Mid-term evaluation of the VLIR-UOS Institutional University Cooperation (IUC) programme in the Universidad Nacional Agraria La Molina (UNALM), Peru

Final Report

VLIR-UOS

Julie Carpenter
Education for Change Ltd.
17A Christopher Street,
London EC2A 2BS,
United Kingdom
www.efc.co.uk

Carlos Alberto Vigil Taquechel
Consultant on International Cooperation, Higher Education
and Project Management
Cofounder of Univercyt
http://www.univercyt.com/

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<td>Meg Goodman</td>
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**Abbreviations**

ANR  Asamblea Nacional de Rectores de las universidades de Perú
AP   Annual plan
BAN  National Agricultural Library
CONCYTEC Consejo Nacional de Ciencia, Tecnología e Innovación Tecnológica de Perú
CONEAU Consejo de Evaluación, Acreditación y Certificación de la Calidad de la Educación Superior Universitaria en Perú
CONSUAN Consejo Universitario Andino
CTG  Close the Gap
FDA  Fundacion para el Desarrollo Agrario
FINCYT Fondos para la Innovación, Ciencia y Tecnología
GDP  Gross domestic product
HE   Higher Education
HUB  Hogeschool-Universiteit Brussel
ICOS Institutional Coordinator for University Development Cooperation
ICT  Information and Communication Technologies (TICs)
IIAP Peruvian Amazon Research Institute
INIA Instituto Nacional de Innovacion Agraria
IPPP Identification Phase Partner Programme
IRD  UNALM Regional Development Centre (Instituto Regional de Desarrollo)
ISRL Institute for Sustainable Rural Livelihoods
IUC  Institutional University Cooperation
JSCM Joint Steering Committee Meeting
KRA  Key result area
LCA  Life-cycle assessment
KUL  Katholieke Universiteit Leuven
M&E  Monitoring and evaluation
OI   VLIR-UOS Own Initiative
OSI  Oficina de Sistemas Informáticos
PUCP Pontifical Catholic University of Peru
PSU  Project Support Unit
SUNESU Superintendencia Nacional de Educación Superior Universitaria
TOR  Terms of reference
UCLV Universidad Central ‘Marta Abreu’ de Las Villas
UG   Universiteit Gent
UIE  Unidad de Innovacion Educativa
UNALM Universidad Nacional Agraria La Molina
UNAP Universidad Nacional de la Amazonia Peruana
UNC  Universidad Nacional del Centro
VCA  Value chain analysis
VLIR-UOS Flemish Inter University Council – University Development Cooperation
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Foreword by the Team Leader

This evaluation commission has taken the position of ‘critical friend’ of the VLIR-UOS IUC Partnership Programme in general and of the IUC-UNALM programme, in particular, in this mid-term evaluation, with a view to highlighting evident challenges and areas of success, and suggesting changes in IUC-UNALM programme policy, emphasis or direction for consideration for Phase II.

At the start of Phase I the UNALM had no institutional experience of large-scale international cooperation initiatives, and little experience of cross-disciplinary collaboration; Phase I of the IUC-UNALM programme has, therefore, implemented in a context of (and stimulated) considerable institutional change. The IUC-UNALM programme has made significant contributions already to introducing innovation in the university’s education and training programmes, and delivered dramatically improved research, teaching and learning facilities and infrastructure, particularly through the institutional strengthening projects. The priority for UNALM in Phase II will be to build on these changes through greater institutional commitment to investment in human resources and openness to policy and procedural change, to capitalise on the challenges and opportunities afforded by the IUC-UNALM programme.

Two major and related challenges have persisted in the research projects: first, the academic and research model in Peru (and UNALM) is different in many respects to that in Belgium, and Flemish universities do not accept the UNALM Master’s as equivalent for direct progression to PhD candidacy; this was undoubtedly a factor contributing to the limited early interest among Flemish universities in engagement with the proposed partnership programme, leading to the disproportionately large role played by the Katholieke Universiteit Leuven (KUL) in the Flemish project teams. Secondly, the differences in the two academic and research models (UNALM and Belgian) contribute significantly to the slow uptake of PhD scholarship opportunities among UNALM academic staff and research students. Phase I has been dominated by the search for feasible ways to bridge these differences and develop sustainable research and teaching capacity through PhD research, and these issues remain largely unresolved as Phase II is under discussion.

The evaluation commission would like to express its appreciation to all of the individuals we met during the course of the evaluation, some of whom may not be listed in the annex to this report. The information, dialogue, and ideas shared with these individuals were instrumental in shaping our thinking on the current stage of the partnership programme, as well as the prospects for the future.

Julie Carpenter
Director and Principal Consultant
Education for Change Ltd.

Carlos Alberto Vigil Taquechel
Consultant on International Cooperation
Higher Education and Project Management
Executive Summary

Introduction

This is the final report of an external evaluation commission contracted by VLIR-UOS to undertake the mid-term evaluation of the VLIR-UOS Institutional University Cooperation (IUC) at the Universidad Nacional Agraria La Molina (UNALM).

The programme is led by the Katholieke Universiteit Leuven (KUL) and draws on limited expertise from three other Flemish universities and university institutes. The Pre-partnership Programme (PPP) began in 2008 and 2010 was Year 1 of the IUC-UNALM programme.

The context for the IUC-UNALM programme is a national higher education system that is being challenged by growing private sector involvement, that have triggered new reforming legislation with a strong focus on accreditation and quality; and UNALM’s core values of sustainable systems, natural resources, food security, human interaction and social justice, excellence, flexibility and responsiveness.

The objectives of the IUC-UNALM programme are:

**Academic overall objective:** develop, increase, consolidate and internationalise UNALM’s academic capacity in research, education, knowledge-transfer and technological-innovation in sustainable management of agro-ecosystems to generate leadership in the Peruvian rural sector by maximising the institutional impact.

**Development overall objective:** improving the food security, the local income, the stability and competitiveness of the agro-ecosystems and thus the overall livelihood situation of the local population through identification and remediation of key agronomic, socio-economic and environmental constraints of small scale family based agriculture in Peru.

IUC-UNALM programme had the following structure at the start of Phase I:

**Cluster 1: Research on sustainable management of agro-ecosystems**

**Project 1 (P1): Farming systems research** (with five sub-projects).

**Project 2 (P2): Development of value chains for biodiversity conservation and improvement of rural livelihoods** (with three sub-projects and one transversal project).

**Project 3 (P3): Agrarian innovation and management of participatory knowledge systems** (with one sub-project linked to sub-projects in P1 and P2).

Cluster 2: Education

**Project 4 (P4): Educational innovation in undergraduate and graduate programmes with emphasis on the sustainable management of agro-ecosystems and rural development.**

Cluster 3: Institutional capacity building and infrastructure development

**Project 5 (P5): Capacity building and infrastructure development of information and communication technologies (ICT), Library and Language Centre.**

**Project 6 (P6): Capacity building and infrastructure development of IRDs.**

**Project 7 (P7): Institutional change and logistic project support.**
Overview of programme implementation in Phase I

In implementation during Phase I the IUC-UNALM programme has made slow but largely positive progress towards the achievement of the programme’s overall goals. Constraints on programme implementation exist in three main areas:

- The IUC programme and project plans: there were weaknesses in the early planning of the IUC-UNALM programme, which was dominated by a few key individuals promoting ambitious project plans that were not necessarily fully endorsed or understood by wider project stakeholders or potential team members from UNALM and the Flemish universities; with the exception of KUL, there was limited early interest from Flemish universities in involvement; and limited direct involvement in programme implementation by Flemish project leaders or team members during Phase I. There have also been several early and critical changes in personnel among the UNALM Project Leaders, which has had an impact on project direction and progress.

- The UNALM institutional commitment and responses: UNALM authorities have shown a relatively slow institutional response to programme implementation, and coordination of the programme from the university side has not provided the level of programme leadership and coordination that dynamically reflects and represents UNALM’s concerns and strategic interests; UNALM staff and authorities lack experience in managing large, complex international cooperation programmes and as a consequence programme planning, implementation and management has been dominated by the Flemish coordinating partner.

- The existing model of academic research and education in UNALM: a number of factors have slowed progress towards generating concrete research results and PhDs in Phase I, including the non-recognition of Peruvian (and therefore UNALM) Master’s degrees as equivalent, thus complicating the routes to PhD candidacy; ongoing and renewed research activities are not considered a priority at UNALM for academic staff career development and UNALM has made limited investment in research or doctoral programmes, or research coordination and support; academic staff commonly supplement their incomes through more lucrative consultancy work and are therefore reluctant to fully engage in research activities; there is no requirement for academic staff to regularly write and publish research articles in internationally peer-reviewed journals; there is widespread lack of capacity in spoken and written English.

Summary of conclusions and recommendations

UNALM response at programme coordination level

The IUC-UNALM programme overall has been adversely affected by the lack of a strong and coherent response from UNALM to programme planning and leadership: the fundamental partnership nature of the IUC programme concept has been weakened and the programme has been driven too much by the Flemish partner (ie KUL).

**Recommendation 1**: An early opportunity should be found to open discussion with UNALM authorities on the appointment of a strong and engaged UNALM Programme Coordinator able to speak for the university and to devote sufficient time to IUC-UNALM leadership issues.

Constraints on IUC PhD development

The constraints on IUC-UNALM PhD development have resulted in frustratingly limited research results in Phase I. Some of the constraints are intractable and beyond the scope of the IUC-UNALM
to address. However, there are three areas where changes in the programme may have beneficial effects for Phase II.

**Greater clarity and simplicity around the route to PhD candidacy**

There are several routes to PhD candidacy, depending on starting points of potential candidates and the judgement of individual Flemish and local promoters, including formal pre-doctoral studies or other study periods in Belgium, and a lack of clarity overall about the process which seems likely to deter those UNALM staff and postgraduate students that may be considering their options on PhD studies outside Peru, or seeking external support. The preferred option of the Flemish Programme Coordinator depends upon potential candidates getting one or two research articles (in English) published in international peer-reviewed journals or getting a research paper (in English) accepted at an international scientific congress. This can be a lengthy process, and is more properly the outcome of successful PhD studies rather than an early input to getting accepted as a candidate.

**Recommendation 2:** Despite the evident challenges and different viewpoints within the IUC-UNALM programme teams, the IUC-UNALM programme Joint Steering Committee should seriously consider working to agree some form of pre-doctoral study in Belgium (funded entirely separately from any subsequent PhD scholarship) as the only route for all potential PhD candidates (academic staff or students), unless, of course, they are already internationally published authors and could be accepted directly by Flemish universities. The success of such considerations for the IUC-UNALM programme would depend upon greater commitment by UNALM authorities to improve the current policies and procedures in the UNALM for university support for doctoral candidates and scholars (e.g. releasing academic staff from teaching duties to study in Belgium, reducing teaching loads etc.)

**Increase PhD scholarship funding in the programme**

The IUC-UNALM programme currently uses a 12-month threshold for PhD studies in Belgium for budgeting purposes, and , which is below the VLIR-UOS IUC norms and likely to disincentivise potential candidates.

**Recommendation 3:** the IUC-UNALM programme should adopt the VLIR-UOS 16 month minimum study in Belgium during a sandwich PhD as a budget threshold and make this clear in any management guidelines and information emerging from the PSU.

**Take English language training for academics and potential PhD candidates seriously**

The IUC-UNALM programme faces an intractable problem of low English language capacity among potential and prospective PhD candidates and researchers involved in the projects. The Phase I contribution to addressing the problem was inadequate and has not yielded good results.

**Recommendation 4:** the Flemish and local Steering Committees should give serious consideration to building in some targeted actions in Phase II to improve English language capacity among academic staff and research students, assuming that appropriate Flemish university support can be identified.

**Simplifying programme administration and accounting**

IUC –UNALM programme regulations add unnecessary and inefficient complexity to programme and project administration by insisting on working on a full cost basis for allowances for board and lodging, local accommodation and travel expenses by IUC-UNALM project team members in Peru, instead of adopting the UNALM local per diem.
Recommendation 5: this practice should stop and the policy for the IUC-UNALM programme in Phase II should be to pay hotel accommodation (on presentation of the bill) where hotels are an option plus a modest per diem for expenses to be set by the PSU in line with UNALM rates.

Allocating scholarships funds to projects

At present, under the P7 “PhD incubator” element, scholarship money for the whole programme is paid out of P7 although the project team has not been able to do any ‘incubation’ activity as planned.

Recommendation 6: The IUC-UNALM programme in Phase II needs to prioritise the PhD scholarships in order to achieve the overall benefits of the programme, and scholarship funds in Phase II should be allocated to the relevant projects according to budgeted Annual Plans.

More active involvement of larger Flemish teams

The relative weakness of the IUC-UNALM partnership at programme level has not prevented some good cooperation and coordination between UNALM and Flemish teams at project level. However, the IUC-UNALM programme would benefit in Phase II from more active engagement and inputs from more members of the designated Flemish teams, offering UNALM project teams more opportunities that demand their use of and practice in English language, and opportunities to observe and take part in Belgian research practice.

Recommendation 7: in a restructured IUC-UNALM programme the Flemish and UNALM Steering Committees should consider ways to engage more and more active research team members in the programme, considering, for example, the involvement of Belgian Master’s or PhD students in the research projects through short field visits funded by the programme, or using such students for training and capacity building activities where UNALM capacity is weak or limited.

Involvement of more Flemish universities in the programme

The IUC-UNALM programme has been dominated by KUL (five out of seven of the projects have had Flemish Project Leaders in Phase I and active input in project teams from other Flemish universities has been limited. This is unusual in VLIR-UOS IUC programmes.

Recommendation 8: in a restructured programme in Phase II ways should be found to strengthen the involvement of other Flemish universities, for example, by selecting new Flemish Project leaders for the restructured projects.

Internationalisation

Internationalisation is not a strong element in the UNALM institutional approach and the impact of international cooperation on major activities of the university is limited. Participation by the UNALM in international research actions is based on isolated initiatives of individual academics and researchers.

Although it is argued that one of the main goals of the UNALM is to build its capacity to solve relevant problems in Peruvian society, these problems - sustainable agriculture, food security, food production, food chain, rural development, forestry, soil system, water management, environmental issues, etc - are among the most pressing global and regional priorities, especially in Latin America.

The IUC-UNALM programme, as the largest single international research and capacity building programme in the university, and intended to encourage South-South academic and research
linkages, offers an opportunity to develop a more coordinated and proactive approach to internationalisation in UNALM.

**Recommendation 9:** in Phase II measures should be taken to strengthen international outreach and raise the profile of internationalisation higher in the UNALM’s strategic thinking.

**Programme restructuring for Phase II**

**Recommendation 10:** the following suggestions about programme restructuring should be taken into consideration in the preparatory discussions for Phase II:

- Close Project 3 and Project 6 at the end of Phase I and re-distribute funds within the programme
- Consider the balance of research in the three main geographical ecosystems of Peru, and consider reorganising Project 1 into new projects
- Enhance and expand the research into watershed management as a critical underpinning of farming production in all three ecosystems in Peru
- Combine farming systems (Project 1) and value chain research (Project 2) into more coherent projects that will facilitate better synergies and sharing of resources
- In Project 5 make no further investment in the BAN (other than provision of ICT services and facilities as a part of the university network)
- Use Project 5 to address English language capacity using blended learning approaches (ICT-based systems and support as well as upgraded English language teaching and support).

**Addressing the UNALM human resource challenges in ICT**

The ICT infrastructure improvements introduced in Phase I P5 have the potential to transform the way the university works at all levels, both academically and administratively, if these improvements are managed and directed by a high-quality technical support team lead by an experienced professional (as Head of OSI). It is evident that the UNALM authorities have not to date fully appreciated the transformative nature of ICT development in a university, nor the need for recruiting and retaining top quality leadership.

**Recommendation 11:** VLIR-UOS should facilitate a short high-level visit by the new Rector, Vice-Rectors (Academic and Research) and Senior Administrative staff (HR, Finance, etc) to the Universidad Central ‘Marta Abreu’ de Las Villas (UCLV) in Cuba, where the recently completed IUC programme included successful and transformative ICT and ICT in Education components, led by a highly competent professional who commands the full support of the UCLV senior management.
1 Introduction

1.1 The VLIR-UOS Institutional University Cooperation (IUC) programme

The IUC programme is an inter-university cooperation programme of Flemish universities, focused on the institutional needs and priorities of partner universities in the South. The IUC programme is in principle demand oriented, and seeks to promote local ownership through the full involvement of the partner both in the design and in the implementation of the programme. The programme relates to only a few carefully selected partner universities in the South, hoping that synergy, added value and greater institutional impact can be achieved through the different IUC projects located in the same partner university.

Support is directed towards the institutional development of the partner university, the improvement of the quality of local undergraduate and postgraduate education, and the encouragement of South-South academic and research linkages. Each partnership consists of a coherent set of interventions geared towards the development of the teaching and research capacity of the university, as well as its institutional management.

Each partnership is broad in orientation, and includes the following:

- Different components (projects) make up the partnership.
- All projects are aimed at achieving maximum institutional impact.
- The activities organised in the context of the partnership can involve all constituent parts of the university.
- Apart from direct support for the improvement of education and research, the partnership can also contain projects that are aimed at improving the organisation, the administration and the management of the university as a whole.
- The identification of the fields of cooperation within the partner programme is in principle based on the partner university’s demands; these demands obviously can only be met in so far as the required expertise can be provided by the Flemish universities (demand driven approach).

The IUC management system is based on the following division of tasks:

- VLIR-UOS is responsible for the programming – including the selection of partner universities – monitoring and evaluation of the overall programme. VLIR-UOS is accountable to the Belgian government.
- The implementation of a partner programme is delegated to a Flemish university that functions as the coordinating university in Flanders. Administratively, this university of the Flemish coordinator is responsible for the day-to-day management of the programme implementation based on an agreement signed by the university and the VLIR.
- The university of the Flemish coordinator and the South partner university have the responsibility of jointly managing the implementation of the partner programme and the constituent activity programmes based on an agreement signed by the Flemish coordinating university, the South partner university and the VLIR.
- The South partner university also has to nominate a local coordinator who functions as the key responsible person from the local side.
- In the South partner university, a full-time professional manager (an academic) is appointed to support the local coordinator and has overall programme management responsibilities associated with the implementation of a complex programme.
In both Flanders and the South a steering committee is established to coordinate the implementation of a partner programme. On an annual or bi-annual basis, both committees hold a Joint Steering Committee Meeting (JSCM).

Cooperation in an IUC partnership programme is funded 100% for seven years. In year eight the budget is reduced to 85%, in year nine to 75% and in year ten to 50% of the original annual budget. After ten years the partner university can access a number of ex-post funds on a competitive basis and participate in transversal activities organised at the overall IUC programme level.

1.2 The Universidad Nacional Agraria La Molina (UNALM) IUC partner programme

1.2.1 Pre-partnership programme (PPP)

The UNALM IUC programme had a long gestation period, with its origins in discussions between Professor Eddie Schrevens (KUL) and Professor Maria Fernandez (UNALM) in September 2004. The IUC programme was finally approved, after re-submission, in 2008 and a Pre Partnership Programme was submitted in October 2008. In November 2008 an open call for research, education and extension proposals within the IUC framework and in agreement with the UNALM’s strategic interests was organised and 21 multidisciplinary letters of intent, including summary logframes, were submitted, screened at KUL and UNALM by respective commissions and the final IUC Programme structure was defined in January 2009.

During the Formulation Week in Lima, the Flemish project leaders in attendance and the local project leaders presented the IUC programme to the broader UNALM community. Trips were organised to the UNALM regional development centres or Institutos Regionales de Desarrollo (IRDs) in Tarapoto and Mantaro Valley, including the pre-existing VLIR Own Initiative (OI) research project in the latter. Also in project working groups Flemish and UNALM teams developed sub-projects and refined budgets etc, with the input of VLIR-UOS experts.

During the first year of the PPP the Programme Support Unit (PSU) was established. The planned investment under the IUC programme in the Language Centre were implemented (see 2.1.2 Project 5) an English crash course and discussion groups for staff of UNALM involved in the IUC programme were organised with the participation of 40 professors, research assistants and counterparts.

In addition, some necessary preliminary investment in the IRDs was made, and a preliminary internal audit of UNALM library facilities was organised, including an enquiry into the use of international journals and books by UNALM staff, and a first inventory of decentralised collections was begun.

The final objectives of the IUC-UNALM programme were established as:

**Academic overall objective:** develop, increase, consolidate and internationalise UNALM’s academic capacity in research, education, knowledge-transfer and technological-innovation in sustainable management of agro-ecosystems to generate leadership in the Peruvian rural sector by maximising the institutional impact.

**Development overall objective:** improving the food security, the local income, the stability and competitiveness of the agro-ecosystems and thus the overall livelihood situation of the local population through identification and remediation of key agronomic, socio-economic and environmental constraints of small scale family based agriculture in Peru.
1.2.2 The projects

IUC-UNALM programme started its first year on 1 April 2010 with the following structure:

Cluster 1: Research on sustainable management of agro-ecosystems

Project 1 (P1): Farming systems research (with five sub-projects). Flemish Project Leader Professor Eddie Schrevens (KUL), UNALM Project Leader Professor Julio Alegre.

Project 2 (P2): Development of value chains for biodiversity conservation and improvement of rural livelihoods (with three sub-projects and one transversal project). Flemish Project Leader Professor Miet Martens (KUL), UNALM Project Leader Professor Luz Gomez

Project 3 (P3): Agrarian innovation and management of participatory knowledge systems (with one sub-project linked to sub-projects in P1 and P2). Flemish Project Leader Marc Craps, (Hogeschool Universiteit Brussel (HUB)), UNALM Project Leader Silvana Vargas

Cluster 2: Education

Project 4 (P4): Educational innovation in undergraduate and graduate programmes with emphasis on the sustainable management of agro-ecosystems and rural development. Flemish Project Leader Professor Jan Elen (KUL), UNALM Project Leader Professor Liliana Meneses

Cluster 3: Institutional capacity building and infrastructure development

Project 5 (P5): Capacity building and infrastructure development of information and communication technologies (ICT), Library and Language Centre. Flemish Project Leader Stephane Sas (KUL), UNALM Project Leader Ivan Soto Rodriguez

Project 6 (P6): Capacity building and infrastructure development of IRDs. Flemish Project Leader Professor Guido Wyseure (KUL), UNALM Project Leader Professor Carlos Gomez

Project 7 (P7): Institutional change and logistic project support. Flemish Project Leader Dr Ignace Lemahieu (Universiteit Gent (UG)), UNALM Project Leader Professor Victor Guevara.

Table 1: IUC programme at UNALM: budget for Phase 1

<table>
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<tr>
<th>Projects</th>
<th>Budget Phase I (€)</th>
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<tr>
<td>P1: Farming systems research</td>
<td>709,231</td>
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<tr>
<td>P2: Development of value chains for biodiversity conservation and improvement of rural livelihoods</td>
<td>408,090</td>
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<tr>
<td>P3: Agrarian innovation and management of participatory knowledge systems</td>
<td>168,695</td>
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<tr>
<td>P4: Educational innovation in undergraduate and graduate programmes with emphasis on the sustainable management of agro-ecosystems and rural development</td>
<td>170,450</td>
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<td>P5: Capacity building and infrastructure development of ICT, Library and Language Centre</td>
<td>565,335</td>
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<tr>
<td>P6: Capacity building and infrastructure development of IRDs</td>
<td>322,287</td>
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<tr>
<td>P7: Institutional change and logistic project support</td>
<td>545,162</td>
</tr>
<tr>
<td>Project Support Unit</td>
<td>590,750</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>3,480,000</strong></td>
</tr>
</tbody>
</table>
1.2.3 Synergies between projects

Because the IUC-UNALM programme was designed around the central concept of sustainable management of agro-ecosystems for rural development, all projects are intended to share resources and logistical support, and organise joint activities including joint training and extension work.

Underpinning the research (P1, P2 and P3) and education (P4) projects is the use of the IRDs as the facilities and equipment are upgraded in P6 and with investment from UNALM.

1.3 The terms of reference (TOR) of the evaluation

The midterm evaluation is meant to generate conclusions that will allow:

1. VLIR-UOS to make a decision regarding the formulation of a second phase of the collaboration;
2. the formulation of recommendations to all stakeholders in terms of the content and management of the programme, including the overall policy framework;
3. to identify and comment upon possible venues for the future of the programme.

The evaluation should cast the light on the following issues:

a) the present implementation of the programme, evaluating the global state of implementation of the programme, both at the level of the overall programme and the constituent projects; evaluating whether the activities, per project, have generated the intermediate results, meeting the objectives, that had been defined by the actors involved, within the given timeframe and with the given means, articulated in the logframe;

b) the nature of the programme, evaluating the quality, efficiency, efficacy, impact, development relevance and sustainability of the programme in the light of the overall goal of the IUC Programme, being institutional capacity building of the local university, as situated in the context of the needs of the local society;

c) the position of the IUC programme within the international cooperation activities of the partner university (bench marking), evaluating the added value of the IUC Programme for the partner university, in comparison to other on-going donor cooperation programmes;

d) evaluating the management of the programme, both in Flanders and locally, and formulating, if necessary, recommendations for improvement;

e) evaluating the cooperation between all parties involved, and formulating, if necessary, recommendations for improvement

The full TOR is annexed to this report as Annex 1.

1.4 The evaluation methodology applied

The methodology for mid-term evaluations of VLIR-UOS IUC programmes has been developed over a number of years to allow consistency of approach and comparability (to an extent) of findings across different partnership programmes. The current methodology relies upon:

- self-assessment by IUC project leaders and Programme Coordinators both North and South
- external review by an evaluation commission comprising an international cooperation and a country expert, familiar with higher education (HE) and development cooperation and country-specific issues

The logical frameworks for the IUC-UNALM and for individual projects (and revisions, in some cases) were used as the primary reference documents in reviewing progress and activities since 2010.
Key Results Areas

The evaluation TOR require a focus on eight key results areas (KRAs) for the programme as a whole and for each project within it. Each KRA is assigned a set of indicators and the evaluators reviewed both quantitative and full descriptive data as a basis for evaluation. The specified KRAs are:

- research
- teaching
- extension and outreach
- management
- human resources development
- infrastructure management
- mobilisation of additional resources/opportunities

Qualitative evaluation criteria

As stated in the TOR VLIR-UOS has defined a set of five criteria for evaluating IUC programmes overall, namely:

- efficiency
- impact
- development relevance
- sustainability
- change

For each project within an IUC programme VLIR-UOS also defined six qualitative evaluation criteria:

- quality
- effectiveness
- efficiency
- outcomes
- development relevance
- sustainability

Rating scale

As required by the TOR a 5-point rating scale was employed by the evaluation commission in their assessment of each project against both KRAs and qualitative criteria.

1 = very poor
2 = insufficient/low
3 = sufficient
4 = good/high
5 = excellent/ very high
N/A = Not Applicable

The rating of programme and project progress against this scale is inevitably subjective and at the discretion of the commission members as there are no objective criteria that can be applied to determine ratings. The commission has tried to be consistent across projects and the overall programme.
1.5 The evaluation activities undertaken

The evaluation began with an extensive review of available programme and background documentation from Phase I of the IUC-UNALM programme. The self-assessment reports were completed by the end of April 2014.

In May 2014 the International Expert had meetings (each of around 1 - 1.5 hours duration) in KUL international office with the Flemish Programme Coordinator/Leader of Project 1 and four Flemish Project leaders (and two team members from Project 5), followed by meetings with VLIR-UOS staff and the Project Leader and one team member of Project 7 in Brussels. One Project Leader (Project 2) was subsequently followed up by email and skype.

The evaluation commission visited UNALM in Lima for an eight-day field mission 18th-26th May 2014. A comprehensive visit programme had been drawn up by the Programme Manager (see Annex 2) enabling presentations by and meetings with all available project leaders, deputy project leaders and team members from the seven Projects, as well as consultation with PSU staff senior UNALM managers. Three field visits in Peru were made by the evaluation commission:

- Mantaro Valley, research sites for sub-projects 1.1, 1.4 and 1.7 in Project 1 and IRD at Yanamuclo for Project 6; and P2, the sub-project on native grains.
- Tarapoto and Yurimaguas, research sites and local partner organisations for sub-project 1.2 in Project 1 and the IRD at Tarapoto for Project 6;
- Cañete and Mala, research sites for sub-project 1.3 in Project 1 and the IRD for Project 6.

The evaluation team’s enquiry focused on reviewing results of both the programme and individual projects and gathering qualitative and anecdotal evidence to assess the programme and projects against the identified evaluation criteria.

The evaluation mission in Lima concluded with a preliminary briefing for the UNALM Programme Manager and Project Leaders, and separate meetings in the National Assembly of Rectors and the Belgian Embassy.

This report in draft was submitted for comment in June 2014.

1.6 Contextual information

1.6.1 The economic and social situation in Peru

Geography and demography

With a surface area of some 1.3 million km², Peru is the fourth largest country in Latin America. Peru’s geography is extremely diverse. It varies from the arid plains in the coastal area of the Pacific (11% of the surface area), to the mountain ranges of the Andean region (34%) and the tropical forest of the Amazonian basin (55%). Each region comprises a distinct entity with individual characteristics. It is bordered in the north by Ecuador and Colombia, in the east by Brazil, in the south by Bolivia, in the south by Chile, and in the west by the Pacific Ocean.

With about 30.5 million inhabitants, Peru is one of the most populous countries in South America. Nonetheless, its population density is low and according to the last census, around 76% of its population lives in urban areas with 24% in rural areas. In 2013, around 61% of its population lived in seven departments (Lima, Piura, La Libertad, Cajamarca, Puno, Junín and Cusco). Major cities include

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the capital (Metropolitan Lima including Callao Province is estimated in more than 9.5 million inhabitants), Arequipa, Trujillo, Chiclayo, Iquitos, Piura, Cusco, Chimbote, Huancayo, Tacna and Juliaca; all with more than 250,000 inhabitants.\(^2\)

Peru is a multi-ethnic country with Amerindians (45%) and Mestizos (mixed of Amerindian and White) (37%) and Whites (15%), with minorities from Africa and Asia and others that represent around 3% of its population. Spanish is the primary language of the country and is spoken by more than 84% of the population. It coexists with several indigenous languages, the most common of which is Quechua (13%). Peru is a very religious country, with Catholic (81%) and Evangelical (12%) being the predominant churches.

**Economic and social development**

**Figure 1: Peru regions (provinces)**

Peru is a representative democratic republic divided into 25 regions (Figure 1). Over the last decade, Peru has made great strides in its development. Its achievements include high growth rates, low inflation, macroeconomic stability, reduction of external debt and poverty and significant advances in social and development indicators.

A combination of a set of reforms, the implementation of prudent macroeconomic policies and a favourable external environment enabled an average GDP growth rate of 6.4% between 2002 and 2012. Growth was 5% in 2013. This solid economic performance drove an increase of more than 50%  

\(^2\) Instituto Nacional de Estadística e Informática de Perú: [http://www.inei.gob.pe/](http://www.inei.gob.pe/)
in Peru’s per capita income during this decade. These policy advances and a stable macroeconomic framework are helping Peru face its development challenges. The effects of strong growth have yielded an important decline in poverty rates: the national poverty rate fell from 48.5% in 2004 to 23.9% in 2013\(^3\).

Nonetheless, the level of development shows enormous geographical inequalities that reflect the unequal social and economic context of the country. The main manifestation of this situation is the significant disparities between rural and urban areas. The regions with the highest rates of poverty and extreme poverty are in the Central mountain range (Huancavelica, Huánuco, Apurimac and Ayacucho). These rates are also high in the rural areas of Cajamarca, Cusco and Puno and in the forest regions of Amazonas, Loreto and Ucayali.

The Peruvian Government’s current programme aims to provide equal access to basic services, employment and social security; reduce extreme poverty and reconnect with rural population through an extensive inclusion agenda.

Based on the Human Development Report 2013, the Human Development Index for Peru is high, at 0.741, which means that the country ranks 77\(^{\text{th}}\) out of 186 countries for which data are available and ranks in an intermediate position in the context of Latin America (9\(^{\text{th}}\) out of 18 countries of the region). The life expectancy at birth is 74.2 years.\(^4\)

The economy of Peru is classified as upper middle income by the World Bank. Peruvian main economic activities include mining, manufacturing, agriculture and fishing. Peru’s economy reflects its varied topography. A wide range of important mineral resources are found in the mountainous and coastal areas, and Peru’s coastal waters provide excellent fishing grounds. Peru is one of the world’s largest producers of silver and copper and is ranked as one of the leaders according to the variety of potatoes, fish, peppers, corn, grains, tubers and root crops.

The labour force by occupation is divided into 25.8% agriculture, 17.4% industry and 56.8% services. The impact of these sectors on the gross domestic product (GDP) has the following distribution: agriculture (6.2%), industry (37.5%) and services (56.3%).

Peru has signed trade deals with the United States, Canada, Singapore, China, Korea, Mexico, Japan, the European Union, Chile, Thailand, Costa Rica, Panama, Venezuela, concluded negotiations with Guatemala, and begun trade talks with Honduras and El Salvador, Turkey and the Trans-Pacific Partnership. Peru is also founding member of the Pacific Alliance, one of the most dynamic economic and trade pacts of the last years, which integrated it with other emerging Latin American economies such as Chile, Colombia and Mexico.

In spite of these ties with other countries in Latin America, the United States and China still remain the main partners for the Peruvian economy. The main national exportation products are copper, gold, lead, zinc, tin, iron ore, molybdenum, silver; crude petroleum and petroleum products, natural gas; coffee, asparagus and other vegetables, fruit, apparel and textiles, fishmeal, fish, chemicals, fabricated metal products and machinery, alloys. The most important markets for these products in 2012 were China 19.9%, United States 15.7%, Canada 9.5%, Japan 6.6%, Spain 5.2% and Chile 4.9%.

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1.6.2 Higher education in Peru

Up to now the central government has not intervened directly in the university higher education (HE) system. Peruvian universities have university autonomy, which is the fundamental principle guaranteeing their independence in relation to public authorities and in decision making within the scope of their competences. The state had placed the responsibility for standardisation, coordination and quality demands on the National Assembly of Rectors (ANR – Asamblea Nacional de Rectores).

The ANR is an autonomous public body, made up of the Rectors of public and private universities, for study, coordination and orientation of the activities of the country’s universities. It has economic, regulatory and administrative autonomy.

Another important institution in the HE system in Peru is the Board of Evaluation, Accreditation and Quality Assurance of University Higher Education (CONEAU – Consejo de Evaluación, Acreditación y Certificación de la Calidad de la Educación Superior Universitaria) that deals with the quality assessment and accreditation of HE institutions and validation of their study programmes.

However, this scenario will change dramatically in the near future as a consequence of the new university law that has been approved by the current government of President Humala. This new law aims to regulate the establishment, operation, monitoring and closure of Peruvian HE institutions in an effort to improve the quality of the university system and ensure public and private institutions meet similar standards.

For these purposes, the government will create the National Higher Education Supervision agency (SUNESU – Superintendencia Nacional de Educación Superior Universitaria), a new entity attached to the Ministry of Education (which will replace the role of the ANR) and whose mission will be to coordinate all processes related with the national system of HE. The new legislation introduces greater rigour into the processes of accreditation and quality assurance, the requirement to be a PhD or MSc holder to be university professor, as well as a set of measures to resize and prioritise research activities and internationalisation in Peruvian universities.

The Peruvian HE system comprises non-university HE including technological, higher pedagogical higher artistic institutions, in which regular studies range from three to five years; and university HE, which has two levels; undergraduate level, with a duration of five years (completing with a written thesis) and postgraduate level, lasting a total of four years, within which two years reach a master’s degree and a further two years for the doctorate. Completing a master’s is now a condition for access to a doctorate.

In 2010, according to the ANR, Peru had 100 universities (35 public and 65 private). There are 39 universities in Lima and 61 universities in the provinces. In recent years the growth of private universities has been one of the main trends in the Peruvian HE, with more dynamic indicators achieved than public universities.
Table 2: Universities in Peru: key indicators

<table>
<thead>
<tr>
<th></th>
<th>Number of universities</th>
<th>Undergraduate students</th>
<th>Postgraduate students</th>
<th>Academic Staff</th>
<th>Administrative Staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public</td>
<td>35</td>
<td>309175</td>
<td>24591</td>
<td>21434</td>
<td>19961</td>
</tr>
<tr>
<td>Private</td>
<td>65</td>
<td>473795</td>
<td>31767</td>
<td>37651</td>
<td>19056</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>782970</td>
<td>56358</td>
<td>59085</td>
<td>39017</td>
</tr>
</tbody>
</table>

1.6.3 UNALM

Origins and status

The UNALM is a public university in Lima, Peru. The university was founded in the early twentieth century, when with the support of a Belgian mission from the University of Gembloux the National School of Agriculture was created. The UNALM was officially recognised as a university in 1960.

The UNALM is considered one of the most important HE institutions in Peru, particularly for its research leadership on agricultural and environmental sciences. In the last edition of the QS University Ranking for Latin America published in May 2014, the UNALM has been ranked in 132nd place and in the fourth place among the Peruvian Universities.

Organisation

The university is organised into eight faculties which contain 24 academic departments. The university offers 12 degrees at the undergraduate level and in the last few years has increased the academic options for postgraduate studies, currently offering 25 MSc and seven PhD programmes.

The following are the courses offered by the different faculties of the UNALM:

Table 3: Faculties and courses at UNALM

<table>
<thead>
<tr>
<th>Undergraduate</th>
<th>Masters</th>
<th>Doctorate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agronomy</td>
<td>Agronomy</td>
<td>Sustainable Agriculture</td>
</tr>
<tr>
<td>Science</td>
<td>Biology, Environmental Engineering, Meteorology</td>
<td>Applied Meteorology, Environmental Sciences, Applied Ecology</td>
</tr>
<tr>
<td>Forestry</td>
<td>Forestry</td>
<td>Forest Resources Management, Conservation of Forest Resources, Ecotourism</td>
</tr>
</tbody>
</table>
In 2010 UNALM had 4903 undergraduate students and 976 at postgraduate level. The university staff comprises 412 permanent professors and other academic staff and 97 working on contract.

The research lines of the UNALM have been established based on the National Plan for Science, Technology and Innovation. Four priority areas have been defined. In the productive area, the university focuses on research topics related to agriculture, agribusiness, agro-energy and agricultural exports (including agricultural and livestock activities) as well as forestry, aquaculture, fisheries, textiles and clothing. In the case of the social area, the focus is on education, health, food security and nutrition. While in the environmental area the most relevant topics are biodiversity, environmental quality, water management, energy, land resources, deforestation, desertification, drought and climate change. There is also a cross-sectional area for fostering studies in biotechnology, ICT, nanotechnology among others.

To support the academic and scientific work developed in the university, UNALM has a network of research centres (such as the Institute of Agro-industrial Development, the Institute of Biotechnology and the Institute for the Sustainable Rural Livelihoods (ISRL)), as well as 4 regional development centres in the main regions of the country (Highland, Coast and lower Amazon basin and Upper Amazon basin).

1.7 Structure of the evaluation report

This report provides the main evaluation findings in section 2, including a summary of programme and project results (2.1.1 – 2.1.2), an evaluation of programme and projects against the qualitative evaluation criteria (2.3), and an assessment of the management of the programme and projects (2.4).

Section 3 presents the overall conclusions reached about the IUC-UNALM programme in relation to the management of the programme and the coordination between Flemish and Peruvian partners, and provides a number of recommendations on the content and management of Phase II of the IUC-UNALM programme.
2 Evaluation findings

2.1 Evaluation of the partner programme and projects in Phase I

2.1.1 IUC programme implementation as a whole in Phase I

In implementation during Phase I the IUC-UNALM programme has made slow but largely positive progress towards the achievement of the programme’s overall goals. Constraints on programme implementation exist in three main areas:

- The IUC programme and project plans
- The UNALM institutional commitment and responses
- The existing model of academic research and education in UNALM

The IUC-UNALM programme and project plans

There is some evidence from documentation, self-assessment reports, interviews with project teams, of weaknesses in the early planning of the IUC-UNALM programme, such as

- The original proposal for the IUC-UNALM programme elicited limited interest among the Flemish universities (with the exception of KUL) and have not subsequently been a strong presence in implementation. KUL plays a dominant role in the IUC-UNALM programme not only providing the Programme Coordinator but also the Flemish project leaders and many team members in the majority of projects.
- The planning process was dominated by a few key individuals, promoting ambitious project plans that were not necessarily fully endorsed or understood by wider project stakeholders or potential team members from UNALM and the Flemish universities, and not necessarily based on sufficiently detailed assessments of the UNALM and Flemish capacities.
- While most of the local Project Leaders and sub-project leaders in P1 and P2 were involved in the formulation of the IUC-UNALM programme, senior management personnel in UNALM change every five years because of the system of electing a new Rector and Vice-Rectors and there are, therefore, few UNALM authorities now involved in the IUC–UNALM programme that were party to the start of IUC negotiations in 2007 and the subsequent PPP. This weakens ‘ownership’ of the programme and projects.
- Overall there has been limited direct (presence in Peru, regular remote communications etc) involvement in programme implementation by Flemish project leaders and team members: although it is recognised that mobility budgets need to be tightly controlled since the distance between Flanders and Peru is great, and research sites within Peru are far from Lima; however, this could be seen as reflecting the relatively limited initial interest shown among Flemish academics for the early project proposals.

The UNALM institutional commitment and responses

UNALM, while clearly welcoming the partnership programme for key research and capacity building areas (e.g. in P1 and P5), has shown a relatively slow institutional response to the implementation of the IUC-UNALM programme as a whole. The coordination of the IUC-UNALM programme from the university side has not provided the level of programme leadership and coordination that dynamically reflects and represents UNALM’s concerns and strategic interests. UNALM staff and authorities lack experience in managing large, complex international cooperation programmes and as a consequence programme planning, implementation and management has been dominated by the Flemish coordinating partner.
Weakness in commitment and response, including ongoing lack of university funding on the part of the UNALM authorities has also constrained implementation of the institutional capacity building projects in the programme (particularly P5 and P7), which more dynamic local coordination might have done much to mitigate.

The model of academic research and education in UNALM

Overall there has been slow progress towards generating concrete research results and PhDs in the IUC-UNALM programme. There are a number of factors behind this, including

- Flemish universities do not recognise the Peruvian Master’s as an equivalent standard and therefore potential PhD candidates may be required (by KUL) to do a pre-doctoral semester in Belgium (5 months with an exam and submission for approval of a PhD proposal), or prove that they have reached an equivalent standard by getting at least one article, if not two, published in an internationally peer-reviewed academic journal. These present significant hurdles to overcome for UNALM academics and research students (the majority of current potential PhD candidates in the programme), and a significant call on IUC-UNALM programme scholarship budgets for pre-doctoral or other preparatory work that may not result in an approved PhD proposal.

- Ongoing and renewed research activities are not considered a priority at UNALM for academic staff career development. There has not, therefore, been much previous investment by the university in research or doctoral programmes, or research coordination and support.

- Academic staff in UNALM are relatively poorly paid (by Lima standards, although this is beginning to change) and have heavy teaching commitments, not alleviated by any organised research or doctoral support strategy or programme in UNALM. Academic staff often supplement their incomes through more lucrative consultancy work and are therefore reluctant to fully engage in research activities. Since a PhD has not to date been a requirement to be a member of UNALM’s academic staff incentives to take-up scholarships (particularly sandwich scholarships), in these circumstances, have been lacking.

- The UNALM does not share the Belgian requirement for academic staff to regularly write and publish research articles in internationally peer-reviewed journals. This kind of publishing is not a factor in academic career progression in Peru and in UNALM; equal or greater importance might be given to a textbook, or a procedural manual (in Spanish) written by individual academics.

- A widespread lack of capacity in spoken and written English, and lack of motivation among UNALM academics and students to acquire better English language skills, as these are unlikely to enhance their wider career prospects.

The IUC-UNALM programme response to the low take-up of research and PhD candidacy opportunities has been on the one hand, introducing the strategy to hire local ‘field workers’ for the IUC projects, allowing academic staff to lead research activities without the need for regular and time-consuming field visits; and on the other hand to allow the inclusion in the research projects of BSc and Master’s students undertaking their thesis work, the results of which can contribute to achieving project objectives. Some of these top students are highly motivated and on track to be PhD candidates in the programme.
2.1.2 IUC-UNALM project implementation in Phase I

Project 1: Farming systems research

The overall academic objective is to strengthen UNALM’s capacity to offer technical support to farmers in decision making related to resource management in five agro-ecosystems in Peru.

The specific academic objective is to research and support adoption of technological packages for efficient use of natural resources within the existing production systems in five agro-ecosystems in Peru.

The overall development objective is to contribute to sustainable rural development through farming systems research in five agro-ecosystems of Peru.

The specific development objective is to generate knowledge of technological packages for efficient use of natural resources within the existing production systems in five agro-ecosystems in Peru.

Context and rationale

Poor farm families have rarely been able to transform subsistence agriculture into capitalised farms that would allow asset accumulation. Project 1 is intended to develop research with small farmers and provide them with information, awareness raising and training, with the ultimate aim of changing their current production systems into more sustainable and profitable ones. The farming system project operates in four representative ecosystems distributed across the main geographical regions of Peru (the Pacific coast, the Andes and the Lower and Upper Amazon Basin).

Project 1 used as a starting point an OI project - Optimization and implementation of green waste compost applications in sustainable agriculture in the high tropics - developed with KUL and implemented from 2004 to 2008 in the central Andes or highlands region of Peru, and builds on the relationship with farm communities and the groups of farmers in the Mantaro valley.

Scope and structure

Project 1 has a rather complex structure: seven sub-projects focusing on different farming systems in different regions of Peru work towards a set of seven common Intermediate Results (IRs). Annual plans and budgets for the Project are prepared and then reported on for each IR, drawing on information from each of the sub-projects, but the operational implementation of research and other activities is organised around the sub-project leaders and their teams.

Initially five sub-projects were included: they are

- SP 1.1 Mixed Farming Systems in the Mantaro Valley, Central Highlands
- SP 1.2 Agroforestry, Tarapoto-Yurimaguas, Lower Amazon Basin
- SP 1.3 Horticultural Production, Mala and Chillion Valleys, Coastal Desert
- SP 1.4 Climate change in arid coastal areas (became Watershed management, focused on the Mantaro Valley, in 2011)
- SP 1.5 Alpaca Breeding and Range Land Management, Cerro de Pasco, Central Highlands

The sub-projects were then expanded to seven in year 4:

- SP 1.6 Animal Parasitology, Mantaro Valley and Cerro de Pasco (new project since year 3): this sub-project was started when the sub-project leader returned from the United States with an MSc in Parasitology and was offered a staff position at UNALM. The IUC-UNALM programme provided an opportunity for him to enrol as a PhD candidate the Universiteit
Gent (UG), while also helping to ameliorate the slow take-up of PhD studies in P1 during Phase I.

SP 1.7 Guinea Pig Breeding and Nutrition, Mantaro Valley (new project since year 4): this relatively small sub-project arose out opportunities emerging from research in the Highlands, where guinea pig farming is a common feature of smallholder systems.

The sub-projects are multidisciplinary with sub-project leaders and research teams (including field workers) drawn from six faculties (Table 4).

**Table 4: Contribution to initial five sub-projects by different UNALM faculties**

<table>
<thead>
<tr>
<th>Faculty</th>
<th>SP 1.1 Mixed farming</th>
<th>SP 1.2 Agroforestry</th>
<th>SP 1.3 Horticulture</th>
<th>SP 1.4 Climate change /watershed</th>
<th>SP 1.5 Alpaca</th>
<th>Contribution to P1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agronomy</td>
<td>60%</td>
<td>70%</td>
<td>70%</td>
<td>50%</td>
<td>10%</td>
<td>52%</td>
</tr>
<tr>
<td>Animal Science</td>
<td>20%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>20%</td>
</tr>
<tr>
<td>Forestry</td>
<td></td>
<td>20%</td>
<td></td>
<td></td>
<td></td>
<td>4%</td>
</tr>
<tr>
<td>Sciences: Biology</td>
<td>10%</td>
<td>10%</td>
<td></td>
<td></td>
<td></td>
<td>4%</td>
</tr>
<tr>
<td>Agro-Engineering</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>10%</td>
</tr>
<tr>
<td>Food Science and Technology</td>
<td></td>
<td></td>
<td></td>
<td>50%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economy and planning</td>
<td>10%</td>
<td>10%</td>
<td></td>
<td>10%</td>
<td></td>
<td>6%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
<td><strong>100%</strong></td>
<td><strong>100%</strong></td>
<td><strong>100%</strong></td>
<td><strong>100%</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

**Progress towards IRs in Phase I**

*Introduction*

With the exception of SP 1.4 Climate change/ watershed management, all the sub-projects selected for Project 1 (including those added in 2013) have as their focus farming and production techniques, methods and conditions relating to specific crops or livestock. However, all the sub-projects arose either from the research interests and experience of individual professors in the Faculties of Agronomy, Animal Science, Forestry, Biology, and Food Science and Technology, or subsequently from developed lines of research considered relevant to be added to the project during Phase I.

Each sub-project, therefore, contributes to the IRs in different ways and to different degrees, building on different pre-existing research and experience, and starting from different research points. For example, SP 1.2 (Forestry) builds on research and data from specific sites developed over several decades, with established relationships with Peruvian national partners, greatly facilitating data-gathering and monitoring of sites; SP 1.1 (Mixed farming) was preceded by a VLIR OI and began work with the same farming communities in established relationships, thus facilitating the preparatory research into farming systems in use under IR1.

Steady overall progress has been made towards the achievement of IRs 1, 2, 4, 6 and 7. Progress has been slower or has stalled completely in activities under IRs 3 and 5.

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6 Adapted from PP [AP2010-AP2014] Project 1 Farming Systems Research October 2009
IR1: Systematic studies of the characterisation of the dynamics of actual production systems

The focus is to research, understand and document farmers’ local knowledge of their actual production systems and to establish baselines from which research hypotheses can be developed, and a generic systems approach elaborated.

Several sub-projects investigated current farming practices and socio-economic factors influencing practice in the research sites (eg Mantaro Valley). The limited socio-economic studies were based on secondary data sources and surveys primarily intended to obtain quantitative information rather than qualitative.

 Nonetheless, the methods used have been described in the North project self-assessment as ‘participatory research’ Some caution needs to be exercised in using the term ‘participatory research’ as it implies a well-established social science-based approach to research in communities that emphasises participation and action greatly influenced by the relationship between researcher and participants, and usually includes research participants (subjects) playing a role in the framing of the research questions. These are issues addressed in Project 3 of the IUC-UNALM (see below), but it seems clear that the work of Project 3 was unable to influence to any great extent the design and implementation of these ‘systematic studies’ leading to IR1.

In addition to research with farmers the sub-projects conducted experimentation (eg on use of fertilisers and seed quality) and data-gathering from five weather stations and pluviometers set up under Project 1 and fifty pilot plots established at field or farm level, and a further 10 plots selected in the areas of small vegetable growers in Chillon and Mala. Three alpaca production systems were elaborated into conceptual models.

Some planned results and outputs relied upon activities and inputs from SP 1.4 (climate change/watershed management). However, the sub-project leader (Liliana Meneses) left UNALM before the start of the IUC programme and by the end of year 1 the climate change sub-project research was stopped due to “inconsistencies in the research protocol and field work”. A new research team was formed, with new objectives and methodology and the experimental location now in the Mantaro Valley rather than the coastal dry mountains. By year 4 this sub-project on watershed management had achieved the installation of additional equipment in two watershed areas, data analysis and development of databases.

The new (2013) SP 1.6 has so far only contributed to this IR through work on preliminary diagnostics of the major gastrointestinal parasites affecting cattle, sheep, alpacas and llamas in the production systems of the Mantaro valley and Pasco.

IR2: Basic and adaptive research of appropriate technologies with a focus on participatory development and accessible to users

Following on the IR1 results, IR2 focuses on basic research activities to solve specific technological problems that will help to manage a sustainable technological system under different ecosystems.

Research was initiated or developed in identified priority areas, including soil sampling in agro-forestry systems, field experiments in pilot plots focusing on pesticide use, fertilisation, land use efficiency, energy efficiency, labour distribution and seed quality, as well as data collection and analysis on soil management and nutrient balance in vegetable production, and on horticultural practice. The research has underpinned several MSc and BSc theses.
**IR3: Research in local markets and quality of the offered products**

The intention is to study the post-harvest chain as a key factor to determine the productivity of the technological system alternatives researched in IR2.

According to the project self-assessment very little progress has been made towards the achievement of this IR, in part due to changing team members. Activities were postponed and are now unlikely to be addressed in Phase I of the IUC-UNALM. There are obvious links here with the objectives and activities of Project 2 (Value chain analysis), although it has not been determined whether there were opportunities for joint approaches to market studies, or any other joint activities, one constraint being that Project 2 focuses in Phase I on different kinds of products with correspondingly different markets and there have not been opportunities for a better interdisciplinary research.

**IR4: University involved in the improvement of the production systems**

This is predicated on the assumption that farmers’ organisations need technical support from the university to develop adequate management of the natural resources. At the start of the IUC-UNALM programme academic staff and students were not well trained in addressing the sustainability of systems using the systematic and holistic method of life cycle assessment (LCA).

Activities undertaken included the training of academic staff and students at UNALM in using LCA (one short course), equipping six laboratories to undertake relevant analysis and, in a link with Project 6 (IRDs), setting up fast sample processing laboratory facilities in the IRD in Yanamuclo (Highlands) Cañete (Coast) and San Ramon (Upper Amazon basin). Staff members from six UNALM laboratories were also trained in analytical procedures.

A number of completed theses and PhD studies commenced, if not completed, by academic staff were also among the expected outputs contributing to this IR. However these have not yet been accomplished as yet but are in progress for year 5 (see Research below).

**IR5: Efficient systems negotiation to sustainable use of natural resources established**

Essentially an outreach result, IR5 focuses on the generation of knowledge of different technological options to create an environment of continuous feedback and capacity for UNALM academic staff and students to apply in research for the development of sustainable farming systems.

Work is in progress on the generation of prediction models of some variables affecting sustainability and on the organisation of activities for strengthening and extending the groups of farmers to the region. However, three planned activities directly linked to the cancelled SP1.4 on climate change have not been pursued.

**IR6: Technological proposals for sustainable production systems offered and adopted.**

Outreach and capacity building among farmers, based on the UNALM research and resulting sustainable production models, are also the focus of IR6.

In the Mantaro Valley (SP 1.1), additional to field experiments, two demonstration plots have been set up (in Aramachay and Cruzpampa). The application of lime to acidic soils and improved fallows with common vetch and oats were tested. In year 4 production plots were set-up in Cruz Pampa, Aramachay, Colpar, Chacrampa and Quilcas and the major crops (corn, quinoa, potato, barley) were tested under various conditions.
The plots were monitored, a capacity building workshop delivered and a production handbook published. Several theses, based on the research and analysis, were prepared – on crop rotation and ecological pest management, and the introduction of new varieties and species of vegetable crops. Through these activities new practices were introduced among the target farming communities.

*IR7: Training service and technical assistance to take decisions and adequate negotiation of natural resources and infrastructure implemented*

The focus of this IR is also the training of farmers through short courses, workshops and the implementation of decision support systems and modelling to improve management of resources and scaling up of technologies.

Most of the planned training workshops and production of associated manuals and models have been accomplished or will be before the end of Phase I. The activities have mainly taken place under SP 1.5 (alpaca production) and SP 1.2 (Agroforestry).

**Project teams**

Project 1 has been seriously affected by the reluctance, and sometimes inability, on the part of UNALM professors and academic staff to become fully engaged with the research activities (see 2.1.1 above). To ensure sufficient capacity, UNALM project teams have been built around field workers, supporting the sub-project leaders in field research and funded by the project, some of whom are also been students undertaking research work for their BSc or MSc theses relevant to the objectives of Project 1.

Effective communication and knowledge-sharing across sub-projects and between sub-projects and the Flemish and UNALM project teams is an important element in the project’s progress as a coherent research project. One of the evident strengths of the UNALM sub-project teams in Project 1 has been the interaction among researchers from different departments and colleges of the UNALM (Table 4), both within and across sub-projects, and collaboration in the use of laboratories and equipment.

There are 19 Flemish team members listed in the Project 1 self-assessment, but it only seven of these (including Eddie Schrevens, the Flemish Programme Coordinator and Flemish Project Leader of project 1) have actually visited UNALM and/or the research sites of Project 1 during the PPP and Phase I of the IUC-UNALM programme.

Several of the Flemish team members are engaged with Project 1 through sponsoring UNALM students on short-term scholarships or pre-doctoral visits to Belgium, and two are promoting PhD candidates from Project 1.

**Research outputs**

Overall the level of research outputs is relatively low for a large and multi-disciplinary research project, even in the first Phase of an IUC programme. Moreover the large majority of all research outputs (66%) in Project 1 have come from only two sub-projects – SP 1.5 Alpaca and rangelands and SP1.2 Agroforestry.
Extension

The success of Project 1 is predicated on achieving effective extension, in particular working with farming communities, farmer associations, community and local government organisations. The extension activities of the sub-projects have progressed well in Phase I.

SP 1.2 (Agroforestry) in particular has also been effective in forging research and collaborative links with other Peruvian research organisations, such as the Instituto de Cultivos Tropicales and the Universidad Nacional de la Amazonia Peruana (UNAP).

Under SP 1.5 (Alpaca) with VLIR support a laboratory for wool quality analysis was upgraded and the accreditation process to obtain accreditation from the International Wool Textiles Organisation (IWTO) was successfully completed, resulting in the alpaca wool laboratory getting accreditation in 2014 for IWTO methods to determine alpaca fibre fineness. It is the only accredited laboratory in Peru for analysing alpaca wool quality, and thus has the capacity to provide good quality services to farmers and industry.

Table 5: Assessment of key result areas Project 1

<table>
<thead>
<tr>
<th>Key result areas</th>
<th>Indicators (quantitative and full descriptive data)</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>KRA 1: Research</td>
<td>Two PhD candidates have been accepted from Project 1 during Phase I to date; one from the SP1.2 (Agroforestry) and one from Sp 1.7 (Parasitology), the latter being a new sub-project introduced into Project 1 in year four. In addition, three students have been given pre-doctoral scholarships to study in Belgium, and will go forward as potential PhD candidates. Seven students’ MSc theses have been supported under Project 1. Eight full papers based on Project 1 research have been published in conference proceedings.</td>
<td>1</td>
</tr>
<tr>
<td>KRA 2. Teaching</td>
<td>There were no specific teaching and education targets set for Project 1. However, eight training courses for UNALM and other university students were developed and delivered by SP 1.2. Four laboratory manuals and/or guides were prepared. Interwoollabs accreditation achieved for methods IWTO-8 and IWTO-12 (SP 1.5)</td>
<td>4</td>
</tr>
<tr>
<td>KRA 3: Extension and outreach</td>
<td>Building on pre-existing community and farmer links in the case of the work in the Mantaro Valley: a series of workshops and training events, production manuals on specific processes and crops, and a number of leaflets and posters have been included among concrete outputs from extension activities. The accredited laboratory for wool quality analysis is now capable of providing services to farmers and industry</td>
<td>5</td>
</tr>
<tr>
<td>KRA 4: Management</td>
<td>Development of five research protocols is in progress</td>
<td>3</td>
</tr>
<tr>
<td>KRA 5: Human resources development</td>
<td>22 BSc and seven MSc research theses have been finalised or are in progress. 2 PhD candidates have been accepted and three are in pre-doctoral training in Belgium. Seven other project team members have undertaken technical or research training in Belgium</td>
<td>4</td>
</tr>
</tbody>
</table>
Evaluation findings

<table>
<thead>
<tr>
<th>Key result areas</th>
<th>Indicators (quantitative and full descriptive data)</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>KRA 6: Infrastructure management</td>
<td>Six laboratories have been upgraded and supported in the Project. In addition the Project has provided eight pluviometric stations and five weather control stations; and infrastructure for three greenhouse installations.</td>
<td>4</td>
</tr>
<tr>
<td>KRA 7: Mobilisation of additional resources/opportunities</td>
<td>No other resources mobilised</td>
<td></td>
</tr>
</tbody>
</table>

Project 2: Development of value chains for biodiversity conservation and improvement of rural livelihoods

The **overall academic objective**: Academic strengthening of knowledge and dissemination on value chains of native plant species.

The **overall developmental objective**: Contribute to increased sustainability of smallholder production systems of native plant species in rural Peru using value chain analysis approach.

The **specific academic objective**: Strengthen the capacity of UNALM in research and development on value chains of native plant species

The **specific developmental objective**: Promote better linkages between smallholders and local and international markets based on sustainable value chains of native plant species.

Context and rationale

The Government of Peru has set as high priorities poverty alleviation, increased nutrition in rural areas, small and medium-sized enterprise development and urban-rural linkages. A main challenge for Peru is to use its rich biodiversity in a sustainable manner to improve quality of life for the poor and to build better linkages between rural and urban areas. Biodiversity in itself has little current market value unless producers, processors, consumers and policy makers can understand and agree on the benefits it confers. Peru lacks sufficient research capacities for the study of its biodiversity and UNALM itself needs laboratory equipment and training of personnel.

The Ministry of the Environment is particularly focused on natural resources management and biocommerce (derived from native biodiversity) and the linkages between biodiversity and gastronomy is an action area in relation to tourism and exports. The Ministry of Agriculture has also been involved for several years in the strengthening of what they call “productive chains”, facilitating contacts between farmers, processors, traders and eventually retailers for various commodities. Organic exports have become a major source of foreign income and almost all organic exports come from organised smallholder groups.

Scope and structure

The scope of the project is to study the value chains of crops and plant materials currently cultivated for self-consumption, local market supply (amaranth) and exports (quinoa, chili peppers); and to develop supply chains for products like sapote gum and organic vegetables that represent interesting opportunities for new emerging markets. A value chain is understood as a set of activities that lead a product or service to reach the final consumers. To work on value chains is also a way of linking an increasing urban population to the solution of poverty and inequality in the countryside.
Project 2 integrates two complementary fields of expertise from UNALM and the Flemish team. The research builds on the main areas of expertise of the sub-project leaders, biochemical, biological and agricultural knowledge of the three main crop species, and also seeks to incorporate food technology and socio-economic expertise into VCA, and poverty and food security studies.

Project 2 is the integration of several research proposals submitted by various UNALM researchers in 2007. A transversal economic component was added during the formulation of the project in. Three research units lead in three sub-projects:

- Sub-project 2.1 Sapote led by Department of Forest Industries (Forestry)
- Sub-project 2.2 Andean grains led by the Cereals and Native Grains Research Programme (Agronomy)
- Sub-project 2.3 Capsicum led by the Vegetable Crops Research Programme (Agronomy)

In December 2011 an additional research group from the Department of Economics and Planning (Economics) was added to the Project to develop the transversal economic component in sub-project 2.4 and research activities started in January 2012.

Progress towards IRs in Phase I

Research IRs

Table 6: Project 2: Activities contributing to research IRs for four sub-projects

<table>
<thead>
<tr>
<th>IR 1</th>
<th>IR 2</th>
<th>IR 3</th>
<th>IR 4</th>
<th>Socio-economic aspects of VC development</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sapote</td>
<td>Technologies for sustainable exploitation of the sapote tree are developed</td>
<td>Improved genotypes of quinoa adapted to the Central Highland conditions are developed</td>
<td>A first national collection of pungent Capsicum established and characterized</td>
<td>Socio-Economic and Market study for three selected farm products is completed</td>
</tr>
<tr>
<td></td>
<td>2.1 Sapote plantation is established and monitored</td>
<td>2.2 Farm technologies for quinoa production systems are improved</td>
<td>3.2 Capsicum collection is characterized with techniques of molecular biology and industrial biotechnology</td>
<td>Research on effect of farm intensification and market development on rural poverty</td>
</tr>
<tr>
<td></td>
<td>1.3 Sapote gum is chemically and physically characterized</td>
<td>2.3 Protocols developed to enhance the appreciation and use of quinoa in food at family level and in the rural agribusiness</td>
<td>3.3 Capsicum collection is analysed according to their culinary and market potential is identified</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.4 Potential commercial uses and market mechanisms are identified</td>
<td></td>
<td>3.4 Farm techniques for organic production of Capsicum are improved</td>
<td></td>
</tr>
</tbody>
</table>

For IR1 one technology for extracting sapote gum was developed; the scientific characteristics of the gum have been successfully elaborated, its potential uses have been analysed and documented. The challenge for this sub-project has come in identifying potential commercial uses and market mechanisms. The current market for sapote products is very limited. The research identified
production challenges relating to climate, irrigation and variable production standards that present barriers to commercial exploitation and, therefore, of value chain research.

For IR2 on native grains the research was more advanced because it built on a well-established line of research in the Cereals and Native Grains Research Programme. In Phase I work has progressed on identifying, developing and evaluating cultivars and adding to the seed bank (held in the IRD at Yanamucla). Farm technologies for quinoa production systems have been improved with the establishment of experiments in different locations and years comparing conventional and organic protocols. On the demand side the sub-project is working with enterprises, associations (e.g. Baker and Pastry Association) and agribusiness on the commercialisation of quinoa.

For IR3 over 250 varieties of capsicum are now being grown and characterised, working with researchers from the Institute of Biotechnology and the Faculty of Food Technology. Several field trials were established in seven locations resulting in improvements in techniques and recommendations for organic production. The first catalogue of Peru’s chilli peppers will be published in 2014. On the demand side a selection of chilli peppers with gastronomic potential has been identified and a short video will be produced in 2014, with Peru’s leading cooks.

Socio-economic work began on IR4 later than the other sub-projects and it has faced significant challenges in progressing with the market studies for the three crops and associated products simultaneously, the main constraints being lack of adequate budgets and, therefore, field workers to undertake research. Work on quinoa and capsicum studies is more advanced than on sapote, where, in the absence of any definable market for sapote products, the focus of study shifted to markets and VCA for other dry forest products (e.g. honey and derivatives).

Capacity building IRs

The relevant capacity-building activities are summarised in Table 7

<table>
<thead>
<tr>
<th>IR</th>
<th>Sapote</th>
<th>IR</th>
<th>Andean grains</th>
<th>IR</th>
<th>Capsicum</th>
<th>IR</th>
<th>Socio-economic aspects of VC development</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.1</td>
<td>Professional staff and students are trained in management and marketing of sapote gum</td>
<td>6.1</td>
<td>Staff and students with knowledge on the genetic improvement of Andean grains</td>
<td>7.1</td>
<td>UNALM staff is trained on Capsicum genetic resources, biochemistry and organic production</td>
<td>8.1</td>
<td>UNALM staff is trained in value chain analysis based on sapote gum, quinoa and Capsicum case-studies</td>
</tr>
<tr>
<td>7.2</td>
<td>Interdisciplinary research between Vegetable Crops Program and Institute of Biotechnology is implemented</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For IR5 one BSc graduate is currently being trained in Belgium. A planned visit, supported by the Project, to study comparable gum production in Sudan had to be cancelled due to security reasons.

For IR6 one MSc student is in the final thesis writing stage and two MSc students have completed their field experiments and three were completed and published.

For IR7 capacity building included the completion of two MSc theses, 15 BSc theses, and the participation of staff in short training courses and four national capsicum conventions. The theses
demonstrate the interdisciplinary aspects of P2 and are from the departments of Horticulture, Crop Production and Food Technology; one candidate (Food Technology) has begun his PhD in Belgium.

For IR8 one pre-doctoral training scholarship began in Belgium in 2014 focusing on quinoa VCA.

Extension IRs

The relevant extension activities are summarised in Table 8.

Table 8: Project 2: Activities contributing to extension IRs for three sub-projects

<table>
<thead>
<tr>
<th>IR 9</th>
<th>Sapote</th>
<th>IR 10</th>
<th>Andean grains</th>
<th>IR 11</th>
<th>Capsicum</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.1</td>
<td>Local people from Humedales are trained in management and marketing of sapote gum</td>
<td>10.1</td>
<td>Farmers trained in improved quinoa farming systems</td>
<td>11.1</td>
<td>Farmers, market personnel, cooks and local government officials trained in Capsicum value chain analysis</td>
</tr>
<tr>
<td></td>
<td>10.2</td>
<td>Farmers trained in marketing and knowledge of the value chain of quinoa</td>
<td>11.2</td>
<td>Farmers trained in organic production of vegetable crops</td>
<td></td>
</tr>
</tbody>
</table>

No extension activities have been completed for IR9.

For IR10 farmers were trained in improved quinoa farming systems in workshops organised in the Yanamuclo IRD, Acostambo-Huancavelica and La Molina; and farmers were trained in the VC of quinoa in workshops organised in the Yanamuclo IRD.

For IR11 the training booklet series “El Punto de Aji” on capsicum VCA was started. Field days were organized in 2012 and 2013 and keynote speeches delivered in two national capsicum conventions.

Project teams

Project 2 has been constrained by several factors relating to project teams:

- The Project lacked field workers or doctoral students assigned to each sub-project to facilitate the continuity of research. Sub-project 2.4 in particular suffered from the lack of field worker support in socio-economic studies.
- Sub-project 2.2 on native grains has felt the lack of collaboration from Flemish partners with appropriate scientific (as opposed to socio-economic) expertise, though such inputs from the Flemish side were not part of the original project plan.
- Communication between UNALM and Flemish teams has sometimes been challenging and the UNALM Project team would have welcomed more active interaction between themselves and their Flemish counterparts, including more mobility between both parties for researchers and students, and more training on new lines of research etc.
- There appears to be limited connection and cross-collaboration between the four sub-projects, so that the overall research coherence of a single project is lacking.

Table 9: Assessment of key result areas Project 2

<table>
<thead>
<tr>
<th>Key result areas</th>
<th>Indicators (quantitative and full descriptive data)</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>KRA 1: Research</td>
<td>Over 30 articles, conference contributions and technical papers published including at least four articles in international peer-reviewed journals.</td>
<td>3</td>
</tr>
</tbody>
</table>
### Evaluation findings

<table>
<thead>
<tr>
<th>Key result areas</th>
<th>Indicators (quantitative and full descriptive data)</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Over 28 BSc and 4 MSc theses initiated and some completed. Students working on their theses have rapidly completed field and laboratory experimental work and evaluation, but have been very slow in completing processing of data and writing can take one or more years. One PhD from Food Technology commenced in Belgium for sub-project 2.3. One pre-doctoral scholarship has begun for sub-project 2.4. The native grains sub-project has not so far been able to identify PhD candidates.</td>
<td></td>
</tr>
<tr>
<td>KRA 2. Teaching</td>
<td>Teaching and education is not a focus of the Project although staff capacity building is: around 14 different courses and workshops were delivered.</td>
<td>3</td>
</tr>
<tr>
<td>KRA 3: Extension and outreach</td>
<td>One workshop/training modules package delivered to a significant number of and three leaflets/guides/posters for extension. 174 farmers were trained in improved quinoa farming systems in workshops; 180 persons were trained in capsicum VCA</td>
<td>4</td>
</tr>
<tr>
<td>KRA 4: Management</td>
<td>One research protocol relating to quinoa and food security is in progress</td>
<td>3</td>
</tr>
<tr>
<td>KRA 5: Human resources development</td>
<td>The project has supported research work and theses development for over 40 BSc and MSc students</td>
<td>3</td>
</tr>
<tr>
<td>KRA 6: Infrastructure management</td>
<td>Equipment in the Forest Products non-woods Laboratory, Food Engineer Laboratory, and Cereal and Native Grains Quality Laboratory has been upgraded, and field equipment provided.</td>
<td>3</td>
</tr>
<tr>
<td>KRA 7: Mobilisation of additional resources/opportunities</td>
<td>Collaboration with Biodiversity-INIA Capsicum project and AGROECO project</td>
<td>3</td>
</tr>
</tbody>
</table>

**Project 3: Agrarian innovation and management of participatory knowledge systems in the Peruvian coast and Andes**

The overall academic objective: to generate a participatory protocol for agrarian knowledge development to increase the innovation capacities and resilience among small producers’ communities within a context of food insecurity

The specific objective: to consolidate capacities in action research, participatory methodologies and systematisation of agrarian innovation processes among faculty members, students and small producers in the area of intervention of the IUC-UNALM programme

**Context and rationale**

Peruvian small agricultural producers face a number of disadvantages: inadequate natural resource management strategies, low productivity levels, limited access to technology and weak integration in domestic and international markets. There is also an identified lack of coordinated agricultural information and knowledge among the main actors: that is farmers and those that support and work with them, including UNALM faculty members, researchers and students.
Project 3 is based on the premise that participatory action-research has been shown to be an efficient methodology for supporting successful rural development interventions, through the active involvement of targeted communities and groups in order to generate ownership and sustainability. The guiding research assumption is that for successful natural resources management, communities must participate in deciding how it is done. Capacity strengthening is therefore needed among all stakeholder groups on how to design, validate, implement and evaluate participatory action-research.

Scope and structure

Project 3 aimed to establish a platform for action research, capacity-building, systematisation and promotion of agricultural knowledge networks, through an emphasis on a participatory approach targeting food security.

The Project demanded a high level of articulation and collaboration with Projects 1 and 2 in the IUC-UNALM programme, since the advocated participatory research required a production line of agricultural crops or livestock produce.

The project began in 2010 with four IRs grouped into three categories:

Academic research

IR 1: Action research on forestry resources with geomatics
IR 2: Action research on alpaca production systems through advocacy coalitions

Participatory Action Research

IR 3: Action research on participatory processes in VLIR UNALM programme sites

Training in participatory methodologies

IR 4: Capacity strengthening in action research and participatory methodologies

The project also included the unrelated IR 5: Design and validation of the strategic M&E system of the VLIR UNALM programme.

In 2012 Project 3 was reformulated and IR1, IR3 and IR5 were dropped from the Project. After a call for research proposals in UNALM two IRs were subsequently added:

IR 6: Socio-ecological resilience of export oriented organic coffee production in Peru
IR 7: Stakeholders, innovation and social learning for sustainable alpaca fibre production

Progress towards IRs in Phase I

Introduction

By any standards this was a very ambitious project in its original conception and design, for a number of reasons:

- It promulgated qualitative research methodologies widely adopted within social sciences, but which are innovative, unusual and not necessarily readily accepted as authentic and scientific research approaches within pure and applied sciences;
- The UNALM project team did not have a firm basis (promoting staff were not permanent members of the university) or supporting academic structure within UNALM (no social sciences departments other than the Department of Economy and Planning);
The IUC project plan brought together a number of disparate elements and methods (presumably driven by individuals’ expertise or interests) without a strong logical underpinning, and was based on some key assumptions that failed.

Overall progress during Phase I has been poor, constrained by the poorly conceptualised project plan, many changes in the UNALM project team members, limited support by the Flemish project team, and a lack of interest and understanding of the relevance of the project among the project teams and students working on other IUC-UNALM programme projects.

**IR1: Participatory forest census with geomatics**

Work on this IR was dependent upon collaboration with and progress in the Project 2 sub-project on sapote. Preliminary work began in year 1 but the challenges of integration between the P2 sub-project and P3 researchers proved too difficult. GIS equipment purchases were transferred to Project 1 sub-project 5 (climate change) and in year two the IR was dropped from Project 3 altogether.

**IR2: Participatory research on advocacy coalitions for alpaca wool producers**

Field work with communities to document experiences of practices, alliances and innovation was completed with moderate success, despite an overall lack of research capacity, particularly relating to the methodology of Advocacy Coalition Frameworks. Collaboration with Project 1 sub-project 1 (alpaca) facilitated this work, as well as the involvement of a Belgian MSc student that researched and completed an MSc thesis on ‘Stakeholders in the sustainable development of the alpaca value chain in Pasco’ (see IR7 below).

**IR3: Action research on participatory processes in VLIR-UNALM sites**

This IR focused on the Mantaro Valley, but the project largely failed to attract sufficient interest from Project 1 and Project 2 research teams working in Mantaro (e.g. sub-projects 1.3 and 2.2) or the students wishing to collaborate and engage in action research. The IR was dropped in year three, and remaining activities to strengthen relationships with farmers, local communities and other actors transferred to Project 6 in the IUC programme.

**IR4: Capacity building in participatory methodologies**

Capacity building and training needs were identified. Progress on this IR depended on researching and fully documenting the experiences of agrarian innovation and knowledge systems in Mantaro and Pasco communities. This was fully completed in Mantaro and in part completed in Pasco. Associated capacity building workshops were implemented.

Neither academic staff nor students responded positively to engaging in capacity-building in participatory methodologies so activities were curtailed in year three, although work to complete the workshop training manuals and guides goes on.

**IR 5: Design and validation of the strategic M&E system of the VLIR UNALM programme**

The IR was dropped from the project after year one, with no activities having taken place.
IR6: Socio-ecological resilience of organic coffee production

This IR was added in year three as a result of a UNALM call for research proposals for inclusion in Project 3. One MSc thesis was completed with the project’s support by academic staff member Julio Chávez, who also completed his PhD proposal which was accepted by the University of Seville.

IR7: Stakeholders, innovation and social learning for sustainable alpaca wool production

The thesis by work of Belgian MSc student Carlo Noe contributed to this IR, and supported the preparation of a PhD proposal by P3 Project Leader Laura Alvarado (appointed 2013).

Project teams

Project 3 was originally conceived and proposed by a Visiting Professor in the Institute of Sustainable Rural Livelihoods (ISRL), who was not a permanent member of UNALM but became the Project Leader. The project drew on a very small pool of expertise in ISRL. Otherwise project team members were all intended to be the sub-project leaders in Project 1 and Project 2 of the IUC-UNALM programme.

By January 2012 the original project leader had left and no other ISRL team member took her place for longer than a few months. This lack of direction and capacity in UNALM played a significant role in the overall lack of progress in Project 3. On the Flemish side, the Project Coordinator and VLIR-UOS had initial difficulties in identifying an appropriate and willing Flemish Project Leader. Overall, Flemish team inputs and leadership were also limited, so the project, after 2011 lacked overall direction and capacity.

Research

Research outputs from Phase I have been very limited to date. Research field work and data analysis was severely constrained by poor articulation and integration with the research Projects 1 and 2.

Extension

Extension work was limited to early consultation and data-gathering among Mantaro Valley and Pasco communities, and the preparation and delivery of four workshops on data-gathering and information sharing for farmers and livestock managers.

Table 10: Assessment of key result areas Project 3

<table>
<thead>
<tr>
<th>Key result areas</th>
<th>Indicators (quantitative and full descriptive data)</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>KRA 1: Research</td>
<td>Six theses (BSc/MSc) were supported by the project.</td>
<td>2</td>
</tr>
<tr>
<td>KRA 2. Teaching</td>
<td>No teaching objectives were set.</td>
<td>N/A</td>
</tr>
<tr>
<td>KRA 3: Extension and outreach</td>
<td>Four training workshops on methods</td>
<td>2</td>
</tr>
<tr>
<td>KRA 4: Management</td>
<td>No progress made in developing procedures or methods in participatory and active research</td>
<td>1</td>
</tr>
<tr>
<td>KRA 5: Human resources development</td>
<td>Two students working on thesis research</td>
<td>2</td>
</tr>
<tr>
<td>KRA 6: Infrastructure</td>
<td>No infrastructure development was included</td>
<td>N/A</td>
</tr>
</tbody>
</table>
P4. Educational innovation in undergraduate and graduate programmes with emphasis on the sustainable management of agro-ecosystems and rural development

The overall objective is enhancement of professional quality with a view to fostering national agrarian sector development

The specific objective is to develop educational models in agrarian sciences to support the development of agrarian professionals linked to the reality of a highly diverse country.

Context and rationale

Universities in Peru need to develop educational strategies and pedagogical models that adequately respond to increasing challenges of globalisation and technology changes, especially in relation to agricultural development. This is particularly important for Peru, where access to HE is limited and decentralisation of HE still needs to cope with large equity gaps, and where the country’s intercultural reality poses important opportunities and restrictions in this regard.

UNALM is the main specialised institution in Peru that provides HE and training related to agronomy, environmental sciences, forestry, food sciences and rural development. However, the university faces challenges in delivering on its mandate to provide undergraduate and postgraduate education: these challenges are associated with education access, quality assurance and the adequacy of its courses to meet the demands of the sector. The development of innovative educational strategies and new pedagogical models are key drivers for the UNALM to improve its position and mission as a leading institution for the development of the Peruvian agrarian economy and also as a model HE institution in this sector in the Latin American context.

To fulfil its instructional mission, the UNALM will have to seek to provide its undergraduate and graduate students with an adequate research-based learning environment, new pedagogical models and to make a start on curricular review to meet international minimum standards.

Scope and structure

Project 4 can be considered to some degree as a cross-cutting project because, while its main objective is to strengthen and improve the quality of education and education delivery at UNALM, the project it also plays a key strategic role within the IUC-UNALM programme, addressing as it does academic and research development and building staff capacity in the university (with obvious links to the research projects, as well as P6 and P7)

The project had three quite ambitious IRs for the first half of Phase 1:

- IR1: Undergraduate and postgraduate educational programmes linked to the country’s reality.
- IR2: Active academic management of research and faculty training in higher education pedagogy.
- IR3: Articulated vision of the reality with emphasis on the system and relationships within.
In the 2013 Annual Plan (AP) the P4 logical framework went through a significant revision, obviously reflecting a rethink by the project team of the Project’s progress and realistic objectives. The post-2013 IRs are now four in total and stated as follows:

- IR1: An education model is developed and (gradually) implemented
- IR2: Teachers are trained and informed
- IR3: Learning environments are redesigned and redeveloped
- IR4: Educational activities are research based

Progress towards IRs in Phase 1

These changes in the project plan are explained by the comments in the self-assessment report about three important assumptions that were made but all failed:

“It was assumed that during the period UNALM was going to execute changes in the curriculum of degree programs supported by P4. This was not the case due to the university council decisions.

It was assumed that there was interest to explore changes in the doctoral programs leading to have a single program at UNALM. This was proved to be difficult at present. Exploring opportunities for improvement of 2 selected doctoral programs (Animal Science and Economy of Natural resources) is conducted now.

It was assumed that opportunity exists for supporting a transdisciplinary vision but this requires whole university compromise in order to be implemented.”

Project 4, therefore, has been faced with considerable challenges in implementing its original project plan and the Flemish and UNALM teams have been flexible and creative in responding to realities and opportunities, and in pitching their expected results at a less ambitious, more achievable level, while maintaining the same overall goals of improving educational quality in UNALM and introducing new educational models across the university.

Curriculum change (IR1) has, perhaps been the biggest challenge in Phase I. Efforts have been directed not at curriculum change itself but at influencing and aligning project activities with the faculty and university councils which take decisions about educational issues like curriculum change and budgeting for improving quality of the teaching and learning process.

Better progress towards achieving IR2 has been made through the delivery of teacher training short courses on innovative educational methods, which have had a positive but so far limited impact on the UNALM academic community.

The UNALM has set up its permanent Unidad de Innovacion Educativa (UIE), which was not included as part of the IUC Project 4 but would not have happened without the work and influence of the IUC Project teams. This unit has been a key element in increasing the impact, visibility and recognition of P4 across the university community, and is likely to continue to play an important and dynamic role as engine of academic culture transformation in the university.

Project teams

Project 4 has been an example of good practice in the IUC-UNALM in terms of building effective and constructive cooperation between the UNALM and Flemish project teams, and in finding solutions to capacity gaps through partnerships with other HE institutions and expert individuals in Peru.
Table 11: Assessment of key result areas Project 4

<table>
<thead>
<tr>
<th>Key result areas</th>
<th>Indicators (quantitative and full descriptive data)</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>KRA 1: Research</td>
<td>Research was not one of the targets of the project. However, two articles have been published and a poster presented in a prestigious conference in the field.</td>
<td>3</td>
</tr>
<tr>
<td>KRA 2. Teaching</td>
<td>The project has delivered 11 courses/trainings during the first phase. Two textbooks were developed during the period, being one of them reprinted.</td>
<td>4</td>
</tr>
<tr>
<td>KRA 3: Extension and outreach</td>
<td>The first edition of the International Conference on Innovation of University Education in Agriculture and Natural Resources, as well as the creation of the UIE website and the bulletin for the publication and dissemination of information and materials on educational topics, are good results for Phase I.</td>
<td>3</td>
</tr>
<tr>
<td>KRA 4: Management</td>
<td>The UIE has been created by the UNALM to foster and coordinate educational processes, and P4 is managed by staff assigned to this unit</td>
<td>4</td>
</tr>
<tr>
<td>KRA 5: Human resources development</td>
<td>The project coordination has integrated young professionals on internships from other institutions to mitigate capacity constraints.</td>
<td>3</td>
</tr>
<tr>
<td>KRA 6: Infrastructure management</td>
<td>P4 has supplied the UIE with some essential equipment, ICT facilities for courses and other resources for use in P4 and other activities.</td>
<td>4</td>
</tr>
<tr>
<td>KRA 7: Mobilisation of additional resources/opportunities</td>
<td>No other resources mobilised</td>
<td></td>
</tr>
</tbody>
</table>

**Project 5 Capacity building and infrastructure development of ICT, library and language centre**

The overall objective is that UNALM becomes a national leader in the design, implementation and promotion of innovative strategies for the use of ICT, libraries and documentation centres in agricultural and environmental research and education, as well as fostering these technologies for all areas of rural development in close interaction with the stakeholders.

The specific objective is to provide technological support and access to information to the university community, aimed at facilitating agricultural research, higher education and rural development.

**Context and rationale**

Well-functioning ICT systems, libraries and language centres are fundamental means for scientific, economic and social strengthening of the agricultural sector. The Government is also promoting initiatives to strengthen information technology in support of education.

Project 5 objectives will build UNALM capacity to enable it to better access up to date information, which will raise the academic level of students, teachers and researchers; and to improve the administrative management within the university, creating an ICT-culture at all levels of UNALM to make optimal and most appropriate use of ICT.
The UNALM Library is the National Agricultural Library (BAN), and as the coordinator of the national network of agricultural libraries in Peru, has contacts with several international institutions (e.g. FAO, IICA) and is linked to several international activities. Very poor ICT technology at BAN was a major constraint for a more effective participation in these initiatives. Online use of BAN resources by UNALM researchers and staff was extremely low. The construction of a new building for BAN (this will not house the entire BAN collections, which remain in the old building) with central government funding has been completed during Phase I of the IUC-UNALM programme.

Project 5 underpins the performance of all other projects of the IUC-UNALM programme and the UNALM as well. The capacity to use advanced networks and information technologies will facilitate the implementation of new teaching and learning methodologies within the P4 project; it will enable communication with and from the IRDs in P6 and support creation of workflows to strengthen academic and administrative management in UNALM in P7.

Scope and structure

Project 5 addresses areas of capacity building in UNALM that are managed by three separate units: the Oficina de Sistemas Informaticos (OSI); the BAN Library Director; and the Language Centre. After a recent UNALM restructuring OSI now sits directly under the Rector, while BAN and Language Centre remain under the Vice-Rector Academic.

The Flemish and UNALM project teams recognised that, to build effective, whole university services, the UNALM management and oversight structure for ICT systems and the BAN needed strengthening and considerable effort has been put into establishing an ICT Council and a Library Council, on which UNALM academic and management stakeholders are represented.

Progress towards IRs in Phase I

**IR1 Modernization of the library and expand its capabilities to better serve the scientific and scholarly information to the university community and the agricultural sector.**

The BAN has expanded into the new building, with the capacity to provide facilities and services to all members of the UNALM community. Project 5 did not contribute towards the construction of this building but has provided the opportunity to equip it with up-to-date ICT and educational technology equipment, library shelving, furniture and RFID technology (for circulation, inventory and security of library collection items) and infrastructure.

In addition BAN documentation centres in eight faculties have been upgraded and integrated more effectively into BAN network and services. A repository of digital documents is under development to make undergraduate and graduate theses accessible through the network.

The professional and technical staff capacity of the BAN was, and remains, low. A number of staff training (professional and technical) interventions were implemented, with some still planned for the remainder of Phase I. However, many, if not most, of the newly trained BAN staff have subsequently left the university for more attractive positions elsewhere. Staff turnover at all levels has been the biggest challenge faced by P5 in Phase I.
IR2 Modernisation and strengthening the infrastructure of information technology in educational management support

The most visible accomplishments of P5 in Phase I lie in the progress towards this IR: the modernisation and strengthening of the ICT infrastructure in UNALM is more or less complete, including enlargement of the main backbone via fibre optics, structured cabling renovation and modernisation of data communication equipment, modernisation of the telecommunications centre and networking with the UNALM IRDs, all of which enables the establishment of new services throughout the university.

In the area of personnel training, Phase I included a significant amount of specialised training interventions, both technical and ICT management training, but here also the challenge has been to retain those trained staff in the UNALM posts, which have low status within the university and are mainly short contract posts.

Staff capacity building will be the main focus for P5 during Phase II and project progress will be very dependent upon the human resource development policies of the UNALM.

IR3 Modernization of the language centre and expand its capabilities

This aspect of P5 was poorly conceived in the PPP stage, considering the paramount importance of English language capacity for academic staff and research students with potential as PhD candidates under the IUC-UNALM programme.

The Language Centre is not an academic unit but an enterprise unit of the UNALM offering services to students and staff at competitive prices. In the pre-financing stage in 2008 before the IUC-UNALM programme began the Centre benefited from a reasonable investment by VLIR-UOS for the acquisition of an interactive e-learning platform for English, as well as some computer equipment. Also in 2008, the UNALM funded the construction of new lecture rooms and two language laboratories. The only contribution of P5 itself to the Language Centre has been the payment (until 2013) of the licence for a Longman e-learning English as a Foreign Language software application. This was subsequently found not to be appropriate or workable and the subscription was transferred to TOEFL.

No more structured or comprehensive plan for support to the provision of English language training for academic use was put forward by either the UNALM or Flemish side during the PPP or during Phase I implementation. One of the main reasons cited for this was the weak management of the Language Centre itself.

Project teams

While the Flemish project team from KUL has been stable during Phase I there have been many changes in the UNALM team in BAN, where the Library Director was changed three times during Phase I, and other staff turnover also had an impact of project progress.

Table 12: Assessment of key result areas Project 5

<table>
<thead>
<tr>
<th>Key result areas</th>
<th>Indicators (quantitative and full descriptive data)</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>KRA 1: Research</td>
<td>No research activities planned</td>
<td>N/A</td>
</tr>
<tr>
<td>KRA 2. Teaching</td>
<td>No education activities planned</td>
<td>N/A</td>
</tr>
<tr>
<td>Key result areas</td>
<td>Indicators (quantitative and full descriptive data)</td>
<td>Score</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>KRA 3: Extension and outreach</td>
<td>No extension or outreach activities planned</td>
<td>N/A</td>
</tr>
<tr>
<td>KRA 4: Management</td>
<td>The ICT Council and Library Council have been established. A strategic plan for the BAN was prepared by the Flemish team</td>
<td>4</td>
</tr>
<tr>
<td>KRA 5: Human resources</td>
<td>Three BAN professional staff were trained in Belgium at KUL. Numerous other short courses and workshops for ICT technical and managerial staff have been delivered by the Flemish team in UNALM. Unfortunately, the UNALM has been unable to retain most of the staff trained during Phase I so this investment has been wasted in large part</td>
<td>3</td>
</tr>
<tr>
<td>KRA 6: Infrastructure management</td>
<td>Servers in the former data centre were replaced with virtualisation capacity and appropriate storage. All old servers have been migrated into the new virtual infrastructure. Network backbone and support switches have been replaced. Patch rooms have been renewed and air-conditioned in order to reduce fails due to temperature or dust. Access-gateways and control systems have been provided. Wireless network throughout the campus has been set up. Connectivity to the internet has been improved and bandwidth increased. The ICT infrastructure of the library has been improved and modernised. Servers have been moved to the virtualised data centre and the number of servers and storage capacity has been increased to up-to-date standards. Equipment has been put in place to digitise books and theses, and to insert RFID programmed tags into books. PCs from Close the Gap (CTG) have been provided for classrooms and the Library. ABCD library management software has been installed and made operational. Digital content has been provided by ebooks, ejournals and improved access to the internet</td>
<td>5</td>
</tr>
<tr>
<td>KRA 7: Mobilisation of additional resources/opportunities</td>
<td>The P5 team, collaborating with P4, has proposed a new, additional project approved for VLIR-UOS funding, which will build on the IUC-UNALM programme to develop an Open Learning Centre in the new BAN building.</td>
<td>3</td>
</tr>
</tbody>
</table>

**P6. Capacity building and infrastructure development of Regional Development Centres (IRDs)**

The overall developmental objective is that the IRD’s contribute to the promotion of sustainable agriculture in Peru as centres of excellence

The specific developmental objective is that the IRD’s contribute to extension in the three regions of Peru oriented to small producers
The overall academic objective is that the IRD’s contribute to research and education activities of UNALM in the three regions of Peru oriented to sustainable agriculture of small producers. The specific academic objective is that the IRD’s contribute with faculties of UNALM to facilitate research and education in the three regions of Peru oriented to small producers.

Context and rationale

Peru is divides the territory into three major ecosystems, Coast, Highlands and Amazon Jungle. The UNALM is located in the Arid Central Coast of Peru and in order to cover research, outreach and education in other representative regions, the IRD’s were created in the 1970s in one of the main components of a World Bank funded project. However, work was unfinished because of social problems in Peru at that time. The purpose of Project 6 is therefore to strengthen the physical and technological infrastructure of the IRDs to improve research, education and extension activities in the three main ecosystems of the country.

The IRDs in the focus of the IUC-UNALM programme are situated in Central Coast (Cañete), Central highlands (Yanamuclo) and Jungle (San Ramon and Tarapoto). These have been underutilised resources that can give UNALM a strong national presence.

Scope and structure

During Phase I of Project 6 the Cereals Research Unit at UNALM won additional funding from the Peruvian Government for the rehabilitation of the IRD of Yanamuclo, which had been badly damaged and abandoned during the social unrest of the 1980 and early 1990s. The joint efforts of the IUC and the extra funding considerably accelerated the rehabilitation process by investing in buildings and infrastructure (investments which are impossible for an IUC). With this extra budget a cheese making pilot, the quinoa germplasm bank and several screen houses for breeding were installed.

The IRD at Cañete (Coast) is accommodated in similarly good buildings; in San Ramon the infrastructure is also good. However, the IRD at Tarapoto, while it has some production capacity, has no buildings or infrastructure suitable for research, education or extension activities. No investments from UNALM are currently forthcoming to rehabilitate or expand this IRD, and the IUC-UNALM programme cooperates with the local Instituto Cultivo Tropicales to support research and extension activities.

To achieve the IRs Project 6 is not working in isolation within the IUC-UNALM programme. The three research projects (P1 and P2 in particular) have been implementing during Phase I within the framework of the improving IRDs (at least at Yanamuclo and Cañete) and the education project (P4) will make increasing use of IRD facilities during Phase II. Greater emphasis in P6 has been given to the Yanamuclo IRD located in the highlands because of the synergies with P1, P2 and P3 and because of the urgent need to upgrade the badly deteriorated infrastructure there.

Progress towards the IRs in Phase I

IR 1 Research equipment implementation at IRDs

The IRD’s are used mainly for research and for production, the latter bringing some cashflow to UNALM. P6 successfully installed and / or upgraded basic research facilities in Yanamuclo and Cañete, such as preparation rooms equipped with ovens, weighing balances and simple portable instruments for pH and similar measurements to enable researchers to take well-prepared field
samples back to the main campus for more sophisticated analysis. Weather stations were also provided at two IRDs. The San Ramon IRD was equipped with internet connectivity, laptops and a meteorological station.

Research work using IRD facilities is now taking place on a regular basis under P1 in the Mantaro Valley.

IR 2  Improvement of UNALM courses using facilities at IRD

In discussion with the faculties and departments of UNALM, particularly focusing on logistics and organisation to enable students can travel to an IRD to complete their practical work and be accommodated at the IRD if necessary, a number of specific pilot courses have been implemented at IRDs and other courses have been improved through student practical work at IRDs.

This is an area for greater attention (with P4) during Phase II.

IR 3  Management, logistics and communication are improved at IRD

Project 6 funded the purchase of a vehicle based at Yanamuclo and in regular use for P1. ICT infrastructure and facilities at Yanamuclo and Cañete were installed as part of P5, and additional PCs purchased under Project 6.

A particular focus of attention in Phase I has been improving the management, planning and timetabling use of the IRDs for research, education and extension by eight different faculties in UNALM. The Board of the UNALM has committed to hire a senior manager for the IRDs, also with a view to making them financially self-supporting.

IR 4  Implementation of selected extension activities at IRD

Extension activities (e.g. in fertilisation advice, cattle production, parasitology) linked to P1 and P2 have been implemented at Yanamuclo. The project works directly with farmers in the Coast region and mainly with associations of farmers in the Mantaro Valley.

Table 13 Assessment of key result areas Project 6

<table>
<thead>
<tr>
<th>Key result areas</th>
<th>Indicators (quantitative and full descriptive data)</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>KRA 1: Research</td>
<td>No research activities were planned.</td>
<td>N/A</td>
</tr>
<tr>
<td>KRA 2. Teaching</td>
<td>Some pilot courses were implemented using IRD facilities. Collaboration with P4 in Phase II is recognised as a priority</td>
<td>3</td>
</tr>
<tr>
<td>KRA 3: Extension and outreach</td>
<td>In collaboration with P1 and P2: Workshop with growers and local authorities from San Lorenzo, Matahuasi, Apata, all in Mantaro Valley to show them that IRD UNALM can work with them for training in their rural activities Workshop with different institutions around Mantaro Valley (Sierra Exportadora, UNC, IVITA, Agencia Agraria, Gloria) to propose joint ventures in common goals Workshop with members of Apata District to identify agricultural limitations in order to coordinate research, training and thecnical assistance activities</td>
<td>4</td>
</tr>
</tbody>
</table>
Evaluation findings

<table>
<thead>
<tr>
<th>Key result areas</th>
<th>Indicators (quantitative and full descriptive data)</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Workshop with Alipio Ponce High School students to show them UNALM careers that they can select for their university studies Workshop in Milk Quality and Milk Production Business</td>
<td></td>
</tr>
<tr>
<td>KRA 4: Management</td>
<td>The project with UNALM has begun to address the management of the IRDs to ensure effective and increasing use of facilities for research, education and extension, as well as income-generating production</td>
<td>3</td>
</tr>
<tr>
<td>KRA 5: Human resources development</td>
<td>No activities were planned</td>
<td>N/A</td>
</tr>
<tr>
<td>KRA 6: Infrastructure management</td>
<td>Equipment acquisition to improve sample management from other projects in Mantaro Valley area (soil and plant sample management) and improvement in irrigation in Costa and Sierra IRD for research in soil physics and irrigation</td>
<td>4</td>
</tr>
<tr>
<td>KRA 7: Mobilisation of additional resources/opportunities</td>
<td>UNALM investment in the upgrading of IRDs (particularly Yanamuclo) and support to small projects at the centres has underpinned IUC-UNALM programme activities</td>
<td>3</td>
</tr>
</tbody>
</table>

Project 7: Institutional change and logistic project support

The overall development objective is to contribute to the identification and remediation of key agronomic, socioeconomic and environmental constraints of small scale family based agriculture in Peru.

The overall academic objective is that UNALM becomes an internationally recognised institution in research, teaching and service to society.

The specific academic objective of the project is to consolidate and articulate an institutional platform, strategic vision and management tools to allow a better integration of university education, research and extension oriented towards results by improving academic, management capacity, leadership and governance.

Context and rationale

The UNALM’s research role is to conduct basic and applied research of importance to the nation in a wide variety of disciplines, linked to the rural sector. As the principal centre for agricultural and environmental research in public HE, the UNALM seeks to become a national and international leader in the advancement of knowledge. While the extent and quality of doctoral training is relatively good, institutional structure and support for doctoral studies and participation in conferences and workshops is weak. Absence of research-policy culture and funding channels, a heavy teaching load for UNALM staff and insufficient command of the English language are major factors explaining low international research outputs from UNALM. An Office for Research Coordination was established, but has had little institutional impact.

Plans for institution-building have focused mainly on strengthening teaching, through faculty upgrading, curriculum development, mostly for basic and applied sciences. These actions have not made programmes more relevant and practical and the links between these goals and potential productivity changes in smallholder agriculture have not been adequately established at the
Evaluation findings

university level. Despite the fact that many isolated research programs in UNALM have excellent connections with the rural smallholders sector, these opportunities were seldom taken into account for institutional educational improvement.

On the management and governance level, lack of funding, limited human resources and sub-optimal professionalism have been the major challenges. UNALM has weak control over some very basic internal decisions regarding funding, staffing and admissions, which limits the possibilities of research coordination and accreditation. Although academic capabilities have been developed, not enough has been done to enhance the institution's ability to guide, direct, and manage these capabilities.

Scope and structure

Project 7 has as its main goal the establishment of policies that can strengthen the activities of the UNALM, and strengthen the capacity of management, administrative and academic staff to facilitate the implementation of these policies. The project has focuses on the following core areas: the strengthening of the research management, accreditation, development of institutional policies, and logistic support for capacity building among academic staff.

Progress towards the IRs in Phase I

Introduction

Project 7 was very ambitious and somewhat confusing in its final conception and plan (as presented in the Partner Programme document), addressing many areas at once through seven IRs, which are a mix of new institutional structures, organisational and attitude changes within UNALM, policy development and implementation, and strengthening of processes already in progress. The self-assessment correctly observed that

It would have been better to elaborate a diagnosis of the status of the organizational culture in the university at the beginning of the project due to its importance as a factor that influences the achievement of the goals of the project.

Nonetheless, the project team has managed to narrow the focus of activity on to realistic outputs. The biggest challenge faced by Project 7 has been an overall lack of interest and participation on the part of the UNALM authorities in the process of endorsement of new policies underpinning the management of the university that has delayed policy implementation.

The current UNALM system of contracting administrative personnel has also proved to be a constraint on continuity; changes to allow more permanent appointments with decision-making powers would strengthen policy implementation and management processes in general.

IR 1: An integration strategy and policies were implemented to improve the flow of UNALM research results and to strengthen UNALM capacity to influence agricultural policy in the country

The most visible progress towards this IR has been the definition and adoption for the first time ever of university strategic plan (2010-2015). This strategy has defined a group of policies and indicators to strength the work in key areas of the UNALM. Nevertheless, the strategy is not well known yet within the university, perhaps as a consequence of the top-down approach to the development of the strategic plan and the lack of wider participation in its definition and dissemination.
Research polices were approved by University Council in 2013. The Project has been instrumental in supporting the new Vice-Rectorship for Research in 2013.

**IR 2: Development of educational standards, accreditation and assessment protocols for international and national accreditation in coordination with local agencies to improve faculty professional development with emphasis on rural innovation and development.**

In 2010 the Consejo Nacional de Evaluación, Acreditación y Certificación de la Calidad de la Educación Superior Universitaria (CONEAU) published national accreditation standards for bachelor’s courses, with biology course accreditation compulsory, which prompted UNALM to prioritise accreditation in P7. The Flemish team supported UNALM with some training advice and worked with the Agronomy Faculty to meet first national and then regional accreditation standards (under a Consejo Universitario Andino (CONSUAN) pilot scheme). The Flemish input was mainly capacity building support to the self-assessment process. The Faculty of Agronomy was accredited by CONSUAN in 2013.

Other faculties are now motivated to follow this example (e.g. forestry, food science and animal science) and different accreditation and quality assurance activities are likely to be prioritised in Phase II.

**IR 3: Establishment of a foresight strategy for financial management and leverage of funds complementary to those from VLIR.**

Progress towards this IR is part of a wider and more general strengthening of research coordination within UNALM, within the context of the new research policies. UNALM has no research fund but draws on government funds (e.g. Fondo para la Innovación, Ciencia y Tecnología (FINCYT) and the Peruvian Technology and Research Council (CONCYTEC)). The evaluators saw no evidence of an actual strategy for managing and leveraging research funds, but FINCYT funds for 12 UNALM projects have been managed by the staff of economics office since 2013. The Vice-Rectorship of Research has begun to set up an office responsible for the management of a further eight projects with funding from CONCYTEC.

**IR 4: An operational logistic support unit**

The only activity listed for this IR in the Logframe was to “arrange for visiting lecturers and experts to organise short trainings”; the self-assessment report lists two courses. The Programme Coordinator self-assessment report explains:

“The logistic support component of P7 is linked to all other projects, because P7 can organise ‘close-the-gap’ short courses on demand. Examples are Scientific Communication, R-programming, Life Cycle Analysis and Statistical Research Planning, DRONE-technology for land-use inventarisation and up scaling of agro-ecosystems, ....”

The rationale and need for this element in P7, and the relevance of its activities to the specific objectives of each of the projects are not at all clear to the evaluators. This IR could usefully be dropped in a re-orientation and re-focusing of Project 7 for Phase II.
**IR5: UNALM institutional image built through a communication strategy to strengthen public relations and strategic links with institutional relevance**

Similarly, the P7 logframe lists activities as “organisation of workshops on communication strategies and setting up partnerships with external partners” in order to extend the scholarly reach of UNALM “by forming strong partnerships with other research universities, corporations, nonprofit and community-based organizations, and state and international agencies through a communication strategy”. The evaluators know of no actual communications strategy and it could not be considered as a high priority for Phase I, or Phase II until other more fundamental organisational changes and policy implementation have taken place. The self-assessment report notes “seven agreements signed in association with national (public and private) and foreign universities for research projects.”

**IR 6: Interdisciplinary research experience for rural innovation, systematization and a publication friendly environment oriented towards interdisciplinarity**

Concerning publications, P7 has ensured that since 2009 the registration of all articles published in indexed journals, which inexplicably did not occur in a university with large research tradition like UNALM.

Standards for edition of the Scientific Annals Journal have been approved, and new rules for the publication of scientific articles updated and approved by University Council. An editor has been chosen for the Scientific Annals Journal with new rules for the publication of scientific articles; by 2014 the journal will complete the requirements for future indexing.

**IR7: Research coordination support and activities are strengthened.**

Some progress has been made in terms of improvement of institutional structures to support research, and strengthen the Research Management Office attached to the new office of the Vice-Rector for Research. A 10% institutional overhead on research projects has been approved and will be introduced in 2014. Work is in progress on the development of database of UNALM research (collaborating with P5).

Nonetheless, progress in this area is very slow. No official policies for the UNALM doctoral programme have been approved by the University Council as yet. The Research Management Office will require increased resources to fulfil its institutional role, especially expert staff resources.

P7 was also assigned the task of providing the ‘PhD incubator’ by the Flemish Programme Coordinator with the following functions:

“Promote and facilitate submission of peer reviewed publications and English language learning

Assure a favorable environment for the applicant to complete the requirements of the university where he/she plans to obtain a PhD

Promote changes in UNALM functioning to facilitate the application for scholarships for the best UNALM candidates. This may include special regulations like less credit weight, facilitating English learning and linkage with complementary research groups in Peru and Belgium

Promote solidarity and a team spirit among the various applicants and candidates.”

---

7 IUC-UNALM Programme management manual October 2013
There is little evidence of any significant progress in P7 on these tasks during Phase I.

**Project team**

The original proposal for Project 7 was developed by the then Vice-Rector Academic and team; by 2009 when Phase I started the UNALM management and the Vice-Rector and whole project team had all changed, so considerable re-negotiation of the Project was required by the Flemish IUC programme Coordinator, as well as the appointment of a new Project Leader, the Head of the Accreditation Unit (now the Accreditation and Quality Office).

On the Flemish side there have been in effect only three active members of the project team; the Project Leader and two teams members focusing on accreditation and research coordination respectively. Communication and consensus among both project teams appears to have been good.

**Table 14 Assessment of key result areas Project 7**

<table>
<thead>
<tr>
<th>Key result areas</th>
<th>Indicators (quantitative and full descriptive data)</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>KRA 1: Research</strong></td>
<td>No research outputs were planned. The project has supported 10 professors/researchers in the preparation of their conferences abstracts to participate in national (2) and international events (4 in Spain, 2 Brazil, 1 Uruguay, 1 China).</td>
<td>3</td>
</tr>
<tr>
<td><strong>KRA 2. Teaching</strong></td>
<td>The project has assisted and supported the Agronomy Faculty to achieve national and regional accreditation standards for its course</td>
<td>3</td>
</tr>
<tr>
<td><strong>KRA 3: Extension and outreach</strong></td>
<td>No extension or outreach activities were planned</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>KRA 4: Management</strong></td>
<td>The definition and approval of the institutional strategic plan and five new policies, the strengthening of the structure for fostering research and other institutional procedures can be considered as results of importance from Phase I.</td>
<td>4</td>
</tr>
<tr>
<td><strong>KRA 5: Human resources development</strong></td>
<td>The project has delivered 10 courses/trainings at the UNALM for university management and academic staff during the first phase, relating to e.g. scientific communications, self-assessment and accreditation, and follow-up to the strategic plan of the university. UNALM project team members have had training visits to Belgium, and the Flemish team members have been involved actively in the four training carried out in Belgium. South-south collaboration also resulted in a visit by professors to the University of Cuenca (Ecuador). The UNALM and the project have not yet found an institutional approach to stimulating the flow of PhD candidates, and this remains one of the weakest elements in the project and in the overall IUC-UNALM programme.</td>
<td>3</td>
</tr>
<tr>
<td><strong>KRA 6: Infrastructure management</strong></td>
<td>No great investments were considered in terms of infrastructures for this period of the project. Consequently, only some basic infrastructure has been acquired for the administrative services with the project funding. According with the expected expansion of this project during the second phase and in correspondence with the investment priorities of the institution, it should be considered</td>
<td>4</td>
</tr>
</tbody>
</table>
## 2.2 The plus value of the IUC programme in comparison to other donor-funded cooperation programmes.

UNALM research cooperation with international donors and partners is constrained at present by the overall lack of an institutional research coordination strategy and management structures, and no effective internationalisation policies or institutional structures. Therefore externally funded research cooperation is characterised by short-term projects developed and won by individual departments or professors, without any coordination at Faculty or university level to ensure strategic alignment or multiplier effects.

The IUC-UNALM programme, therefore, is the largest research programme currently implementing, and the most aligned with the university’s own goals and role in national rural development. The unique aspects of the VLIR-UOS IUC programme model, which distinguishes it from any other international cooperation programme or interventions in which UNALM has ever participated, could be said to set a standard in UNALM that future research cooperation initiatives will struggle to emulate. It is, however, questionable whether UNALM was or is well-placed, because of its lack of research coordination and internationalisation approach, to recognise the full potential of an IUC programme model or to make the best use of its key features.

These key features are:

- UNALM is able to engage directly with one or more Flemish universities, and not with or through VLIR-UOS or other intermediaries; projects were or should have been negotiated between the joint university teams. Real academic partnership and collaboration should be possible as UNALM and Flemish universities manage and review programme progress together and negotiate changes or contentious issues.

- At the beginning of the IUC programme, in the pre-partnership programme, adequate time was allowed to ‘match-make’ between the UNALM and Flemish universities, to develop and negotiate joint partnerships and project proposals based on all parties’ interests and needs. This is an important process in which UNALM academics had to clarify and defend their needs and ideas and arrive at good compromises with Flemish partners.

- The length of time that VLIR-UOS and Flemish partner universities commit to an IUC partnership programme is unique. A two-phase, 10 to 12-year programme allows engagement in long-term thinking and planning in collaboration with Flemish partners.
2.3 Qualitative evaluation of the programme and its constituent projects

2.3.1 Qualitative evaluation of the programme as a whole

Efficiency

Overall the IUC – UNALM programme has used the financial resources at its disposal prudently and efficiently, with slow but steady progress towards the achievement of the programme’s major goals. The scholarship funds have not been utilised to the full during Phase I because of the difficulties encountered in promoting and encouraging PhD candidates from among suitably qualified UNALM academic staff interested in pursuing research topics aligned to the IUC-UNALM programme research projects. The development (through hands-on research and mentoring) and preparation of MSc students and young academic staff with Master’s degrees to meet the PhD candidacy requirements of Flemish universities is a long process, with uncertain outcomes.

Impact

The IUC-UNALM programme is ambitious in its institutional capacity building and organisational change goals. Limited impact is evident from the activities implemented in Phase I. However, several projects have sown the seeds of institutional change and development: such as P4 in the collaboration with the UIE to introduce innovation into education at UNALM; and the adoption by UNALM of documented institutional strategies and policies in P7.

The research projects (P1, P2 and P3) have also had limited impact due to low take-up of research and PhD scholarship opportunities (P1) during Phase I; high turnover of staff in project teams and in senior UNALM posts and significant research capacity gaps in UNALM that could not be overcome (P3).

Development relevance

Overall the IUC-UNALM programme remains highly relevant to addressing the identified national rural development and associated problems of poverty and inequality in the rural areas. The programme has the potential to make a significant contribution to UNALM’s capacity to fulfil its role as an important actor in national rural development.

Sustainability

Institutional sustainability of the potential and actual gains promoted by the IUC-UNALM programme will depend on the UNALM’s commitment and willingness to change, modernise and innovate in its approaches to, e.g. institutional and human resource management, research coordination and support, internationalisation and quality education.

Academic sustainability of the IUC-UNALM programme achievements will depend upon their being a sufficient volume of academics and research students contributing to the programme’s research and exploiting opportunities for research scholarships and PhDs.
Table 15: Summary of qualitative evaluation scores for the IUC-UNALM projects

<table>
<thead>
<tr>
<th>Qualitative evaluation criteria</th>
<th>P 1</th>
<th>P 2</th>
<th>P 3</th>
<th>P 4</th>
<th>P 5</th>
<th>P 6</th>
<th>P 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Quality</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>5</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>2. Effectiveness</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>3. Efficiency</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>5</td>
<td>3</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>4. Outcomes</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>5. Development relevance</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>5</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Sustainability</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>5</td>
<td>3</td>
</tr>
</tbody>
</table>

2.3.2 Qualitative evaluation of the different projects

The qualitative criteria are evaluated and summarised below for each individual project. Table 15 presents the overall qualitative scores for the seven projects and the score definitions.

Project 1 Farming systems research

While steady progress towards the achievement of all the Intermediate Results is being made, sub-projects are not advancing at the same rate, due in part to the changes to the original project plan and the addition of new sub-projects.

Although geographical balance in research across the three main Peruvian agricultural regions was not a factor in initial project planning (demographics and intensity of small-holding farming were greater drivers), five out of the seven sub-projects have agro-ecosystems and production in the Highlands areas as their focus.

Table 16: Qualitative evaluation of Project 1 Farming systems research

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Indicators</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Quality</td>
<td>Steady progress in research work is being made. However, the level of research outputs is relatively low for a large and multi-disciplinary research project, even in the first Phase of an IUC programme. The large majority of all research outputs (66%) have come from sub-projects 1.1 and 1.2.</td>
<td>4</td>
</tr>
<tr>
<td>2. Effectiveness</td>
<td>Steady progress is being made towards achievement of the project’s specific objectives, though not at the same rate across all sub-projects. The changes made to the original project plan raise questions of the coherence of the project and the continued relevance of all the sub-projects to the specific academic and developmental objectives: for example, changing sub-project 1.5 on climate change into watershed management research could be seen to weaken the link to specific production systems support; and the late addition of sub-project 1.7 on parasitology has contributed only to IR1 during Phase I</td>
<td>3</td>
</tr>
<tr>
<td>3. Efficiency</td>
<td>Investment and operational costs have been relatively high, including presumably payment of field workers’ wages and costs to maintain progress in field research; while mobility and scholarship costs have been relatively low, reflecting the difficulties in finding PhD and other research scholars willing to</td>
<td>3</td>
</tr>
</tbody>
</table>
Evaluation findings

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Indicators</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>take up research supported under P1.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4. Outcomes

There are few outcomes from P1 as yet, although the training and extension work undertaken, particularly in the Mantaro Valley, are having evident and positive effects on farming communities

5. Development relevance

The project addresses highly relevant development issues in innovative ways, and Phase I lays the foundation for obtaining, in Phase II, important knowledge transfer results and capacity gains for UNALM as a supporting partner in Peru’s rural development.

6. Sustainability

The challenge for sustainability will be to embed the research expertise and results from P1, as well as the capacity to provide scientific support services to rural communities and to Peruvian policy development, within UNALM itself. At present P1 is dependent upon a relatively high level of field research workers who are not necessarily members of or students in UNALM, and prospects for building a sufficient volume of research capacity among UNALM academic staff, to ensure continuity and sustainability, remain uncertain.

Project 2 Development of value chains for biodiversity conservation and improvement of rural livelihoods

Project 2 was based on a very challenging project concept, involving applied science research in the field (supply side), while needing equally strong socio-economic research capacity (demand side). There has been an evident imbalance between these two, with greater emphasis being put by UNALM project teams on the applied science research. The Flemish team (bringing socio-economic and not applied science expertise to the project) support has not been able to overcome this imbalance and VCA aspects of the project have had a relatively lower priority.

The project was also developed initially by combining several relatively unrelated project proposals as sub-projects, and the weaknesses of this approach are now evident in a lack of interconnectedness between the four sub-projects.

Nonetheless, some concrete research results have been achieved and interesting interdisciplinary work is taking place in the capsicum sub-project.

Table 17: Qualitative evaluation of Project 2 Development of value chains

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Indicators</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Quality</td>
<td>Some very interesting research work has been produced in Phase I, mainly related to the supply side (scientific research) and some potentially interesting interdisciplinary work is evident. However, research outputs are relatively low, even for Phase I of an IUC programme</td>
<td>3</td>
</tr>
<tr>
<td>2. Effectiveness</td>
<td>A greater emphasis on VCA would be required to achieve the specific objectives set for the project. The lack of interconnectedness and collaborative work across sub-projects is a weakness</td>
<td>3</td>
</tr>
<tr>
<td>3. Efficiency</td>
<td>Allocation of funds to the socio-economic sub-project was too low to enable appropriate level of research resources to be engaged. Synergies with other IUC-UNALM programme projects, however, were evident in Phase I (e.g. with P1 and P6) that could be better exploited for both resource efficiency and effectiveness.</td>
<td>2</td>
</tr>
<tr>
<td>4. Outcomes</td>
<td>Engagement with the enterprises on the demand side of the VC has been initiated with some good early results, particularly in the capsicum sub-project.</td>
<td>3</td>
</tr>
</tbody>
</table>
### Evaluation findings

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Indicators</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. Development relevance</td>
<td>The focus of the project, on VCA and supporting agro-producers to improve their products to meet market demand, should have considerable development relevance, and UNALM needs to build capacity in this area. Some early work is producing promising indications</td>
<td>4</td>
</tr>
<tr>
<td>6. Sustainability</td>
<td>Until the project builds both research capacity and results in VCA aspects, sustainability of the work to date is at risk.</td>
<td>2</td>
</tr>
</tbody>
</table>

**Project 3 Agrarian innovation and management of participatory knowledge systems in the Peruvian coast and Andes**

Project 3 was poorly defined in the initial preparation stage, and not clearly or consistently understood by all of the different stakeholders in UNALM and the Flemish side. Given UNALM’s existing capacity in social science research and education, and the lack of permanent UNALM staff to form a project team, the plan was over-ambitious. There were too many high-level risks: e.g. the plan was based on a single academic’s expertise and interpretation of needs, who was not a member of UNALM; UNALM capacity to support was questionable; interest among Flemish universities to develop and take responsibility for the project as planned was limited and so it was difficult to secure a committed Project Leader.

Despite these difficulties, and with all the changes in project personnel and plans, some interesting work and research has been done in last period of Phase I.

**Table 18: Qualitative evaluation of Project 3 Participatory knowledge systems**

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Indicators</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Quality</td>
<td>Only limited research results have emerged during Phase I, and several of those were the outcome of late changes of plan and co-opting of existing research work into P3</td>
<td>2</td>
</tr>
<tr>
<td>2. Effectiveness</td>
<td>The specific objectives of the project were too ambitious and not clearly or consistently understood. The introduction of robust qualitative research methodologies to support UNALM’s applied science research goals is a worthy objective, but capacity building for that needs a more focused approach than that taken in P3.</td>
<td>2</td>
</tr>
<tr>
<td>3. Efficiency</td>
<td>The departure of key project staff and UNALM staff changes badly affected the project team, which reduced in size over the course of Phase I thereby reducing capacity to achieve any results. The project was poorly supported from the Flemish side.</td>
<td>1</td>
</tr>
<tr>
<td>4. Outcomes</td>
<td>Some work on participatory research methodologies and collaboration on extension work and training within communities has had good outcomes in the P1 sub-projects.</td>
<td>2</td>
</tr>
<tr>
<td>5. Development relevance</td>
<td>The project had no overall or specific development objectives, being principally a research and capacity building project focused on internal UNALM capacity.</td>
<td></td>
</tr>
<tr>
<td>6. Sustainability</td>
<td>The sustainability of the project work already done is at risk in UNALM because of lack of capacity and lack of commitment to the overall objectives of the project</td>
<td>1</td>
</tr>
</tbody>
</table>
Project 4 Educational innovation in undergraduate and graduate programmes with emphasis on the sustainable management of agro-ecosystems and rural development

Project 4 was a very ambitious project as originally conceived, and the original plan has been effectively revised and re-oriented to accommodate UNALM realities. UNALM has responded with real commitments to change, embodied in the setting up of the UIE.

The project provides the best example in the IUC-UNALM programme of Flemish-UNALM cooperation and coordination at project level, and of drawing on external expertise in Peru and elsewhere in the region to meet capacity gaps.

Table 19: Qualitative evaluation of Project 4 Education innovation

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Indicators</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Quality</td>
<td>The activities implemented as well as the services of the UIE have achieved a high standard during Phase 1. However, big challenges are still ahead and stronger support from UNALM will be necessary to introduce qualitative curriculum changes and support to doctoral studies.</td>
<td>3</td>
</tr>
<tr>
<td>2. Effectiveness</td>
<td>A key element has been the high level of motivation of the Flemish and UNALM teams and the strong cooperation between both sides. This was a very ambitious project as originally conceived; nonetheless the objectives and expected results have been adapted and interpreted realistically to meet institutional constraints.</td>
<td>4</td>
</tr>
<tr>
<td>3. Efficiency</td>
<td>The financial resources have been used efficiently and in correspondence with the objectives and expected results. Furthermore, the project capacity has been well managed, especially with limited staff resources for both the project and the UIE. The Project Leaders have found sensible solutions to mitigate institutional constraints and has demonstrated flexibility during the project implementation.</td>
<td>5</td>
</tr>
<tr>
<td>4. Outcomes</td>
<td>The creation of the UIE has underpinned the main outcomes of the project; the work done for and by this unit is already contributing to upgrading the quality of education at UNALM and the unit is a crucial component to achieve longer-term institutional objectives. Its work should also contribute to facilitating the accreditation processes at national and international level. Conferences, seminars, workshops and training programmes have been developed and delivered successfully during Phase I. The implementation of the Innovation Education Day is a very good initiative for helping the academic staff to get familiar with new ways of teaching/learning.</td>
<td>4</td>
</tr>
<tr>
<td>5. Development relevance</td>
<td>The main results of the project so far have been institutional. In the context of the whole IUC-UNALM programme, the extension of university education and training services into the community constitutes one of the main lines of intervention, and will be a high priority for UNALM in Phase II. The improvement of agrarian sciences curricula will be an effective way of achieving significant development relevance.</td>
<td>3</td>
</tr>
<tr>
<td>6. Sustainability</td>
<td>It is expected that UIE with a strong support of the university administration can consolidate its work as strategic unit for the development of the UNALM during the second phase of the IUC-UNALM programme.</td>
<td>3</td>
</tr>
</tbody>
</table>
Project 5 Capacity building and infrastructure development of ICT, library and language centre

The technical infrastructure inputs in P5 have been very successful and the UNALM’s ICT capacity has been transformed. The project faced very significant lack of capacity in technical support, professional and ICT management staff, and the UNALM human resource recruitment and management policies have greatly constrained efforts to address this during Phase I. In particular the UNALM needs to urgently address the issue of recruiting (at a competitive salary to attract good candidates) and retaining a professional manager in OSI, capable leading and managing the further development of ICT infrastructure and use, to build on the gains of Phase I.

While BAN has benefited from infrastructure development, there has been no sustained investment in human resources, services or collections by the UNALM in the past, and no sign of any commitment to do so now, which raises serious questions around what it may be possible to achieve in Phase II of the project.

The project plans for the language centre inputs were very weak, presumably reflecting a lack of interest or commitment on the part of both UNALM and Flemish universities in properly addressing institutional capacity building in this area. This weakness is surprising considering the importance of the English language for UNALM staff and research students, and for the UNALM itself in positioning itself within the international research and scholarly community.

Table 20: Qualitative evaluation of Project 5 Capacity building of ICT, Library and Language Centre

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Indicators</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Quality</td>
<td>The implementation of ICT infrastructure development and renewal has resulted in greatly improved network performance, higher availability of ICT-based equipment and solutions, and better and wider access to ICT and information resources for the whole university community.</td>
<td>5</td>
</tr>
<tr>
<td>2. Effectiveness</td>
<td>The greatly improved ICT capacity and infrastructure were the main objective of the project and have been achieved. The big challenge for the project and UNALM in Phase II lies in appointing an experienced professional Head of OSI and building an effective technical support and ICT management team.</td>
<td>4</td>
</tr>
<tr>
<td>3. Efficiency</td>
<td>Financial and staff resources from the project have been used judiciously and effectively, even though greatly constrained by UNALM management changes and project team staff turnover.</td>
<td>3</td>
</tr>
<tr>
<td>4. Outcomes</td>
<td>The improvements and increase of ICT capacity for the university are highly visible and positive. There is great potential in Phase II to build on this capacity and infrastructure to support administrative and management processes (P7), improve research information availability (P1 and P2) and develop innovative educational approaches using ICT (P4). However, these outcomes will be at risk unless UNALM is able to develop stable, professional and technical staff support in ICT and ICT-based services.</td>
<td>3</td>
</tr>
<tr>
<td>5. Development relevance</td>
<td>No development objectives were set for Phase I; the project focuses on building institutional capacity, though it should position UNALM better in its support role to national rural development goals</td>
<td>N/A</td>
</tr>
<tr>
<td>6. Sustainability</td>
<td>The gains of the project will be at serious risk without stable, professional and technical staff put in place at the earliest opportunity, especially the professional and technical leadership of OSI.</td>
<td>2</td>
</tr>
</tbody>
</table>
Project 6 Capacity building and infrastructure development of Regional Development Centres (IRDs)

Project 6 was the most straightforward project to implement in the IUC-UNALM programme.

UNALM’s investment in the IRD in Mantaro Valley and Cañete was very significant; this has allowed the IUC-UNALM programme to achieve most of the project’s objectives in terms of infrastructure development and research use. The decision to focus the main intervention of the project in the coast and highlands IRDs was sensible, considering the extent and importance of agricultural sector production in both geographical regions, and the current and potential demand from faculties, departments and research centres in UNALM for use of the IRDs.

UNALM investment in the Tarapoto IRD has to date been low, and the facilities there need major rehabilitation and extension beyond the scope of the IUC-UNALM programme.

P6 has been successful in collaborating with and underpinning other projects the IUC-UNALM programme as well as with other units/departments of the UNALM. With the IRDs now fully a part of the UNALM infrastructure the range of IUC-UNALM project research, education and extension activities in the rural communities can increase in Phase II.

Table 21 Qualitative Evaluation of Project 6 Capacity building of IRDs

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Indicators</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Quality</td>
<td>The main objective of the project has been achieved successfully; in collaboration with project teams in P1, P2 and P5 good facilities and equipment have been provided in the IRDs of Mantaro Valley and Cañete, which create the conditions for promotion of methodologies that integrate teaching and research in the field.</td>
<td>4</td>
</tr>
<tr>
<td>2. Effectiveness</td>
<td>The objectives and expected results of the project were achieved during the project implementation. The UNALM is now in a better position to develop teaching and research of high standards oriented to sustainable agriculture in the ecosystems of coast and highlands.</td>
<td>5</td>
</tr>
<tr>
<td>3. Efficiency</td>
<td>The financial resources were used efficiently and in line with the objectives and expected results. Flemish and Peruvian coordination project coordination has prioritised key elements to ensure smooth implementation.</td>
<td>5</td>
</tr>
<tr>
<td>4. Outcomes</td>
<td>The project has resulted in significantly improved education, research and extension capacity of the UNALM. The benefits of this project have not been felt yet in all their potential but they will underpin successful implementation of the other projects during the Phase II.</td>
<td>4</td>
</tr>
<tr>
<td>5. Development relevance</td>
<td>The project addressed the creation of conditions for the better intervention of the UNALM as a key development agent in the national agricultural sector, with emphasis in local farmers and small producers. Some extension activities were carried out with success by other projects of the IUC-UNALM programme in areas such as fertilisation, parasitology, cattle production and the introduction of improved cultivation techniques like potatoes, quinoa, wheat and corn.</td>
<td>5</td>
</tr>
<tr>
<td>6. Sustainability</td>
<td>Assuming the continued commitment of the UNALM to maintain and extend existing facilities the project inputs to the IRDs are sustainable.</td>
<td>5</td>
</tr>
</tbody>
</table>
Project 7 Institutional change and logistic project support

Project 7 had a very ambitious project plan, addressing too many areas at once, which, had a more in-depth study of the UNALM organisational structure, culture and constraints been possible, might have been tailored more closely to achievable results. However, in implementation the project teams have focused their efforts in more realistic ways and made some significant progress in accreditation, the introduction of new management methods and policies, and in assessing the institutional research management and coordination needs.

The biggest challenge overall is to change the UNALM organisational culture, which, in any organisation, demands a full commitment from key organisational managers and personnel and typically takes a long time. Completion of the task may be beyond the scope of even an IUC programme. For example, despite some considerable efforts real change and capacity development in ‘soft skills’ (e.g. human resource management, communication skills, leadership, etc) has had limited effects in Phase I.

Table 22: Qualitative evaluation of Project 7 Institutional change

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Indicators</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Quality</td>
<td>P7 addresses changes in terms of attitude, organisational structure and culture, vision and management. It has made a slow good start in introducing institutional strategies and policies, and critical structural changes, and faces challenges in getting policies and strategies implemented. Accreditation has been one area promoted by that the UNALM itself and effectively carried forward, with modest but real achievements. It also provided the project team with the opportunity to introduce a range of other quality improvements and processes to the university community.</td>
<td>3</td>
</tr>
<tr>
<td>2. Effectiveness</td>
<td>A lot of objectives and results were initially defined, and some progress has been made, although P7 needs to improve and consolidate its work in the main lines of intervention it has established (i.e. implementation of strategies and policies to foster research and innovation; creation and reinforcement of stable administrative staff cadres to support new management processes, and the processes of quality assurance and accreditation).</td>
<td>3</td>
</tr>
<tr>
<td>3. Efficiency</td>
<td>Project resources (financial and staff) have been used efficiently to further the objectives of P7. However, a significant part of the P7 budget is not contributing directly to its objectives and results because the project functions as &quot;PhD incubator&quot; and funding source for the whole IUC programme.</td>
<td>3</td>
</tr>
<tr>
<td>4. Outcomes</td>
<td>The adoption of the institutional strategic plan for the period 2010-2015, and the accreditation of the Faculty of Agronomy, are key steps in the right direction. Nonetheless, the value of this project lies in potential outcomes if the UNALM and the IUC-UNALM programme are able to provide the necessary conditions in terms of stability and empowerment of key staff.</td>
<td>4</td>
</tr>
<tr>
<td>5. Development relevance</td>
<td>P7 has potential to contribute to development relevance through supporting UNALM in changes that will better position the university to play its role in national rural development</td>
<td>3</td>
</tr>
<tr>
<td>6. Sustainability</td>
<td>If all the key assumptions are met and the project can be implemented in a more dynamic way during Phase II P7 has the potential to introduce sustainable and positive institutional change.</td>
<td>3</td>
</tr>
</tbody>
</table>
2.4 The management of the programme

2.4.1 Evaluation of programme management by UNALM

Overall management of the programme

The overall local management of the IUC-UNALM is now very effective and efficient. The Project Support Unit (PSU) began with poor management capacity, particularly in financial management and accountancy skills. For the first two years of the IUC-UNALM programme the UNALM Rector would not approve the provision counterpart staff for the PSU; now, however, the university contributes one funded administrative post.

There were early difficulties in getting a common understanding among the university authorities and faculties about the shape and purpose of the IUC programme and projects, neither of which fit the usual research grant model with which university managers and academic staff are familiar.

Management challenges for the PSU were also created by many personnel changes among the local project leaders, creating the need for constant advice and training on VLIR-UOS IUC programme planning, budgeting and reporting procedures at project level.

English language has been a constraint for administrative staff both in the PSU and in UNALM. It has constrained regular communications between KUL (the ICOS) and the PSU and PSU staff have been unable to benefit from training visits to Belgium focusing on specific management issues.

A monthly meeting in the PSU by all local Project Leaders or designated team members serves as the main planning and management forum. A two-day retreat is planned to reflect on and discuss the shape of Phase II.

Conflation of roles between local Programme Manager and local Programme Coordinator

Since 2009 the UNALM Programme Coordination as expected was not strong enough to accelerate political decisions. The local Programme Coordinator has provided the necessary support to routine management of the IUC-UNALM programme, and been the figurehead for UNALM in official and formal meetings, but has not been able to provide a more dynamic leadership role for the programme by regularly engaging, for example, in strategic management and planning discussions at programme (not project) level with the Flemish Programme Coordinator in order to put the UNALM case.

In part, therefore, this role has been taken by the Programme Manager, which has been an unhelpful conflation of two different roles (leadership and management), thus reducing the voice of UNALM in planning and negotiation.

Financial management

The PSU staff found it challenging initially to understand VLIR-UOS IUC management and financial regulations, and this was particularly complicated by the mismatch in many areas between the VLIR-UOS templates for financial management and those of the UNALM. The addition to the PSU of a qualified accountant improved this situation.

The Fundacion para el Desarrollo Agrario (FDA) has overall responsibility for financial management of the IUC-UNALM programme funds, while the PSU is responsible for the day to day financial management and administration. An ongoing challenge for the PSU and the IUC-UNALM programme has been the delays in funds reaching the FDA from Belgium during Phase I.
2.4.2 Evaluation of programme management by the Flemish coordinating partner

Dominant role of Flemish partner in programme coordination and management

As noted above (2.4.1) the local Programme Coordinator and Programme Manager roles have in effect been conflated. As a result the Flemish Programme Coordinator has played a dominant role in planning and management of the whole IUC programme.

The IUC-UNALM PhD model

The extent of the problem of fulfilling the IUC-UNALM programme research and human resource development goals has been a major management issue, particularly for the Flemish Coordinator and Steering Committees.

The management manual states a core problem for the IUC programme model:

“The basic principle of this IUC is to create a research environment and tradition based on existing pioneering research units of UNALM/IUC. In these research units investments are creating many opportunities for high level research and as a consequence for PhD finalisation. In contrast with other IUCs where PhD’s are forming the core research strategy, the IUC-UNALM believes that this is not an optimal strategy to promote and facilitate research at an institutional level, because PhDs are not guaranteeing the continuity and ownership of the research. As seen in many developing countries PhDs are fast moving away from research into more lucrative managerial functions in universities and government.”

As part of the solution to this problem the IUC-UNALM programme requires possible PhD candidates to join running research projects and to “prove their ability and capacity in finalising research within the research frame work of IUC-UNALM”. This in itself has also created problems as the topics and themes of the current research projects (essentially P1 and P2) have not necessarily attracted the interest of many academic staff seeking to do either Master’s or PhD research.

Added to these factors is the additional constraint that some faculties of KUL would normally require potential PhD candidates from UNALM to undertake a pre-doctoral semester in Belgium (see 2.1.1) or undertake other preparatory studies before submitting doctoral proposals.

The Flemish Programme Coordinator’s view is that what is required is firstly to develop strong research growth by strengthening existing units, within which PhD research can evolve, rather than focusing on stand-alone PhDs that will not strengthen research traditions and overall capacity at UNALM. He has, nonetheless, led the way on trying to find solutions to building PhDs into the IUC-UNALM programme, not always in complete agreement with all IUC-UNALM Flemish and local project leaders. The following basic principles are stated in the Programme Management Manual:

- potential PhD candidates “should finalise at least one international journal publication under mentorship of UNALM and/or Flemish team members of IUC and based on results of running IUC-research”. This is a contentious issue, deemed not workable by some IUC-UNALM programme team members, and certainly questionable from an academic value point of view, since most potential PhD candidates have little experience in either research or teaching and publishing research by even experienced academic staff in Peru generally is not regarded as a priority.
- Students with a BSc/Engineer degree or Master’s undertaking their thesis work are hired as ‘field workers’ (in P1 and P2); they have been “selected between top 1% students of UNALM
and were trained to conduct optimal experimental protocols, predefined in the respective subproject are now in line to become excellent PhD candidates and future UNALM professors.\textsuperscript{8} Several of these prospective candidates have received short-term scholarships to study in Belgium and upgrade their English language skills while working on their research articles intended for publication (jointly with Belgian promoters) in international peer-reviewed journals and/or their PhD proposal. These scholarships are mostly not pre-doctoral scholarships, although it appears that some potential candidates are in fact on formal pre-doctoral training, depending on the decision of the potential Flemish and local PhD promoters.

**Financial management**

A ‘PhD incubator’ has been set up as part of the activities of P7, on the basis that

“PhD scholarships are the core of UNALM-VLIR program, with its ramifications to research, capacity building and extension. Reality shows that UNALM is not currently prepared to submit the required number of excellent candidates for PhD scholarships.”\textsuperscript{9}

Among the functions of the PhD incubator are “to promote and facilitate submission of peer reviewed publications and English language learning” and “promote changes in UNALM functioning to facilitate the application for scholarships for the best UNALM candidates. This may include special regulations like less credit weight, facilitating English learning and linkage with complementary research groups in Peru and Belgium”.

The Flemish Programme Coordinator has transferred scholarship funds for the whole IUC-UNALM programme into the P7 budget, to overcome the problem of trying to budget in advance in every project for MSc and PhD scholarships and then not being able to spend the money in each year because these scholarships are so hard to fill.

Flemish Programme Coordinator has also introduced some cost-saving measures, including

- Insisting on working on a full cost basis for allowances for board and lodging, local accommodation and travel expenses by IUC-UNALM project team members in Peru, instead of adopting the UNALM local per diem. “Although causing some administrative overload” this measure is justified as it “facilitates considerably the engagement of BSc and MSc students in the respective projects and avoids possible abuse. In many occasions students are involved in the remote activities and thus travel, board and lodging has to be foreseen for a whole team, including staff and students. Moreover in many of the remote locations, no hotel facility is available and local farmers have to provide lodging facilities.”

- Although the VLIR-UOS norm for study in Belgium during a sandwich PhD in an IUC programme is between 16 months (the minimum recommended) and 24 months, the formulation of the IUC-UNALM Phase I budget was based on only a total of 12 months paid study in Belgium, as the Flemish Programme Coordinator is convinced that 12 months is adequate time for well-trained Latin American PhD students. While not an actual restriction (more time could be argued for), it appears to be quite widely understood to be so among UNALM project team members. If this is the case it is likely to have a disincentive effect on UNALM academics and students considering putting themselves forward as PhD candidates.

\textsuperscript{8} North programme self-assessment report

\textsuperscript{9} IUC-UNALM Programme management manual October 2013
2.4.3 Evaluation of the role of and capacity for international relations and international projects at UNALM

During Phase I of the IUC-UNALM programme, the impact of the programme on the internationalisation of academic and research activities at UNALM has been limited, especially because it has not resulted in any significant increase of organisational contacts and networks with academics, scientists and professionals of other countries. There is also relatively low representation of different Flemish universities in the IUC project teams, KUL being very dominant in project collaboration.

In this context the evaluators implemented a survey of 50 members of the UNALM community (academics, researchers, members of the administrative staff and students from different faculties and departments, of which some were involved in the IUC programme projects and others not) to assess the level of maturity or readiness to identify, develop and manage international projects in UNALM, and the organisational capacity to promote sustainable actions. This included an assessment of the university’s current resources and structures in place through its International Relations Office. Figure 2 summarises the overall results of the survey exercise.

The survey asked participants to consider and answer questions that enabled the ranking of the overall work of UNALM in relation to eight key criteria for the successful implementation of international processes in a university:

1. Strategic alignment: the place of international relations and activities in the university strategy and the extent to which the organisation actively facilitates and promotes internationalisation in different academic and research activities.
2. Knowledge of project development and management: in different academic and research departments of the university and among international relations staff.
3. Existence and use of consistent methodologies, guidelines and tools for international project development and management.
4. Professional training to improve capacity to develop international dimensions and to seize opportunities for internationalisation of programmes.
5. Knowledge of international systems of HE, science and technology, as well as international programmes, organisations and agencies.
6. Communication management: the existence and effectiveness of strategic communication plans to promote and develop internationalisation of the university.
7. Use of software and computer applications in support of internationalisation.
8. Organisational structure: the capacity and resources to support international relations in the university.

From the results of the survey (overall value: 1.41/10), UNALM is ranked as being at ‘Initial State’ in internationalisation, the first of the five maturity levels established for this analysis (Initial, Planning, Standardisation, Advanced and Full Optimisation). This result validates the assessment of the evaluators about the weaknesses of the internationalisation processes and the lack of capacity in the UNALM for developing a solid and coherent international dimension that allow its university community to take advantage of international opportunities and boost a culture of international cooperation within the organisation.
2.5 Cooperation and coordination between all parties concerned

At the level of programme management, in part because of the relatively weak UNALM programme coordination, the relationship between the Flemish and UNALM partners appears to be rather one-sided: dominated by the Flemish coordinating partner in forward planning and decision-making.

At project level cooperation and coordination between partners has gone relatively well, except in the case of P3. There are some communication challenges between team members from Flemish and UNALM parties because of the relative weakness of UNALM team’s English language capacity.

However, there appears to be a mismatch between the views of the Flemish and UNALM partners on the issue of the overall communication with and responsiveness of Flemish teams: the North self-assessment report indicates that there have been no problems and that this is working well. In the South self-assessment report, also supported by interviews with UNALM team members, the view is more mixed: in some projects (e.g. P4) communication and responsiveness has been very good, in others the Flemish side has been regarded as less supportive. Typically, UNALM project team members noted no response to emails, no regular skype conversations, and feeling rather isolated.

The overall view from UNALM is that there have not been enough visits by Flemish team members to Peru, and the lack of English language capacity among UNALM project teams has limited the number of people visiting Belgium.
3 Conclusions and recommendations

3.1 Overall conclusions

While individual projects and sub-projects have made good progress, and have exploited effectively the synergies between projects, they do not yet make up a coherent programme with real prospects to change institutional capacity, research and education at the UNALM.

For Phase II the IUC-UNALM programme will benefit from serious rethinking and the introduction of significant changes in programme shape and focus (see 3.4.1 below)

The UNALM authorities have been slow to recognise the transformative potential of the IUC-UNALM programme and to respond to opportunities the programme offers to address fundamental change (especially in the capacity building projects).

Despite some exceptions within projects and sub-projects, overall the IUC-UNALM programme would benefit from more systematic efforts to make national, regional and South-South partnerships to augment existing Flemish and UNALM capacity and to build a network of contacts to support sustainability.

3.2 Concerning the management of the programme

3.2.1 UNALM response at programme coordination level

The IUC-UNALM programme overall has been adversely affected by the lack of a strong and coherent response from UNALM to programme planning and leadership: the fundamental partnership nature of the IUC programme concept has been weakened and the programme has been driven too much by the Flemish partner (ie KUL).

We recommend that an early opportunity should be found to open discussion with UNALM authorities on the appointment of a strong and engaged UNALM Programme Coordinator able to speak for the university and to devote sufficient time to IUC-UNALM leadership issues.

3.2.2 Constraints on IUC PhD development

The constraints on IUC-UNALM PhD development have resulted in frustratingly limited research results in Phase I. Some of the constraints are intractable and beyond the scope of the IUC-UNALM programme to address. However, there are three areas where changes in the programme may have beneficial effects for Phase II.

Greater clarity and simplicity around the route to PhD candidacy

The evaluators heard several versions of the current routes to becoming a PhD candidate in the IUC-UNALM programme, given the non-recognition by Flemish universities of the Peruvian Master’s as an equivalent standard, from both Flemish Project Leaders and UNALM project team members, and all of them slightly or very different. While some scholarships have been given for formal pre-doctoral studies in Belgium, most seem to be non-defined scholarships given for more informal visits and studies (and language practice) in Belgium for promising young scholars, with a view to them being able (albeit greatly assisted by their Belgian promoters or Project Leaders) to get one, if not two research articles accepted for publication in a peer-reviewed international journal (or sometimes a paper presented at an international scientific congress), and therefore be accepted by Flemish universities as PhD candidates.
The lack of clarity prevailing about the process is almost certainly confusing to those UNALM staff and postgraduate students that may be considering their options on PhD studies outside Peru, or seeking external support.

More importantly, however, writing English-language research articles that are then accepted for publication in ranked, peer-reviewed journals can be a very lengthy process, and is more properly the outcome of successful PhD studies rather than an early input to getting accepted as a candidate, especially if the potential candidate is not an experienced academic but a post-master’s student. Moreover, as noted in 2.1.1, writing and publishing research articles in internationally peer-reviewed journals is not a factor in academic career progression in Peru and in UNALM, so this is challenging even to seasoned academic staff.

We recognise the difficulties and risks for the IUC-UNALM programme in budgeting and funding formal pre-doctoral scholarships, and accept that not all Flemish universities would make pre-doctoral studies a requirement to become a PhD candidate. For the sake of clarity, however, and to overcome the unworkable publications issue and ‘level the playing field’ for potential candidates, we recommend that the IUC-UNALM programme Joint Steering Committee works with Flemish partners and UNALM authorities to agree some form of pre-doctoral study in Belgium (funded entirely separately from any subsequent PhD scholarship) as the only route for all potential PhD candidates (academic staff or students), unless, of course, they are already internationally published authors and could be accepted directly by Flemish universities. While we understand that the Flemish Programme Coordinator, and possibly others in the Flemish and local Steering Committees, will reject this recommendation outright, we suggest that it is given serious consideration as an option in the preparation for Phase II.

The success of such considerations for the IUC-UNALM programme would depend upon greater commitment by UNALM authorities to improve the current policies and procedures in the UNALM for university support for doctoral candidates and scholars (e.g. releasing academic staff from teaching duties to study in Belgium, reducing teaching loads etc.)

**Increase PhD scholarship funding in the programme**

The IUC-UNALM programme currently uses a 12-month threshold for PhD studies in Belgium for budgeting purposes, and, which is below the VLIR-UOS IUC norms and likely to disincentivise potential candidates.

We recommend that the IUC-UNALM programme adopts the VLIR-UOS 16 month minimum study in Belgium during a sandwich PhD as a budget threshold and makes this clear in any management guidelines and information emerging from the PSU.

**Take English language training for academics and potential PhD candidates seriously**

The IUC-UNALM programme faces an intractable problem of low English language capacity among potential and prospective PhD candidates and researchers involved in the projects. The Phase I contribution to addressing the problem was inadequate and has not yielded results.

We recognise that there is limited scope within the IUC-UNALM programme Phase II to address the language capacity issue. However, we recommend that the Steering Committees give serious consideration to building in some targeted actions to improve English language capacity, assuming that appropriate Flemish university support can be identified (see 3.4.1 below for more detailed suggestions).
3.2.3 Simplifying programme administration and accounting

While we endorse the need on the part of the Programme Management to be cost-conscious in use of the IUC–UNALM budget we cannot see the value in adding layers of complexity to programme and project administration by insisting on working on a full cost basis for allowances for board and lodging, local accommodation and travel expenses by IUC-UNALM project team members in Peru, instead of adopting the UNALM local per diem. This procedure is not efficient and any cost-savings are likely to be outweighed by the impact on project teams, the PSU in UNALM and the ICOS and financial staff in KUL.

We recommend that this practice stops, and that the policy for the IUC-UNALM programme in Phase II is to pay hotel accommodation (on presentation of the bill) where hotels are an option plus a modest per diem for expenses to be set by the PSU in line with UNALM rates.

3.2.4 Allocating scholarships funds to projects

At present, under the P7 “PhD incubator” element, scholarship money for the whole programme is paid out of P7 although the project team has not been able to do any ‘incubation’ activity as planned.

The IUC-UNALM programme in Phase II needs to really prioritise the PhD scholarships in order to achieve the overall benefits of the programme, and we recommend that scholarship funds in Phase II are allocated to the relevant projects according to budgeted APs.

3.3 Concerning the coordination between all parties involved

3.3.1 More active involvement of larger Flemish teams

The relative weakness of the IUC partnership at programme level (3.2.1) has not prevented some good cooperation and coordination between UNALM and Flemish teams at project level, most notably in P1, P4, P5 and P7. However, the IUC-UNALM programme (in particular the research projects) would benefit, in Phase II from more active engagement and inputs from more members of the designated Flemish teams, offering UNALM project teams more opportunities that demand their use of and practice in English language, and opportunities to observe and take part in Belgian research practice.

We recommend that, in a restructured IUC-UNALM programme (see 3.4.1 below), the Flemish and UNALM Steering Committees should consider ways to engage more and more active research team members in the programme, considering, for example, the involvement of Belgian Master’s or PhD students in the research projects through short field visits funded by the programme, or using such students for training and capacity building activities where UNALM capacity is weak or limited (e.g. in socio-economic research to support VC research).

3.3.2 Involvement of more Flemish universities in the programme

The IUC-UNALM programme has been dominated by KUL (five out of seven of the projects have had Flemish Project Leaders in Phase I) and active input in project teams from other Flemish universities has been limited. This is unusual in VLIR-UOS IUC programmes.

We recommend that, in a restructured programme in Phase II, ways should be found to strengthen the involvement of other Flemish universities, for example, by selecting new Flemish Project leaders for the restructured projects.
### 3.3.3 Internationalisation

Internationalisation is not a strong element in the UNALM institutional approach and the impact of international cooperation on major activities of the university is limited. Participation by the UNALM in international research actions is based on isolated initiatives of individual academics and researchers.

The International Relations Office plays a very limited role; its low level of resources and capacity can be seen as an indicator of the low priority given to this area by the UNALM. The staff of the office can only be reactive rather than proactive in their work and therefore mainly focus on mobility actions. There is no evidence of collaboration or links with other key units of the university to develop international activities in strategic areas such as research, science and technology, innovation or extension.

Although it is argued that one of the main goals of the UNALM is to build its capacity to solve relevant problems in Peruvian society, these problems - sustainable agriculture, food security, food production, food chain, rural development, forestry, soil system, water management, environmental issues, etc - are among the most pressing global and regional priorities, especially in Latin America. A highly specialised university like UNALM in this sector has the resources and arguably an obligation to become engaged in and open to international debate and research to mitigate and solve problems at national, regional and international level, and to contribute to improving the quality and relevance of its own education, training and extension work.

The IUC-UNALM programme, as the largest single international research and capacity building programme in the university, and intended to encourage South-South academic and research linkages, offers an opportunity to develop a more coordinated and proactive approach to internationalisation in UNALM.

We recommend that through P7 in Phase II measures are taken to strengthen international outreach and raise the profile of internationalisation higher in the UNALM’s strategic thinking. Cooperation in the programme with a higher number of Flemish institutions will help; identifying ways to build the capacity of staff in the UNALM International Relations Office, and exploiting potential links and synergies between the IUC-UNALM programme and other IUC programmes (past and present) in the region, might be relevant considerations.

### 3.4 Overall recommendations to VLIR-UOS on Phase II of the IUC-UNALM

#### 3.4.1 Programme restructuring for Phase II

We recognise there are many complex considerations to be factored in by both the UNALM and Flemish Steering Committees in considering the shape of the programme in Phase II. We also recognise that this external evaluation has had relatively little time to become apprised of all the institutional and other pressures that impact upon those considerations.

Nonetheless, we recommend that the following suggestions about programme restructuring be taken into consideration: more details are given below:

- Close P3 and P6 at the end of Phase I and re-distribute funds within the programme
- Consider the balance of research in the three main geographical ecosystems of Peru, and consider reorganising P1 into new projects
Conclusions and recommendations

- Enhance and expand the research into watershed management (P1 SP 1.4) as a critical underpinning of farming production in all three ecosystems in Peru
- Combine farming systems (P1) and value chain research (P2) into more coherent projects that will facilitate better synergies and sharing of resources
- In P5 make no further investment in the BAN (other than provision of ICT services and facilities as a part of the university network)
- Use P5 to address English language capacity using blended learning approaches (ICT-based systems and support as well as upgraded English language teaching and support).

Close P3 and P6 and the end of Phase I

There is broad agreement from both the Flemish and UNALM sides that P3 has not worked and should end with Phase I.

There is also broad agreement that P6 has done its job in upgrading, facilitating and promoting the use of the IRDs (Yanamuclo, Cañete, San Ramon), and that the task ahead is to integrate the use of these facilities into the research and education projects in the IUC-UNALM programmes, and wider into UNALM activities. This can be done more effectively through coordinated actions within each project and does not need a stand-alone project to achieve it. Moreover, any further investment in the remaining IRDs (e.g. Tarapoto) would need to be matched and exceeded by investment in rehabilitation and expansion by the UNALM authorities, and this is not forthcoming at present.

The balance of research in the three main geographical ecosystems of Peru

We recognise that geographical balance between research in the three main ecosystems of Peru (coast, highlands, jungle) was not a factor in planning the IUC-UNALM programme; more pertinent were factors such as population density, intensity of farming, key crops and products for Peru, etc.

However, the research activities and sub-projects in P1 in the IUC-UNALM programme Phase I have been heavily weighted towards work in the highlands. Moreover, the sub-projects in P1 are all proceeding at different speeds and slightly different directions, in which those focused on the highlands appear to share approaches, facilities and exchange knowledge, but the others (e.g. SP 1.2. agroforestry, SP 1.3 horticulture) do not. We suggest the following restructuring is considered: make SP 1.2 a stand-alone project (jungle); combine SPs 1.1, 1.5, 1.6 and 1.7 into one highlands project; make SP1.3 into a coast project (see Figure 3)

Figure 3: Possible restructured P1 into three new projects

![Figure 3: Possible restructured P1 into three new projects](image)
Conclusions and recommendations

Enhance and expand the research into watershed management

Watershed management (P1 SP 1.4) seems to be a very different sub-project to the others, with no direct focus on farming systems and production of specific crops or livestock, in which the research is currently focusing on the Mantaro Valley. However, watershed management seems to be a much bigger and more critical topic, equally relevant to all three ecosystems in Peru and to all kinds of farming and production systems. We suggest it should become a project in its own right, thus the programme might have four research projects developed from P1 (see Figure 4).

Figure 4: Possible addition of new watershed management project, from P1 SP 1.4

Combine farming systems and value chain research into more coherent projects

In Phase I P2 (VCA) made progress in the scientific (supply) side of the research, but was challenged overall to adequately address the socio-economic and product market (demand) side. Moreover, sub-projects in P1 also addressed market aspects of farming production, with marked synergies (not well-exploited) between them and P2. Since the link between farming systems to optimise and stabilise production is proved to be inextricably linked to ensuring stable markets for products, we suggest that consideration is given to amalgamating the P2 research into the suggested new Jungle, Highlands and Coast Projects (see Figure 3) to make them more coherent projects that would address properly both the science and production (supply) of farming systems in each ecosystem, and VCA that incorporates the market and demand side aspects.

No further investment in the BAN

The scale of the IUC-UNALM programme is too limited to make any serious and sustainable improvements in the BAN and its services beyond what has been achieved through ICT developments in the new building and (some) staff training. What is required is for the UNALM itself to make serious, long-term investment in staff development and retention, collections management, upgrading and acquisitions to meet the real needs of research and education. There are no signs that this level of commitment on the part of UNALM would be forthcoming. Moreover, the project team has successfully won additional VLIR-UOS funding to develop the Open Learning Centre in the BAN building and we suggest that the IUC-UNALM programme should not, therefore, include any new BAN activities in Phase II.

Use P5 to address English language capacity using blended learning approaches

P5 in Phase II will have as a priority the institutional changes to ensure that the upgraded ICT systems and networks are properly supported and that technical and support service staff can be trained and retained. We suggest the project also includes a more dynamic and coherent English language element, which might build on adopting appropriate ICT-based methods for English for
Academic Purposes (e.g. here there may be much to be gained from looking at the IUC programme in UCLV, Cuba), at the same time as building teaching capacity in the UNALM Language Centre to provide language support relevant to academic staff (e.g. needing to improve spoken, presentational or written English skills). This will be reinforced by the new University Law which now requires obligatory English courses at all levels and grades.

At present the Language Centre runs no course specifically for academic staff and offers staff only options to study in the same classes as undergraduate and postgraduate students, which would surely be a very big de-motivating factor for academics in any university! The IUC-UNALM programme might therefore also consider actually funding the costs of targeted training and support to academic staff and research students who are prospective PhD candidates.

3.4.2 Addressing the UNALM human resource challenges in ICT

Human resource challenges in UNALM (effective recruitment, retention and investment in administrative staff) have negatively affected the institutional capacity projects in IUC-UNALM Phase I, in particular P5. The ICT infrastructure improvements introduced in Phase I P5 have the potential to transform the way the university works at all levels, both academically and administratively, if these improvements are managed and directed by a high-quality technical support team lead by an experienced professional (as Head of OSI). It is evident that the UNALM authorities have not to date fully appreciated the transformative nature of ICT development in a university, nor the need for recruiting and retaining top quality leadership.

To raise awareness of these issues among the new UNALM senior management team we therefore recommend that VLIR-UOS facilitates a short high-level visit by the new Rector, Vice-Rectors (Academic and Research) and Senior Administrative staff (HR, Finance, etc) to the Universidad Central ‘Marta Abreu’ de Las Villas (UCLV) in Cuba, where the recently completed IUC programme included successful and transformative ICT and ICT in Education components, and where an experienced ICT team is led by a highly competent professional who commands the full support of the UCLV senior management.
Annex 1: Terms of reference for a midterm evaluation of 2 institutional university cooperation programmes in South Africa and Peru

2.1. Objective of the evaluation

The midterm evaluation is meant to generate conclusions that will allow:

1. VLIR-UOS to make a decision regarding the formulation of a second phase of the collaboration;
2. the formulation of recommendations to all stakeholders in terms of the content and management of the programme, including the overall policy framework;
3. to identify and comment upon possible venues for the future of the programme.

2.2. Scope of the evaluation

The evaluation should cast the light on the following issues:

a. the present implementation of the programme
   evaluating the **global state of implementation** of the programme, both at the level of the overall programme and the constituent projects;
   evaluating whether the **activities**, per project, have generated the **intermediate results**, meeting the **objectives**, that had been defined by the actors involved, within the given timeframe and with the given means, articulated in the logframe;

b. the nature of the programme
   evaluating the **quality, efficiency, efficacy, impact, development relevance and sustainability** of the programme in the light of the overall goal of the IUC Programme, being institutional capacity building of the local university, as situated in the context of the needs of the local society;

c. the position of the IUC programme within the international cooperation activities of the partner university (bench marking)
   evaluating the **added value of the IUC Programme** for the partner university, in comparison to other on-going donor cooperation programmes;

d. evaluating the **management** of the programme, both in Flanders and locally, and formulating, if necessary, recommendations for improvement;

e. evaluating the **cooperation** between all parties involved, and formulating, if necessary, recommendations for improvement

3. Evaluation criteria

The logical framework will serve as the main reference document in terms of the objectives and indicators specified to assess any progress against the objectives and results formulated.

All project leaders will therefore in the framework of the self-assessment report (see further) against the key indicators as well as the assumptions formulated at project design stage.

3.2. A five-point evaluation scale
In addition to the primarily descriptive profile of results both per project and in more general terms at programme level, the evaluation commission will be invited to evaluate these results in qualitative terms applying different qualitative criteria and a five-point scale.

A five-point evaluation scale is to be used, both when judging the results in general terms, and when evaluating the performance of the projects and the programme as a whole in terms of the qualitative criteria. The scale is as follows:

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

These scores - expressing in quantitative terms an overall and synthetic yet differentiated qualitative judgement - should facilitate the task of evaluation and should be applied to

- the Key Result Areas and
- the qualitative criteria

for the IUC programme and for each project within the IUC programme.

3.3 Output: Key Result Areas

The evaluation will focus on eight areas of key (programme/project) results areas (KRAs), each one specified in terms of its corresponding set of indicators. Where possible, both quantitative and full descriptive data will be obtained and used as a basis for evaluation.

Key result areas and some qualitative criteria (see below) will be provided by the Northern and Southern stakeholders through self-assessment formats and will be at the disposal of the evaluation committee. The evaluation committee is expected to conduct the interviews based on the results of both the desk study and the self-assessment reports. The results of the self-assessment reports should be integrated and – based on the interviews and own findings – commented.

In order to allow the usage of some ‘standard indicators’ all projects will report against these indicators (full list in annex 2). These indicators are essentially output-oriented and quantitative. Such a reporting contributes to documenting the actual outputs and retaining such information in a database that is annually updated in view of evaluations.

With input of the VLIR-UOS-secretariat and the concerned stakeholders, this table is to be completed for each project of each partner programme. In case it is impossible to complete the table in details, the evaluation commission can make its evaluation at the level of the main categories or subcategories.

3.4 Outcomes and impact: Qualitative evaluation criteria

Outcomes can be defined as the intermediate effects on the stakeholders receiving or producing the outputs (or the services generated by the outputs).

Impact can be defined as the long term effects of the outputs on society or the wider campus or region.

In order to allow the usage of some ‘standard evaluation criteria set against some indicators’, the programme and all projects will report against these criteria. These criteria are essentially outcomes (more project level) and impact (more programme level) oriented and qualitative to semi-quantitative.
The evaluation will be focused on **4-6 evaluation criteria (programme/project)**, each specified in terms of its corresponding indicators. Where possible, both quantitative and full descriptive data will be obtained and used as a basis for evaluation.

Please note that the indicators are not exhaustive. It is left to the evaluator’s appreciation to consider these and/or alternative indicators.

### 3.4.1. At programme level

In terms of collaboration at the level of the programme, the following criteria can be applied as a reference.

<table>
<thead>
<tr>
<th><strong>Criterion</strong></th>
<th><strong>Indicators</strong></th>
</tr>
</thead>
</table>
| **1. Efficiency** | The relationship between the objectives and the means used to reach the objectives.  
The use and application of the means earmarked for collaboration.  
The actual net result in terms of the achieved efficiency through collaboration.  
The extent to which collaboration can contribute to solving institutional needs and problems.  
*Possible indicators of “efficiency”*:  
At the level of the programme: existence of systems for continuous alertness for opportunities to enhance efficiency through cost-sharing/economies of scale etc. |
| **2. Impact** | Not just actual but also (given time limitations) potential impact.  
*Possible indicators of “impact”*:  
- impact at the institutional level: the extent to which the collaboration has sparked other departments to initiate interuniversity collaboration, joint capacity building, fund raising etc.  
- impact at regional developmental level: the extent to which the collaboration has led to joint developmental activities or similar collaborative models at the regional level  
- impact at policy level: the extent to which the collaboration has raised interest of policy makers and academics, and how the partner university is called upon or is pro-actively developing collaboration models that could be fed into policy advice |
| **3. Development relevance** | The extent to which the planned collaboration is addressing immediate and significant problems and needs of the concerned partners as well as regional and national policy makers, with reference to the MDGs, PRSP and other multilateral policy papers. |
| **4. Sustainability** | Financial, institutional and academic sustainability  
*Possible indicators of institutional commitment in the South*:  
- co-funding by the partner university (matching funds)  
- incorporation of costs into the budget of the partner university  
- the partner university sets aside funds for operations and maintenance of physical infrastructure  
- Ability to attract external funds |
- Ability for full financing or co-financing events, workshops, congresses, mobility, grants, investments, infrastructure
- Strengths and weaknesses of the institution in terms of institutionalising the collaboration
- Intensification and/or formalisation of interuniversity consultations (North-South and South-South)
- Ability to produce joint proposals (fund raising, research)
- Collaboration and exchanges outside of VLIR-UOS-programme
- Curbing brain drain into sustainable brain circulation, installing incentives, “pull factors” against “push factors”

5. Change

- changes in awareness, knowledge, skills
- increases in the number of people reached
- policy changes
- changes in behaviour
- changes in community capacity
- changes in organisational capacity (skills, structures, resources)
- increases in service usage
- improved continuity of care

3.4.3. At project level

In terms of collaboration at the level of the projects, the following criteria can be applied as a reference.

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Quality</td>
<td>This is the main criterion, being the result of all other criteria.</td>
</tr>
<tr>
<td></td>
<td><em>Possible indicators of &quot;quality&quot;:</em></td>
</tr>
<tr>
<td></td>
<td>- quality of research: the extent to which the results have been incorporated in local or international refereed journals</td>
</tr>
<tr>
<td></td>
<td>- quality of education: the extent to which alumni easily get a job which fits their education profile; the number of fellowships acquired from foundations</td>
</tr>
<tr>
<td></td>
<td>- quality of rendering services to society: the extent to which the university/faculty/department is involved in feasibility studies/consultancies, extension work, spin-offs, strategic vision, participatory farmer’s education etc...</td>
</tr>
<tr>
<td>2. Effectiveness</td>
<td>the extent to which the specific objectives have been achieved (the quality of the results)</td>
</tr>
<tr>
<td>3. Efficiency</td>
<td>The relationship between the objectives and the means used to reach the objectives.</td>
</tr>
<tr>
<td></td>
<td>The degree to which the installed capacity (human/physical/financial) is used; goals/means ratio in human, physical and financial resources</td>
</tr>
<tr>
<td></td>
<td><em>Possible indicators of &quot;efficiency&quot;:</em></td>
</tr>
<tr>
<td></td>
<td>At the level of the project: the extent of flexibility in the programme implementation, e.g. reallocation of resources during implementation</td>
</tr>
<tr>
<td>4. Outcomes</td>
<td>Not just actual but also (given time limitations) potential outcomes, looking at</td>
</tr>
</tbody>
</table>
consultancy, policy advice, accreditation models, extension work, etc…

**Possible indicators of "impact":**

- **impact at the level of the private sector**: the amount of money earned on the market
- **impact at policy level**: the extent to which academics, involved in the IUC programme, are called upon by the government for policy advice
- **impact at the level of the own university or other universities**:
  - renewed curriculum functions as example for other universities/departments
  - the new style of teaching has become a model for teaching (e.g. the systematic use of teaching in combination with laboratory work)
  - the library has experienced a clear increase in number of visitors

<table>
<thead>
<tr>
<th>5. Development relevance</th>
<th>the extent to which the project addresses immediate and significant problems of the community, looking at the amount of self-finance, demand from state and private actors, the level of transfer of know-how and technology</th>
</tr>
</thead>
<tbody>
<tr>
<td>6. Sustainability</td>
<td>Especially financial and institutional sustainability</td>
</tr>
</tbody>
</table>

**Possible indicators of mutual interest:**

- do the Flemish universities commit their own university funds to the programme, for instance by giving fellowships or by allowing academics to go to the field?
- are Flemish academics personally committed?
- are there joint research projects which are interesting both to the Northern and Southern academics involved?
- do the partner universities also commit their own funds to the programme (matching funds)?

### 3.5. The collaboration as a whole: management and related issues

A more elaborate indicative list of indicators to review the management and cooperation aspects of the partnership is provided to the external evaluators. This list is partly drawn from the TOR developed for the audits of the management of IUC partnerships, as well as the basic IUC concept and may still be modified during the contracting on mutual agreement due to new inputs from VLIR-UOS and/or suggestions by the consultants.

More specifically, the following areas are among the issues to be reviewed:

- Overall assessment of the programme management (North and South)
- System development (manuals, synergy approach, interim monitoring and reporting etc.)
- Management issues related to actual implementation (financial information flow, procurement, facilitation of visits etc.)
- Financial management
- Academic cooperation
- PR and visibility
4. Actors involved

4.1. General

The following actors will be involved in the evaluation:
- the members of the evaluation commission;
- the Northern stakeholders involved in the ongoing IUC cooperation programmes;
- the Southern stakeholders involved in the ongoing IUC cooperation programmes;
- the VLIR-UOS secretariat;
- the Direction General for Development Cooperation (DGD), i.e. the Belgian government administration for international cooperation
- other relevant local and national stakeholders;

4.2. The evaluation commission

4.2.1. Expertise in management, academic content and country context

Ideally, the following expertise would be represented in the evaluation commission:

- a development management expert who is familiar with processes of institutional/organisational development, capacity building and methodological issues in general and in higher education in particular;
- an academic expert regarding the core theme of the partner programme such that the academic quality may be assessed;
- a country expert who is familiar with the national issues at hand in terms of higher education and research in the country concerned.

The above fields should be accommodated by the joined expertise of two external evaluators. These experts should be neutral, and have no relation with the universities involved - neither the Flemish universities involved nor the partner university - or the IUC partnership itself. The experts should have a proven experience and expertise with evaluation.

The executive board of VLIR-UOS will decide on the composition of the evaluation commission, based on suggestions from the Flemish and the partner universities, as well as of VLIR-UOS-secretariat.

4.2.2. Division of tasks among the members of the evaluation commissions

The evaluation is to be undertaken by both members of the evaluation commission who are expected to function as a team.

*The international cooperation expert*

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

*The country expert*

The country expert will be invited to situate the partner university and its IUC Programme in its larger national context, taking into account local legislation relating to higher education, etc.
4.3. The Northern stakeholders involved in the ongoing IUC cooperation programmes

What is meant by the Northern stakeholders is: all persons from the Flemish universities who are involved in one of the ongoing IUC cooperation programmes (UL, UNALM). This means: the top management of the Flemish coordinating university, the Flemish coordinator, the Flemish project leaders and team members, Ph.D. student promoters, the Institutional coordinator for University Development Cooperation of the Flemish coordinating university (the so-called ICOS), the financial officer(s) of the Flemish coordinating university, the permanent expert(s) (if applicable), the IUC desk officer, students, etc.

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

What is meant by the Southern stakeholders is: all persons from the partner university and the local community who are involved in the respective IUC partnership. This means:
- the top management of the partner university, the authorities at faculty level, the local coordinator, the programme manager, the local project leaders, their deputies (if applicable) and team members, the staff of the local coordinating unit of the IUC programme (secretaries, accountants,...), the students funded by the programme, the student supervisors and/or promoters, technicians, staff from other donor-sponsored cooperation programmes being implemented at the partner university, etc.;
- representatives from central, regional and local government agencies and from civil society (e.g. local chambers of industry, employers' association, ...), officials of the Ministry of Education and of Foreign Affairs, and of the Belgian Embassy, ...

4.5. The VLIR-UOS-secretariat

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

4.6. DGD

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

5. Methodology

Input into the evaluation will be provided through:

1. an analysis of documents (desk study) by the evaluation commission,
   a. programme documents (reports)
   b. self-assessment reports which will be available prior to the mission of the evaluation commission;
2. focused interviews of the evaluation commission with various stakeholders;
3. visits of the evaluation commission to the relevant facilities of the partner university and the site of development projects with a link to the IUC programme.
4. an evaluation mission to the partner country

5.1. Desk study

5.1.1. Programme documents
Prior to its mission the evaluation commission will receive from VLIR-UOS, apart from basic information on the IUC Programme, a number of documents relating to the respective IUC partnership, such as the university strategy paper, the IUC partner programme, annual reports, management manual, etc. 18/29

5.1.2. Self-assessment reports

The stakeholders in a given IUC partnership are invited, prior to the mission of the evaluation commission, to make a self-assessment and to report on it to the commission in the form of a number of self-assessment reports.

The objectives of the self-assessment are manyfold:

a. Interim reporting against the logical framework;

b. Consolidation and/or completion of some quantitative and qualitative information to the evaluation commission to complement the information contained in the formal programme documents (especially the Key Result Areas);

c. Stimulate the internal quality assurance by a strengths-weaknesses analysis by all parties involved;

d. internal preparation for the discussions with the evaluation commission and its visit to the partner university;

e. Reflection about the future of the programme and the projects towards phase II.

The following 3 formats will be used in the context of the IUC evaluations in 2013. These formats have been refined and consolidated:

- format n° 1 : self-assessment per project: it is the intention that per project all stakeholders make a self-evaluation, including an Excel sheet displaying the Key Result Areas

- format n° 2 : collective self-assessment North: the Northern team is expected to develop a draft of this document.

- format n° 3 : collective self-assessment South: the Southern team is expected to develop a draft of this document.

5.2. Focused interviews with all stakeholders

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

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

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

5.3. Visits

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

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

5.4. Mission

An evaluation mission will be conducted for each of the ongoing IUC cooperation programmes. This evaluation commission will have discussions with the stakeholders defined under heading 4.

At the end of the mission the evaluation commission will present its draft conclusions and recommendations to all stakeholders during a special session.

At the end of the mission the evaluation commission will discuss its preliminary findings - general conclusions and recommendations - during a meeting with all present stakeholders during a Local Steering Committee Meeting.

5.5. Evaluation report

Each evaluation commission will draft an evaluation report, in English, based on the written material and the discussions and visits during the mission.

The draft report will be submitted, for comments, to VLIR-UOS who will then continue the follow up planning of feedback in order of obtaining a management response. VLIR-UOS will as such send the draft report to the respective Flemish and local coordinator. It will be up to the two coordinators to coordinate the reactions to this draft report. The evaluation commission will decide, given its autonomy, whether or not to take into account the comments received. The final report will be submitted to VLIR-UOS. A format for the final report has been drafted (see annex 1).

6. Organisation of the evaluation

1. The evaluation commission will be composed by the executive board of VLIR-UOS called Bureau UOS (BUOS), based on suggestions from the Flemish and the partner universities, submitted proposal by the international expert (concerning the local expert), as well as of VLIR-UOS-secretariat and on the basis of the submissions following a tender procedure.

2. The evaluation commission will receive from VLIR-UOS, apart from basic information on the IUC Programme, a set of documents relating to the respective IUC partnership for the desk study.

3. The Northern and Southern stakeholders of each of the ongoing IUC cooperation pro-grammes will receive the formats for the self-assessment reports the latest by 18 December 2013. The reports will have to be submitted to VLIR-UOS-secretariat at the latest before 20 April 2014.

4. The partner universities will be invited to draft the programme of the evaluation missions, taking into account the possible requests formulated by the resp. evaluation commission.

5. The evaluation missions will be organized in consultation with the main stakeholders in May or 1st week of June 2014, each of them lasting at least one week.

6. At the end of each mission, one or more days will be reserved for discussions between the evaluation commission and (a delegation of) the Northern stakeholders who will be invited to be on the spot at that moment.

7. At the very end of the mission, the evaluation commission will discuss its preliminary con-clusions and recommendations at length with the Southern and the present Northern stake-holders. It is advised that this debriefing meeting be followed by a local steering committee meeting. The evaluators are not supposed to participate in this local steering committee meeting, except for a debriefing session.

The evaluation commission members will submit a draft report within three weeks after their return from the mission (at the latest by 21 June 2014). This draft report will be submitted, for
comments, via VLIR-UOS to the resp. Flemish and local coordinator. The commission will decide whether or not to change its final report based on the comments received.

9. Submission of the final report by the evaluation commission to VLIR-UOS the latest by **15 August 2014** (UNALM and UL).

### 7. Timing of the evaluation

<table>
<thead>
<tr>
<th>Action</th>
<th>Actor</th>
<th>Time UL, UNALM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mailing of the formats for the self assessment reports to the stake-holders</td>
<td>VLIR-UOS secretariat</td>
<td>December 2013</td>
</tr>
<tr>
<td>Tendering process for hiring the international consultant(s)</td>
<td>VLIR-UOS</td>
<td>Jan-Feb 2014, deadline of bidding: 13 February 2014</td>
</tr>
<tr>
<td>Selection of the International consultant and proposal of local consultant on advice of partner universities and international consultant</td>
<td>VLIR-UOS, Bureau-UOS</td>
<td>24 February 2014 (indicative, date Bureau UOS)</td>
</tr>
<tr>
<td>Negotiations on TOR and contracting</td>
<td>VLIR-UOS and international consultant</td>
<td>March 2014</td>
</tr>
<tr>
<td>Mailing of the terms of reference to the stakeholders</td>
<td>VLIR-UOS secretariat</td>
<td>March 2014</td>
</tr>
<tr>
<td>Mailing of the resp. IUC partnership documents to the members of the evaluation commission</td>
<td>VLIR-UOS secretariat</td>
<td>April 2014</td>
</tr>
<tr>
<td>Deadline for submission of the self assessment reports to VLIR-UOS-secretariat</td>
<td>to be submitted by the Flemish and local coordinators to VLIR-UOS secretariat</td>
<td>20 April 2014</td>
</tr>
<tr>
<td>Preparation of the missions of the evaluation commission</td>
<td>VLIR-UOS secretariat</td>
<td>April-May 2014</td>
</tr>
<tr>
<td>Drafting of the programme for the evaluation commissions</td>
<td>Partner universities</td>
<td>April-May 2014</td>
</tr>
<tr>
<td>Preparation/briefing evaluation commissions</td>
<td>• the evaluation commissions&lt;br&gt; • the Southern stakeholders&lt;br&gt; • the Northern stakeholders&lt;br&gt; • VLIR-UOS and DGD</td>
<td>May 2014</td>
</tr>
<tr>
<td>Evaluation missions</td>
<td>• the evaluation commissions&lt;br&gt; • the Southern stakeholders&lt;br&gt; • the Northern stakeholders&lt;br&gt; • VLIR-UOS and DGD</td>
<td>Indicatively 1 week in May – early June 2014</td>
</tr>
<tr>
<td>Interview session North</td>
<td>• the evaluation commissions&lt;br&gt; • the Northern stakeholders&lt;br&gt; • VLIR-UOS and DGD</td>
<td>May 2014</td>
</tr>
<tr>
<td>Submission of the draft evaluation reports to the Flemish and local coordinators</td>
<td>the evaluation commissions via VLIR-UOS secretariat</td>
<td>within three weeks after the mission (before 21 June 2014)</td>
</tr>
<tr>
<td>Commenting on the draft evaluation report</td>
<td>• the Northern stakeholders, under the coordinatorship of the Flemish coordinator&lt;br&gt; • the Southern stakeholders, under the coordinatorship of the local coordinator&lt;br&gt; • VLIR-UOS</td>
<td>Within one month after the end of the mission (early July 2014)</td>
</tr>
<tr>
<td>Management letter in view of Phase II</td>
<td>VLIR-UOS</td>
<td>Bureau UOS meeting of 4 July 2014</td>
</tr>
</tbody>
</table>
| Finalising the evaluation report                                       | The evaluation commissions                                                                       | Within 6 weeks after the
| **Submission of the evaluation reports to VLIR-UOS** | **The evaluation commissions** | **Within two months after the end of the evaluation mission, on 15 August 2014 at the latest** |
Annex 2: Programme of the evaluation mission to Peru

Saturday 17/05
18h00: Arrival Carlos Alberto Vigil Taquechel
21h40: Arrival Julie Carpenter

Sunday 18/05
08h30: Meeting of the experts at the Hotel for the final setting of the mission
11h00: Kick-off meeting of the mission (preparatory work) with the IUC Program Manager, Prof. Julio Cesar Alegre at the Hotel
15h45: Travel to Jauja and Huancayo for the visit to Mantaro Valley. Participants: Dr. Gustavo Gutiérrez, Dr. Sady García, MSc. Andrés Casas

Monday 19/05
08h00 – 17h00: Work program in Mantaro Valley visiting different areas of intervention of the UNALM in this region and the IRD of the Sierra.
17h00: Return to Lima from Jauja

Tuesday 20/05
09h00 – 10h30: Opening ceremony at the UNALM
  Welcome by the Rector, Dr. Abel Mejía
  Brief explanation of the mission by Julie Carpenter
  Overall presentation of the IUC Program in the UNALM by Dr. Julio Cesar Alegre
  Participants: Project coordinators of the IUC Program in the UNALM and members of different projects and units of the university.
11h00 – 13h00: Meeting with the Vice-rector, Jorge Luis Aliaga, Dr. Julio Cesar Alegre and the IUC Program Coordination Staff.
14h00 – 16h00: Meeting with project 1. Research on sustainable management of agro-ecosystems
16h00 – 18h00: Meeting with project 2. Development of value chains biodiversity conservation and improvement of rural livelihoods

Wednesday 21/05
09h00 – 10h30: Meeting with project 3. Agrarian innovation and management of participatory knowledge system
10h45 – 12h15: Meeting with project 4. Educational innovation in undergraduate and graduate programs with emphasis on the sustainable management of agro-ecosystems and rural developments.
12h30 – 13h45: Working lunch with Dr. Carlos Gomez, coordinator of project 4
14h00 – 15h30: Meeting with project 5. ICT, Library and language Centre
15h30 – 16h30: Meeting with Dr. Ritva Repo, Director of the International Relations Office
16h30 – 17h30: Meeting with Dr. Liliana Aragón, Director of the Accreditation Office

Thursday 22/05

09h00 – 10h30: Meeting with project 6. Strengthening of IRD

10h30 – 11h30: Meeting with MSc. Elva Rios and the staff of the Educational Innovation Unit (UIE)

11h30 – 13h00: Meeting with project 7. Institutional change

14h00 – 15h00: Meeting with Dr. Carmen Velezmoro, Director of the Research Office

15h30 – 16h00: Visit to the Language Centre

16h30 – 17h30: Enquiry on Internationalisation/International Cooperation

20h30: Departure of Julie Carpenter to Tarapoto-Yurimaguas. Participants: Dr. Julio Cesar Alegre, Ing. Ruby Vega y Bach and Luciana Chávez.

Friday 23/05

06h30: Departure of Carlos Alberto Vigil Taquechel to Mala - Cañete. Participants: Ing. Andrés Casas, Ing. Saray Siura

08h00 – 17h00: Work program in Mala and Cañete visiting different areas of intervention of the UNALM in this region and the IRD of the Coast.

08h00 – 21h00: Work program in Tarapoto-Yurimaguas visiting different areas of intervention of the UNALM in this region and the IRD of the Jungle.

22h00: Return to Lima from Tarapoto

Saturday 24/05

09h30: Meeting of the experts at the Hotel for reaching main findings and conclusions and setup the midterm evaluation report.

14h30 – 16h30: Meeting at the UNALM to present the main findings of the evaluation mission. Participants: Dr. Julio Cesar Alegre and the Project coordinators of the IUC Program in the UNALM.
Sunday 25/05

09h10: Departure of Julie Carpenter

Monday 26/05

10h00 – 11h00: Meeting with Dr. Sofia Wong Ortiz, Director of the International Relations of the National Association of Rectors (ANR).

11h30 – 12h30: Meeting with Mrs. Gabriela Elgegren, Deputy Attaché for cooperation, and Mrs. Teresa Mendieta, Responsible for NGO and University Cooperation at the Belgian Embassy.

19h40: Departure of Carlos Alberto Vigil Taquechel
# Annex 3: People consulted in Belgium

<table>
<thead>
<tr>
<th>Name</th>
<th>Organisation</th>
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<tbody>
<tr>
<td>Peter de Lannoy</td>
<td>Coordinator South VLIR-UOS</td>
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<tr>
<td>Tupac Calfat</td>
<td>ICOS, KUL</td>
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<tr>
<td>Marc Craps</td>
<td>Project Leader P3, Hogeschool Universiteit Brussel</td>
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<tr>
<td>Jan Elen</td>
<td>Project Leader P4, KUL</td>
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<tr>
<td>Ignace Lemahieu</td>
<td>Project Leader P7, Universiteit Gent</td>
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<tr>
<td>Miet Maertens (by skype)</td>
<td>Project Leader P2, KUL</td>
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<tr>
<td>Ann Peters</td>
<td>P7 Team member, Universiteit Gent</td>
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<td>Stephane Sas</td>
<td>Project Leader P5, KUL</td>
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<td>Eddie Schrevens</td>
<td>Programme Coordinator and Project Leader P1, KUL</td>
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<tr>
<td>Guido Wyseure</td>
<td>Project Leader P6, KUL</td>
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