusing on education and the IUC project 2 is focusing on research. Complementary, financial support has been found in a Lotus grant (IR4, EU funding) and in an additional PhD scholarship within the framework of 911 scholarships of the Vietnamese government. A global minds operational grant for post-doc research (IR1) has been achieved as well. Finally, financial support has been delivered by the Commission of Scientific Research of the Faculty of Bioscience Engineering and the doctoral schools of Ghent university in order to give PhD researcher the opportunity to participate in congresses and workshops.

Although external synergies have been created through additional funding, the internal synergy and coherence is main topic of concern. The three PhD students are member of two different faculties and it is not yet defined how these three PhD researchers will be integrated in their respective faculties and/or how they will cooperate after graduation. New research initiatives have not (yet) been developed and besides the fact that PhD researcher will go back to their teaching responsibilities once they are graduated, it has not yet been defined whether curricula will be adapted to the acquired knowledge and skills. It remains to be seen whether a structural and institutional cooperation after the completion of the PhD research will be implemented. It is therefore advisable to establish research units in order to stimulate joint research initiatives between different faculties/departments and to attract extra funding.

#### **Transversal Themes**

As described in the 'responding to needs' paragraph, an important contribution of this project is the focus on sustainable and environmental production. In the past, Vietnamese aquaculture and agriculture have been focusing on increasing the productivity, not considering environmental issues and pollution. During the matchmaking process, the link between food safety and environmentally issues has been established. The PhD research topics deliver evidence for the focus on environmental issues.

#### Ownership:

It has been reported that decisions are taken in consensus between local and Flemish project leaders and PhD students and their supervisors. At the beginning of the project implementation, the complexity of two-level governance structure and the involvement of three different faculties in the project caused some coordination problems, but gradually a strong and efficient division of labor has been achieved. All team members as well as PhD students have shown a high level of involvement and engagement. The commitment of projects leaders has been appreciated.

Efficiency		
P.3.1.Intermediate Results have been deliv-	•	IR's are achieved or on the way to be achieved in
ered		the next coming two years, except IR3 caused by
Score: Good		the fact that an additional 911 scholarship has not
		been achieved.
P.3.2.Relationship between objectives, re-	•	Efficient use of means
sults and means	•	IR`s contributed to the
Score: Good		
Recommendation: R1 & R5		
P.3.3.Project management	•	Overall project management has been reported to
Score: Excellent		be very effective (including PhD students)
	•	Effective management considering the 3-in-1-pro-
		ject (see also synergy)
Final judgement/comments		

IR1: The critical conditions essential to optimise larviculture of rabbit fish are identified. (*PhD scholarship*)

IR2: Technical aspects related to poly-cultural aquaculture systems (e.g. choice of species in relation to food chain, nutrient flow, ...) are integrated in a multifactorial approach, including environmental influences and economic conditions (*PhD scholarship*)

IR3: Potential entopathogenic fungi are identified which could be used in further studies to control brown planthopper in rice culture.

IR4: Identification of dietary strategies to mitigate ammonia, main odor compounds, nitrate, phosphorous and/or greenhouse gas excretion from growing pig excreta (urine and faeces) from 10 to 50% by manipulation (*PhD scholarship*)

IR5: Research-based training is enhanced and research results can be part of BSc and MSc courses and practical exercises.

#### Extension IR's:

IR6: Stakeholders benefit from research output of the project and from the increased knowledge acquired by Bachelor and Master graduates, PhD students and university staff who disseminate project results in workshops

IR7: Staff is trained to develop short term trainings in dairy nutrition and similar concepts can be used to develop intensive short term trainings in other livestock related subjects.

#### Intermediate results have been delivered?

As reported in the self-assessment reports and confirmed during the interviews, project 2 is mainly a PhD research project with supporting activities to the PhD candidates and bachelor and master students. Workshops have been organised to upgrade capacities of staff members of the faculties involved in the project. Overall, the IR's have been achieved or important progress has been made to achieve the IR's in the short term, with exception of IR3.

IR1 is completed. Van Bao Duy Le has been the first student from the VLIR-IUC project who defended his PhD in December 2017. The PhD research related to IR2 and IR4 is making progress and it has been reported that the researchers will defend their PhD successfully in the coming years. Although manuscript writing has been delayed, the supervisors reported that the PhD research have made a lot of progress and have submitted several papers. The reason for the delays of the PhD research of IR2 has been caused by receiving a 911 PhD scholarship from the Vietnamese government later than it was planned and due to the need for extra technical capacity development training of the PhD students. The delays in the PhD research of IR4 have been explained by the fact that additional experiments have been implemented. As a consequence, the PhD research is expected to generate results of higher level and lead to publications in international journals with a higher impact factor.

IR3 suffered of the lack of an additional 911 Vietnamese scholarship. A candidate with high qualifications has been selected but she decided to accept an Australian scholarship. After efforts to replace the candidate by another candidate in the field of biological insect control and with sufficient English proficiency, it has been decided to discontinue the research on this topic.

It has been reported that IR5 has largely exceeded the expected results. A high number of BSc students (total of 27) could benefit from participation in the research and as such were exposed to research-based education. On the other hand, the number of MSc students which could be involved in the project for their MSc dissertation is more limited than expected and due to the relatively low number of students starting a MSc programme at the two faculties of Hue University. This evolution is related to the current market situation, sufficient interesting or high paid job opportunities for undergraduates (BSc level) are available thus removing the motivation to continue studying at a higher level. On the other hand, the involvement of two MSc students in the research activities of the current project, although limited in number, opened opportunities to strengthen international collaborations e.g. with Wageningen University.

Within the framework of IR6, four workshops have been organised to disseminate the project results and to share knowledge. Participants were from the ministry of agriculture and rural development, research institutes, universities inside and outside of Hue, and especially stakeholders from provincial extension agencies, departments of animal production and veterinary medicine, departments of aquaculture, etc.

A 'light version of ITP Diary Nutrition programme' (<a href="http://www.dairynutrition.ugent.be">http://www.dairynutrition.ugent.be</a>) has been organised by HU and coordinated by a trainee of the ITP programme. As a result, an alignment with the train-the-trainer approach with the ITP programme has been realised.

The trainee completed successfully the ITP programme. This has been used as lever for further capacity building as this candidate obtained a 911 grant from Vietnamese government to start MSc studies in Animal Nutrition at Wageningen University. In addition, this candidate is now linking her MSc thesis research with the PhD research of the PhD student of IR4. She is being considered as a potential PhD candidate for phase II.

#### Relationship between objectives, results and means

No strategic changes were made during the implementation period of this phase as compared with the formulation process. The Logical Framework was not changed, although some sub-intermediate results (e.g. IR4.2 and IR4.3) were slightly changed in focus, based on results obtained during the first research activities – but this is considered to be a logic way of practicing 'good science', i.e. to progress based on the outcome of former research activities. Only some adaptation was made to IR3 due to external reasons: one training took place, whereas the second training was cancelled (see before). Furthermore, no external funding was obtained for a 4<sup>th</sup> PhD. Nevertheless, the need for external funding to fully exploit IR3 was considered from the start as a risk factor.

All IR's allowed to contribute to specific objectives. IR1-5 particularly contributed to the specific academic objective, whereas IR6-7 contributed more to the specific developmental objective. Nevertheless, information obtained during research in IR1-4 was important input for dissemination activities of IR6, whereas input from stakeholders to 'translate research results to practice' (IR6) and from the training (IR7) also contributed to the improvement of the specific academic objective.

#### **Project Management**

Given the involvement of different departments which had not been working very closely together (i.e. aquaculture, terrestrial livestock production and crop protection), it has been reported that the first year included somewhat 'searching' of the best way of organising decision-making and establishing mutual trust. The open view of the LPL (and deputy LPL) as well as the open communication by other TM (both Flemish as well as Vietnamese) allowed to quickly establish the required mutual trust to make important progress in order to reach the ambitious project goals.

FPL, LPL (and deputy project leaders) as well as Flemish and local supervisors of the PhD students are actively involved in the strategic planning of the whole project. PhD students and other staff members are actively involved in operational planning of specific activities related to their research activities. The project team also involves PhD students to a large extent in the financial planning of both their own activities as well as at project level. This has been considered as an effective way of working because:

1/ in this way, the PhD students get 'hands-on' training in some aspects of project management; and 2/ as the PhD students are direct beneficiaries of the financial inputs in IR1-4, it is within their own, direct interest to strategically use the financial support, to obtain value for money and to make sure the required proofs are available for reporting.

The Programme support unit is well-organised and very effective in its communication issues with P2. In particular, following aspects are very highly appreciated:

 support in terms of e.g. providing project-specific financial overviews to be included in P2 reports;

- the establishment of a very well-organised platform (Sharepoint) which allows simultaneous contribution from North and South partners to project reports and plans;
- the logistic support for travelling and accommodation in relation to the JSCM allowed TM to efficiently focus on 'content' during these (often relatively short) meetings.

The annual Joint Steering Committee Meeting (JSCM) is considered as a 'traditional' event during which PL and TM are informed about research topics and progress of each project and of the entire programme. PhD students are actively involved in this process through a one-day meeting (organised in conjunction with the JSCM since last year) of presentations on the progress of the PhD research of all projects of the programme. Additional meetings of PL, both at the Flemish as well as Vietnamese side ensure information transfer. Moreover, extra visits of (Flemish) supervisors are used to communicate on project-level issues beyond the specific PhD research. Furthermore, communication through e.g. skype is frequently used, both to discuss specific scientific results as well as issues related to reporting. Finally, templates for reporting as well as former activity plans and reports are stored on 'Sharepoint', which ensures smooth access and contribution of every (deputy) PL to the reporting templates. As such, also submitted (final) versions of reports and activity plans remain accessible for all (deputy) PL.

Overall, the communication about administrative issues is evaluated as very good within and among the project and at programme level. All necessary documents (templates) are provided, written and consulted in time with contributions of both LPL and FPL as well as other TMs (including PhD students, if necessary).

Effectiveness		
P.4.1.Specific academic objective	•	Achieved as IR1, 2, 4 and 5 are contributed largely
Score: Good		to the SO. IR3 is only partly achieved.
P.4.2.Specific development objective	•	Achieved by the organisation of 4 workshops shar-
Score: Good		ing the research results with stakeholders
Recommendation: R4 & R7		

#### Final judgement/comments

#### **Specific Academic Objective**

Capacity building is enhanced through research and training on aquaculture, livestock production and crop protection by means of integrating applied animal and crop sciences as well as environmental sciences

#### **Specific Developmental Objective**

Essential information is supplied to stakeholders about sustainable aquaculture and livestock systems as well as biological crop production techniques.

Given that the intermediate results do contribute to the specific objectives and are on the way to be achieved, the achievement of the academic objectives within the period of ten years is a realistic objective. One PhD students already defended his PhD and the others have made significant progress in their research. The Livestock and crop component of the specific objective is not achieved as an additional 911 scholarship has not been awarded.

The remarks on synergy (internal coherence) remains an issue of concern as it will enhance the impact and sustainability of the project. The internal coherence is vital to achieve an integrated multidisciplinary approach.

Research results have been communicated through four workshops to stakeholders such as university colleagues and policy makers. Some of the research results are on the eve of commercialisation. Taking into account the progress made on the other research topics and the relevance of these research topic, the evaluation team expects that more valorisation and outreach can be achieved during the second phase of the project.

Impact		
5.1.Individual impact Level	•	Increased knowledge and capacity of PhD re-
Score: good.		searchers and MSc/BSc students.
	•	Upgraded teaching skills of staff
1.3. Academic and Institutional impact	•	Increased number of PhD holders in the faculties
Score: Low	•	The project delivered added value to the university
Recommendations: P1 & P5	•	No policy changes could be reported at the mem-
		ber university level / isolated research
	•	No incentives for similar initiatives or collaboration
		with other faculties within the member university.
5.3.Developmental impact (impact on soci-	•	Commercialisation of Rabbit Fish research results
ety)	•	Other PhD research also relevant for society and
Score: good		private sector
Final judgement/comments		

#### **Individual Impact level**

Within the framework of this project three PhD students, 27 bachelor students and two Master students could increase their knowledge and skills as a result of this project. These results were directly caused by the project activities and would not have been appeared with the same high quality level without the support of the project. Other staff members of the three faculties gained additional skills as a result of the workshop/training activities of this project.

In other words the individual research and teaching skills of staff members have been increased as a result of the project. The individual impact will increase during the second phase when the other PhD students will be graduate.

#### Academic and institutional level

As the PhD students are member of the faculties, the project contributed (or will contribute) to an increased number of PhD holders in the faculties, although there is no mechanism in place to ensure that graduated PhD holders will stay at the university after graduation (see sustainability). It has been a very good choice to select PhD students among the existing staff as this will increase the possibilities of keeping staff members at the university once they are graduated.

It is obvious that the project strengthened not only the individual capacities of staff members, but also academic and teaching performance of the faculty. But it remains to be seen how the current PhD research will be integrated in the curricula of the faculties. The PhD research projects are based on the needs of each of the faculties involved. The risk exists that PhD researchers, after graduation,

just add to the existing staff. New collaborative or joint research initiatives are not yet made. At the end of phase one, no joint research proposals or new research proposals have been developed.

#### **Developmental impact**

The developmental impact has been enormous for IR1 (research on Rabbit Fish). The results of this research have high commercial value. The PhD researcher, together with other stakeholders, is exploring the possibilities of commercialising the result of his research. A plot has been rented (from the university) to explore the possibilities of commercialising the Rabbit fish aquaculture and implementing polyculture (rabbit fish and shrimps) to decrease the use antibiotics and diseases. Although this process of commercialisation has been evaluated as very positive, it is not clear how the university will benefit from the results. Of course, the increased knowledge of the lecturer-PhD student will be used in his teaching classes, it remains uncertain whether a legal framework does exist to set-up a spin-off within the university framework (which could contribute to the institutional impact of the project).

The other PhD research, although not (yet) at the same level, has also the potential to lead to very valuable results for the society (e.g. changing composition of pig feed in order to decrease the negative environmental impact of pig raising).

In a sum, the individual and developmental impact results of this project are very high and can be considered as a direct effect (result) of this project and the VLIRUOS funding. The academic and institutional impact is still rather limited and should be a major point of attention during the second phase.

Sustainability		
6.1.Academic and Institutional sustainability	•	Academic sustainability is not yet achieved: no
Score: Low		guarantees of PhD holders.
Recommendation: R1, R4, R5, R7 & R8	•	No integration of PhD research: no research unit,
		no new curricula
	•	No new research initiatives
	•	More extension is possible.
6.2.Financial Sustainability	•	No additional research funding at the member uni-
Score: Low		versity
Recommendation: R1, R4, R5, R7 & R8	•	No new research proposals are developed as a
		result of this project.
Final judgement/comments		

#### Academic sustainability:

Although the impact of the project has been evaluated as very high, the academic sustainability of the project is not (yet) guaranteed for the following reasons:

There are no guarantees that PhD-holders will keep an engagement within the faculties.
 If they receive better (academic) opportunities, they might choose for other challenges.
 On the other hand, it has been very wise to select only PhD students among the existing staff members of the faculties.

- There are no plans to change the existing curricula in order to include and optimise the knowledge and skills of the new PhD graduate.
- The three PhD students belong to two different faculties within the member university. There are no plans to create a new research unit joining the PhD students.
- An environment (or culture) to explore new research activities and funding does not yet exist.
- A sustainable impact on society is not (yet) guaranteed. It is possible that research results will be commercialised without any direct benefit for the university.
- More extension activities could be organised to inform society (farmers, fisheries, etc.) about the research results, in order to improve environmental and sustainable production.

#### Financial sustainability.

Although the Vietnamese team members reported to continue the research after the VLIRUOS funding, no new research proposals (and funding) have been received. The PhD graduate within IR1 did receive a global mind scholarship, but it is not clear how HU will directly benefit from this scholarship as it is an individual scholarship. Measures should be taken to include his post-doc research continuously in the research and education activities of the university. New research proposals could be developed. For the other research lines, it is not yet clear how these will survive after the end of this project.

#### 2.1.3 Project 3 Coastal ecosystems and natural resources management

#### 2.1.3.1 Short description of the member university and faculties / main activities

**Member University and faculties:** University of Sciences, thirteen Faculties. The University of Sciences has around 9000 students, 440 staff members, 300 of which are teaching staff. Four faculties are involved in VLIR-IUC:

- Faculty of Biology, 31 teaching staff members (minority are PhD holders).
- Faculty of Chemistry: 33 teaching staff members (minority are PhD holders).
- Faculty of Environmental Science: 16 teaching staff members (minority are PhD holders).
- Faculty of Geography and Geology: 26 teaching staff members (minority are PhD holders).

#### Main activities of the project:

- Three PhD research projects;
- Involvement of BSc and MSc students within the framework of the PhD research;
- Workshop/training of staff members of the faculties;
- Equipment investment.

#### 2.1.3.3 Assessment of evaluation criteria

Scientific Quality	
P.1.1.	None of the three PhD students has yet completed their PhD re-
Quality of research	search, but their supervisors confirmed that they made signifi-
Score: Excellent	cant progress and that they will graduate.
	Master and Bachelor students are involved in the research of the
	PhD students.
	Research questions and topics can be considered as new appli-
	cations in the Lagoon area region
	One international peer reviewed article by one PhD student and
	three papers submitted for review.
P.1.2	PhD research is not yet linked to education. Once PhD students
Quality of Education	are graduated they will continue to lecture and new courses will
Score: Good	be developed in order to teach the newly acquired knowledge of
Recommendations: R5 & R8.	the PhD students.
	Training and workshops did introduce new skills and knowledge
	to staff members who are intended to use this in their classes.
	- Educational innovation initiatives of P1 are not (yet) implemented
	in the project departments.

Final judgement/comments

#### **Quality of Research**

The research activities in this project are mainly connected to the three PhD scholarships. The first three intermediate results are directly linked to the 3 PhD scholarships. The topics of the PhD research have been defined as follows:

- Importance of nitrogen and phosphorus fluxes and stoichiometry for the vegetation of the Cau Hai Lagoon, Vietnam (PhD 1);
- Dynamics, functions and resilience of the submerged aquatic vegetation in the Cau Hai lagoon, Central Vietnam (PhD 2);
- The environmental toxicology of organochlorine pesticides in sediment and organisms in Cau Hai Lagoon and health risks to food consumers (PhD 3)

The PhD research questions can be considered as new and relevant for the member university and the broader lagoon region. The topics were identified by the member university and further elaborated during the match making process. The fourth IR and PhD (Remote sensing data, GIS analysis and hydraulic modeling are applied for management purposes of the lagoon environment) could not be achieved because of the lack of external scholarship funding (for more information: see efficiency). Since external funding was lacking for topic 4, the activities were strongly linked to delivering support to the PhD students, mainly for sampling issues.

The results of the research are at this stage, still limited. The reason given by the team members is that during the first years the PhD students mainly focused on longitudinal data collection. As the nature of the data is longitudinal, analysis of data could only start after 2-3 years. The three PhD students are preparing a PhD at the VUB. One of the requirements at VUB to defend a PhD is the publication of one international peer reviewed article (A1 publications). Although the North and South project leaders reported that the PhD students are making progress and that they will be able to defend their PhDs, it remains to be seen whether they will succeed. One of the positive aspects of

the PhD research is that MSc and BSc students have been included. By including them they could practice their research skills.

#### **Quality of Education**

The PhD students are focusing on their research and have limited teaching responsibilities as they are released from major teaching duties. All three PhD students are staff members of the university and will return to their departments and have teaching responsibilities. The team members are hoping that the graduated PhD students will integrate their research in their teaching, but no specific actions are taken to guarantee that integration. The North team hopes that the integration of research and education will take place during the second phase of the project.

Several specific workshops to increase research capacity of staff members and students have been organised at the member university by Flemish academics. Besides increasing research capacity, the purpose of these workshops was to extend teaching capacity. Evidence of the integration of new skills could not be found.

It has been reported by the South team members that knowledge acquired during the workshop on educational innovation (P1) have not (yet) been implemented in the four departments involved in this project.

Relevance				
P.2.1. Responds to	Project based on problem and solution tree			
needs	Project in line with environmental priorities			
Score: Excellent	Project responds to the lack of explanatory research at the university			
P.2.2. Synergy & Complementary	<ul> <li>Lack of synergy with other projects in the programme: no synergy with P2 and P1</li> </ul>			
Score: Low Recommendations:	<ul> <li>Lack on internal synergy – three different projects of three different de- partments.</li> </ul>			
R1 & R5 & R8	Lack of synergy with other organisations			
	No synergy with VLIR-Network programme			
P.2.3. Transversal	Sustainable environmental concerns of the Lagoon area are the core			
Themes	Themes research agenda of this project			
Score: N/A	All PhD students are female			
P.2.4. Ownership	PhD students are very committed and strongly motivated to carry out			
Score: good	their research.			
Recommendations:	Project is mainly a PhD research project, team members are relying on			
R1 & R5 & R8	the (research) results of the PhD research			
	The post PhD-research phase has not been yet prepared.			
Final judgement/comme	nts			

The project's specific objectives and intermediate results were based on the problem tree and solution tree developed at the beginning of the project formulation. During the matchmaking process the project proposal has been refined. The core problem was formulated around the knowledge on the degradation of biodiversity and bio-resources in the lagoon ecosystem. Descriptive studies have been implemented in the past, but the involved departments lacked experience in exploratory research (theory driven research). The project and the PhD research tried to build up this specific research capacity. Finally the research topics are in line with the environmental priorities of local and national authorities. Understanding the characteristics and functions of the lagoon ecosystem and inverse impacts on it will be helpful for the national/local authorities and communities to establish strategic priorities for exploitation and preservation of the coastal ecosystem and zone development. The project objectives are suitable for the national development strategy, according to Decision 148/2004/QD-TTg "Central Vietnam being developed to become the Central Key Economic Zone in the period of 2010 - 2020" and the Master Plan for the socio-economic development of the Central Coastal Region to 2020 approved by the Prime Minister of Vietnam on May 9, 2008. In addition, preservation of the coastal ecosystems (including the lagoon ecosystem) has been one of the priority programmes of the national strategy of environmental protection and priority programmes of environmental protection.

#### Synergy:

The project is lacking synergy and complementary with other projects in the IUC. Team members of project 3 did participate in the workshops of P1 but no concrete actions have been taken to implement any new ideas shared during the workshops. Also with project 2 the cooperation has been very limited. Common activities have not been organised. It has been reported by members of P2 and P3 that joint research will be integrated in the second phase (idea: Life Cycle Analysis), which is an excellent idea to create more synergy between both projects.

The 3 PhD students reported not working together, their research topics are characterised by a wide diversity. This diversity can hazard the integration of the research domain after graduation.

There has been no cooperation at all with the VLIR Network in Vietnam, although some synergies could be realised, in particular the MSc and PhD summer schools of the Network could be of added value for the students, especially those related to research methodologies.

The involved departments are (and were) not involved in major research projects. The projects/interventions supported by internal and external donors have contributed to sustainable development of the area and conservation of the lagoon ecosystem, namely, project "Study on sustainable development in Thua Thien Hue lagoon area" supported by Nord Pas de Calais, France (1998 – 2003); project "Integrated Coastal Zone Management" (ICZM) supported by The Netherlands government for Thua Thien Hue and Quang Nam provinces, and Danang city (2001 – 2005); project "Integrated Management of Lagoon Activities in Thua Thien Hue province" (IMOLA) supported by FAO (2005 – 2010). However, the success of these projects/interventions has been limited due to shortage of profound research on the environmental conditions and functions of aquatic vegetation and animals in the ecosystem, lacking of institutional response survey and cooperation between stakeholders. The researchers from Hue University had opportunities to participate in the projects mentioned above. However, due to lacking of multidisciplinary collaboration under supervision of experienced foreign experts, their contributions to the local development and preservation of the coastal ecosystems were limited.

#### Transversal themes

#### The project document describes the environmental importance of the lagoon area as follows:

"The lagoon system is strongly influenced by both marine and fresh-water inflows. Most main rivers in the province (Huong, Bo, O Lau, Dai Giang, Truoi, Nong) flow into it, but only two tidal inlets (Thuan An and Tu Hien inlet) along its entire length connect it to the sea, causing vulnerability under the effects of flooding in the wet seasons and climate change. The lagoon is a dynamic and sensitive environmental system ruled by a complex set of interacting physical and biological components, which are controlled by dynamic processes varying in time and space. Extreme flooding, shifting inlets and coastal erosion have caused major problems recently. Hence, it is no surprise that management of such a complex system for sustainable use and development is a very difficult task. Meanwhile, the growing population of Hue city is exerting more and more pressure on the lagoon system, through increased agriculture, aquaculture, fishing, transportation, and cargo handling, in a limited and confined area. The lagoon plays a very important role in water regulation, preventing salinity intrusion into inland flows and transportation on waterway. In addition, approximately 300,000 inhabitants (accounting for 30% of the whole population of the province) from 31 communes of five districts (Phong Dien, Quang Dien, Phu Vang, Huong Tra and Phu Loc) live around the lagoon in 236 villages and earn their living by directly or indirectly exploiting natural resources in and around the lagoon (ICZM, 2004). Inverse impacts to the lagoon ecosystem derived from uncontrolled fishery and aquaculture, untreated wastes released from artificial activities have raised much concern about environmental pollution, decline of natural resources and ecosystem degradation (ADB, 2007). Uncontrolled use of N-fertilizer and pesticides for agriculture in the past led to increase in eutrophic level in the waters and accumulation of organochlorine pesticides in sediment and aquatic animals (Hop N.V, 2007). The occurrence of toxic and harmful algae was found in waters in the area (Doc L.Q. et al., 2006 & 2010). "

#### **Ownership**

The three PhD students showed a high commitment and engagement on their research topics. PhD students are highly motivated to complete their PhD research successfully. The team members are mainly relying on the PhD researchers in terms of success of the project. The second phase is not yet prepared in terms of integration of PhD students and PhD research in the different departments. It should be considered whether the newly acquired skills could be integrated through a review of the existing curricula in the member university.

It is the first time in the history of the University of Sciences that an international project (IUC-project) has been awarded. The Vietnamese team members are considering the project as an opportunity to upgrade staff and to invest in equipment.

Efficiency		
P.3.1.Intermediate Results have been deliv-	Delays in PhD research which are justified (IR1)	-3)
ered	IR4 has partly achieved. PhD research has be	en
Score: Good.	replaced by other activities: creation of databa	ase
Recommendation: R4 & R7	and workshops.	
	IR5 has been achieved.	
	Activities within IR6 are limited.	
	- Equipment has been provided	
P.3.2.Relationship between objectives, re-	No major changes in the logical framework,	ex-
sults and means	cept for IR4.	
Score: good	Expenses are considered as justified	
P.3.3.Project management	High commitment of PhD scholars	
Score: Good	Project is relying on the PhD research results	
Recommendations R1, R3, R5	More inter-project and external communication	ı is
Final industry and a second	needed.	

#### Final judgement/comments

#### **Intermediate Results:**

IR1: The biodiversity and natural resources in the lagoon region that are important for maintaining the carrying capacity are characterised and thus are a priority for preservation

IR2: The sources of N and P from the rivers into the lagoon and from aquaculture activities are elucidated together with their effect on primary producers (submerged aquatic vegetation, algal blooms) and risk assessment of toxic algae or cyanobacteria for food consumers

IR3: The environmental toxicology of organochlorine pesticides in water and sediment, accumulation in organisms are measured for estimating health risks to food consumers.

IR4: Remote sensing data, GIS analysis and hydraulic modeling are applied for management purposes of the lagoon environment

#### Education related IR:

IR5: Research-based training is enhanced and research results can be part of BSc and MSc courses and practical exercises.

#### Extension related IR:

IR6: Stakeholders benefit from research output of the project and from the increased knowledge about the lagoon area acquired by Bachelor and Master graduates (obtaining jobs in environmental sector)

#### Intermediate results have been achieved:

The first three intermediate results are based on the results of three PhD research project. The three PhD students have not graduated yet. One of the PhD students published her first article in an international peer reviewed journal which is a requirement for defending her PhD at the VUB. The others submitted a first article or are in the process of finalising a first article. The PhD students face some delays in their research which was basically caused by:

- Repeated testing of firstly encountered findings in monitoring or experimental work has led to extra scientific working hypotheses that needed to be considered.
- Longitudinal set-up of the data collection.
- In the initial phase, delays were reported because of late ordering and delivering of lab equipment.

The PhD students research capacities did increase by learning new methods and skills due to their visits to Belgium, the collection of data in the Lagoon area, the support of supervisors and the participation in workshops and conferences. It has been reported several times, that the 3 PhD students made enough progress to makes us believe that they will defend their PhD within one or two years and that the final output is envisaged to be of a higher level and in better 'impact factor' journals than initially foreseen

IR4: The data structure for GIS database establishment was standardised. Hydrological data and natural resources in the lagoon under study have been collected. Free-of-charge satellite images of low resolution were used for a preliminary study on estimation of SAV coverage in the lagoon. One bachelor research has been conducted since 2014 for establishing the GIS database. The visit to VUB and discussions about hydraulic modelling with the professors in VUB indicated that it is impossible to apply hydraulic modelling for the lagoon, due to the insufficiency of related information. Therefore, PhD candidate for this topic could not be selected (proposal for getting 911 scholarship from Vietnam government was cancelled).

IR5: Several training courses for staff members, BSc and MSc students have been organised on a broad range of topics: sampling, analysis, multivariate analysis, experimental designs, chemical analysis, and software trainings. Bachelor and Master students have been included in the PhD research and were able to be graduated as a result of the research done within the PhD framework and under supervision of the PhD students.

The activities within IR6 are rather limited if external stakeholders are taken as a criterion. Most of the activities are related to informing staff members, Master and Bachelor students about the progress made on the PhD research and PhD related activities (see IR5.). One workshop on "Environment Issues at Cau Hai lagoon, Thua Thien Hue province" was organised in Hue University of Sciences from December 3-11, 2016, with the participation of local authorities and institutes of Hue University. According to the yearly reports, which have been confirmed during the field visits, most of the information to stakeholders has been supplied internally (within Hué University of Sciences). Only one information session has been organised with the participation of local stakeholders. It has been reported that DARD (Department of Agriculture and Rural Development) and DONRE (Department of Natural Resources and Environment) are important stakeholders in terms of creating awareness for research topics related to the lagoon area, as well as for funding opportunities. A detailed description is lacking on how the local authorities have used the results of the workshop.

#### Relationship between objectives, means and results

No strategic changes were made following the formulation process. The Logical Framework was not changed. An adaptation was evoked in IR4 due to external reasons but the absence of such a 4<sup>th</sup> PhD was considered from the start as a risk factor (see above).

The major group of activities (means) is focused on the PhD research: sandwich scholarship, costs for data collection, travel costs, workshops and trainings for PhD research. It has been considered as very positive that Bachelor and Master students' thesis research has been a component of the PhD research. Equipment has been provided to implement the PhD research and the Master and Bachelor

research project. Several workshops have been organised to upgrade the capacity of the four departments of the faculty, staff and students. The coherence between equipment expenses and the research activities of students has been evaluated as justified.

#### **Project management**

Overall, the communication about administrative issues was very good within and among the project and at programme level. The team member reported being well-informed in time about all documents and joint steering committees. All necessary documents were written and consulted in time and went through the hands of both LP, FP and TMs (including local TM meetings). The communication about research between projects was as expected in a Phase 1, namely every PL and TM remained informed about research topics and progress of each project and of the entire programme (at JSCM). A one-day meeting and presentation of all PhDs and their progress (including all projects of the programme) was among the best initiatives to enhance communication.

It is advisable that more inter-project communication activities will be organised in the second phase in order to increase synergies and impact.

Effectiveness	
P.4.1.Specific academic objective	Upgraded research skills of PhD students-lectur-
Score: Good	ers
	Upgraded research skills of Master and Bachelor
	students
	Upgraded skills of staff members through work-
	shops
P.4.2.Specific development objective	Internal university stakeholders have been in-
Score: Good	formed about the research results
Recommendations: R4 & R7	External stakeholders have only been informed
	once during one workshop.
Final judgement/comments	

#### **Specific Academic Objective**

Capacity building is enhanced through research and training on the unique lagoon ecosystem by means of integrating Biological, Chemical and Geographical Sciences

#### **Specific Developmental Objective**

Essential information is supplied to stakeholders about the lagoon ecosystem properties, functions and potential for sustainable use.

As the specific objectives are the sum of the intermediate results, the evaluation of the specific academic objectives can be found in the paragraph on efficiency. The capacity of biological and chemical sciences have been upgraded by the three PhD researchers and will be further elaborated during the second phase by the graduation of the PhD scholars. The increased capacity of geographical sciences have been (partly) achieved through workshops and trainings. Twelve Bachelor students and ten Master students completed their thesis research within the framework of the three PhD research project. At individual student level, the capacity has been increased through the project. The three

PhD students are lecturers within the member university of science, and as long as they are imbedded with the university, the university will benefit from their increased research and teaching skills. Besides the students, staff member could upgrade their skills during six specific workshop (design, data analysis and manuscript writing) organised. Equipment has been provided to implement the PhD research and can be used by other staff members and students to execute their own research.

The outreach of research results is still very limited as only one related workshop has been organised and evidence of how stakeholders have been using this information is lacking. More dissemination activities should be organised in the second phase of the project.

Impact		
5.1.Individual impact Level	•	Increased knowledge and skills of students and
Score: good		staff
5.2. Academic and Institutional impact	•	Impact is limited to the integration of PhD research
Score: Low		in different faculties/departments of the universi-
Recommendations: R1, R5, R8		ties
	•	No policy or institutional changes.
5.3.Development impact (impact on society)	•	Not (yet) any impact on society/policy level
Score: Low	•	It has been reported as major point of attention
Recommendation: R4 & R7		during the second phase.
Final judgement/comments		

#### Individual impact

As described above, the most important objective of the project is to increase the capacity of three PhD researchers and, indirectly through the PhD research, improve the research capacity of the bachelor and master students research. Staff members have been upgraded through workshops. The reported research progress made by the PhD students, should be considered as a direct impact of the project. As the PhD students are lecturers in three different department of HU Science, they contributed in building up capacities of Bachelor and Masters students who made their thesis research within the broader framework of the PhD research. Thanks to the project, these students could use new and modern equipment which was not available before the project started. As a result of the project these bachelor and master students acquired better skills which they can use in their (academic) professional life. Although we could not evaluate the impact of the workshops on the increased capacity of the staff of involved departments, according to the yearly reports and comments reported during the interviews, it seems that staff acquired more advanced skills which are being used in their classes. The potential impact may increase during the second phase, once the PhD students have graduated.

#### **Academic and Institutional Impact**

It has been a very good choice to select lecturers as PhD students, as it increases the chance of embedding the graduated PhD students within research and teaching tasks in the existing departments. Since the PhD students are not yet graduated the direct impact on the academic and institutional level of the HUScience is not yet achieved:

- The number of international publications did not (yet) increase
- A post-doc policy is not yet developed in terms of new departmental curricula to maximise the acquired skills of the PhD-students.

There are some major concerns about the potential impact of this project in the second phase (and after closing of the project). The policy of the HUScience and the several departments has not changedThe PhD scholarship are distributed among three different departments. A close research collaboration (with explicit joint research agenda) among these three departments is not developed. The risk of just having three extra PhD graduates into three different departments without having joint collaborative research is very high. We couldn't find any indication of changed policy, towards developing joint and new research agendas at departmental and institutional level. We could not see any impact of this project on other departments in the HUScience.

#### **Developmental impact**

Besides one workshop where the first results of the PhD research have been shared with local authorities, no direct impact could be identified on the broader society:

- No initiatives at policy level have been taken as result of this project;
- No new initiatives by external stakeholders have been taken as a result of the project; and
- The added value of the project for the society has still to be proven and no joint developmental activities have been created.

It has been reported by the team members that this will be one of the major points of interest during the second phase of the project.

Sustainability		
6.1. Academic and Institutional sustainability	•	Academic sustainability is not (yet) guaranteed
Score low	•	No policy to retain PhD graduates
Recommendations: R1, R5, R8	•	No initiative to integrated upgraded knowledge
		and skills
6.2.Financial Sustainability	•	Lack of extra funding
Score: low	•	Lack of no research initiatives
Recommendations: R4 & R7	•	No extra funding perspectives
Final judgement/comments		

#### Academic

The sustainability of this project turned out to be one of the major issues during this evaluation at several levels.

At the individual and institutional level, there has been no measures taken to ensure staff retention. Although the individual PhD students are already appointed as lecturers in the department, no extra measures are taken to keep them at the university once they have graduated. Besides that, upgrading the research skills of the departments is almost exclusively dependent from the newly acquired

knowledge and skills of these PhD students. If they leave the university after graduation, almost all knowledge and skills (as a result of this project) are lost.

Evidence is scarcely available on how the knowledge and skills of the PhD students will be integrated in the departments. There is no evidence of joint research policy after graduation of the PhD students and it is not sure whether curriculum of the departments will be adapted to be in line with the competences of the PhD students. The project did not result in new research strategy and research proposals.

#### **Financial**

Also the financial sustainability of the project is a major concern. No indications could be found that the existing PhD research agenda could be continued after closing of the project in the second phase. The departments were not able to attract extra funding from other donors or authorities. New project proposals were not yet developed and submitted to potential donors.

On the level of equipment, there seems to be a policy and budget to maintain the existing equipment, although very expensive equipment (delivered by the national government) has been unused because funds were lacking to maintain and repair it.

# 2.1.4 Project 4 Strengthening training and services at primary level to improve rural health care

#### 2.1.4.1 Short Description of member university and Family medicine Institute/ main activities.

The Family Medicine Centre of Hue University of Medicine and Pharmacy was established in 2015 and it has been since the unit which is responsible for project 4. The Family Medicine Centre is housing twenty staff members who do participate in research activities and who provide service to patients in the Family medicine clinic. The FMC is a department of the Hue University of Medicine and Pharmacy. It has become a flagship centre for Vietnam. The FMC is characterised by a rapid expansion since its establishment through the creation of excellent synergies.

#### 2.1.4.2 Assessment of evaluation criteria

Scientific Quality	
P.1.1.	- Three PhD students have made significant research progress.
Quality of research	- PhD students were recruited gradually, which has been evaluated as very
Score: Excellent	good, considering the establishment of a new FMC.
P.1.2	- Many innovational initiatives have been taken, e.g. new text books, e-
Quality of Education	learning, development of guidelines and training, curriculum revision.
Score: Excellent	
Final judgement/comments	
Quality of Research	

The research component of the project is primarily based on the PhD research of three PhD scholars:

- A comprehensive assessment of primary care services quality in Central Vietnam (Initiated in 2014)
- A supporting model to stimulate self-management in patients with type 2 diabetes mellitus (Initiated in 2015)
- Hypertension and cardiovascular risk factors management in primary care in rural areas in Vietnam (Initiated in 2016)

It has been reported that all PhD students made enough progress to believe that they will graduated within two or three years. During the field mission, a paper submitted at an international peer reviewed journal by the first PhD student has been accepted, which is a requirement for defending her PhD. It has been reported as well, that the scholarship time in Belgium has been reduced. As the FMC is still in its early stage, a lot of duties have to be fulfilled by all staff members, including the PhD students. Nevertheless, Vietnamese as well as Flemish supervisors reported that the PhD students have made important research progress.

The PhD students were recruited gradually. This has been a strategic choice. By recruiting them gradually, the needs within the FMC could be identified and staff members of the FMC could be recruited. As the FMC has been established recently, recruiting 3 PhD students at the beginning of the project within the framework of FMC was not feasible. By gradually attracting PhD students, a sustainable environment could be given to the scholars on the one hand, and on the other hand strengthening the research and education capacity within the FMC could be ensured. In other words, recruiting three PhD scholarships at the beginning of the project implementation would have meant a recruitment from different departments without internal coherence within the framework of the FMC.

#### **Quality of Education**

The results on improving the quality of education are overwhelming:

- Curriculum revision has been implemented resulted in a revised curriculum on Family medicine
- Two new textbooks on family medicine were developed: one for undergraduate level and one for post-graduate level.
- Family medicine has become a subject in the regular curriculum (4<sup>th</sup> year) and that has been considered as an achievement of the advocacy activities of the FMC.
- Guidelines have been developed and workshops have been organised to upgrade the skills of doctors/physicians at Community Health Centres (CMC)
- Steps have been taken to develop e-learning courses and to introduce them in the regular curriculum.

Besides these activities, staff member upgraded their skills in training workshops in Belgium and these upgraded skills are and will be used in the Family medicine courses.

Relevance	
P.2.1. Responds to	- Family Medicine as core of primary care has been proven highly relevant
needs	and efficient
Score: Excellent	- Since the establishment of the FMC the subject of the project have be-
	come even more relevant as the FMC has become a Flagship centre for
	Family Medicine in Vietnam.
P.2.2. Synergy & Com-	- High synergy with other funding agents like: Boston University, Atlantic
plementary	Philanthropies, Liège University, World Bank
Score: Excellent	- High internal synergy.
P.2.3. Transversal	
Themes	
Score + reference to	
recommendations:	
P.2.4. Ownership	- Very high commitment and ownership
Score: Excellent	
F: 1: 1	

#### Final judgement/comments

#### Needs

The project's objectives and key activities are based on the analysis during the match making and formulation of the project proposal. The interventions and activities are developed and implemented based on strong evidence demonstrating that primary care delivered, managed and led by competent physicians well-trained in core principles of primary care, such as those trained in Family Medicine, results in improved population-based outcomes, as well as on the public policy development during the project time. Building on the situation analysis, especially on the demands of the region, the development of training and service delivery in Family Medicine as the core specialty for primary care within this project coupled with national policy reforms to reduce hospital overcrowding, improved population health and improved health system cost efficiency.

Since the establishment of the FMC the topic of the project has become even more relevant as the FMC has become a Flagship centre for Family Medicine in Vietnam. The dynamics and competences of the FMC delivers an input at national discussion on primary care. The FMC is considered as a reference centre for innovation and policy making.

#### Synergy

The synergy of this project with other initiatives and funding opportunities can be considered as a textbook example of creating synergy and complementary.

The Family Medicine Project funded by the Atlantic Philanthropies should be considered as the start of the establishment of the FMC. This project has been implemented by Hue University of Medicine and Pharmacy with the technical supports from Boston University. It was a model programme for training health professionals to meet standards of practice, and delivering care effectively at the basic level in underserved rural areas. Recently, the University has been continuously requested by provinces in the Central and Highland of Vietnam to provide this training programme to fulfil the limited capacity of the staff there in providing care at primary level. The University was also very successful in implementing the Capacity Building for Public Health Project funded by the Atlantic Philanthropies

during the period 2007 - 2011. With the technical support from the Queensland University of Technology, the Project has brought significant improvement in the quality of public health teaching and the capacity of academic staff. Another achievement of the University was the success in getting a grant from the China Medical Board and Atlantic Philanthropies and is now undertaking a re-design of the professional education in order to strengthen primary care in rural areas of Vietnam. Subsequently the university developed a plan to bring together all of the major health professions in one educational organisation, The IUC project builds upon these achievements and puts the family medicine at the core of the programme. linking it directly to community health centres in the lagoon area. It has been reported that the VLIR-IUC project has been an important incentive for additional funding of Atlantic Philanthropies to construct the Family Medicine Centre building (including the Family Medicine Clinic). There is also a strong link between the project team and the team from Liege University in an FM project funded by the Wallonie Bruxelles. The FM Clinic (as part of the Family Medicine Centre) has obtained an exceptional status by the Ministry of Health: the National Social Insurance and the Provincial Health Service officially-approved the clinic as referral centre for health insurance holders from CHCs, providing some additional income to maintain the operation and elevating the status of the Hue FM Centre. Moreover, the established short course FM training and the model of Hue Family Medicine Centre in this project are being used as the core to develop an inter-professional training programme for national scale-up through the World Bank Health Professions Education & Training (HPET) project. Finally additional (financial) input has been delivered by the Faculty of Medicine and Pharmacy as additional staff could be recruited on its budget. It has been reported that the IUC-project has been used as a lever for extra funding and that project timing was extremely good, almost by chance.

A high internal synergy has been created through this project with a lot of complementary activities, like curriculum revision, production of textbooks, e-learning modules, development of trainings and guidelines and PhD-research. All these activities have been strongly linked to building up capacity and outreach on family medicine.

#### **Ownership**

There is a very strong academic interest and commitment in this project in particular and in the building up of the Family Medicine Centre in general. Considering the results of the projects, it goes without saying that this would not have been achieved without an overall strong engagement. Due to the many tasks of the staff members, the research has been suffered some delays and reporting on time has proved to be challenging.

Efficiency	
P.3.1.Intermediate Results have been deliv-	- Overall, these IRs constitute a remarkably successful
ered	outcome, certainly beyond the initial hopes and scope
Score: Good	of the project
Recommendation: R9	- Transfer of knowledge and skills to CHC can be im-
	proved.
P.3.2.Relationship between objectives, re-	- The logical framework is well-developed embedded
sults and means	in an overall FMC strategy.

Score: Excellent	- A very good coherence between means, results and
	objectives
P.3.3.Project management	- Overall project management has been evaluated as
Good	very positive
	- Communication between PhD-students and super-
	visors can be improved
Final judgement/comments	

#### Intermediate results achieved

IR1: Current common health problems presented at primary care level and the needs of community and health staff on primary/rural care will be identified.

A survey has been implemented and the results of the survey are published in international peer reviewed journal by one of the PhD Students. Common health problems at primary care level have been presented. An Electronic Health Record (EHR) system has been developed and currently it is used by the Family Medicine Clinic and in some Community Health Centres. In the next phase a direct digital link will be established between the CHC's and the FMC. The system has been developed with funding from VLIR-UOS and with the support of Microsoft Vietnam. Assessments have been implemented to identify needs of health care centres and staff members.

IR2: Capacity of staff of Hue UMP who are responsible for teaching primary/rural health (Family Medicine) and the training programme (pre service and in service) on Family Medicine will be improved to meet the needs of the system and the community.

Two textbooks have been developed with the support of VLIR-UOS which are used in the family medicine course and in the regular medical course. Family medicine became a credit course in the regular medical programme. A training programme (and manual) for upgrading CHC staff has been developed. Three PhD students have started their PhD research. They were gradually introduced into the project. One of the PhD students started at the beginning of the project, the other 2 were added later and integrated in the activities of the Family Medicine Centre. This was a strategic choice. The centre has been growing rapidly since the start of the project, but at the beginning of the project not enough candidates were available. By waiting, the centre has been able to recruit more staff members and offer them a PhD scholarship. The advantage of this strategy has been that PhD students are integrated in the FMC. Recruiting three PhD's at the beginning of the project would have resulted in selecting candidates who were not members of the FMC.

In general terms, IR1 and IR2 were successfully achieved with a large number of papers published and presentations at conferences. Moreover, results of the research were used as important inputs for policy and advocacy, e.g. the Circular 16/14/TT-BYT set training-related licensure requirements and laid out a variety of potential trainings to be tied to licensure. In addition, results from these IRs continue to be inputs for MOH work on further defining the role and function of the family doctor in the primary health care system, and additional work continues on detailing additional training requirements for continued and new licensing in the FM model. Public policy development was impressive in establishing a policy base for FM. The project team has taken this advantage to promote more activities and focus more on policy and advocacy than initially planned. The policy development continues even now following the conclusion of this phase of the project.

IR3: Health care services at primary level will be improved through training in Family Medicine and the establishment and maintaining contact and exchange amongst Hue UMP, Thua Thien Hue Health Services, The Centre for Primary/Rural Health Care Training and Practice at Phu Loc District Hospital and the network of participating CHCs and IR4: IR4: Improved linkage between HU College of Medicine, the Phu Loc District Hospital & the network of participating family doctors

A network of CHC health professionals in Thua Thien Hue province was established. Twelve workshops and CME courses for CHC health professionals have been organised. The purpose of this workshop and course was to strengthen the network and enhance their capacity. Ten CHCs in the network were provided with equipment. Besides that, several policy papers on FM have been developed. These papers have been used at national policy level. However, this was a more difficult area to assess in terms of its adherence to the proposed outputs. The limited human resources trying to meet training and daily practice is a big obstacle for additional training and then supervision of students. Thus, this needs further sustainable intervention and incentives for participants.

A system of EHR using the ICPC-2 and ICD-10 was developed and implemented for coding RFE, diagnosis and treatment at this Centre, which received great compliments. This plays a very important role in the effective functioning of the Centre and could be a model for expanding to other facilities.

#### Relationship between objectives, results and means

The logical framework is well-developed and embedded in an overall FMC strategy. The PhD project serves the needs of the FMC and the projects. The PhD-projects are not stand-alone projects (as e.g. in project 3) but integrated in the other activities and outputs of the projects. The activities and outputs should be considered as a key piece of the FMC puzzle.

#### **Programme Management**

The communication is good within and among the project and at programme level. The project team is well-informed about reporting deadlines and joint steering committees. All necessary documents (templates) are provided and have become more efficient and user-friendly.

The annual Joint Steering Committee Meeting (JSCM) is good and necessary for PL and teams to be informed about the progress of each project and of the entire programme. Additional meetings of PL, both at the Flemish and Vietnamese side ensure information disseminated and getting consensus. Visits of supervisors are very useful to communicate on project-level issues beyond the specific PhD research. Other types of communication, email, Skype, are frequently used. The templates for reporting as well as former activity plans and reports are stored on Google Drive (before) and Share-Point now are very helpful for project monitoring and reporting.

The communication among PhD students is somewhat not very frequent and effective. The annual meeting and PhD workshop should be periodically organised. More communication channels and activities should be conducted among PhD students and supervisors of different projects within this programme.

Effectiveness	
P.4.1.Specific academic objective	- Achieved beyond the expectations
Score: Excellent	
P.4.2.Specific development objective	- Achieved beyond the expectations
Score: Good	- Extension to CHC is still needed
Recommendation: R9	
	·

## Final judgement/comments

#### **Specific Academic Objective**

- Current common health problems presented at primary care level and the needs of community and health staff on primary/rural care are identified
- Capacity of staff of Hue UMP (University Medicine) who are responsible for teaching primary/rural health (Family Medicine) and the training programme (pre service and in service) on Family Medicine will be improved to meet the needs of the system and the community

#### **Specific Developmental Objective**

 Health care services at primary level will be improved through training in Family Medicine and the establishment and maintaining contact and exchange amongst Hue UMP, Thua Thien Hue Health Services, the centre for Primary/Rural Health Care Training and Practice at Phu Loc District Hospital and the network of participating CHCs.

The Specific Academic Objective 1 was successfully achieved with twenty six scientific papers published in international and national journals and presented at conferences. These results provide evidence for policy development (Circular 37/2014/TT-BYT, Circular 16/2014/TT-BYT, and the Vietnam Health Plan for 2016 – 2020 in Policy 139/KH-BYT on March 1, 2016).

The Specific Academic Objective 2 was successfully achieved with three staff members receiving PhD training in Belgium, and two staff members receiving MSc training in Vietnam. One staff member is expected to complete the PhD training programme by the end of 2018 while the other two PhD students are in good progress. Some BSc and MSc students participated in the research of these three PhD projects which allowed them to learn and use part of the data collected to obtain their degree.

Within this objective, in particular in the initial project proposal, the plan was to improve the quality of the existing training programme and develop some continuing medical education (CME) modules. Success in the policy arena moved much more quickly than anticipated, requiring an adjustment to the original plan. Examples of the extreme success include the development of one undergraduate curriculum, one revised curriculum for specialist level I, one 3-month CME programme in Family Medicine and one e-learning course in FM for undergraduate training. In addition, three textbooks in FM training programme and three FM reference books were published.

The specific developmental objective was exceedingly successful with the newly operational Hue FM Centre as a flagship state-of-the-art primary care training and service delivery model. A system of EHR using the ICPC-2 and ICD-10 was developed and implemented at Hue FM Centre. A network of CHC health professionals in Thua Thien Hue province was established and several workshops and CME courses for CHC health professionals were organised in order to enhance their capacity as well as to strengthen the network. Several workshops and activities held at Hue FMC had several significant impacts on Family medicine policy development and implementation. These workshops helped

to develop several decisions on family medicine in Vietnam as well as to improve capacity of family medicine physician and clinics in Thua Thien Hue Province. Hue FMC and Hue UMP - Hue University continue to be the focal point for innovative Family Medicine training and practice in Vietnam and is the only Family Medicine Centre approved by Vietnam's Ministry of Health to be an independent clinic at 3rd level in referral system. With the support of this project, the development of e-learning and skilled lab training is well established and in good progress of development.

Impact	
5.1.Individual impact Level	- PhD researchers have upgraded research and
Score	teaching skills
	- Medicine students received better education in Fam-
	ily Medicine
	- CHC staff member acquired upgraded skills.
5.2. Academic and Institutional impact	- Family medicine Centre has been established partly
Score	as a result of the project
	- PhD research topics are driven by societal needs and
	a strategy to improve knowledge and expertise at the
	FMC
	- Family medicine curriculum has been revised and
	the subject of Family Medicine has been structurally
	embedded in the curriculum of Medicine.
	- The number of publications, manuals and textbooks
	did increase as a result of the project.
	- The FMC became a flagship and example for other
	universities in Vietnam. Support of MOET and MOH.
5.3.Development impact (impact on society)	- Awareness for FMC and primary care has been
Score	raised among other universities and policy makers.
	- The FMC and activities of the project raised high in-
	terest of policy makers. The FMC has influenced im-
	portant policy decisions at national level.
	- A network with staff members of community health
	centres has been established.
	- Some CHC are performing better as a result of the
	project.
Final judgement/comments	

### Impact at the individual level.

The three PhD scholars upgraded their research and teaching skills during their study visits to Belgium and their data collection in Vietnam. As the project was able to revise a curriculum and to introduce the subject of Family Medicine in the regular medicine programme, more students received training. Moreover, the project did develop two textbooks which are used in the teaching programmes, strengthening the quality of education and the knowledge on Family medicine among the medical students. Finally, at individual level, staff members of CHC's have been trained. Some of them had not received any training for more than twenty years. These three month intensive trainings have

been considered as very successful and received attention from Vietnamese government (within the framework of a World Bank loan).

#### Impact at institutional level.

The impact at institutional level has been enormous. The Family Medicine Centre has been established in 2015. Although the establishment should not be seen as a direct causal result from the project, the project did contribute to the rapid development of the expertise, knowledge and number of activities. The major achievement of the project is that all activities and results are directly linked to the development of the FMC. The major consequence of this approach is that all results are embedded in the FMC and cause multiple effects within the institute (and broader society; see below): the PhD research topics are driven by societal needs and a strategy was implemented to improve knowledge and expertise at the FMC with a direct link to Family Medicine and primary care. The introduction of Family medicine as subject in the regular medicine programme, as a result of the advocacy activities of team members of the project, resulted in a structural change of the curriculum. Besides that, material (textbooks, e-learning courses, books) have been produced which are used in the curriculum. The number of publications of the centre did increase as a result of the project. These publications are a result of the increased capacity within the centre. Finally important technical decisions have been taken, such as the introduction and development of EHR system using the ICPC-2 and ICD-10, which will be used at the Family Medicine clinic and the CHC.

As a consequence of the successful establishment and development of the centre (and of the project), the centre became a flagship and an example for other universities and policy makers in Vietnam.

#### **Developmental Impact.**

The Family Medicine centre could raise awareness for family medicine and primary care among policy makers and other universities, in the sense that FMC became a reference point for other universities and policy makers. The FMC was able to influence at least four policy decisions:

- Circular 37/2014/TT-BYT,
- Circular 16/2014/TT-BYT,
- Vietnam Health Plan for 2016 2020 in Policy 139/KH-BYT on March 1, 2016).
- Resolution No. 20-NQ/TW of the Sixth Plenary Session the 12th Party Central Committee on the protection, care and improvement of people's health in the new situation, dated October 25, 2017 stated clearly that development of Family Medicine is one of major tasks and solutions.

Secondly, a network between the FMC and CHC has been established and trainings to staff members of CHC are delivered. Although the evaluation team was not able to visit a CHC, we could find indirect indications of an improved performance of these CHC, as a result of the project. CHC centres are intensively trained during a 3-month training session at the FMC. Besides that, the Vietnamese government used this model to upscale this training programmes to more CHC (with the support of World Bank loan, World Bank Health Professions Education & Training (HPET)). In the end, patients will be better served visiting the CHC.

#### Sustainability

6.1.Academic and Institutional sustainability
Score: Excellent

- FMC will continue to exist after the phasing out of the project as financial sustainability is guaranteed.

## 6.2. Financial Sustainability Score: Excellent

- Staff members of FMC are active players in policy development and will continue to play their role in the future.
- FMC is considered as Flagship and as a good practice, which will results in new (research) funding
- Curriculum innovation has been introduced in the regular medicine programme and has been confirmed by the MoH.
- FMC has been recognised by other funding agents as an implementing agency for extension programmes
- Family Medicine Centre approved by Vietnam's Ministry of Health to be an independent clinic at 3rd level in referral system

#### Final judgement/comments

The academic, institutional and financial sustainably seems to be guaranteed for many different reasons:

- 1. The FMC will continue to exist after the phasing out of the project as the Faculty of Medicine and Pharmacy is delivering support in terms of staff salaries.
- 2. FMC is considered as a Flagship and a good practice which will result in new research projects directly linked to Family Medicine and Primary care.
- 3. Staff members are active players in policy making and will continue to play their role in the future
- As pioneers in curriculum development and as innovators in the development of course materials, FMC will become well known among students, which will lead to more medicine students at the university.
- 5. The curriculum revision is approved and decided by MoH and this will be difficult to revise in the near future.
- FMC has been recognised by other funding agents as an implementing agency for extensionprogrammes (e.g. HEPT), meaning that funding will be available to continue some of the project activities.
- 7. The family medicine clinic is approved by the Vietnamese Ministry of Health to be an independent clinic at the third level in the referral system. The clinic is allowed to enroll a maximum of 15.000 patients. The recognition guarantees the FMC a stable and continuous funding.

## 2.2. Evaluation of the programme level

Considering the Logical framework at programme level (and in particular the specific objectives and intermediate results), the programme level could be interpreted as the sum of the project results (see limitations no 4 & 5). The programme level evaluation should mainly considered as a summary of the project evaluations.

#### 2.2.1 Relevance

	Programme level
1.1.Responding to needs	-Programme is in line with Vietnamese government policy
Score: Excellent	-Programme is in line with the priorities of HU
Recommendations: -	-Programme is in line with country strategy paper of VLIR-UOS
1.2.Synergy	-Internal synergy is very low: project are implemented separately
Score: Low	and within projects synergy is lacking
Recommendations: R1, R2, R3,	-External synergy: synergy with external stakeholders is limited;
R4.	synergies with other donors & funding has been achieved.
1.3.Transversal Themes (gen-	-Environmental focus is at the core of the PhD research project
der, environment and D4D)	in P2 and P3.
No score as this was not a crite-	
rion during programme formula-	
tion.	
1.4. Ownership	-Strong ownership by president of HU and management staff.
Score: excellent	
Recommendation: -	

In its strategic vision HU wants to become a leading institution in delivering education, research and services in Central Vietnam. HU's ambition to become a leading authority in the field of aquaculture, crop production and rural health are (partly) reflected in the P2, P3 and P4. The projects should be considered as in line with the overall central university strategy. The projects are also in line with the country strategy and the priorities of the Vietnamese central and local governments. This programme supports both the academic development (training, education, exchanging staff and researchers etc.) and the production sectors so to contribute to the difficulties and constraints met by Hue University. By supporting the academic development of the university, it could reduce the gap that the university faces towards the international standard and towards the sustainable development of the production sectors

In project 1, 2 and 3 internal synergy and complementary is largely absent. The PhD research projects are distributed through different faculties (departments) of the member universities. As a result, the PhD research projects can be considered as separated research projects of separated faculties (or departments). The risk does exist that the PhD students once they have graduated, become an isolated lecturer in their respective faculties (departments) and that change at institutional level remains absent.

In order to increase the internal synergy, we would like to recommend:

- Creating a research unit within project 2 and project 3 bringing together PhD researchers and other staff members with a high interest in research and stimulate them to write joint research proposal and implement common research in order to achieve the objective of implementing multidisciplinary research. Also from sustainability point of view (see below), the creation of such units are advisable. It has been reported by members of P2 and P3 that joint research will be integrated in the second phase (idea: Life Cycle Analysis), which is an excellent idea to create more synergy between both projects.
- In the second phase, activities should be developed to transfer knowledge and skills from P1 to the other projects. The results of the transfer of that knowledge and skills should be added as IR`s into the respective projects.

The external synergy with other stakeholders within the broader society is still limited which is to be expected as the first phase of the programme focused on increasing research capacity and skills. During the second phase, attention should be paid to involve at a larger scale stakeholders from other member universities and external stakeholders. It has been reported that not all member universities have the skills to engage external stakeholders in the projects (in particular P2 & P3). It remains to be seen whether these projects will be able to involve external stakeholders at a large scale. It should be considered whether stakeholder involvement should become a responsibility at central university level and/or P1.

The Central university level has been very successful to align the VLIR-UOS-IUC programme with other international projects and programmes like:

- ASEAN-EU SHARE (<a href="http://www.share-asean.eu">http://www.share-asean.eu</a>) project which is linked with the quality assurance activities of P1. Additional experience on how to increase the quality of education has been achieved through ASEAN-EU share.
- Nutrisea (<a href="http://www.nutrisea.eu">http://www.nutrisea.eu</a>): This project has been linked to curriculum development activities of VLIR-UOS-IUC. Although food technology is the focus of this programme, curriculum development issues have been introduced in this programme as well, e.g. tech-transfer, entrepreneurship based education.
- MOET 911: additional PhD scholarships from the Vietnamese government has been achieved.
- VLIR Network Vietnam: linkage between individual lecturers from HU with the network activities (see more Mid-term evaluation Vietnam Network)
- VLIR-UOS North-South-South projects
- LOTUS (ERASMUS Mundus) scholarship (<a href="https://www.lotusplus.eu">https://www.lotusplus.eu</a>): thanks to the Lotus programme Vietnamese PhD students could spent more time in Belgium to execute their research.
- Belgium Embassy: during the Belgian days HU was given the opportunity to show the results of the IUC cooperation.
- Atlantic Philanthropies; funding of the building and infrastructure of Family Medicine Clinic (see P4 for more information)
- Worldbank on Health programmes for upgrading the capacity of staff in the rural health centre (see P4 for more information).

Environmental sustainability is the focus of all the PhD research projects in P2 and P3. Within project 2, a first PhD is focusing on "Poly-culture systems as a complete approach to enhance productivity and improve the ecological environment of aquaculture". The objective of the second PhD is "to decrease ammonia emission from growing pig's manure by inclusion fiber-rich feedstuffs in diets without impairing animal performance" and the third PhD aims to close the life cycle of rabbit fish in captivity allowing to produce fingerlings at commercial level (already completed). Within project 3 the research topics are defined as: Importance of nitrogen and phosphorus fluxes and stoichiometry for the vegetation of the Cau Hai Lagoon, Vietnam (PhD 1); Dynamics, functions and resilience of the submerged aquatic vegetation in the Cau Hai lagoon, Central Vietnam (PhD 2); The environmental toxicology of organochlorine pesticides in sediment and organisms in Cau Hai Lagoon and health risks to food consumers (PhD 3). New initiatives have been taken on e-learning in P4 and plans to continue does exists with a clear link between P1 and P4. According to the available data female and male PhD, Master and Bachelors students are almost equally distributed. As the transversal themes were not a criterion during programme evaluation this criterion is not been scored.

The central university leadership has shown a high commitment to the programme. Right from the formulation stage of the programme, project objectives were strongly demand-driven. The commitment to the initial objectives have been confirmed during this mid-term evaluation. At programme level, the presidency of HU has emphasised again the importance of the IUC for increasing the management capacity, educational innovation and quality assurance. The IUC is being used to increase visibility at national fora and to influence the policy. The IUC seems to be vital as a lever to generate other projects at central university level. Further evidence of ownership at institutional level could be found in the creation of quality assurance unit which is funded from HU own budget.

#### 2.2.2 Efficiency

	Programme level	
2.1. Link between inputs and output	- links between and output are well designed	
Score: Good		
Recommendations: R5		
2.2. Delays	- A few PhD research started late	
Score: Good	- One PhD students graduated successfully	
Recommendations: R6	- Other PhD scholars are progressing well.	
	- Most of the activities are implemented as planned	
2.3.Programme management	- Strong PSU leadership	
Score: Good	- Strong coordination between Flemish and Vietnamese part-	
Recommendations:	ners	
	- Minor management issues have been solved accurately	
	- No major budget issues	
	- Reporting requirements are considered as very demanding	
	and time consuming.	

Most activities has been organised as planned in all the projects of the programme. Delays have been reported in the PhD research which could be explained by:

- Mismatch of PhD students (P1)
- Delays caused by the research results which required additional data collection and the formulation of new hypotheses (P2-P3).
- Gradual recruitment of PhD researcher in order to grow gradually with a newly established centre (P4)
- Students reported that their PhD research is hindered by the fact that they still have duties in their faculties when they are in Vietnam. They consider their time in Belgium as productive and a possibility to focus exclusively on their research.

The evaluation team considers the delays as a normal development in PhD research projects. PhD students should increase their skills and knowledge and they have to learn how to plan and to conduct their research. It is advisable that PhD supervisors are closely involved in supervision activities and that possibilities for extra funding should be explored in order to create longer scholarships in Belgium

The overall satisfaction with the programme management is very high. Strong leadership of the PSU has been appreciated by all stakeholders. It has been reported that at the beginning of the IUC some coordination problems occurred but that during the programme implementation, these issues have been

solved easily. The steering committees are appreciated as very useful. The relations with the PSU both on the Flemish and the Vietnamese side have been very good. From the Flemish side, support in terms of organisation of missions, financial and administrative statements are very positively appreciated. From the Vietnamese side also the arrangement for visitors, their accommodation and their financial records are perfectly followed up.

No major budget issues were encountered. Late submission of expenditures remains a concern as it impedes proper budget management. No feeling of abuse or excessive spending prevails among Flemish project members. Occasionally, the composition and large size of visiting delegations did not seem to contribute to project objectives but it did not affect it negatively either and extra costs were not submitted to the IUC budget

Occasionally, changes in the timing of visits were communicated late forcing the Flemish counterpart into uncomfortable rescheduling of agenda's and causing logistic headaches for the ICOS as to hectic housing and visa arrangements.

No major budget issues were encountered. Late submission of expenditures remains a concern as it impedes proper budget management.

From Vietnamese side, it has been reported that the administrative requirements are sometimes very demanding. In particular the different models of financial reports and the narrative reports is causing double reporting work load which seems not to be very efficient.

#### 2.2.3 Effectiveness

	P1- Institutional
3.1.Academic objectives	- in general terms, specific objectives have been achieved
Score: Good	
3.2.Developmental objectives	- in general terms, specific objectives have been achieved
Score: Good	

The specific development and academic objectives at programme level are formulated as the sum of the specific objectives of the project 1 to 4. The achievement of these specific objectives will be discussed at project level. The limitation no 4 & 5 should be taken into account when reading this paragraph on academic and specific objectives. As the project results (and effectiveness) varies strongly between the projects, the programme level scoring is an "average" of the specific objectives.

It is important to mention that the programme specific objectives are formulated to be achieved after ten years (total duration) of programme implementation. The programme is strongly based on PhD research and increasing capacities of PhD students, staff members and Master/Bachelor students. Eleven PhD scholarships have been given of which one PhD student already graduated (P2). Seven other PhD students are making significant progress and both Vietnamese and Flemish stakeholders have reported that sufficient progress has been made to conclude that they will be able to graduate very soon. Three PhD projects from project 1 have been stopped after an investment of two years. Three new PhD students will replace them. Their scholarship will be covered during the second phase of the programme. Since publication in international peer reviewed journals is a requirement for being allowed to defend a

PhD manuscript, all students are working towards international publications. Some of them already succeeded in the acceptance of papers, others submitted their paper (but were not accepted yet) and a minority of students are still preparing their research papers.

Although a lot of workshop for staff members of the HU and the member universities have been organised, it could not be observed whether these workshop had a direct effect on improved research based education in the member universities. Equipment has been provided to the member universities and faculties in project 2, 3 and 4. The equipment is not only used by the PhD researchers, but also by MSc/BSc students and other staff members of the university. In most of the cases a maintenance plan and budget is in place.

In general terms, there is room for progress in achieving developmental objectives. The outreach of the programme is rather limited although important achievement could be identified like e.g. national debate on university governance, upgrading staff of community health centres, commercialisation of rabbit fish, flagship family medicine centre. It would be recommendable to increase the outreach and dissemination activities in the second phase for all projects. New (research) initiatives should be taken to increase the sustainability of the programme.

#### **2.2.4** Impact

	Programme level
4.1.Academic impact	-Research capacity has been increased
Score: Good	-Number of publication increased and will continue to increase in
Recommendations:	the second phase
	-Teaching capacity has been increased
	-Equipment has been provided and used by staff members.
4.2.Institutional impact	- Awareness of multidisciplinary research has been raised but not
Score: Good	yet implemented
Recommendations:	- Awareness created for research based education, but not largely
	implemented
	- Joint collaborative initiative are not yet taken.
	- increased capacity of Family Medicine centre at different levels.
4.3. Developmental impact /	-Family Medicine Centre has become a flagship centre and good
Societal impact	example to policy makers
Score: Good	-Changes in the national medicine curriculum (inclusion of family
Recommendations:	medicine)
	-Research on Rabbit fish and commercialisation of Rabbit fish pro-
	duction.
	-Increased visibility of HU

The programme achieved an increased academic impact by upgrading the research and teaching capacities of staff members. In the second phase the academic impact will be speeded up when most of the PhD students will have graduated and publish their research results in international peer reviewed

journals. Equipment has been provided to member universities and faculties and maintenance plans and budgets seem to be available. In other projects, the PhD researchers are making progress and it has been reported that all of them made enough progress to conclude that they will be graduated within the second phase of the programme. The academic impact has been strengthened by linking IUC with other initiatives, e.g. Asian-EU-Share, lotus grants, Nutrisea, etc.

The institutional impact is still limited as policy changes at institutional level (central university and member universities) are absent with the exception of the establishment of a Quality Assurance unit at central level and the increased capacity within the Family Medicine Centre. The QA unit is taking up the responsibilities to develop a Quality Assurance handbook and tools. The Family Medicine Centre has become, within a timespan of only seven years, a well-established centre, with support of IUC (see project 4). The first phase was important to increase awareness on the nature and quality of curriculum development, research based education, multidisciplinary research. The awareness establishing activities, have not yet resulted in new policies neither at central level nor at the level of the member universities.

The developmental impact (impact on society) has been excellent for some of the projects and is absent for other projects. The impact of project 4 and to a lesser extent of project 1 and 2 is obvious. The Family Medicine centre became a flagship and good practise for the Family Medicine approach at national level. The Ministry of Health has been inspired by the work of the FMC and several national initiatives are taken based on the experience of FMC (e.g. Family Medicine as subject in the regular Medicine curriculum; see more about project 4 below). The results of the research project on rabbit fish are of such high quality that it ideas to commercialise the results have developed rapidly. As mentioned before, project 1 contributed, to a large extent through the organisation of a yearly international conference, to the national discussion on university governance. A government decision on the autonomy of universities is expected to be approved in the course of 2018. It is clear that HU and IUC contributed significantly to this debate.

It has been reported that the impact on these three levels – academic, institutional, and developmental - has boosted the international character of HU and that an increased visibility has been achieved in line with the strategic choices made by the HU management.

#### 2.2.5 Sustainability

	Programme level	
5.1. Academic sustainability	-PhD students are all staff members of the university	
Score: low	-see also lack of research units (except P4)	
Recommendations: R1 & R5		
5.2. Institutional sustainability	-in general terms, maintenance manuals and budgets for equipment	
Score: low	are in place	
Recommendations: R1 & R5	- No structural measures are taken to retain and upgrade human	
	capital continuously	
	-Institutional collaboration is not (yet) guaranteed – separated re-	
	search projects	
	-Only for P4 institutional sustainability has been achieved	

5.3. Financial sustainability

Score: low

Recommendations: R1 & R5

-IUC has been used to attract additional funds (911 scholarships, lotus grant)

-Except for P4 and to a lesser extent for P2, no additional funding could be attracted and no new joint research proposals for extra funding were (yet) developed.

The sustainability of the programme has been evaluated as low. This is nothing out of the ordinary considering that the programme is just halfway of its implementation. Sustainability should be a major point of attention during the second phase of the programme. Except for project 4, all other projects have major points to consider during the second phase. Project 4 can be considered as textbook example of sustainability as described below (see project 4). The project reached a high level of academic, institutional and financial sustainability (see project 4). What the other projects (P2-3) have in common is the lack of institutional coherence and synergy. The same risk does exist within the new strategic research line in P1. Although most of the PhD candidates are staff members (lecturers) at the university, they implement their research almost isolated from each other. As mentioned in the paragraph on synergy, these islands of expertise are not directly linked to joint research units and to the development of new curricula based on the capacities of PhD graduates. As far as the evaluation team has been informed, the establishment of research units and the revision of curricula is not planned for the second phase. There is a high risk, that once PhD students are graduated that they go back to their position within their own faculty or department without being linked to other PhD students or departments. The PhD scholarships have almost been equally divided among faculties and departments within a member university. For example in P2 and P3, each of the three PhD students are member of three different faculties. The same will happen with P1 in the second phase: one PhD student at the Family Medicine Centre, one at the school of education and one at the central university level. It remains to be seen whether a structural and institutional cooperation after the completion of the PhD research will be implemented. It is therefore advisable to establish research units in order to stimulate joint research initiatives between different faculties/departments and to attract extra funding. The establishment of QA unit on the other hand, is a very good example of institutional sustainability. Although the first director of the unit resigned, a new director has been appointed. The budget for the QA unit is embedded in the central university budget. It has been reported that QA unit will continue to exist after the end of the programme. Evidence was delivered of the added value of QA unit and the strategic importance of the unit in order to achieve the objectives of HU (being recognised as international university and accredited accordingly).

Although external funds have been attracted, in particular at central university level (as mentioned above) and within the framework of P4 (see project description), sufficient external funding is lacking for project 2 and project 3. Joint and new research proposals have not (yet) been written. Possibilities for extra funding have only been explored marginally. The creation of strong research units or teams could be a possibility to encounter the difficulties of generating extra funding.

On the level of equipment investment, it has been reported by members of the projects that maintenance manuals and budget are available.

#### 3 Main Lessons Learned

**LR1.** The complex structure of HU University came as surprise for most of the Flemish stakeholders. Acquire a thorough insight in the local partner universities' administrative status prior to the launch has been an important lesson learnt in order to understand the cultural and organisational context and to act accordingly. The project team has learned that the structure of Hué University is a complex organisation, built from individual entities. That includes that the member universities like to have their own autonomy and decision-making. As this is a political decision from the Vietnamese government, it is sure that a Flanders team cannot push to any change in this structure.

**LR2.** Regarding University Governance some ideas might be introduced, but the main effort should come from local officials. As the project team thinks from a Western European context, it is important to support a forum for discussion of the Vietnamese partners only, and - if wished – experts from other South-East Asian countries might be added.

**LR3.** It has been observed that no spontaneous changes in the way of teaching, using education tools, defining curriculum has been done, even when member university management, staff members, and lectures are informed and trained through the programme. So more activities and linkages are need to stimulate change (see recommendations)

#### 4 Recommendations

R1. Creating a research unit (Centres of Excellence) within project 2 and project 3 bringing together P hD researchers and other staff members with a high interest in research and stimulate them to write joint research proposals and implement common research in order to achieve the objective of implementing multidisciplinary research. Also from the sustainability point of view (see below), the creation of such units is advisable. One of the possibilities has been formulated by the project teams 2 and 3: "Given the mutual interest and complementary expertise in P2 and P3, on the interaction between rabbitfish polyculture and the lake environment, common PhD research could be developed. Besides the 'delivery of PhD degrees', the combination of the human resources and facilities of P2 and P3 within this PhD research should also allow to set the frame for future multidisciplinary research on "aquatic food and environment".

**R2.** In the second phase, activities should be developed to transfer knowledge and skills from P1 to the other projects. The results of the transfer of knowledge and skills should be added as IR's into the respective projects.

**R3.** It is advisable to upscale successful innovative educational ideas funded by the innovation fund to institutional practices. Good and successful ideas could serve as practice that could be used by more than one lecturer and could be used to initiate innovative educational policies at member universities and at central level.

**R4.** At project level, it should be considered whether it would be possible to involve more stakeholders in order to transfer knowledge and expertise to the broader society. Although P1 did involve a lot of authorities, which is considered as very positive, the question remains whether the central level should take the lead in organizing stakeholders involvement at the project level in order not only to increase the visibility of the project results, but also to increase the role of the university as a whole as a major player in the research topics developed within the framework of the IUC.

**R5.** Although a lot of progress has been made on QA, curriculum development awareness and university governance issues, attention should be paid to ensure that the acquired skills and knowledge are transferred to (key) staff members of the member universities. The decision to recruit three new PhD students from the member universities to increase the capacity on the issues of curriculum development and quality assurance has been a very good decision. But it seems necessary to develop activities to ensure that the research results of these PhD students will be transferred and implemented in more than one member university. From the sustainability point of view, it would be advisable that these PhD students, after having graduated, become key players in their domain, not only in their own member university, but at central level and in support of the member universities. Besides the PhD research, mechanisms and activities should be developed in order to engage staff and create change in the fields of curriculum development and quality assurance in the member university. It is advisable that this change should start with the three other projects of the programme, in particular P2, P3.

- **R6.** In order to minimise the delays in PhD-research, students reported that it would be good to increase the scholarship time in Belgium. This point of view has not been shared by all stakeholders. Some stakeholders reported that PhD students should develop their research skills (like reading, reflecting, writing) continuously. The university should develop a support policy to young researchers in order to create opportunities to participate in international and national conferences and stimulate a research attitude. It would be advisable to discuss this issues during the formulation process of the second phase.
- **R7.** It would be recommendable to increase the outreach and dissemination activities in the second phase for all projects. New (research) initiatives should be taken to increase the sustainability of the programme.
- **R8.** Although the quality of teaching has been improved as a result of the programme, the progress made, has been achieved at individual level. Specifically, in project 2 and 3 the evidence for innovative curriculum development or teaching methodology could not be found. It is advisable that new research and teaching skills become anchored at institutional level (member university, faculties, departments) through adapting the existing curricula in line with the capacities of the PhD scholars and to introduce new teaching methodologies at faculty level (through workshops and new policies).
- **R9.** Project 4 scored on all criteria good to excellent. The major challenges for the second phase of the project are the links between the FMC and CHC's. Upgrading the quality of services delivered to patients at CHC remains an important challenge. The project can contribute by delivering training to CHD staff and maintain strong links between FMC and CHC network (providing tools like: HER, online CME courses). The CHC network should be expanded in order to increase the potential impact of the project. This should be given major attention during the second phase of the project. Attention should be paid to synergy with the World Bank Health Professions Education & Training (HPET) project in order to maximise the impact of the project and to avoid double funding.
- **R10.** There is room for developing stronger links between P1 and P4 through the development of innovative trainings and educational methods (e.g. e-learning, teleconferencing and telemedicine).
- **R11.** The Reporting formats and requirements are perceived as time consuming and very efficient. It would be advisable to revise these formats and avoid double reporting in financial (Model 1D) and narrative reports.
- **R12.** More attention should be paid to the development of the logical framework and the formulation of good and robust indicators. The **logical frameworks should reflect the Theory of Change (ToC)**. In particular, the specific objectives should reflect the outcome-level of the programme. (target audience: VLIR-UOS, Belgian and Vietnamese programme coordinator and project leaders)

#### 5 Annexes

#### 5.1. Methodology (scoring)

#### General approach - Scoring

- 4-Excellent: the overall (Criterion) is of excellent quality. Additional measures are not needed.
- 3-Good: Minor room for improvement exists, however with minor effect on (Criterion); See recommendations No:
- 2-Low: Major room for improvement exists, with a potential of major effects on (Criterion) of the Programme/project. See recommendation No:
- 1-Poor: The (Criterion) is of poor quality and extra necessary measures are urgently need to realize the (Criterion). See recommendation No:

Excellent Good L	_OW	Poor
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#### **Programme Level- Scoring**

#### Criterion 1: Definition of Relevance:

The extent to which the objectives of a programme are consistent with beneficiaries' requirements, country needs, global priorities and partners' and donors' policies." Retrospectively, the question of relevance often becomes a question of whether the objectives or intervention logic of an action are still appropriate given changed circumstances.

**Sub-criterion 1.1.:** 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.

Sub-criterion 1.1. Responding to the needs				
Scores	Definition Scores	Topic and item lists		
4-Excellent	The programme is aligned with National and regional policies, university policy and with VLIR-UOS country strategy.  The overall relevance is of excellent quality. Additional measures are not needed.	<ul> <li>Process of programme formulation</li> <li>Demonstrated links with the policy documents.</li> <li>In case of non-alignment, why?</li> <li>Are partners (universities and governmental agencies) involved in Context Analysis?         How?     </li> </ul>		
3-Good	The programme is partly aligned with National, regional and university policies and with VLIR-UOS strategy. Minor room for improvement exists, however with minor effect on increasing the relevance of the programme. See recommendations No`s:	What could be improved in the process of formulating programme objectives? Are the chosen approaches, methodologies, partnerships and implementation modalities relevant? Is the programme responsive to changes in the local priorities and development context?		
2-Low	The programme is partly aligned with National, regional and university policies and with VLIR-	and result promises and development context.		

	UOS strategy. Major room for improvement exists, with potential major effects on the relevance of the Programme. See recommendation No`s:	
1-Poor	The programme is not aligned with National, regional and university policies and with VLIR-UOS strategy. The relevance of the programme is of poor quality and extra necessary measures are urgently needed. See recommendation No's:	

Sub-criterion 1.2. Synergy and complementarity with other (Belgian) actors.

Sub-criterion 1.2. Sy	Sub-criterion 1.2. Synergy and Complementary				
Scores	Definition Scores	Topic and item lists			
4-Excellent	Synergy and complementary (with other actors) have been identified and common activities are implemented.  The overall synergy and complementary is of excellent quality. Additional measures are not needed.	Are there any synergy and complementary issues with other programmes funded by VLIR-UOS and/or other donors in the country or in the region?     Has possibilities for synergy explored?     What has been done to create synergy? What activities have been organ-			
3-Good	Synergy and complementary (with other actors) have been identified and but common activities are not yet implemented.  Minor room for improvement exists. See recommendations No`s:	iseorganised with others? Are activities planned?  Is there any synergy and complementary issue within the programme (and between the different projects)? Has possibilities for synergy explored within			
2-Low	Synergy and complementary (with other actors) have been partly identified and common activities are not yet implemented. Major room for improvement exists. See recommendation No`s:	the programme? What activities have been organiseorganised with other projects?			
1-Poor	Synergy and complementary are not identified and common activities are not implemented. The synergy and complementary of the programme is of poor quality and extra necessary measures are urgently needed. See recommendation No`s:				

**Sub-criterion 1.3.** Link with transversal themes of Belgian development cooperation: gender, environment and D4D (Digital for Development).

Transversal themes: can elements be found at the programme and project level. Recommendations for the next phase as the transversal themes were not a criterion during programme formulation. The main question is how these new priorities of the Minister can be integrated in the second phase

Scores	Definition Scores	Topic and item lists
4-Excellent	Transversal themes (gender, environment and D4D) are identified and transversal theme activities and outputs are formulated.  The overall approach on transversal themes is of excellent quality. Additional measures are not needed.	Are women and men equally approached?     Is a gender policy in place? What measures and activities are implemented?     Is an environmental policy and strategy in place? What measures and
3-Good	Transversal themes (gender, environment and D4D) are identified and transversal theme activities and outputs are not formulated.  Room for improvement exists. See recommendations No`s:	egy in place? What measures and activities are implemented? Is there a D4D policy and strategy? What measures and activities are implemented?

2-Low	Transversal themes (gender, environment and D4D) are partly identified and transversal theme activities and outputs are not formulated. Major room for improvement exists. See recommendation No`s:	•	Do specific projects contribute to better transversal theme approach at university level?
1-Poor	Transversal themes (gender, environment and D4D) are not identified and transversal theme activities and outputs are not formulated. The transversal theme approach is of poor quality and extra necessary measures are urgently needed. See recommendation No`s:		

# **Sub-criterion 1.4.: Ownership**. Demonstration of effective commitment of all partners in the programme.

Scores	Definition Scores	Topic and item lists
4-Excellent	All key stakeholders are still very committed to the programme The overall commitment is of excellent quality. Additional measures are not needed.	Do all key stakeholders still demonstrate effective commitment? (taking up responsibilities, reporting, motivation, focus)     Why not?     What is the interest of the stakeholders of being part of the programme?
3-Good	All key stakeholders are still committed to the pro- gramme. Minor room for improvement exists, however with minor effect on increasing ownership of the pro- gramme. See recommendations No`s:	ers or being part or the programme:
2-Low	Some key stakeholders are losing commitment to the programme. Major room for improvement exists, with a major effect on increasing ownership of the programme. See recommendations No's:	
1-Poor	A majority of key stakeholders are losing commitment to the programme. The ownership of the programme is of poor quality and extra necessary measures are urgently needed. See recommendation No`s:	

"A measure of how economically resources/inputs (funds, expertise, time, etc.) are converted to results."

**Sub-criterion 2.1 Links between inputs and outputs**. Demonstration of effective commitment of all partners in the programme.

Scores	Definition Scores	Topic and item lists
4-Excellent	The activities of the programme are implemented in cost-efficient manner. A similar cost-efficiency logic has been implemented for all projects.  The overall cost-efficiency of the programme is of excellent quality. Additional measures are not needed.	<ul> <li>Do the resources correspondent to the needs of the action?</li> <li>Have the outputs been produced/delivered in a cost-efficiemanner?</li> <li>Spending rates</li> <li>Activities are chosen based on</li> </ul>
3-Good	Most of the activities of the programme are implemented in cost-efficient manner. Minor room for improvement exists, however with minor effect on increasing cost-efficiency of the programme. See recommendations No`s:	cost-considerations
2-Low	Most of the activities of the programme are implemented in cost-efficient manner. Major room for improvement exists, with major effect on increasing cost-efficiency of the programme. See recommendations No`s:	
1-Poor	Most of the activities of the programme are not implemented in cost-efficient manner. The cost-efficiency of the programme is of poor quality and extra necessary measures are urgently needed. See recommendation No`s:	

#### Sub-criterion 2.2. Delays.

Sub-criterion 2.2. Delays		
Scores	Definition Scores	Topic and item lists
4-Excellent	The programme did not face any important delay in activities and in case of delay, revisions have been planned and implemented.  Additional measures are not needed.	<ul> <li>To what extent are inputs available on time?</li> <li>If there are delays, how important are they?</li> <li>Have the reasons be identified? Have revisions</li> <li>Have revisions of planning been properly implemented?</li> </ul>
3-Good	The programme did not face any important delay in activities and in case of delay, revisions have been planned but not yet implemented.  Minor room for improvement exists, however with minor effect on the timing of implementation. See recommendations No`s:	
2-Low	The programme did face important delays in activities and revisions have been planned but not yet implemented.  Major room for improvement exists. See recommendations No's:	
1-Poor	The programme did face important delays in activities and revisions have not been made.  The implementation of activities is of poor quality and extra necessary measures are urgently needed. See recommendation No`s:	

Sub-Criterion 2.3. Programme Management: quality of programme management

Sub-criterion 2.3. Programme Management		
Scores	Definition Scores	Topic and item lists
4-Excellent	The overall programme management is of excellent quality. Additional measures are not needed.	The management manual is well- developed and applied at pro- gramme and project level
3-Good	The overall programme management is of good quality. Minor room for improvement exists, however with minor effect on increasing the quality of programme management. See recommendations No`s:	<ul> <li>Is the programme adequately monitored and/or assessed by local and Flemish partners?</li> <li>Planning, monitoring and reporting system in place? Timely reporting?</li> <li>Good cooperation and communication between programme and local university, between programme and projects, between projects</li> </ul>
2-Low	The overall programme management is of low quality. Major room for improvement exists, with a major effect on increasing the quality programme management. See recommendations No`s:	
1-Poor	The overall programme management is of poor quality and extra necessary measures are urgently needed. See recommendation No`s:	

#### **Criterion 3: Definition of Effectiveness**

"The extent to which the programme's objectives are expected to be achieved, taking into account their relative importance."

Sub-criterion 3.1. S	Sub-criterion 3.1. Specific Academic Objectives		
Scores	Definition Scores	Topic and item lists	
4-Excellent	The specific objectives (and outputs) will be achieved in case of successful implementation during the second phase. The programme is on track in order to achieve the specific objectives. Additional measures are not needed.	<ul> <li>Has the expected progress in terms of outputs properly achieved?</li> <li>Is the quality of the output satisfactory?</li> </ul>	
3-Good	The specific objectives (and outputs) will be achieved in case of successful implementation during the second phase. The programme is on track in order to achieve the specific objectives. Minor room for improvement exists. See recommendations No`s:	<ul> <li>Are the outputs still likely to the expected outcomes?</li> <li>Is there evidence that the action supports the implementation or development or change of partners' policy/actions?</li> <li>Are there changes in awareness, knowledge, skills at institutional level?</li> <li>Are there changes in organisationorganisational capacity (skills, structures, resources)</li> <li>The indicators for the specific academic objective have been achieved.</li> </ul>	
2-Low	The specific objectives (and outputs) will be partly achieved. Major room for improvement exists, with a major effect on increasing programme management. See recommendations No`s:		
1-Poor	The specific objectives (and outputs) won't be achieved. Extra necessary measures are urgently needed. See recommendation No's:		

Sub-criterion 3.2. Specific Development Objective		
Scores	Definition Scores	Topic and item lists
4-Excellent	The specific objectives (and outputs) will be achieved in case of successful implementation during the second phase. The programme is on track in order to achieve the specific objectives. Additional measures are not needed.	<ul> <li>Has the expected progress in terms of outputs properly achieved?</li> <li>Is the quality of the outputs satisfactory?</li> <li>Are the outputs still likely to the ex-</li> </ul>
3-Good	The specific objectives (and outputs) will be achieved in case of successful implementation during the second phase. The programme is on track in order to achieve the specific objectives. Minor room for improvement exists. See recommendations No`s:	<ul> <li>pected outcomes?</li> <li>Is there evidence that the action supports the implementation or development or change of partners' policy/actions in order to create impact on society?</li> <li>Are there changes in awareness, knowledge, skills at institutional level in order to create changes in society?</li> <li>Are there changes in organisationorganisational capacity (skills, structures)</li> </ul>
2-Low	The specific objectives (and outputs) will be partly achieved. Major room for improvement exists, with a major effect on increasing programme management. See recommendations No`s:	
1-Poor	The specific objectives (and outputs) won't be achieved. Extra necessary measures are urgently needed. See recommendation No's:	<ul> <li>resources) in order to serve society</li> <li>The indicators for the specific development objective have been achieved.</li> </ul>

#### **Criterion 4: Definition Impact**

"Potential positive and negative, primary and secondary long-term effects produced by the programme, directly or indirectly, intended or unintended." *Remark*: in this mid-term evaluation, only indications (stories of impact) possible.

Sub-criterion 4.1. Academic Impact		
Scores	Definition Scores	Topic and item lists
4-Excellent	The academic performance of the university has been increased significantly since the start of the programme (as a result of the programme) and will further increase during phase 2 if implemented in the same manner. Additional measures are not needed.	Added value of the programme for the academic performance of the university     Increased publication in international refereed journals
3-Good	The academic performance of the university has been increased significantly since the start of the programme (as a result of the programme) and will further increase during phase 2 if implemented in the same manner. Minor room for improvement exists. See recommendations No`s:	<ul> <li>Increased academic capacity of staff members</li> <li>Increased collaborative academic activities not funded by the programme</li> </ul>
2-Low	The academic performance of the university has been increased partly since the start of the programme (as a result of the programme). Major room for improvement exists, with a major effect on increasing academic performance of the university. See recommendations No`s:	
1-Poor	The academic performance of the university hasn't been increased since the start of the programme (as a result of the programme). Extra necessary measures are urgently needed. See recommendation No's:	

Scores	Definition Scores	Topic and item lists
4-Excellent	Policy development in society is based on programme experiences and results. Programme experiences and results are used for new initiatives. Additional measures are not needed to increase impact	The extent to which the collaboration has raised interest of policy makers and academics, and how the partner univer- sity is called upon or is pro-actively de-
3-Good	Programme experience and results are known in the broader society but have not yet caused new initiatives. Minor additional efforts are needed to increase impact. See recommendations No`s:	veloping collaboration models that could be fed into policy advice  The extent of the activities developed with local or regional stakeholders, contributing to the economic and social development  Added value of the programme for the role of the university as a development actor: the extent to which the collabora-
2-Low	Programme experience and results are known in the broader society but have not yet caused new initiatives. Major additional efforts are needed to increase impact.	
1-Poor	Programme experience and results are known in the broader society. Extra necessary measures are urgently needed. See recommendation No's:	tion has led to joint developmental ac- tivities or similar collaborative models at the regional and global level

Sub-criterion 4.2. Institutional Impact		
Scores	Definition Scores	Topic and item lists
4-Excellent	Major Institutional reforms at university level are implemented as a result of the programme. Additional measures are not needed.	Policy changes at institutional level?     Changes in behavior at institutional level?     the extent to which the collaboration has
3-Good	Major Institutional reforms at university level are planned as a result of the programme. Minor measures are needed. See recommendations No`s:	sparked other departments to initiate in teruniversity collaboration, joint capacity building, fund raising etc.
2-Low	Major Institutional reforms at university level are planned as a result of the programme. Major measures are needed. See recommendations No`s:	
1-Poor	No institutional reforms are implemented or planned. Extra necessary measures are urgently needed. See recommendation No`s:	

#### **Criterion 5: Definition Sustainability**

"Sustainability is the continuation of benefits from a development intervention after major development assistance has been completed, the probability of continued long-term benefits, and the resilience to risk of net benefit flows over time."

Sub-criterion 5.1. Academic Sustainability		
Scores	Definition Scores	Topic and item lists
4-Excellent	Academic sustainability is guaranteed or will be guaranteed in the second phase. Measures are identified and will be implemented at the second phase. Additional measures are not needed.	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-ac-
3-Good	Academic sustainability will be guaranteed in the second phase. Measures are partly identified and will be implemented at the second phase. Minor additional efforts are needed to increase sustainability. See recommendations No's:	tively developing collaboration models that could be fed into policy advice  The extent of the activities developed with local or regional stakeholders,
2-Low	Measures for academic sustainability are in the process of identification. Major additional efforts are needed to increase sustainability. See recommendations No's:	contributing to the economic and so- cial development  Added value of the programme for
1-Poor	Academic sustainability will not be guaranteed in the second phase. Extra necessary measures are urgently needed. See recommendation No`s:	the role of the university as a devel- opment actor: the extent to which the collaboration has led to joint develop- mental activities or similar collabora- tive models at the regional and inter- national level

Sub-criterion 5.2. Institutional Sustainability		
Scores	Definition Scores	Topic and item lists
4-Excellent	Institutional sustainability is guaranteed or will be guaranteed in the second phase. Measures are identified and will be implemented at the second phase. Additional measures are not needed.	Decision-making structures are in place to guarantee sustainability     Measure are taking to retain and upgrade human capital continu-
3-Good	Institutional sustainability will be guaranteed in the second phase. Measures are partly identified and will be implemented in the second phase. Minor additional efforts are needed to increase sustainability. See recommendations No`s:	<ul> <li>upgrade human capital continuously</li> <li>Maintenance of Infrastructure is guaranteed.</li> <li>Strengths and weaknesses of the institution in terms of institutionalizing the collaboration</li> <li>Intensification and/or formalization of interuniversity consultations (North-South and South-South)</li> </ul>
2-Low	Measures for institutional sustainability are in the process of identification. Major additional efforts are needed to increase sustainability. See recommendations No`s:	
1-Poor	Institutional sustainability will not be guaranteed in the second phase. Extra necessary measures are urgently needed. See recommendation No`s:	

Sub-criterion 5.3. Financial Sustainability		
Scores	Definition Scores	Topic and item lists
4-Excellent	Financial sustainability is guaranteed or will be guaranteed in the second phase. Measures are identified and will be implemented at the second phase. Additional measures are not needed.	financial viability     incorporation of costs into the budget of the partner university     other sources of finance:
3-Good	Financial sustainability will be guaranteed in the second phase. Measures are partly identified and will be implemented at the second phase. Minor additional efforts are needed to increase sustainability. See recommendations No`s:	Ability to attract external funds     co-funding by the partner university (matching funds)     (financial) involvement of private actors
2-Low	Measures for financial sustainability are in the pro- cess of identification. Major additional efforts are needed to increase sustainability. See recommenda- tions No`s:	o system of scholarships
1-Poor	Financial sustainability will not be guaranteed in the second phase. Extra necessary measures are urgently needed. See recommendation No`s:	

#### **Project Level- Scoring**

#### **Criterion 1: Definition Scientific Quality:**

"The extent to which a project has a ground-breaking nature and ambition (excellence)."

Sub-criterion P.1.1. Quality of Research		
Scores	Definition Scores	Topic and item lists
4-Excellent	The project has implemented innovative and outstanding research which have been published in international refereed journals. No additional measures are needed to increase innovative research results.	the extent to which research is cutting edge; Involvement of stakeholders in the South  Extent to which the results have been incorporated in local or international refereed journals
3-Good	The project has implemented innovative and outstanding research but the results are not yet published in international refereed journals. Activities are planned to publish research results or academic articles are submitted to international refereed journals.	
2-Low	The project has replicated existing research and results are not (yet)published in international refereed journals.	
1-Poor	The research component of the project failed. Extra necessary measures are urgently needed. See recommendation No`s:	

Sub-criterion P.1.2. Quality of Education		
Scores	Definition Scores	Topic and item lists
4-Excellent	The overall education objectives are of excellent quality. Additional measures are not needed.	<ul> <li>the extent to which new education practices are cutting edge;</li> <li>Involvement of South Stakeholders</li> <li>Extent to which alumni easily get a job</li> </ul>
3-Good	The overall education objectives are of good quality. Room for improvement exists. See recommendations No`s:	<ul> <li>which fits their education profile;</li> <li>the number of fellowships acquired from foundations</li> <li>Regional and international integration of ed-</li> </ul>
2-Low	The overall education objectives are of low quality. Major room for improvement exists, with potential major effects on the education quality of the Programme. See recommendation No`s:	ucation practices.
1-Poor	The overall education objectives are of poor quality. Extra necessary measures are urgently needed. See recommendation No`s:	

#### **Criterion 2: Definition Relevance**

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

Sub-criterion P. 2.1. Responding to the needs			
Scores	Definition Scores	Topic and item lists	
4-Excellent	The project is aligned with National and regional policies, university policy and with VLIR-UOS country strategy. The overall relevance is of excellent quality. Additional measures are not needed.	<ul> <li>Process of project formulation</li> <li>Demonstrated links with the policy documents.</li> <li>In case of non-alignment, why?</li> <li>Are partners (universities and governmental agencies) involved in Context Analysis? How?</li> </ul>	
3-Good	The project is partly aligned with National, regional and university policies and with VLIR-UOS strategy. Minor room for improvement exists, however with minor effect on increasing the relevance of the project. See recommendations No`s:	What could be improved in the process of formulating project objectives?      Are the chosen approaches, methodologies, partnerships and implementation modalities relevant?	
2-Low	The project is partly aligned with National, regional and university policies and with VLIR-UOS strategy. Major room for improvement exists, with potential major effects on the relevance of the project. See recommendation No`s:	Is the project responsive to changes in the local priorities and development context?	
1-Poor	The project is not aligned with national, regional and university policies and with VLIR-UOS strategy. The relevance of the project is of poor quality and extra necessary measures are urgently needed. See recommendation No`s:		

Scores	Definition Scores	Topic and item lists
4-Excellent	Synergy and complementary (with other actors) have been identified and common activities are implemented. The overall synergy and complementary is of excellent quality. Additional measures are not needed.	<ul> <li>Are there any synergy and complementary issues with other projects and programmes funded by VLIR-UOS and/or other donors in the country or in the region?</li> <li>Have possibilities for synergy explored? What has been done to create synergy? What activities have been organiseorganised with others? Are activities planned?</li> <li>Is there any synergy and complementary issue within the programme (and between the different projects)?</li> <li>Have possibilities for synergy explored within programme? Have activities been organiseorganised together with other projects?</li> </ul>
3-Good	Synergy and complementary (with other actors) have been identified but common activities are not yet implemented.  Minor room for improvement exists. See recommendations No`s:	
2-Low	Synergy and complementary (with other actors) have been partly identified and common activities are not yet implemented. Major room for improvement exists. See recommendation No`s:	
1-Poor	Synergy and complementary are not identified and common activities are not implemented. The synergy and complementary of the programme is of poor quality and extra necessary measures are urgently needed. See recommendation No`s:	
Sub-criterion P.2.	3. Transversal Themes	1
Scores	Definition Scores	Topic and item lists
4-Excellent	Transversal themes (gender, environment and D4D) are identified and transversal theme activities and outputs are formulated.  The overall approach on transversal themes is of excellent quality. Additional measures are not needed.	<ul> <li>Are women and men equally approached?</li> <li>Is a gender policy in place? What measures and activities are taken?</li> </ul>

3-Good	Transversal themes (gender, environment and D4D) are identified and transversal theme activities and outputs are not formulated.  Room for improvement exists. See recommendations No`s:	<ul> <li>Is an environmental policy and strategy in place? What measures and activities are taken?</li> <li>Is there a D4D policy and strategy? What measures and activities are taken?</li> </ul>
2-Low	Transversal themes (gender, environment and D4D) are partly identified and transversal theme activities and outputs are not formulated. Major room for improvement exists. See recommendation No`s:	
1-Poor	Transversal themes (gender, environment and D4D) are not identified and transversal theme activities and outputs are not formulated. The transversal theme approach is of poor quality and extra necessary measures are urgently needed. See recommendation No`s:	

Sub-criterion P.2.4. Ownership			
Scores	Definition Scores	Topic and item lists	
4-Excellent	All key stakeholders are still very committed to the project.  The overall commitment is of excellent quality. Additional measures are not needed.	Do all key stakeholders still demonstrate effective commitment? (taking up responsibilities, reporting, motivation, focus)     Why not?	
3-Good	All key stakeholders are still committed to the project. Minor room for improvement exists, however with minor effect on increasing ownership of the project. See rec- ommendations No`s:	What is the interest of the stakeholders of being part of the project?	
2-Low	Some key stakeholders are losing commitment to the project. Major room for improvement exists, with a major effect on increasing ownership of the project. See recommendations No's:		
1-Poor	A majority of key stakeholders are losing commitment to the project. The ownership of the project is of poor qual- ity and extra necessary measures are urgently needed. See recommendation No's:		

#### **Criterion 3: Definition Efficiency.**

"A measure of how economically resources/inputs (funds, expertise, time, etc.) are converted to results."

Sub-criterion P.3.1. The intermediate results have been delivered		
Scores	Definition Scores	Topic and item lists
4-Excellent	All the intermediate results are delivered. Additional measures are not needed.	<ul><li>Check values on the output-indicators</li><li>KRA's</li><li>Are indicators SMART?</li></ul>
3-Good	The intermediate results are partly delivered. Minor room for improvement exists. See recommendations No`s:	
2-Low	The intermediate results are partly delivered. Major room for improvement exists. See recommendations No`s:	
1-Poor	The intermediate results are not delivered. Extra necessary measures are urgently needed. See recommendation No`s:	

Scores	Definition Scores	Topic and item lists
4-Excellent	There is clear link between means, outputs and objectives. The input is carefully thought-out. The project did not face any important delay in activities and in case of delay, revisions have been planned and implemented.  Additional measures are not needed.	The means/inputs are justifiable and are carefully thought-out solution for the defined outputs.  Outputs (intermediate results) contribute to the project objectives.
3-Good	There is clear link between means, outputs and objectives. The input is partly thought-out. The project did not face any important delay in activities and in case of delay, revisions have been planned but not yet implemented.  Minor room for improvement exists, however with minor effect on the implementation modalities. See recommendations No`s:	project objectives.  To what extent are inputs available on time?  If there are delays, how important are they?  Have the reasons be identified? Have revisions of planning been properly implemented?
2-Low	The link between means, outputs and objectives is blurred. Inputs are too expensive in relation to the outputs. The project did face important delays in activities. Revisions have been planned but not yet implemented.  Major room for improvement exists. See recommendations No`s:	
1-Poor	The link between means, outputs and objectives is blurred. Inputs are far too expensive in relation to the outputs The project did face important delays in activities and revisions have not been made. The implementation of activities or the link between activities and output/objectives is of poor quality.  Extra necessary measures are urgently needed. See recommendation No's:	

Sub-criterion 3.3. Project Management		
Scores	Definition Scores	Topic and item lists
4-Excellent	The overall project management is of excellent quality. Additional measures are not needed.	The management manual is well-developed and applied at project and project level Is the project adequately monitored
3-Good	The overall project management is of good quality. Minor room for improvement exists, however with minor effect on increasing the quality of project management. See recommendations No's:	<ul> <li>Is the project adequately monitored and/or assessed by local and Flemish partners?</li> <li>Planning, monitoring and reporting system in place? Timely reporting?</li> <li>Good cooperation and communication within the project</li> </ul>
2-Low	The overall project management is of low quality. Major room for improvement exists, with a major effect on increasing project management. See recommendations No`s:	
1-Poor	The overall project management is of poor quality and extra necessary measures are urgently needed. See recommendation No`s:	

#### **Criterion 4: Definition of Effectiveness.:**

"The extent to which the project`s objectives are expected to be achieved, taking into account their relative importance."

Scores	Definition Scores	Topic and item lists
4-Excellent	The specific objectives (and outputs) will be achieved in case of successful implementation during the second phase. The project is on track in order to achieve the specific objectives. Additional measures are not needed.	<ul> <li>Has the expected progress in terms of objectives properly achieved?</li> <li>Is the quality of the outputs satisfactory?</li> </ul>
3-Good	The specific objectives (and outputs) will be achieved in case of successful implementation during the second phase. The project is on track in order to achieve the specific objectives. Minor room for improvement exists. See recommendations No`s:	<ul> <li>Are the objectives still likely to the expected objectives?</li> <li>Is there evidence that the action supports the implementation or development or change of partners' policy/actions?</li> </ul>
2-Low	The specific objectives (and outputs) will be partly achieved. Major room for improvement exists, with a major effect on increasing programme management. See recommendations No`s:	Are there changes in awareness, knowledge, skills at institutional level?     Are there changes in organisationor- ganisational capacity (skills, structures, resources)
1-Poor	The specific objectives (and outputs) won't be achieved. Extra necessary measures are urgently needed. See recommendation No's:	The indicators for the specific academic objective have been achieved.

Sub-criterion P.4.2. Spe	Sub-criterion P.4.2. Specific Development Objective		
Scores	Definition Scores	Topic and item lists	
4-Excellent	The specific objectives (and outputs) will be achieved in case of successful implementation during the second phase. The project is on track in order to achieve the specific objectives. Additional measures are not needed.	<ul> <li>Has the expected progress in terms of outputs properly achieved?</li> <li>Is the quality of the outputs satisfactory?</li> </ul>	
3-Good	The specific objectives (and outputs) will be achieved in case of successful implementation during the second phase. The project is on track in order to achieve the specific objectives. Minor room for improvement exists. See recommendations No`s:	Are the objectives still likely to the expected objectives?     Is there evidence that the action supports the implementation or development or change of partners' policy/actions?	
2-Low	The specific objectives (and outputs) will be partly achieved. Major room for improvement exists, with a major effect on increasing project management. See recommendations No`s:	Are there changes in awareness, knowledge, skills at institutional level?      Are there changes in organisa-	
1-Poor	The specific objectives (and outputs) won't be achieved. Extra necessary measures are urgently needed. See recommendation No's:	tionorganisational capacity (skills, structures, resources)  The indicators for the specific development objective have been achieved.	

#### **Criterion 5: Definition of Impact**

"Potential positive and negative, primary and secondary long-term effects produced by the programme, directly or indirectly, intended or unintended." *Remark*: in this mid-term evaluation, only indications (stories of impact) possible.

Sub-criterion P.5.1. Individual Impact			
Scores	Definition Scores	Topic and item lists	
4-Excellent	A significant number of scholars/students/staff members has increased their knowledge and skills as result of the project. They use the newly required knowledge and skills. No Additional measures are not needed in the second	Scholars/Students/staff members from the project are embedded in society and economic life and are contributing significantly.	
3-Good	A significant number of scholars/students/staff members has increased their knowledge and skills as result of the project. They use the newly required knowledge and skills partly. Minor room for improvement exists in the second phase. See recommendations No`s:	<ul> <li>contributing significantly.</li> <li>Individual capacities of scholars/students are increased and they are using upgraded skills and knowledge in their jobs (ever outside of the university).</li> </ul>	
2-Low	A low number of scholars/students/staff members has increased their knowledge and skills as result of the project. They use the newly required knowledge and skills partly. Major room for improvement exists, with a major impact at individual level. See recommendations No`s:		
1-Poor	A low number of scholars/students/staff members has increased their knowledge and skills as result of the project. They don't use the newly required knowledge and skills. Extra necessary measures are urgently needed. See recommendation No's:		

Scores	Definition Scores	Topic and item lists
4-Excellent	Major departmental/university reforms are implemented as a result of the project and academic performance increased as a result of the project Additional measures are not needed.	<ul> <li>Added value of the project for the academic performance of the university</li> <li>PhD students and PhD holders         (VLIR-UOS scholarships) are embedded in the department and are implementing research.</li> <li>Increased number of publication in international refereed journals</li> <li>Increased number of PhD and MScholders as a result of the project.</li> <li>Policy changes at departmental/university level? Changes in behavior at departmental/university level?</li> <li>the extent to which the collaboration has sparked other departments</li> </ul>
3-Good	Major departmental/university reforms are planned as a result of the project and academic performance increased as a result of the project. Minor measures are needed. See recommendations No`s:	
2-Low	Major departmental/university reforms at university level are planned as a result of the project and academic performance did not increase substantially. Major measures are needed. See recommendations No`s:	
1-Poor	No departmental/university reforms are implemented or planned and academic performance did not increase. Extra necessary measures are urgently needed. See recommendation No`s:	

Sub-criterion P.5.3. Development Impact (impact on society)		
Scores	Definition Scores	Topic and item lists
4-Excellent	Policy development in society is based on project experiences and results. project experiences and results are used for new initiatives. Additional measures are not needed to increase impact	The extent to which the collaboration has raised interest of policy makers and academics, and how the partner univer- sity is called upon or is pro-actively de-
3-Good	Project experiences and results are known in the broader society but have not yet caused new initiatives. Minor additional efforts are needed to increase impact. See recommendations No`s:	veloping collaboration models that could be fed into policy advice  The extent of the activities developed with local or regional stakeholders, contributing to the economic and social de-
2-Low	Project experiences and results are known in the broader society but have not yet caused new initiatives. Major additional efforts are needed to increase impact.	velopment     Added value of the project for the role of the university as a development ac-
1-Poor	Project experiences and results are known in the broader society. Extra necessary measures are urgently needed. See recommendation No's:	tor: the extent to which the collaboration has led to joint developmental activities or similar collaborative models at the regional level

#### Criterion 6: Definition Sustainability.

"Sustainability is the continuation of benefits from a development intervention after major development assistance has been completed, the probability of continued long-term benefits, and the resilience to risk of net benefit flows over time."

Scores	Definition Scores	Topic and item lists
4-Excellent	Academic sustainability is guaranteed or will be guaranteed in the second phase. Measures are identified and will be implemented at the second phase. Additional measures are not needed.	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 collabora-
3-Good	Academic sustainability will be guaranteed in the second phase. Measures are partly identified and will be implemented at the second phase. Minor additional efforts are needed to increase sustainability. See recommendations No`s:	tion models that could be fed into policy advice  The extent of the activities developed with local or regional stakeholders, contributing to the economic and social development
2-Low	Measures for academic sustainability are in the process of identification. Major additional efforts are needed to increase sustainability. See recommendations No`s:	Added value of the project for the role of the university as a development actor: the extent to which the collaboration has led to joint de- velopmental activities or similar collaborative
1-Poor	Academic sustainability will not be guaranteed in the second phase. Extra necessary measures are urgently needed. See recommendation No`s:	<ul> <li>models at the regional level</li> <li>Are individual academics committed to continue to work within the department.</li> <li>Joint projects</li> <li>Strengths and weaknesses of the department in terms of institutionalizing the collaboration</li> <li>Intensification and/or formalization of interuniversity consultations (North-South and South-South)</li> <li>Measures are taking for staff retention of trained staff.</li> </ul>

Sub-criterion P.6.2. Financial Sustainability						
Scores	Definition Scores	Topic and item lists				
4-Excellent	Financial sustainability is guaranteed or will be guaranteed in the second phase. Measures are identified and will be implemented at the second phase. Additional measures are not needed.	financial viability     incorporation of costs into the budget of the partner university     other sources of finance —				
3-Good	Financial sustainability will be guaranteed in the second phase. Measures are partly identified and will be implemented at the second phase. Minor additional efforts are needed to increase sustainability. See recommendations No's:	Ability to attract external funds     co-funding by the partner university (matching funds)     Joint new projects (non project-funding)				
2-Low	Measures for financial sustainability are in the process of identification. Major additional efforts are needed to increase sustainability. See recommendations No`s:					
1-Poor	Financial sustainability will not be guaranteed in the second phase. Extra necessary measures are urgently needed. See recommendation No`s:					

## 5.2. Mission Programme & List of People consulted

#### **Meetings with Flemish Stakeholders**

Tuesday, Dec. 19, 2017:

- Prof. Ludwig Triest (P3)

Thursday, Dec. 21, 2017:

- Prof. Anselme Derese (P4)
- Prof. Veerle Fievez (P2)
- Prof. Peter Bossier (Programme Coordinator)
- Prof. Martin Valcke

Friday, Dec. 22, 2017:

- Dr. Jean Dhont (Programme coordination)
- Valerie Henrist (UCOS)

Monday, Febr. 17, 2018:

- Prof. Gerrit Janssens (P1)

## Mission Programme – Vietnamese Stakeholders

	Morning	Afternoon
Sunday, Jan. 21, 2018	Travel to Hué and evaluation team m	
Monday, Jan. 22  Tuesday, Jan. 23	Opening Interview – Programme level: - Prof Nguyen Van Toan, LC - Prof Hoang Huu Hanh, PM - Prof Mr. Truong Quy Tung - Prof, Le Duc Ngoan - Prof. Nguyen Van Hop Interview – P2:	Interviews – P1: - Prof Le Manh Thanhj - Prof Hoang Huu Hanh - Prof Le Van Thuyet - Prof Tran Dao Dong - Dr. Hoang Tinh Bao - Dr. Vo Viet Minh Nhat
	<ul> <li>Prof Le Duc Ngoan</li> <li>Prof Le Dinh Phung</li> <li>Dr. Nguyen Ngoc Phuoc</li> <li>Le Van Bao Duy (PhD)</li> </ul> Lab visits	<ul> <li>Prof Nguyen Van Hop</li> <li>Dr. Duong Van Hieu</li> <li>Dr. Hoang Thai Long</li> <li>Dr. Luong Quang Doc</li> <li>Dr. Tuan</li> <li>Lab visits</li> </ul>
Wednesday, Jan.24	Interview – P4:  - Professor. Tam  - Dr Nguyen Minh Tam  - Mr. Ho Anh Hien  - Ms. Nguyen Thi Hoa  - Ms. To Quynh Anh  - Dr. Toan  FMC visit	Focus Groups - Stakeholders: PhD and MSc studetns + short training beneficiaries:  - P2: Mr. Nguyen Hai Quan, Mr. Le Van Bao Duy, Ms. Ho Le Quynh Chau;  - P3: Mrs. Phan Thi Thuy Hang; Mrs. Dang Thi Nhu Y, Mrs. Tran Thi Ai My; Mrs. Tran Thi Thanh Huong (MSc)  - P4: Ms. Nguyen Thi Hoa, Mr. Ho Anh Hien, Mr. Duong Quang Tuan (Innovation Grantee)
Thursday, Jan.25	Field trip: P2, P3. Visits to University Aquaculture site + visit of fishing village	Interview – NETWORK-evaluation: - Dr Nguyen Van Toan - Dr Nguyen Van Hue - Prof Do Thi Bich Thuy - Dr. Le Van Dan - Dr. Nhuyen Duy Quynh Tram - Dr. Nguyen Ngoc Phuoc
		Evening: Debriefing - Prof. Nguyen Quang Linh, President of Hue University - Prof. Madame Do Thi Xuan Dung, Vice President - Dr. Hoang Huu Hanh, Di- rector of IC dept. 0905885090, P1 deputy

		project director, Programme manager  - Mr. Le Van Toan, Local Coordinator of IUC programme  - Prof. Le Duc Ngoan, P2 (Agriculture)  - Prof Nguyen Van Hop, P3 team leader  - Dr Nguyen Minh Tam, P4 Team leader  - Ms. Thu, PSU Secretary		
Friday, Jan. 26	Travel to Hanoi and evaluation team meeting			
Saturday, Jan. 27 & Sunday, Jan 28	Report writing and evaluation team meeting			
Monday, Jan. 29	Meeting – Belgian Embassy: - Ivo Hooghe	Evening: Departure to Belgium		

#### 5.3. List of documents consulted

Project proposals- all projects & programme

Annual plans 2013, 2014, 2015, 2016, 2017 - all projects

Annual reports 2013, 2014, 2015, 2016 - all projects

Self-assessment report of all projects and programme level North and South.

Nguyen Van Nhã, Vu Ngoc Tú (2015). Higher Education Reform in Vietnam: Current Situation, Challenges and Solutions. In: VNU Journal of Science, Vol.31, No.4: 85-97

N.V. Varghese and Michaela Martin (2014). Governance reforms in higher education: A study in institutional autonomy in Asian Countries. Paris: Unesco

World Bank Group (2016). Vietnam 2035. Towards prosperity, creativity, equity and democracy.

## 5.4. KRA - Projects

Indicators	Baseline value	Achieved value (total phase 1)
Improvement of the governance expertise, governance tools and instruments at Hue University;	Staff, knowledge and practices at the start of the programme	A national forum for discussion on governance issues has been established.
Improvement of the curriculum development expertise, practices and research evidence at Hue University;	Lecturers and scientific staff at the level at start of the pro- gramme	Trained lecturers in innovative methods and tools through workshops. Awareness for scientific work through PhD scholars
Improvement of the Quality Assurance expertise, models and practices at Hue University.	Staff and man- agement at the level of the start of the pro- gramme	Department for Quality Assurance established with dedicated manage- ment and staff
KRA-5: 3 PhD completed	0	2 PhD candidates + 2 PhD students
KRA-5: 1 short training on University management	0	3 training sessions
KRA-5: Course on Academic English at 2 levels	0	3 levels completed
KRA-5 6 workshops on Educational Innovation (one per year)	0	5 workshops + one shared with Erasmus + project NUTRISEA
KRA-5 2 workshops on Quality Assurance	0	4 workshops
KRA-5 1 short training on capacity building	0	2 training visits
KRA-6 : ICT equipment	0	2 PCs, 5 laptops, 1 server
KRA-6 Library equipment	0	Books and journals
KRA-7 3 short term (6 months and 2x12 months) scholarships funded by Erasmus Mundus (Lotus) and Erasmus+ (UAIC)	0	4 scholarships (6 + 12 + 12 + 3 months)

Key Result Areas	Indicators (quantitative and full descriptive data)	Baseline value	Initial target va- lue	Final total value (achieved)	Comment on the evolution (if any)
Research Related	Indicators				
	Articles in international peer reviewed journals	0		1	
KRA 1: Research	Articles in national peer reviewed journals	0	5	0	PhD students focus to publish in interna- tional peer reviewed journals
	Conference proceedings (full paper)		4	0	
	Conference abstracts	0		6	
Capacity Related I	ndicators				
1/DA 0 T	Courses/training programmes developed	0	3	1	ITP course
KRA 2. Teaching	Laboratory manuals	0	1		
	Research protocols	0	2	3	
	Bsc.	0	20	27	
KRA 5: Human re-	Msc.	0	8	2	
sources develop-	Phd.			3	
ment	Training in Belgium (technical, adm,)	0	4	4	
	Computer Rooms				
KRA 6: Infrastructure Management	Laboratories			2	Two sets of equip- ment for aquaculture research, and live- stock environment re- search
	Other	0	3		
Extension Related Indicators					
KRA 3: Extension and outreach	Leaflets, flyers or posters for extension	0	200	165	120 participants at the 4 workshops + 45 par- ticipants to the train- ing on dairy nutrition → all received handouts & other doc- umentation
	Workshop or training modules package	0	4	4	

Key Result Areas	Indicators (quantitative and full descriptive data)	Baseline value	Initial target va- lue	Final total value (achieved)	Comment on the evolution (if any)
Research Related	Indicators				
	Articles in international peer reviewed journals			1	
	Articles in national peer reviewed journals				
	Conference proceedings (full paper)				
	Conference abstracts				
	Chapters in books (based on peer review)				
KRA 1: Research	Books with international distribution (author or editor)				
	Working/technical papers/popularizing literature/articles in national journals, electronic journals etc.				
	Conference contributions (posters, lectures)			10	
	Patents.				
	Other				
Capacity Related I	ndicators		T		
	Courses/training programmes developed				
	New or substantially updated curriculum				
	Textbooks development				
KRA 2. Teaching	Learning packages developed (distance learning, CD-ROM etc.)				
	Laboratory manuals			1	
	Excursion guides				
	Accreditation (labs, programmes etc)				
	Other				
	New institutional procedures / policies				
KRA 4: Manage- ment	Lab or departmental management inputs				
	Systems development (e-management, software etc.)				
l	Research protocols				

Campaigns etc.		Awareness, sensitisation			
Sec.		campaigns etc.			
KRA 5: Human resources development    Moc.   Moc.   10   10   10   10   10   10   10   1		Business plan			
KRA 5: Human resources development    Msc.   Phd.   3   3		Other			
KRA 5: Human resources development  Phd. 9re-doc				12	
Sources development  Pre-doc Training in Belgium (technical, adm,) Other  Computer Rooms  S labtops provided  Equipment for research and education was newly acquired and updated updated and updated and updated updated and updated upda		Msc.		10	
ment  Training in Belgium (technical, adm,)  Other  Computer Rooms  Laboratories  KRA 6: Infrastructure Management ture Management  Libraries  Classrooms Libraries  Clher  Clher  Clher  Clher  Classrooms Libraries  Clher  Clher  Classrooms Libraries  Clher  Classrooms Libraries  Classrooms Libraries  Cher		Phd.	3		
Training in Belgium (technical, adm,) Other  Computer Rooms  Laboratories  KRA 6: Infrastructure Management ture Management Libraries  Other  Flemish travel grants Flemish PhDs Other PhDs Spin off projects other  Extension Related Indicators  KRA 3: Extension and outreach  KRA 3: Extension and outreach  An aluaculture outdoor experiment room established  Flemish florational resources/opportunities  Flemish travel grants  Flemish revel grants  Flemish PhDs Other PhDs Spin off projects  Other  The phose of the phose of the projects of the phose of the phos	· ·	Pre-doc			
KRA 6: Infrastructure Management  KRA 6: Infrastructure Management  Laboratories  Classrooms  Libraries  Classrooms  Libraries  Classrooms  Libraries  Classrooms  Libraries  Telemish travel grants  KRA 7: Mobilisation of additional resources/opportunities  Flemish PhDs  Other Dynamic Management  Telemish PhDs  Other Dynamic Management  Telemish PhDs  Other PhDs  Spin off projects  The PhD granted by LOTUS fund for 12 months  Extension Related Indicators  KRA 3: Extension and outreach  Manuals or technical guides  Workshop or training modules package  Audio visual extension materials  Consultancy  Policy advice/papers  Telujoment for research and education was newly acquired and updated  An aquaculture out-door experiment room established  1 PhD granted by LOTUS fund for 12 months  The PhD granted by LOTUS fund for 12 months  One workshop, Training course: 5 at HUS  Audio visual extension materials  Consultancy  Policy advice/papers	THOIR .				
KRA 6: Infrastructure Management ture Management    KRA 7: Mobilisation of additional resources/opportunities    Flemish travel grants		Other			
Laboratories  KRA 6: Infrastructure Management  Classrooms Libraries  Other  Classrooms Libraries  An aquaculture outdoor experiment room established  Flemish travel grants  Flemish PhDs Other PhDs Spin off projects Other PhDs Spin off projects  Other  Classrooms  Flemish travel grants  Flemish PhDs Other PhDs Other PhDs Other PhDs Spin off projects  I PhD granted by LOTUS fund for 12 months  Extension Related Indicators  Extension Related Indicators  KRA 3: Extension Manuals or technical guides  Workshop or training modules package Audio visual extension materials Consultancy Policy advice/papers  I PhD Granted by COTUS fund for 12 months  One workshop, Training course: 5 at HUS  Audio visual extension materials Consultancy Policy advice/papers		Computer Rooms			
Libraries	KRA 6: Infrastruc-	Laboratories			search and education was newly acquired
Consultancy	ture Management	Classrooms			
Cother   C		Libraries			
KRA 7: Mobilisation of additional resources/opportunities  Flemish PhDs Other PhDs Spin off projects other  Leaflets, flyers or posters for extension and outreach  KRA 3: Extension and outreach  KRA 3: Extension and outreach  KRA 3: Extension and outreach  Manuals or technical guides  Workshop or training modules package  Audio visual extension materials Consultancy Policy advice/papers  Flemish PhDs Other  1 PhD granted by LOTUS fund for 12 months  CONE Workshop or training modules Flemish PhDs Other PhDs Other PhDs  A University of the projects Other PhDs Other Ph		Other			door experiment room
tion of additional resources/opportunities  Other PhDs Spin off projects  Other  I PhD granted by LOTUS fund for 12 months  Extension Related Indicators  KRA 3: Extension and outreach  KRA 3: Extension and outreach  Audio visual extension materials Consultancy Policy advice/papers  Other PhDs  I PhD granted by LOTUS fund for 12 months  One workshop, Training course: 5 at HUS		Flemish travel grants			
resources/opportunities  Spin off projects  other  I PhD granted by LOTUS fund for 12 months  Extension Related Indicators  Leaflets, flyers or posters for extension  Manuals or technical guides  Workshop or training modules package  Audio visual extension materials  Consultancy  Policy advice/papers		Flemish PhDs			
tunities  Spin off projects  other  the projects  other  The pranted by LOTUS fund for 12 months  Extension Related Indicators  Leaflets, flyers or posters for extension  Manuals or technical guides  Workshop or training modules package  Audio visual extension materials  Consultancy  Policy advice/papers  The projects  1 PhD granted by LOTUS fund for 12 months  One workshop, Training course: 5 at HUS  One workshop, Training course: 5 at HUS		Other PhDs			
Extension Related Indicators  KRA 3: Extension and outreach  KRA 3: Extension Audio visual extension materials  Consultancy Policy advice/papers		Spin off projects			
KRA 3: Extension  Manuals or technical guides  Workshop or training modules package  Audio visual extension materials  Consultancy Policy advice/papers					LOTUS fund for 12
KRA 3: Extension and outreach  Manuals or technical guides  Workshop or training modules package  Audio visual extension materials  Consultancy Policy advice/papers	Extension Related	Indicators	 		
KRA 3: Extension and outreach  Workshop or training modules package  Audio visual extension materials  Consultancy Policy advice/papers  One workshop, Training course: 5 at HUS					
KRA 3: Extension and outreach  Audio visual extension materials  Consultancy  Policy advice/papers  Consultancy  Consultancy  Policy advice/papers		Manuals or technical guides			
Consultancy Policy advice/papers				6	Training course: 5 at
Policy advice/papers		Audio visual extension materials			
		Consultancy			
		Policy advice/papers			
		Other			

Key Result Areas	Indicators (quantitative and full descriptive data)	Baseline value	Initial target va- lue	Final total value (achieved)	Comment on the evolution (if any)
Research Related	Indicators				
	Articles in international peer reviewed journals	0		3	Publishing articles in international is a long-term process. 3 PhD students of project are preparing their manuscripts to publish in international peer reviewed journals.
KRA 1: Research	Articles in national peer reviewed journals	0		19	19 articles published in national peer reviewed journals reflect the capacity improvement of lecturers. This achievement is also a key component to contribute in policy making for FM development in Vietnam.
	Conference proceedings (full paper)	0		1	1 lecturer won the 3 <sup>rd</sup> prize for his oral presentation at a national conference.
	Conference abstracts	0		4	3 PhD students had successful oral presentations in inter- national conferences.
	Conference contributions (posters, lectures)	0		2	
Capacity Related I	ndicators				
	Courses/training programmes developed	2		14	The increase of training programmes in FM is essentials for development a high-qualified primary care physicians.
KRA 2. Teaching	New or substantially updated curriculum	1		4	Two new curriculums for undergraduate and one new 3-month CME curriculum for healthcare providers are important success in phase 1 to promote the role of FM in the training system in Vietnam

	Textbooks development	0		8	Developing and publishing textbooks in FM is core element to reflect the achievements in training and capacity improvement of lecturers
	Learning packages developed (distance learning, CD-ROM etc.)			2	
	New institutional procedures / policies	0		3	The 2 new policies are extremely important for the development and expansion of FM in Vietnam
	Lab or departmental management inputs	0		1	Skill lab unit estab- lished for practical training in FM
KRA 4: Manage- ment	Systems development (e-management, software etc.)	0		2	Website and EMR system are used in the management of Family medicine clinic and the network of commune health Centres.
	Research protocols	0		10	
	Phd.	0	1	3	
	Training in Belgium (technical, adm,)	0		1	
	Computer Rooms				
KRA 6: Infrastructure Management	Laboratories	0		1	A skill lab established for practical training in FM
_	Other				Providing equipment to the network of commune health Centres.
KRA 7: Mobilisa- tion of additional	Flemish travel grants			8	
resources/oppor- tunities	Flemish PhDs	0		3	
Extension Related Indicators					
	Workshop or training modules package	0		11	Organising workshops and short training courses contribute to capacity improvement of primary health care workers and strengthening of the network of commune health Centres.

#### **ABOUT VLIR-UOS**

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

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

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

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## Management response to mid-term evaluation

Multidisciplinary cooperation for innovative education & research at Hué University & Hué Province - 2018

## **Programme level**

#### **General appreciation**

The draft report was circulated among Local and Flemish project leaders; critical remarks were collected. The evaluation report was discussed by the Flemish coordinator and the evaluators team on March 23.

During the JSCM (April 2018), each Local project leader was given the opportunity to describe how adequate responses on the main recommendations will be incorporated in the 2nd phase project plans.

Project team members appreciated the thorough and critical assessment of their past efforts. Recommendations are largely endorsed and are believed to contribute to improving main and secondary project lines of the 2nd phase plans.

Recommendation 1:	Creating a research unit (Centers of Excellence) within project 2 and project 3 bringing together PhD researchers and other staff members with a high interest in research and stimulate them to write joint research proposals and implement common research in order to achieve the objective of implementing multidisciplinary research.	
<b>Management Response</b> (Agree, partially agree, disagree):	partially agree	
If recommendation is rejected or partially accepted, report reasons:	agreed, provided it can be fitted in the budget and aligned with university and faculty initiatives	
Actions Planned /Actions taken + timeframe	(action finalised) Implementation stage (not started, underway, completed	
an ad hoc mixed P2/P3 working group will impler activities	ment the joint research not started	

Recommendation 2:	activities should be developed to transfer knowledge and skills from P1 to the other projects. The results of the transfer of knowledge and skills should be added as IR's into the respective projects.
	as it is into the respective projects.

<b>Management Response</b> (Agree, partially agree, disagree):	agree
If recommendation is rejected or partially accepted, report reasons:	
Actions Planned /Actions taken + timeframe (	(action finalised) Implementation stage (not started, underway, completed
PhD students are recruited at the project depa ownership of new developments by the constitue	

Recommendation 3:	Upscale successful innovative educational ideas funded by the innovation fund to institutional practices
<b>Management Response</b> (Agree, partially agree, disagree):	agree
If recommendation is rejected or partially accepted, report reasons:	
Actions Planned /Actions taken + timeframe (	(action finalised) Implementation stage (not started, underway, completed
Educational Innovation outcomes will feed dire shops; workshops will actively address faculty te	

Recommendation 4:		e more stakeholders in order to d expertise to the broader soci-
<b>Management Response</b> (Agree, partially agree, disagree):	agree	
If recommendation is rejected or partially accepted, report reasons:		
Actions Planned /Actions taken + timeframe (action finalised)		Implementation stage (not started, underway, completed
In most cases, the focus during the 1 <sup>st</sup> phase was on capacity building (mostly through PhD) and generating new knowledge while the 2 <sup>nd</sup> phase would concentrate on the transfer of that knowledge. Project activities in Ph2 are designed accordingly		underway

Recommendation 5:		red skills and knowledge are ff members of the member uni-
<b>Management Response</b> (Agree, partially agree, disagree):	agree	
If recommendation is rejected or partially accepted, report reasons:		
Actions Planned /Actions taken + timeframe	(action finalised)	Implementation stage (not started, underway, completed
analogous to R4 (above)		

Recommendation 6:	increase the scholarsh	ip time in Belgium
<b>Management Response</b> (Agree, partially agree, disagree):	partially agree	
If recommendation is rejected or partially accepted, report reasons:	agree provided paralle	el funding can be secured
Actions Planned /Actions taken + timeframe (action finalised)		Implementation stage (not started, underway, completed
just as in Phase 1, parallel funding will be sourced which may eventually allow for longer scholarship time		underway
the problem is twofold: short stay in Belgium and an overload of other responsibilities when at the home institute. Ideally, PhD researchers should be exempted from too high teaching or administrative burdens but this often affects salary. This issues can only be resolved via adjustments in institutional policy		not started

Recommendation 7:	increase the outreach the second phase for a	and dissemination activities in all projects.
<b>Management Response</b> (Agree, partially agree, disagree):	agree	
If recommendation is rejected or partially accepted, report reasons:		
Actions Planned /Actions taken + timeframe (	(action finalised)	Implementation stage (not started, underway, completed
see R4		

Recommendation 8:	lum development or to be found. It is advisabl	evidence for innovative curricu- eaching methodology could not e that new research and teach- nored at institutional level
<b>Management Response</b> (Agree, partially agree, disagree):	partially agree	
If recommendation is rejected or partially accepted, report reasons:	implementation is not projects	entirely within the scope of the
Actions Planned /Actions taken + timeframe (action finalised)		Implementation stage (not started, underway, completed
The PhD researcher involved in the projects are being prepared to incorporate their acquired knowledge into their teaching.  However, only project team members that have an significant teaching assignment will impact on this recommendation		underway

Recommendation 9:	For P4, the major challenges for the second phase of the project are the links between the FMC and CHC's. Upgrading the quality of services delivered to patients at CHC remains an important challenge
<b>Management Response</b> (Agree, partially agree, disagree):	agree

If recommendation is rejected or partially accepted, report reasons:		
Actions Planned /Actions taken + timeframe	(action finalised)	Implementation stage (not started, underway, completed
This issue is at the core of the Phase 2 project a	activities	

Recommendation 10:		ks between P1 and P4 through novative trainings and educa-
<b>Management Response</b> (Agree, partially agree, disagree):	agree	
If recommendation is rejected or partially accepted, report reasons:		
Actions Planned /Actions taken + timeframe (	(action finalised)	Implementation stage (not started, underway, completed
Analogous to R2	_	

Recommendation 11:	The reporting formats and requirements are perceived as time consuming and very efficient. It would be advisable to revise these formats and avoid double reporting in financial (Model 1D) and narrative reports
<b>Management Response</b> (Agree, partially agree, disagree):	agree
If recommendation is rejected or partially accepted, report reasons:	
Actions Planned /Actions taken + timeframe (	(action finalised) Implementation stage (not started, underway, completed
This is VLIR territory	underway

Recommendation 12:	More attention should be paid to the development of the logical framework and the formulation of good and robust indicators.
<b>Management Response</b> (Agree, partially agree, disagree):	agree
If recommendation is rejected or partially accepted, report reasons:	
Actions Planned /Actions taken + timeframe	(action finalised) Implementation stage (not started, underway, completed
The revised VLIR formats based on the Theory size the identification and formulation of adequate	

# **Project 1: Institutional strengthening**

#### Follow-up on recommendations

Recommendation 1:		
<b>Management Response</b> (Agree, partially agree, disagree):	Agree	
If recommendation is rejected or partially accepted, report reasons:		
Actions Planned /Actions taken + timeframe (	(action finalised)	Implementation stage (not started, underway, completed
The topics of the two doctoral research students have been chosen that their practical work is situated in two colleges (one in Agriculture and Forestry, one in the Medicine faculty). In such a way both students will be in permanent contact with doctoral students from these faculties.		not started

## **Project 2: Livestock and Aquaculture**

Recommendation 1:	project 2 and project 3 and other staff members stimulate them to write ment common research imple-menting multidistainability point of view units is advisable. One lated by the project teat and complementate raction between rab ronment, common Physides the 'delivery of Phuman resources and research should also a	ch unit (Center of Excellence) within 3 bringing together PhD researchers is with a high interest in research and it joint research proposals and implesh in order to achieve the objective of sciplinary research. Also from the suswisce below), the creation of such it of the possibilities has been formulars 2 and 3: "Given the mutual interry expertise in P2 and P3, on the inbitfish polyculture and the lake envi-D research could be developed. BephD degrees, the combination of the facilities of P2 and P3 within this PhD allow to set the frame for future multiple in "aquatic food and environment".
<b>Management Response</b> (Agree, partially agree, disagree):	Partially agree	
If recommendation is rejected or partially accepted, report reasons:	There are certainly links between P2 en P3 and these will be more exploited in Phase II (see methodology). Concerning the 'centre of excellence' → some grouping of departments within the same (broa) research topic has been initiated and are currently kicking off. As such, these intitiatives first will be further supported rather than developing a new excellence centre.	
Actions Planned /Actions taken + timeframe (action finalised)		Implementation stage (not started, underway, completed
Develop a joint/common PhD project between P2 and P3		Not started/For second phase

Recommendation 5:	R5. Although a lot of progress has been made on QA, curriculum development awareness and university governance issues, attention should be paid to ensure that the acquired skills and knowledge are transferred to (key) staff members of the member universities. The decision to recruit three new PhD students from the member universities to increase the capacity on the issues of curriculum development and quality assurance has been a very good decision. But it seems necessary to develop activities to ensure that the research results of these PhD students will be transferred and implemented in more than one member university. From the sustainability point of view, it would be advisable that these PhD students, after having graduated, become key players in their domain, not only in their own member university, but at central level and in support of the member universities. Besides the PhD research, mechanisms and activities should be developed in order to engage staff and create change in the fields of curriculum development and quality assurance in the member university. It is advisable that this change should start with the three other projects of the programme, in particular P2, P3.	
<b>Management Response</b> (Agree, partially agree, disagree):	Agree	
If recommendation is rejected or partially accepted, report reasons:		
Actions Planned /Actions taken + timeframe (action finalised)		Implementation stage (not started, underway, completed
Formulate strong research groups		Not started/For second phase

Recommendation 6:	R6. In order to minimize the delays in PhD-research, it would be interesting to increase the scholarship time in Belgium.	
Management Response (Agree, partially agree, disagree):	(not relevant) – this has been done for the P2-PhD students: all were longer than 18 months in Belgium, with external funding.  Also for phase 2 a somewhat extended period is foreseen for the PhD student (21 months in Belgium).	
If recommendation is rejected or partially accepted, report reasons:	P2 PhD students have no delay in their PhD study	
Actions Planned /Actions taken + timeframe (action finalised)		Implementation stage (not started, underway, completed

Recommendation 7:	R7. It would be recommendable to increase the outreach and dissemination activities in the second phase for all projects. New (research) initiatives should be taken to increase the sustainability of the programme.	
<b>Management Response</b> (Agree, partially agree, disagree):	agree	
If recommendation is rejected or partially accepted, report reasons:		
Actions Planned /Actions taken + timeframe (action finalised)		Implementation stage (not started, underway, completed
Discuss with the feeding companies on the possibility of using tofu by-products in commercial feed production		Not started/second phase
Organise dissemination workshops		Underway

Spin off project on rabbit fish	Underway

Recommendation 8:	R8. Although the quality of teaching has been improved as a result of the programme, the progress made, has been achieved at individual level. Specifically, in project 2 and 3 the evidence for innovative curriculum development or teaching methodology could not be found. It is advisable that new research and teaching skills become anchored at institutional level (member university, faculties, departments) through adapting the existing curricula in line with the capacities of the PhD scholars and to introduce new teaching methodologies at faculty level (through workshops and new policies).	
<b>Management Response</b> (Agree, partially agree, disagree):	Agree	
If recommendation is rejected or partially accepted, report reasons:		
Actions Planned /Actions taken + timeframe (action finalised)		Implementation stage (not started, underway, completed
Adapting the existing curricula in line with the capacities of the PhD scholars and to introduce new teaching methodologies at faculty level		Not started/second phase

# **Project 3: Coastal ecosystem and natural resources** management

Recommendation 1:		nit within P2 and P3 and multi- arch on 'aquatic food and envi-
<b>Management Response</b> (Agree, partially agree, disagree):	Partially agree	
If recommendation is rejected or partially accepted, report reasons:	Creating a joint unit is a challenge; specific contributions from P3 to P2 remain possible in PhD research	
Actions Planned /Actions taken + timeframe (action finalised)		Implementation stage (not started, underway, completed
SO1 : Synergy at department and university level		Underway
IR1 and activities 1.2 : PhD study including aquaculture areas		Not started
IR2 and activities 2.2 and 2.3: Integrated environmental monitoring program (EMP) with focus on aquaculture and lagoon environment		Not started
IR5 and activity 5.3: Workshop and training courses in cooperation with P2		Not started

Recommendation 2:	Transfer knowledge and skills from P1 to other projects
<b>Management Response</b> (Agree, partially agree, disagree):	Partially agree

If recommendation is rejected or partially accepted, report reasons:	Transferable knowled	ge must remain feasible
Actions Planned /Actions taken + timeframe (action finalised)		<b>Implementation stage</b> (not started, underway, completed
IR4 and activity 4.1 : upgrading research-based courses		Not started
IR4 and activities 4.2 and 4.3 : awaiting input from P1 for new teaching and evaluation methods		Not started

Recommendation 3:	Initiate educational po	olicies (P1)
<b>Management Response</b> (Agree, partially agree, disagree):	Not directly applicable	e to P3
If recommendation is rejected or partially accepted, report reasons:	Not directly applicable to P3	
Actions Planned /Actions taken + timeframe (action finalised)		Implementation stage (not started, underway, completed
Not applicable to P3 (awaiting action from P1)		Not applicable to P3

Recommendation 4 :	Involve stakeholders broader society	and transfer knowledge to
<b>Management Response</b> (Agree, partially agree, disagree):	Agree	
If recommendation is rejected or partially accepted, report reasons:		
Actions Planned /Actions taken + timeframe (	action finalised)	Implementation stage (not started, underway, completed
SO2: sustainability through research and training itiated already in Phase I	, incl. stakeholders, in-	Underway
IR5 and activities 5.1, 5.2, 5.3 and 5.4: worksholing data from EMP with DONRE	ps, meetings and shar-	Not started

Recommendation 5:	Create change in curriculum development and quality assurance	
<b>Management Response</b> (Agree, partially agree, disagree):	Partially agree	
If recommendation is rejected or partially accepted, report reasons:	Transferable knowledge must remain feasible	
Actions Planned /Actions taken + timeframe (action finalised)		Implementation stage (not started, underway, completed
IR4 and activity 4.3 :awaiting input from P1		Not started

Recommendation 6:	Stimulate a research attitude of young researchers

<b>Management Response</b> (Agree, partially agree, disagree):	Agree	
If recommendation is rejected or partially accepted, report reasons:		
Actions Planned /Actions taken + timeframe (	<b>Implementation</b> started, underway	• •
IR3 and all activities therein: postdoc research a team in Phase I will continue the expertise through		

Recommendation 7:	Increase outreach, d crease sustainability o	issemination activities and infrogramme
<b>Management Response</b> (Agree, partially agree, disagree):	Agree	
If recommendation is rejected or partially accepted, report reasons:		
Actions Planned /Actions taken + timeframe (action finalised)		<b>Implementation stage</b> (not started, underway, completed
SO2: sustainability through research and training		Not started
IR3 and activities 3.5 and 3.9 for postdocs (PhDs of Phase I): International mobility for cooperation, joint research and organise/attend meetings		Underway
IR5 and all activities therein		Not started

Recommendation 8:	New teaching skills and adapting curricula	
<b>Management Response</b> (Agree, partially agree, disagree):	Partially agree	
If recommendation is rejected or partially accepted, report reasons:	Transferable knowledge must remain feasible	
Actions Planned /Actions taken + timeframe (action finalised)		Implementation stage (not started, underway, completed
IR4 and activity 4.3 :awaiting input from P1		Not started

Recommendation 9, 10 and 11: Not applicable to P3
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Recommendation 12:	TOC with specific objectives reflecting the out-come level of the programme	
<b>Management Response</b> (Agree, partially agree, disagree):	Agree	
If recommendation is rejected or partially accepted, report reasons:		
Actions Planned /Actions taken + timeframe (	(action finalised) Implementation stage (not started, underway, completed	

GO: Environmental awareness is enhanced for different groups of audience: BSc and alumni, MSc and alumni, university staff, various stakeholders at local and regional level, even at higher authority levels (DONRE) to obtain sustainability through future projects and potential cooperation in monitoring	
IR5 and activity 5.4: Environmental data sharing from EMP with the DONRE and local authority will be done to obtain sustainability on longer term	Not started

# Project 4: Rural health care

Recommendation 1:	challenges for the second between the FMC and Cl vices delivered to patier challenge. This should be second phase of the prosynergy with the World B	iteria good to excellent. The major d phase of the project are the links HC's. Upgrading the quality of sertes at CHC remains an important e given major attention during the oject. Attention should be paid to tank Health Professions Education of in order to maximize the impact d double funding.
<b>Management Response</b> (Agree, partially agree, disagree):	Agree	
If recommendation is rejected or partially accepted, report reasons:		
Actions Planned /Actions taken + timeframe (action finalised)		Implementation stage (not started, underway, completed
Organise workshops, seminars to update knowledge and skills for health care workers		Underway
Invite some DHCs and CHCs to participate in the project an provide technical support to these partners		Underway
Pilot some best practice models among the network of selected DHCs and CHCs focusing on chronic non-communicable disease management		Not started/ For Phase 2
Provide health education and self-management support program at CHCs to increase the awareness of population about the availability and quality of primary health services		Not started/ For Phase 2
Conduct interventional study on health care provision and management in primary care in order to provide evidence for policy makers to strengthen and expand the scope of work of grassroots level		Not started/ For Phase 2

Recommendation 2:	There is room for developing stronger links between P1 and P4 through the development of innovative Trainings and educational methods (e.g. e-learning, Teleconferencing and telemedicine).	
<b>Management Response</b> (Agree, partially agree, disagree):	Agree	
If recommendation is rejected or partially accepted, report reasons:		
Actions Planned /Actions taken + timeframe (	(action finalised) Implementation stage (not started, underway, completed	

Continue working closely together with P1 in development and maintain the E-learning system as well as in implementation of other innovative training methods	
Develop a joint interventional research project between P1 and P4 within the studying of one PhD	Not started/ For Phase 2