



# Ecuador Strategy document

As discussed by the Bureau UOS on 20 Dec 2011

# Table of contents

|                                                                                                           |           |
|-----------------------------------------------------------------------------------------------------------|-----------|
| <b>Foreword</b>                                                                                           | <b>2</b>  |
| <b>Acronyms</b>                                                                                           | <b>5</b>  |
| <b>1. Introduction</b>                                                                                    | <b>8</b>  |
| 1.1. <i>General Info</i>                                                                                  | 8         |
| 1.2. <i>Development priorities</i>                                                                        | 9         |
| 1.3. <i>Reforms in the Ecuadorian higher education system</i>                                             | 10        |
| <b>2. Country Strategy</b>                                                                                | <b>13</b> |
| 2.1. <i>Background</i>                                                                                    | 13        |
| 2.1.1. Ecuador country strategy formulation process                                                       | 13        |
| 2.1.2. Higher education and research: policy environment                                                  | 14        |
| 2.2. <i>Views and themes expressed (based on survey, interviews and seminar, and mission and seminar)</i> | 17        |
| 2.2.1. Expressions of interest by the Flemish (academic) stakeholders                                     | 17        |
| 2.2.2. Expressions of interest by the South (government and academic stakeholders)                        | 18        |
| 2.3. <i>Strategy framework and implementation</i>                                                         | 20        |
| 2.3.1. Areas of focus (thematic, regional, partners):                                                     | 20        |
| 2.3.2. Country Strategy Framework (strategic niche resulting from the above – see also annex 3)           | 22        |
| 2.3.3. Partnership modalities (portfolio of intervention types)                                           | 23        |
| 2.3.4. Collaboration within networks                                                                      | 24        |
| 2.3.5. Non-academic partners and stakeholders                                                             | 25        |
| 2.3.6. Contribution and opportunities for Flemish non-university HE institutions                          | 25        |
| 2.4. <i>SWOT analysis of a VLIR-UOS strategy with Ecuador</i>                                             | 25        |
| <b>ANNEXES</b>                                                                                            | <b>26</b> |
| 1. <i>Pré Mission Strategy Framework</i>                                                                  | 26        |
| 2. <i>Country Fact Sheet (see VLIR-UOS website – Ecuador Country info)</i>                                | 26        |
| 3. <i>Country Strategy grid</i>                                                                           | 26        |
| 1. <i>Pré Mission Strategy Framework</i>                                                                  | 27        |
| 3. <i>Country Strategy grid</i>                                                                           | 29        |

# Foreword

The process of country strategy identification and IUC selection was rolled out by VLIR-UOS in the context of the implementation of the political agreement signed in 2010. This agreement necessitates VLIR-UOS to formulate a strategy for each of its 20 VLIR-UOS partner countries. This will be done in a phased manner, Ecuador being one of the first six countries for which a strategy will be formulated by the end of 2011. Identification missions were conducted by country teams consisting of two experts (one international and one local expert), a member of the Bureau UOS and the VLIR-UOS country desk officer.

A VLIR-UOS strategy represents an informed policy choice that serves as a framework for programming. This framework must be sufficiently broad in order to ensure that a sufficient number of quality partnerships can be formed and projects formulated on the basis of the VLIR-UOS operating modalities. However, the means of VLIR-UOS, both in terms of financial and human resources, are limited. For this reason, a relatively broad strategy may result in a modest programme.

VLIR-UOS funds partnerships of willing academics (Flemish academics offer their time on a voluntary basis) on themes that are developmentally relevant and result from a shared interest. Interventions may be in the form of scholarships or projects at institutional or sub-institutional level. Capacity development aimed at furthering the ability of HE institutions to serve as actors in development, is at the centre of the VLIR-UOS programme.

Country strategies are policy documents that will guide funding decisions of VLIR-UOS and allow for strategic impact based on programme coherence and contextual relevance.

## *Time frame and content*

The development of academic capacity requires a long term framework that often goes against the current policy dynamics that are characterized by constant changes and shifts at the international and country level in both North and South.

Therefore, VLIR-UOS has opted for a strategic framework covering 12 years. This may seem long but merely represents one or two programming cycles in case of the budgetary more significant VLIR-UOS intervention types. Obviously, contextual changes (national policies, donor positions, VLIR-UOS (country) priorities etc.) may necessitate interim changes.

Also, the 12 year timeframe should be seen as a guideline given a more 'evolutionary' approach whereby every 6 years a strategic review will be made, if possible coinciding with the 6-year strategic programming of VLIR-UOS to DGD. A more explicit re-formulation will occur every 12 years. As a principle, abrupt strategic re-orientations will be avoided as this undermines the need for predictability and long term visioning, in particular at the level of the academic communities concerned.

As for content, strategies are meant to focus on academic and societal needs that match with the interest and expertise that can be offered by Flemish higher education institutes. This focus may be conceptual and/or region based with due consideration for the importance of possible themes put forward by ongoing IUC partnerships. In all cases, however, it must allow for multidisciplinary inputs. VLIR-UOS indeed favours holistic approaches.

### *Ownership and legitimacy*

A country strategy is the result of numerous inputs and consultations with a wide spectrum of actors in Flanders and 'Country'. The strategy draws legitimacy from the lengthy consultation and formulation process. Eventually, however, it is a VLIR-UOS policy document.

While fully funded by the Belgian government, VLIR-UOS is not obliged to align itself with the Belgian bilateral cooperation programme, in those VLIR-UOS partner countries that also are Belgian partner countries. In terms of its strategic orientation and priorities, VLIR-UOS is therefore fully independent.

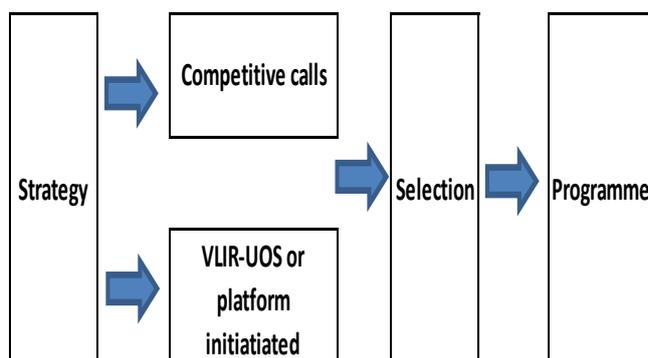
### *The country strategy as overriding reference*

VLIR-UOS embraces project funding through open competitive calls and a merit and quality based selection. However, calls for proposals will make reference to the respective country strategies. Given sufficient quality, proposals will be further evaluated and ranked in terms of their possible contribution to the strategic framework. This may include considerations of strategic areas that are relatively over or underserved.

### *A country programme*

VLIR-UOS has defined an indicative country budget that allows for a translation of this strategy academic partnerships and related initiatives through competitive calls and need/opportunity based interventions. The totality of the selected and funded projects represents a country programme for which VLIR-UOS in turn receives funding of the Belgian government on the basis of successive action plans each covering 3 years. VLIR-UOS oversees project implementation by the academics concerned, and reports to the Belgian government in terms of the (country level) results achieved.

However, in terms of fundable initiatives, VLIR-UOS relies on the response of the academic partners, and in most cases the academics of Flemish higher education institutes, to respond to such calls.



### *Country level objectives and results*

VLIR-UOS facilitates academic partnerships and related initiatives within the context of a long term country strategy with a general objective. The portfolio of funded VLIR-UOS initiatives in 'country' will contribute to attaining this objective, and represents a result in itself.

Furthermore, VLIR-UOS has defined a range of indicators (Key Result Areas - KRAs) on the basis of which individual initiatives are expected to report. Such KRAs conform with standard academic benchmarks. Apart from objective key result areas such as publications and degrees being awarded, VLIR-UOS also tracks more qualitative results. The accumulated indicators for the whole of the funded country level initiatives, henceforth represent actual results that qualify the objectives.

The building of academic capacity is central to the work of VLIR-UOS. However, such capacity is expected to generate knowledge and insights as well as applications that when adopted could result in 'changing lives'. This dimension is obviously much more difficult to capture, but VLIR-UOS hopes to identify trends through interim country level evaluations.

# Acronyms

|         |                                                                                                                                                               |
|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ALFA    | Latin American Academic Training Programme                                                                                                                    |
| BA      | Bachelor of Arts                                                                                                                                              |
| BSc.    | Bachelor of Science                                                                                                                                           |
| BTC     | Belgian Technical Cooperation                                                                                                                                 |
| CAF     | Andean Development Corporation                                                                                                                                |
| CAN     | Andean Community of Nations: Bolivia, Colombia, Ecuador, Peru + AISCEA<br>Centro de Estudios Amb                                                              |
| CEAACES | Consejo Nacional De Evaluación Y Acreditación De La Educación Superior Del Ecuador                                                                            |
| CES     | National Council of Higher Education                                                                                                                          |
| CESPLA  | Centro de Estudios Sociales y Politicos Latinoamericanos                                                                                                      |
| CONEA   | National Council on Evaluation and Accreditation                                                                                                              |
| CONESUP | Consejo Nacional de Educación Superior                                                                                                                        |
| CPI     | Corruption Perception Index (Tranparency International)                                                                                                       |
| CTG     | Close the Gap (VLIR programme)                                                                                                                                |
| DAC     | Development Assistance Committee (of the OECD)                                                                                                                |
| DGD     | Directorate General for Development Cooperation (the former DGDC)                                                                                             |
| EPN     | Escuela Politécnica Nacional                                                                                                                                  |
| ESPOCH  | Escuela Politecnica de Chimborazo                                                                                                                             |
| ESPOL   | Escuela Superior Polytécnica del Litoral                                                                                                                      |
| ETAPA   | Empresa Municipal de Telecomunicaciones, Agua Potable, Alcantarillado y Saneamiento                                                                           |
| EU      | European Union                                                                                                                                                |
| EUR     | Euro                                                                                                                                                          |
| FLACSO  | Facultad Latino-americana de Ciencias Sociales                                                                                                                |
| FWO     | Research Foundation Flanders (Fonds voor Wetenschappelijk Onderzoek)                                                                                          |
| GIS     | Geographic Information System                                                                                                                                 |
| HDI     | Human Development Index (UNDP)                                                                                                                                |
| HEI     | Higher Education Institute                                                                                                                                    |
| ICOS    | Instellingscoördinator Ontwikkelingssamenwerking (entity within the Flemish universities in charge of the coordination of university development cooperation) |
| ICT     | Information and Communication Technology                                                                                                                      |
| ICCA    | Interamerican Institute for Cooperation on Agriculture                                                                                                        |

|           |                                                                             |
|-----------|-----------------------------------------------------------------------------|
| INCO      | European Union academic cooperation programme                               |
| INPC      | Instituto Nacional del Patrimonio Cultural                                  |
| IR        | Intermediate Result                                                         |
| IUC       | Institutional University Cooperation                                        |
| JSCM      | Joint Steering Committee Meeting                                            |
| KRA       | Key Result Area                                                             |
| KUL       | Katholieke Universiteit Leuven                                              |
| LAN       | Local Area Network                                                          |
| LFA       | Logical Framework Analysis / Approach                                       |
| LogFrame  | Logical Framework                                                           |
| LUC       | Limburg University Centre (Limburgs Universitair Centrum)                   |
| M&E       | Monitoring and Evaluation                                                   |
| MBA       | Master of Business Administration                                           |
| MDG       | Millennium Development Goal                                                 |
| MHO       | Dutch programme on international university cooperation                     |
| MoU       | Memorandum of Understanding                                                 |
| MSc.      | Master of Sciences                                                          |
| NUFFIC    | Dutch counterpart of the VLIR                                               |
| OECD      | Organisation of Economic Cooperation and Development                        |
| PCM       | Programme/Project Cycle Management                                          |
| PROMAS    | Programa para el Manejo del Agua y del Suelo                                |
| PRSP      | Poverty Reduction Strategy Paper                                            |
| PUCE      | Pontifica Universidad Catolica del Ecuador, Quito                           |
| Ughent    | University of Ghent (Rijksuniversiteit Gent)                                |
| SENACYT   | Secretaría Nacional de Ciencia, Tecnología e Innovación                     |
| SENESCYT  | Secretaría Nacional de Educación Superior, Ciencia, Tecnología e Innovación |
| SENPLADES | Secretaría Nacional de Planificación y Desarrollo                           |
| TOR / ToR | Terms of Reference                                                          |
| UA        | University of Antwerp                                                       |
| UASB      | Universidad Andina Simon Bolivar                                            |
| UCuenca   | Universidad de Cuenca                                                       |
| UCE       | Universidad Central del Ecuador                                             |
| UCSG      | Universidad Católica Santiago de Guayaquil                                  |

|        |                                                                                                                                    |
|--------|------------------------------------------------------------------------------------------------------------------------------------|
| UDC    | University Development Cooperation                                                                                                 |
| UNACH  | Universidad Nacional de Chimborazo                                                                                                 |
| UNDP   | United Nations Development Fund                                                                                                    |
| UNESCO | United Nations Educational, Scientific and Cultural Organization                                                                   |
| UNL    | Universidad Nacional de Loja                                                                                                       |
| UOS    | Universitaire Ontwikkelingssamenwerking (= UDC)                                                                                    |
| URBAL  | Latin American Urban Programme (for the establishment of networks of local authorities in various areas of activity)               |
| USFQ   | Universidad San Francisco de Quito                                                                                                 |
| UTA    | Univesidad Técnica de Ambato                                                                                                       |
| UTN    | Universidad Técnica el Norte                                                                                                       |
| UTPL   | Universidad Técnica Particular de Loja                                                                                             |
| VLIR   | Flemish Interuniversity Council (Vlaamse Interuniversitaire Raad)                                                                  |
| VUB    | University of Brussels (Vrije Universiteit Brussel)                                                                                |
| VVOB   | Vereniging voor Opleidingsprogramma's in het Buitenland (Flemish Association for Development Cooperation and Technical Assistance) |
| WB     | World Bank                                                                                                                         |
| WTO    | World Trade Organization                                                                                                           |

# 1. Introduction

## 1.1. General Info



Ecuador is a small country (256,370 km<sup>2</sup>) in the Andean region with a great diversity of geographical and ecological systems, a population made up of a variety of cultures and ethnic groups and highly differentiated local economies. The country is a presidential democracy, and held presidential and congressional elections in late 2006.

The total population was estimated at 13.2 million in 2005. Population numbers are subject to the contradictory effects of a high birth rate and a high rate of emigration, with a high proportion of young people.

Geographically, culturally and economically, the country can be divided into four markedly different

regions:

1. the Andean region in the centre, which includes the capital, Quito, and the cities of Ambato, Cuenca and Loja, which are important centres for trade and the rural economy;
2. the Pacific coastal region in the western part of the country, which historically has absorbed major population flows (Arabs and Africans from the days of slavery, Asians and East Europeans more recently). Trade and industry have developed in economic centres such as Guayaquil (the largest port and biggest city in the country), Manta and Santo Domingo de los Colorados;
3. the Amazonian region, which covers more than 50% of the national territory, and features extensive reserves of wood and oil, the country's major economic asset. The area is thinly and sparsely populated; and,
4. the island region of the Galápagos Archipelago, a nature reserve dedicated to tourism and fishing.

For more information on the country we refer to the [Country Fact Sheet](#) and [Identification Mission Report](#), available on the VLIR-UOS website.

## 1.2. Development priorities

There is no formal PRSP document available. However it is important to underline the role of the planning office SENPLADES. It's mission is to coordinate participative development planning. It is (intended to be) a strong central office entrusted with development strategies and the planning of **development**.

The overall tendency is towards centralisation, in spite of earlier (not implemented) decentralization strategies, and on-going processes at regional level. Decentralization is officially seen as political autonomous regionalism, and considered a refuge for conservative politicians to preserve their power. At operational level this implies that no real advances are made in administrative decentralization and local participation. There were some attempts to reorganise local regions, but more based on political strategies than taking into account management requirements characteristic for the different regions. Local dependencies of national entities (ministries) are intensifying, not exceptionally at the expense of local political entities (provinces, and to a lesser degree municipalities). The regional reorganisation of SENPLADES is an example in case (7 Regions instead of the 24 Provinces) and is the model of administrative division / organisation of the country, and not yet the Provinces.

The regions are:

- Zone 1 – Norte: Esmeraldas, Carchi, Imbabura, Sucumbios
- Zone 2 – Centro Norte: Pichincha, Napo Orellana
- Zone 3 - Centro: Chimborazo, Cotopaxi, Tungurahua, Pastaza
- Zone 4 - Pacífico: Manabí, Santo Domingo
- Zone 5 – Litoral: Guayas, Santa Elena, Los Ríos, Bolivar
- Zone 6 - Austro: Cañar, Azuay, Morona Santiago
- Zone 7 – Sur: Loja, El Oro, Zamora Chinchipe

The seven regions (zones) are intended to become development regions, where all state actions are developed within a more or less homogenous territory, and not - as was often the case in the past – different actual territories for each Ministry. Hence now every Ministry is supposed to have the same seven development regions. Exception is SENAGUA, the water management body for which there are 9 regions, not completely coinciding with the seven SENPLADES regions, but this is due to the logical decision to make water management coinciding with actual water basins. Some former local development offices (e.g. CREA in the Austro Region, and PREDESUR in the South Border Region) were integrated in SENPLADES' regional offices.

Notwithstanding the absence of the clear policy framework which would be provided by a national development plan or a PRSP, the Ecuadorean authorities developed a National Plan that focuses on well-being and good standards of living ("Plan Buen Vivir" – 2009-2013) which in fact became the guiding document in terms of Ecuadorian development priorities in all relevant sector and the document referred to by SENPLADES when talking about the reform of HE and the new Law for Higher Education (LOES).

Ecuador is firmly committed to building, consolidating and extending a democratic society even if there are still huge areas of disagreement as to the forms this should take. Ecuador is also committed to achieving the Millennium Development Goals and has made considerable progress in extending the

coverage of basic services, education and health; however, greater efforts are needed in these areas to reduce poverty levels and offer economic opportunities to the majority of the population who remain excluded from national life. Recent years have seen important achievements in education, such as falling illiteracy rates, but access to education remains linked to income levels, gender, race and geographical location. There are also concerns about the quality of education, in particular the outdated and over centralised curriculum with little connection to local realities and to the needs of labour markets. Similarly, while various health indicators are showing a marked improvement, the rural and poorest sectors of the population have limited access to good quality health care. The significant majorities (ranging from 64% to 67%) in favour of three propositions submitted to referendum in late 2006, all of which focused on increasing social investment particularly in health, education and economic regeneration, provide the Correa government with a clear mandate to step up Ecuador's efforts in these fields. Work has been under way for several years on the reform of the public sector, with the aim of achieving more efficient public management.

The respect for Biodiversity and respectful management of natural resources (taking care of ancestral knowledge, effects of climate change, etc.) ; modernisation of the state (public sector, justice system, decentralisation, education sector ...) are all very high on the agenda.

### 1.3. Reforms in the Ecuadorian higher education system

Higher education is provided by universities, polytechnics and, at non-university level, "Institutos Pedagógicos" and "Institutos Técnicos Superiores". All universities whether public or private, are autonomous. Higher education institutions are now supervised by CES/ SENESCYT, but an important stepping stone to the preparation of a thorough reform of the higher education sector was the 2008 CONEA report. The National Council on Evaluation and Accreditation (CONEA) elaborated a technical report with respect to the level of performance of the superior education establishments to guarantee quality. Indicators used by CONEA for the assessment of Universities and other higher education establishments were: (i) Teacher training, (ii) Budget for scholarships, (iii) Mobility of students and credit acknowledgment, (iv) Investment in libraries, (v) Financial resources and budget performance, (vi) Coherence between academic processes and mission and objectives of the University, (vii) Use and creation of extensions to guarantee academic quality and infrastructure (classroom spaces)

Subsequently, on November 10, 2009, CONEA's final report was published. In this report, five categories were distinguished for the classification of 68 universities and poly-technical high schools.

Apart from the central university headquarters assessed in the report, the system counts about 145 more or less independent extensions in 107 cities. Most of these do not meet any quality criteria.

Main Conclusions and Recommendations of the report include:

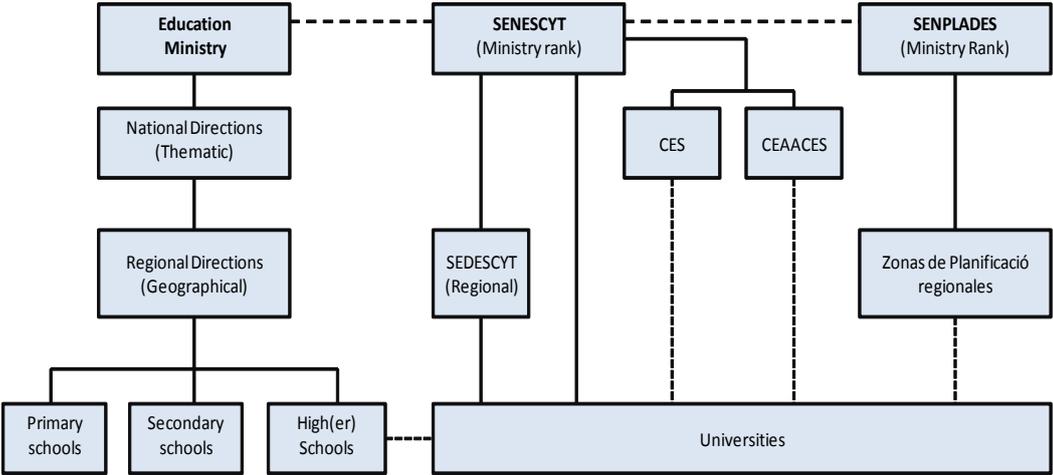
- a depuration of Universities, in other words closing down the E category of 26 Universities;
- the gradual dismantling of university extensions;
- promotion of alliances between universities;
- a moratorium on the creation of new universities;
- a regulation of academic performance and institutional framework for higher education;

- a strengthening of postgraduate offers, including suspension of postgraduates in Universities in classes D and E;
- more strict criteria for the organisation of postgraduates;
- classification of masters according to orientation;
- presentation and approval of strategic plans;
- paying attention to harmonization of concepts and higher education practice;
- recuperation of historic identity and university memory;
- amplifying university democracy;
- development of an integral system for teaching and researcher careers;
- guarantying equality of opportunities;
- promotion of scientific research and;
- guaranties for social relevance and focussing on enhanced integrality of the entire educational system.

### **The New Institutions for Higher Education**

The former CONESUP (Consejo Nacional de Educación Superior) was dismantled in October 2010. Functions were partially overtaken by the CES (National Council of Higher Education), a more central and official body, directly dependent of the Presidency. Reason for this change was the rather inefficient action of this body, which needed to coordinate (and integrate) 72 Universities, more than 160 more or less independent extensions and about 300 Higher Institutions. This thus does not come as a surprise. A more centralised and delegated management should improve this. Some reactions from Universities and Higher Institutions about loss of autonomy are to be expected. It now is to be seen if management by CES will be more efficient, and if it can win legitimacy in the sector. The members of CES and CEAACES are appointed / elected in the first months of 2011. This CES will be an advisory body or a part of SENESCYT. This is not yet entirely clear. The below Figure 1 gives a schematic overview of the actual organisation of higher education in Ecuador.

Figure 1 : Institutional Chart of the Organisation of Higher Education in Ecuador at Present



Related Institutional Transformations

One of the general aspirations is to change the universities in Ecuador from teaching institutes with little research to a higher level of teaching and research. It is estimated that only 87% of the staff in public universities have already obtained a master's degree and fewer than 5% have Ph.D. It can be stated that Ecuador in general is in a dynamic process of change. Reforming the universities is part of that process. Rather typical situation for the past history in Ecuador is that new administrations replace former institutions. In this way CONESUP (the Counsel of Ecuadorian universities or the equivalent counsel as VLIR) has been dissolved and is being replaced.

Other related institutional transformations are being worked / under implementation. The former SENACYT, which was responsible for research and basically managed funds for research and scholarships, saw its competences broadened with recognition of students' titles, a former CONESUP competence and became the SENESCYT.

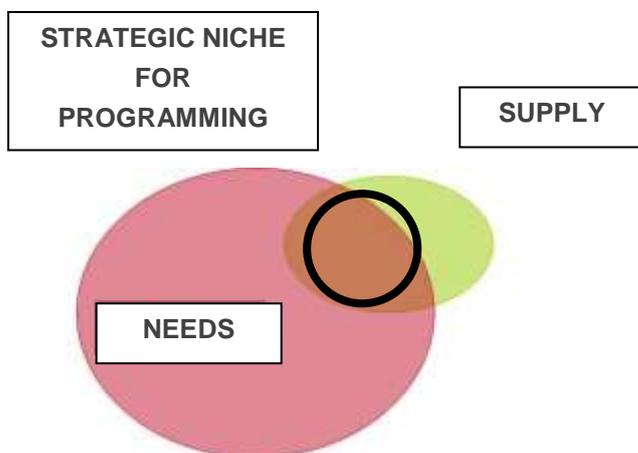
The (temporarily active) CONEA Commission was converted into the CEAACES (Consejo Nacional De Evaluaci3n y Acreditaci3n de la Educaci3n Superior del Ecuador), which probably will be another advisory body to the SENESCYT. This body has the mandate of evaluating and accrediting Universities in Ecuador. It was created to assure higher education quality, due to the fact that the former responsible body (CONESUP) in practice was not so well in a position to do so, amongst others due to its composition (universities and institutes) with peer evaluations proving not so productive. Ecuador has a high proliferation of Universities and Higher Educational Institutes (72 Universities, more than 160 extensions and about 300 higher institutes), and no systematic quality control. An important achievement is the ranking of Universities, based on both an auto-assessment and an external evaluation. This exercise is almost completed. Next step is passing the information to the CES for action to be taken accordingly.

## 2. Country Strategy

### 2.1. Background

#### 2.1.1. Ecuador country strategy formulation process

In the past months, the Flemish areas of interest in working with Ecuador have been captured (supply side). The identification mission was meant to identify the needs (demand side) and identify (thematic, regional, institutional) the space and opportunities for both to match. Need identification will be done through visits to pre-selected HE institutions, authorities and other stakeholders. In addition, the hosting of a local seminar will allow for further inputs and discussions.



The preparatory work consisted of a survey of Northern and Southern institutions and a desk study of various Ecuadorian and international (policy) documents. Among other, The Ministry of Higher Education and Science and Technology (SENESCYT) and Consejo de Educación Superior (CES) were contacted, as also a number of Ecuadorian partner institutions. Also, VLIR-UOS could draw on the findings obtained during a 2011 preparatory mission on the occasion of which various stakeholders, including SENESCYT and stakeholders from ESPOL and UCuenca were visited. In addition, discussions were held with a representative of the Ecuadorian Embassy in Brussels. Mid September 2011, a North Seminar was organised in Brussels, attended by some 45 participants representing a variety of different actors.

All the information collected, including the results of a survey among academic stakeholders in Flanders resulted in a Ecuador Fact Sheet, including thematic/geographical overviews of present VLIR-UOS cooperation as compared to national and HE priorities. This document, as well as further information on the preparatory work can be found on the Ecuador webpage.

## 2.1.2. Higher education and research: policy environment

### ***Significant observations resulting from the interaction with local stakeholders***

The Ecuadorian Higher Education Sub-sector finds itself in an important momentum. The recently approved New Law on Higher Education calls for quality and puts priority on excellence and research, two terms which until now were not very illustrative for Ecuadorian Higher Education. There is a need for massive university staff upgrading to PhD levels, induced by the new law but also felt by the universities themselves. Governmental goals seem unrealistic (60% of university staff obtaining a PhD degree within seven years) and some measures seem contra productive (e.g. the strong reticence on sandwich PhDs). However, governmental efforts (scholarships, call for quality) are valued by most universities, although the apparent unique concentration on “hard” sciences is considered negative for a balanced development of the country. Although swift developments in the sector and instability in governmental organisations and staff may present risks, the Ecuadorian Higher Education Sector would at this moment have much profit from a broad VLIR support programme, concentrating at research strengthening and PhD development.

### ***Higher Education and research: Status and policy environment***

During the constituent assembly in 2007 there was a great concern for the poor quality of higher education in Ecuador and mandate nr. 14 was issued, calling for an evaluation of all Higher Education institutions. The CONEA evaluation ranked all 73 universities in five categories A to E. The new Law on Higher Education (LOES), which was issued in October 2010, demanded the closure of the 26 institutions in the poorest category E within 18 months. Besides the closure of the weakest universities the new law also calls for an evaluation (accreditation) of all existing careers, every five years; a university categorisation in 1) Universities of Teaching; 2) of Teaching and Research and 3) Research Universities. In order to be accredited Education and Research University, 60% of university staff must in two years have full time appointments (now an average 3%) and 60% must have a PhD degree within 7 years (this percentage is now under 10%).

In order to achieve this goal, SENESCYT developed an ambitious scholarship programme awarding more than 1000 full-time scholarships in 2011 and double this number in 2012. The law suspended the creation of new universities; called for the suspension of extensions because of the low quality and suspended all local doctoral programmes. The new law proposes four new universities, which will be created by the state: Universidad Nacional de Educación in Azogues, Universidad de las Artes in Guayaquil, Universidad Regional Amazónica in Tena and the very ambitious Ciudad del Conocimiento (City of Knowledge) which will include all National Research Institutes and SENESCYT, and which is expected to attract a lot of external funding in science, technology and innovation. This scientific park will be dedicated only to the hard sciences. Foreign universities will be invited to create local branches. This project will take some time. The other three new universities are already in the process of creation and will be reality within one or two years. The objective of the new universities is to rationalise the education system, replacing existing mediocre institutions and interacting with the good ones, giving coherence to the system. Also, these universities will be ‘pilot’/model universities in their field (Pedagogics, Arts and Amazon studies) and receive national support to fulfil this objective.

There seems to be a lot of uncertainty and misunderstanding regarding the new law and some of its consequences, such as the perceived ‘ban’ on social sciences and sandwich scholarship programmes. There were contradictions in statements from various universities but also from

representatives from governmental bodies. It should be emphasised that there have been frequent changes in the Higher Education System recently and many council and staff members have only recently taken position. Many measures and procedures are new and will have to be improved in the months to come. An example is the new procedure for validation of degrees. In order to facilitate degree validation SENESCYT drafted a list with 1000 universities in the world whose degrees will be accepted automatically. SENESCYT acknowledges that in this list there are some contradictions which will be corrected in a second version. Still, academics who obtained postgraduate titles which are not on the list, can ask for validation through a more laborious time-consuming process with a commission who will decide on the basis of criteria. It was not clear what this would mean for the sandwich type PhD degrees obtained for example under the VLIR-IUC programme with ESPOL. As all Flemish universities are on the list, there should not be any problem. However, this could not be confirmed by the government representatives, who affirmed that in principle, sandwich programmes are not accepted. There is a clear contradiction between the objective of linking all research to the Buen Vivir objectives (with relevance for Ecuador) and the apparent obligation to follow post-graduate studies full-time outside Ecuador. However, the identification mission found all government bodies very open for improvement and suggestions and it is hoped that all (apparent) contradictions will be solved in the near future.

### ***Strategic focus on national development priorities***

The new law fits within the National Plan 'Buen Vivir', which was also presented in 2010 and which proposes a paradigm change from 'development' to 'good living', aiming at ambitious objectives through concrete strategies in various domains. The transformation of higher education and the transfer of knowledge in science, technology and innovation is one of the strategies. The plan specifically mentions the importance of international cooperation which should be aimed at satisfaction of basic needs and consolidation of the national industry. Biodiversity is the foremost subject mentioned in the plan, followed by Renewable Energy, Entrepreneurship, Education, Health and Natural Heritage. Furthermore, the use of ICT in education is considered another strategy for achieving 'good living'.

The national plan has been translated in development plans for the seven regional development zones in Ecuador through consultative processes taking into account "buen vivir" and the regional characteristics.<sup>1</sup>

### ***Academic and non-academic partners and stakeholders (synergies, complementarity etc.) – general comments and general appreciation on the institutional visits***

Fifteen universities were visited in the framework of the VLIR-UOS identification, which were all recommended by Flemish and/or Ecuadorian stakeholders. Most universities have been evaluated category A<sup>2</sup> in the 2009 CONEA report, four of them category B<sup>3</sup>. Of these universities, six are private, the rest public. Although government representatives pronounced a priority towards strengthening public universities in the category A (combining criteria of democracy and excellence), some private universities provide access to lower medium classes and have a societal spin off in terms of research and extension (e.g. PUCE, UTPL). Other private universities were considered by the identification

---

<sup>1</sup> For further general information on Ecuador reference is made to the VLIR Country Fact Sheet ([www.vliu.be/en/documents/country\\_information/771#ecuador](http://www.vliu.be/en/documents/country_information/771#ecuador)).

<sup>2</sup> Category A: These universities have potential to develop into a scientific and professional community acknowledged and legitimised by their surroundings. Some have already achieved this status.

<sup>3</sup> Category B: These universities present a breach with category A regarding research and academic level.

team to be directed towards the more privileged groups in society, which was confirmed by Ecuadorian government representatives and Belgian DGD (USFQ, UCSG, UASB, FLACSO). However a complementary role in thematic/departmental cooperation initiatives could be envisaged.

Public universities often are disturbed by political processes (elections for rectors, directors, deans, etc.). The new Law on Higher Education has changed the rules for all universities (public and private): only rectors are elected once every five years. The rectors appoint deans and directors. It is expected that this will calm political turbulence in some public universities. However, it is not clear how this will turn out and it is at least hoped that in the future academic culture will prevail over politics.

The Buen Vivir National Plan mentions the importance of the National Research Institutes and the need for “linking research produced in universities to public research institutions is paramount for the purpose of creating synergies that contribute the added value to national industries.” Recently, many already approved research projects from universities have been cancelled by SENESCYT. The reason for this is that National Research Institutes should be involved in all research projects. Universities are not always interested as not all these institutes have enough research capacity. Academics now fear that all governmental support to research will be reserved for the National Research Institutes.

SENESCYT Government representatives pronounced an explicit wish that VLIR support the four new to be established universities (Universidad Nacional de Educación in Azogues, Universidad de las Artes in Guayaquil, Universidad Regional Amazónica in Tena and Ciudad del Conocimiento). As these universities do not yet exist, they could not be visited and included in the SWOT analysis. It is recommended to take into account these new universities as they become reality, in possible future projects and programmes. However, the identification mission warns for the consequences of a potential neglect of the research capacities at universities which would be detrimental for achieving the so much hoped for academic excellence.

### ***Collaboration and networking in HE and research***

Deepening cooperation between universities within Ecuador is a challenge that could become an important element of a Country Strategy. Very often cooperation with the North or other Latin American Countries is stimulated rather than looking for improvement of national cooperation schemes through theme-based networking.

In fact, there is a lot of institutional envy and various stakeholders mentioned that it seems easier to coordinate and cooperate with universities abroad, than within the country. On the other hand, most university authorities and researchers are aware of the need for cooperation and synergy. During the stakeholder seminar academics exchanged views and experiences on certain subjects and intentions for future cooperation were made. **For VLIR this could be an opportunity to support one or two nation-wide networks coordinated by a hub university or one central university.** Also, strengthening of existing network cooperation in the educational sector could be interesting, in particular if considering the experience of VVOB and taking advantage of the potential synergies between the work of VLIR-UOS and VVOB.

## 2.2. Views and themes expressed (based on survey, interviews and seminar, and mission and seminar)

### 2.2.1. Expressions of interest by the Flemish (academic) stakeholders

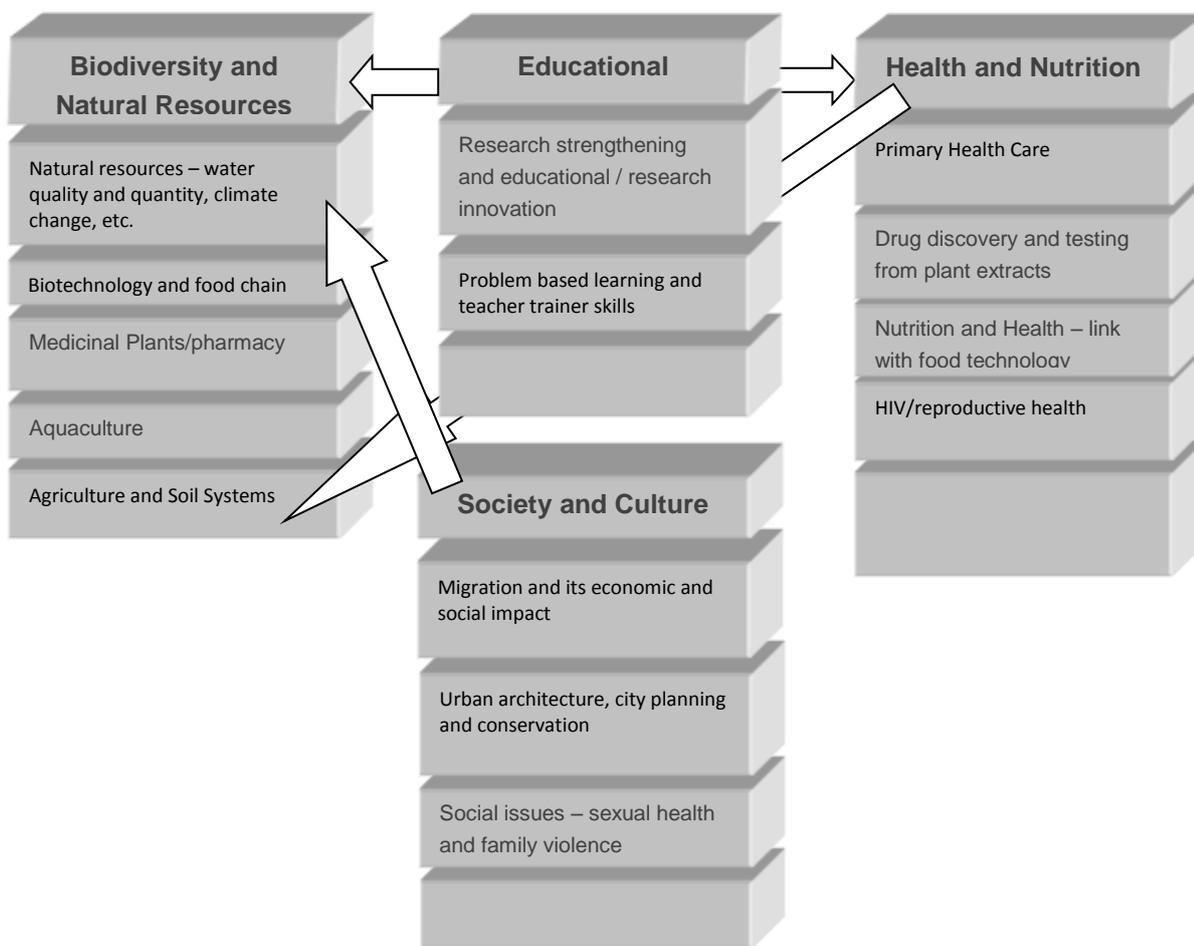
In terms of subject areas/themes, the following clusters of Flemish interest had been identified before the identification mission: **(1) Biodiversity and natural resources, including management, (2) Food, nutrition and Health, (3) Society and culture (migration, social and intercultural issues, cultural heritage), and (4) Higher education reform including pedagogical/research innovation.**

Research based education, language, university management strengthening and intellectual property rights come forward as clear transversal support areas where a more crosscutting approach.

Flemish universities and individual academics have been engaged in collaboration and human resource development initiatives in Ecuador since at least the 1990s. With the start of the ESPOL IUC programme in 1998 and the IUC with UCuenca in 2007 the level of activity has significantly increased.

Reference is being made to the strategy grid that was elaborated before the mission on the basis of present cooperation and interest in Ecuador ([annex 1](#)). Figure 2 (below) summarises the thematic priorities and research interests (and potential synergies between these) of Flemish academics who expressed interest in working with Ecuador or are currently working in Ecuador. collaboration experience in other countries.

**Figure 2: Summary of Flemish academic priority themes and research interests**



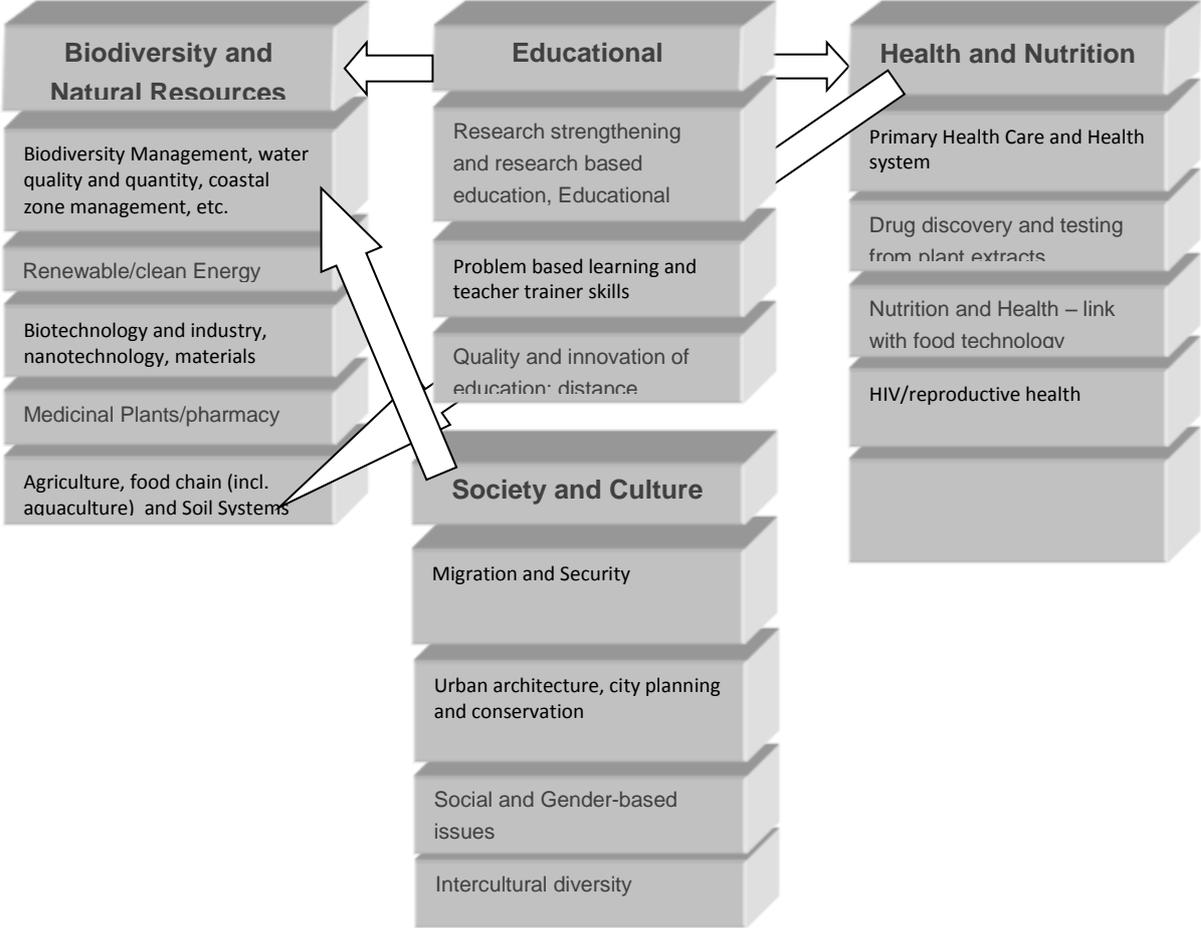
### 2.2.2. Expressions of interest by the South (government and academic stakeholders)

The Ecuadorian government poses much emphasis on ‘hard’ sciences as this is considered necessary to make the transition from an economy that is mostly dependent on the export of raw materials to an import substitution economy that can achieve added value through high quality production processes. The scholarships that are awarded by SENESCYT therefore only consider certain selected disciplines within these ‘hard’ sciences. This causes a lot of criticism from academics who warn for neglect and even disappearance of other equally important areas such as health. Academics also criticise the emphasis on applied research as opposite to basic research, which is considered indispensable for academic development in all areas.

In response, representatives of various governmental organisations have acknowledged that other disciplines are equally important for Ecuadorian society as is basic research, however for now the focus is on productive sectors and applied research. For the future other opportunities will not be excluded. They also confirmed that there is no need for VLIR-UOS to limit itself to the governmental priorities. In some cases, VLIR was invited to complement, for example the SENESCYT scholarships in ‘hard’ sciences with VLIR-UOS scholarships in the Social Sciences. **However, all stakeholders in Flanders and Ecuador indicated clearly that VLIR-UOS cooperation should take the ‘Buen Vivir’ national plan as a point of departure.**

In the following figure 3 an overview is given of the subjects that were given priority by stakeholders in Ecuador during the identification process.

**Figure 3: Identified research themes and sub-themes prioritised by Ecuadorian HEIs**



As can be seen there is a good match between the identified strategic priorities of Ecuadorian HEIs (Figure 2) and the interests of Flemish academics as expressed thus far (Figure 3), this also because already in the past cooperation between Flemish universities and institutes for higher education was very demand-driven and based on a strong partnership.

## 2.3. Strategy framework and implementation

### 2.3.1. Areas of focus (thematic, regional, partners):

#### Regional focus

Ecuador is not a very extensive country and no geographical concentration is recommended for university cooperation. At the same time it is clear that most universities outside Quito have a spin off in their respective regions, mostly through their extension activities (the third objective of the universities, next to education and research). Ecuador is naturally divided in three geographical regions: the coastal area (Costa), the Andes region (Sierra) and the sparsely populated Amazon region (Oriente). While most universities are concentrated in the Sierra, they usually have their influence sphere (in terms of students and research and extension activities) also in the Costa and Sierra (e.g. UNL, UTN).

While the Ecuadorian government in its Buen Vivir plan considers seven development regions, the Belgian bilateral cooperation concentrates in the Northern region. Although there are no indications that VLIR-UOS should adhere to this geographical preference, the possibility for synergies should not be neglected.

#### Themes

In all meetings without exception one area has been mentioned as most relevant and important for Ecuador: **Biodiversity**, in the broadest sense of the word. The importance for Ecuador as 'mega diverse' country is obvious. As this theme includes sub-themes such as biotechnology, biomedicine, bio-informatics, natural resources but also biodiversity management, water treatment, energy, materials, nanotechnology, biotechnological industry and agricultural export products, virtually all potential partners develop specific activities in this area, having more or less national importance. Other priority subjects that have been mentioned (but with far less frequency) are **Health, Food & Nutrition, Education, and Social Sciences** (migration, security and intercultural diversity).

Under '**education**' some diverging areas are hidden. It was important to distinct between the different levels of education. For example in higher education the need for **research based education** at universities was stressed which is one of the transversal themes which could be treated simultaneously at various Ecuadorian universities in the margin of a broader academic strengthening project. However various stakeholders expressed also a need to strengthen primary and secondary education, through **support to teacher training institutes and support to the still to be established National University for Education** (both higher education institutions). If this will be a priority line for the VLIR cooperation in Ecuador, cooperation, complementarity and synergy must be sought with the VVOB programme in Ecuador.

The following are the main themes resorting from the mix of Flemish and Ecuadorian interest and expertise:

---

**Biodiversity/natural resources**

**Education (educational research and problem based learning, research based education, teacher training)**

**Health (health system and public health/family medicine, HIV)**

**Social Sciences: security issues, migration and intercultural topics**

**Food & Nutrition**

**Cultural Heritage**

---

On the basis of all input before and during the mission and the above overview table 1 a completed strategy grid was included (**Annex 3**).

### **Transversal needs and opportunities**

Needs for strengthening academic infrastructure and skills, as well as university management aspects: scientific writing, library, ICT, statistics, academic English, curriculum development, institutional development, academic leadership, human resources management, basic research training, etc., were identified for almost all visited institutions. These could best be worked out in an institutional setting, but some themes could be worked out for various institutions in one transversal project.

Specific attention will have to be paid to PhD training of staff in all projects, in view of the ambitious plans of both Ecuadorian government and individual universities. Lessons should be learned from the experiences in the current and former IUCs in ESPOL and UCuenca respectively. During the stakeholder seminar in Brussels various problems connected with PhD training were mentioned: it is difficult to find candidates who are well enough prepared, but even if they complete their trajectory successfully, they often encounter difficulties upon return in their home institution: they are involved in teaching, consultancies, management and even politics, but there is no time and no environment for doing research. This in its turn hampers academic cooperation with the Belgian partner. It was strongly recommended to strengthen a broad MSc basis in the partner organization to embed the PhD fellows. This should be a point of attention for all potential projects.

### **Possible synergies with the activities of the Belgian Cooperation in Ecuador**

DGD and BTC stressed that the next Mixed Commission - if there will be one - will probably be more focused on capacity building because of the improved economic condition of the Ecuadorian state and the current needs being primarily in capacity building and equal partner cooperation rather than budget support. Therefore synergies might be stronger in the future between the direct cooperation and university cooperation in Ecuador. It is obvious that activity of VLIR-UOS in the Northern region would stimulate such synergies. The Universidad Técnica del Norte seems to be a very relevant partner to make this possible. Also BTC had positive experiences in working with them.

## 2.3.2. Country Strategy Framework (strategic niche resulting from the above – see also annex 3)

Table 2: Country Strategy Framework summarises the potential domains in which these themes and sub-themes could be pursued in a programme of VLIR-UOS supported cooperation. It also takes into account where the Flemish interests lie, as articulated in the North seminar on Ecuador and subsequent interviews.

**Table 2: Country Strategy Framework – strategic niche of cooperation considering Ecuadorian demands and Flemish interest/expertise for cooperation**

| THEMES                             |                                                                                                                                                                                                           | REGIONS     | PARTNERS                                                                                                          | OUTPUTS                                        |               |     |                   |                 |           |                          |            | EFFECT                                          |                                                                               |
|------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-------------------------------------------------------------------------------------------------------------------|------------------------------------------------|---------------|-----|-------------------|-----------------|-----------|--------------------------|------------|-------------------------------------------------|-------------------------------------------------------------------------------|
| SUB-THEMES /AREAS                  |                                                                                                                                                                                                           |             |                                                                                                                   | EDUCATION, curriculum development / adjustment |               |     | RESEARCH          |                 | Extension |                          | MANAGEMENT |                                                 |                                                                               |
|                                    |                                                                                                                                                                                                           |             |                                                                                                                   | short-courses, modules                         | Master degree | PhD | Research training | Research output | Advocacy  | Consultancy and services | HRD        | International/ regional networking and linkages |                                                                               |
| CONTENT-BASED THEMES               |                                                                                                                                                                                                           |             |                                                                                                                   |                                                |               |     |                   |                 |           |                          |            |                                                 |                                                                               |
| Biodiversity and Natural Resources | biotechnology, biomedicine, bio-informatics, natural resources, biodiversity management, water treatment, energy, materials, nanotechnology, biotechnological industry, agricultural export products, etc | nation-wide | Various universities involved and through variety of intervention types (IUC, OI, Network University Cooperation) | *                                              | *             | *   | *                 | *               | *         | *                        | *          | *                                               | THEMATIC CAPACITY AT UNIVERSITIES RESPONSIVE TO NATIONAL CHALLENGE IN ECUADOR |
| Social Sciences                    | Migration                                                                                                                                                                                                 | nation-wide | Various universities involved and through variety of intervention types (IUC, OI, ..)                             | *                                              | *             | *   | *                 | *               | *         | *                        | *          | *                                               | THEMATIC CAPACITY AT UNIVERSITIES RESPONSIVE TO NATIONAL CHALLENGE IN ECUADOR |
|                                    | Security issues                                                                                                                                                                                           |             |                                                                                                                   | *                                              | *             | *   | *                 | *               | *         | *                        | *          | *                                               |                                                                               |
|                                    | Intercultural diversity                                                                                                                                                                                   |             |                                                                                                                   | *                                              | *             | *   | *                 | *               | *         | *                        | *          | *                                               |                                                                               |
| Health, Food & Nutrition           | Health                                                                                                                                                                                                    | nation-wide | Various universities involved and through variety of intervention types (IUC, OI, Network University)             | *                                              | *             | *   | *                 | *               | *         | *                        | *          | *                                               | THEMATIC CAPACITY AT UNIVERSITIES RESPONSIVE TO NATIONAL CHALLENGE            |
|                                    | Food                                                                                                                                                                                                      |             |                                                                                                                   | *                                              | *             | *   | *                 | *               | *         | *                        | *          |                                                 |                                                                               |
|                                    | Nutrition                                                                                                                                                                                                 |             |                                                                                                                   | *                                              | *             | *   | *                 | *               | *         | *                        | *          |                                                 |                                                                               |



|                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                | experiences with similar institutions in Belgium (e.g. the Flemish-Dutch quality assurance scheme- NVAO). CES asked for support for the development of specific regulations and exchange of experiences with the Flemish Council of Higher Education (VLIR).                                                                                                                                                                                                                                                                     |
| Transversal                    | Needs for strengthening academic infrastructure and skills, as well as university management aspects: scientific writing, library, ICT, statistics, academic English, curriculum development, institutional development, leadership, university management, human resources management, basic research training, etc., were identified for almost all visited institutions. These could best be worked out in an institutional setting, but some themes could be worked out for various institutions in one transversal project. |
| Inter-institutional, hub-based | Support to two content networks (hub and spokes) addressing: <ul style="list-style-type: none"> <li>• Biodiversity possibly hosted by ESPOL</li> <li>• Education possibly hosted by UCuenca in coordination with the new to be established National Education University in Azogues (medium term).</li> </ul>                                                                                                                                                                                                                    |
| Institutional                  | Good potential for IUC detected in a number of regional universities (Imbabura and Loja Province), but whether or not to engage in a full or more focussed IUC will depend on the outcome of further selection process and policy decisions. In some cases further preparation through OI might be more adequate.                                                                                                                                                                                                                |
| Sub-institutional              | A strengths and weaknesses analysis is made for all visited universities. Although there are differences between the universities in terms of quality, accessibility and outreach towards community, most universities would be eligible for Own or South Initiatives, in one or more of the prioritised subjects.                                                                                                                                                                                                               |
| Individual (scholarships)      | A massive upgrading to PhD level is aimed for by universities and government. Opportunity for synergy. However, SENESCYT should confirm the possibility of Sandwich PhD programmes.                                                                                                                                                                                                                                                                                                                                              |

### 2.3.4. Collaboration within networks

Both North and South stakeholders emphasised the importance of academic networks within Ecuador through which the benefits of international cooperation are shared between HEIs and national collaboration in research is encouraged. It is clear that a network strategy for VLIR-UOS support and Flemish cooperation with Ecuadorian HEIs can be diverse and around several topics. Important would be to build in particular on the strengths and achievements of the ESPOL and UCuenca IUC programme's and take into account the expertise and activities of VVOB and look for complementarity and synergy, in particular in the field of educational sciences. In the context of the new intervention

type VLIR-UOS is developing, being 'Network University Cooperation', it is obvious that considering the above, there are opportunities for pilot projects in Ecuador.

### 2.3.5. Non-academic partners and stakeholders

There is considerable potential to collaborate with several non-academic partners in research projects that would directly impact on the lives of communities and enterprises.

### 2.3.6. Contribution and opportunities for Flemish non-university HE institutions

There is a clear potential for Flemish non-university Higher education Institutions within the potential education network in coordination with the National Education University in Azogues. There will be potential and call for complementarity and synergy with the activities of VVOB who is already working in this area together with higher education institutes in Flanders (Artevelde, XIOS),

## 2.4. SWOT analysis of a VLIR-UOS strategy with Ecuador

| Strengths                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Weaknesses                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Strong national vision on Science and Technology and the importance of good higher education for the future of the country.</p> <p>Young, competent staff in governmental organisations responsible for higher education. Open mind.</p> <p>Good internet connectivity.</p>                                                                                                                                                                                                                                                                                                                             | <p>Limited reliability: decisions can be cancelled by decision of the president, as has happened with the SENESCYT research projects.</p> <p>Relatively low academic level at Ecuadorian universities, absence of research culture.</p> <p>Few academic staff holding PhD titles.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Opportunities                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Threats                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <p>Considerable government funding in Science &amp; Technology.</p> <p>Impressive national scholarship programme for post-graduate training.</p> <p>Government and universities express need for support for research capacity and staff upgrading at PhD levels.</p> <p>Good match between expressed need in thematic areas and Flemish potential offer.</p> <p>Mega-bio-diverse country, interesting natural lab.</p> <p>Potential for synergy with bilateral cooperation in Northern region through IUC with UTN.</p> <p>Previous positive experiences with IUC and OI on which can be capitalised.</p> | <p>Frequent organisational and staff changes in governmental organisations responsible for higher education.</p> <p>Too ambitious national objectives.</p> <p>Many staff members will be engaged in post-graduate training which leaves limited capacity at universities for core business, let alone extra activities in the form of VLIR projects.</p> <p>Concentration of government funding for research in National Research Institutes threatens research capacity development at universities.</p> <p>Ecuadorian universities are not very open for cooperation and exchange with other academic institutions.</p> <p>Funding limitations at national and institutional level.</p> <p>High average age of academic staff.</p> |

|  |  |
|--|--|
|  |  |
|--|--|

## **ANNEXES**

**1. Pré Mission Strategy Framework**

**2. Country Fact Sheet (see VLIR-UOS website – Ecuador Country info)**

**3. Country Strategy grid**

## 1. Pré Mission Strategy Framework

|                                          | <i>SUB-THEMES/AREAS</i>                                                                                                                     | <i>Regions</i>                           | <i>Partners</i>                                    |
|------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|----------------------------------------------------|
| <b>RURAL DEVELOPMENT AND AGRICULTURE</b> | <i>Rural development (farmers organisation, microcredit, ..)</i>                                                                            | <i>Guayas</i>                            | <i>ESPOL</i>                                       |
|                                          | <i>Agriculture and food production &amp; chain (incl Aquaculture and bioprocesses)</i>                                                      | <i>Guayas and Quito</i>                  | <i>ESPOL, Esc. Politecnica Nacional</i>            |
| <b>ENVIRONMENT</b>                       | <i>Water quantity and quality</i>                                                                                                           | <i>Austro-ecuatoriano (Azuay, Cañar)</i> | <i>Ucuenca (VLIR-UOS and CUD)</i>                  |
|                                          | <i>Clean technologies and renew. Energy</i>                                                                                                 | <i>Guayas and Quito region</i>           | <i>ESPOL and Esc Politecnica Nacional</i>          |
|                                          | <i>Biodiversity (incl. medicinal plants), environment, climate change</i>                                                                   | <i>Austro-ecuatoriano (Azuay, Cañar)</i> | <i>Ucuenca, ESPOL</i>                              |
| <b>ECONOMY</b>                           | <i>SME development, job creation and competitiveness</i>                                                                                    | <i>Quito and Guayaquil</i>               | <i>ESPOL and Esc Politecnica Nacional</i>          |
|                                          | <i>Migration - economic approach</i>                                                                                                        | <i>Austro-ecuatoriano (Azuay, Cañar)</i> | <i>Ucuenca, CUD with Fac Lat Ciencias Sociales</i> |
| <b>HEALTH</b>                            | <i>Nutrition and Health</i>                                                                                                                 | <i>Austro-ecuatoriano (Azuay, Cañar)</i> | <i>Ucuenca</i>                                     |
|                                          | <i>Family Medicine</i>                                                                                                                      | <i>Loja</i>                              | <i>UTPL</i>                                        |
|                                          | <i>Health care systems</i>                                                                                                                  | <i>Loja</i>                              | <i>UTPL</i>                                        |
| <b>SOCIETY, GOVERNANCE AND CULTURE</b>   | <i>Rights issues (human, social, gender equality, indigenous people, sexual rights, family violence) civil society and local government</i> | <i>Azuay</i>                             | <i>Ucuenca</i>                                     |
|                                          | <i>Migration and social consequences</i>                                                                                                    | <i>Austro-ecuatoriano (Azuay, Cañar)</i> | <i>Ucuenca</i>                                     |
|                                          | <i>Reform of the state,</i>                                                                                                                 |                                          |                                                    |

|                                           |                                                                                              |                                                 |                |
|-------------------------------------------|----------------------------------------------------------------------------------------------|-------------------------------------------------|----------------|
|                                           | <i>institutional &amp; justice reform</i>                                                    |                                                 |                |
|                                           | <i>City Conservation and National Heritage Management</i>                                    | <i>Cuenca and historical sites Azuay, Cañar</i> | <i>Ucuenca</i> |
| <b>EDUCATION, RESEARCH AND UNIVERSITY</b> | <i>Education (primary and vocational) and higher education (QA, accreditation, HRD, ...)</i> | <i>Cuenca</i>                                   | <i>Ucuenca</i> |
|                                           | <i>Research and university development, tech transfer, ICT</i>                               | <i>Cuenca</i>                                   | <i>Ucuenca</i> |

### 3. Country Strategy grid

| THEMES                             |                                                                                                                                                                                                           | REGIONS     | PARTNERS                                                                                                          | OUTPUTS                                        |               |     |                   |                 |           |                          |            |                                                 |                                                                               |
|------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-------------------------------------------------------------------------------------------------------------------|------------------------------------------------|---------------|-----|-------------------|-----------------|-----------|--------------------------|------------|-------------------------------------------------|-------------------------------------------------------------------------------|
|                                    | SUB-THEMES /AREAS                                                                                                                                                                                         |             |                                                                                                                   | EDUCATION, curriculum development / adjustment |               |     | RESEARCH          |                 | Extension |                          | MANAGEMENT |                                                 | EFFECT                                                                        |
|                                    |                                                                                                                                                                                                           |             |                                                                                                                   | short-courses, modules                         | Master degree | PhD | Research training | Research output | Advocacy  | Consultancy and services | HRD        | International/ regional networking and linkages |                                                                               |
| CONTENT-BASED THEMES               |                                                                                                                                                                                                           |             |                                                                                                                   |                                                |               |     |                   |                 |           |                          |            |                                                 |                                                                               |
| Biodiversity and Natural Resources | biotechnology, biomedicine, bio-informatics, natural resources, biodiversity management, water treatment, energy, materials, nanotechnology, biotechnological industry, agricultural export products, etc | nation-wide | Various universities involved and through variety of intervention types (IUC, OI, Network University Cooperation) | *                                              | *             | *   | *                 | *               | *         | *                        | *          | *                                               | THEMATIC CAPACITY AT UNIVERSITIES RESPONSIVE TO NATIONAL CHALLENGE IN ECUADOR |
| Social Sciences                    | Migration                                                                                                                                                                                                 | nation-wide | Various universities involved and through variety of intervention types (IUC, OI, ..)                             | *                                              | *             | *   | *                 | *               | *         | *                        | *          | *                                               | THEMATIC CAPACITY AT UNIVERSITIES RESPONSIVE TO NATIONAL CHALLENGE IN ECUADOR |
|                                    | Security issues                                                                                                                                                                                           |             |                                                                                                                   | *                                              | *             | *   | *                 | *               | *         | *                        | *          | *                                               |                                                                               |
|                                    | Intercultural diversity                                                                                                                                                                                   |             |                                                                                                                   | *                                              | *             | *   | *                 | *               | *         | *                        | *          | *                                               |                                                                               |
| Health, Food & Nutrition           | Health                                                                                                                                                                                                    | nation-wide | Various universities involved and through variety of intervention types (IUC, OI, Network University Cooperation) | *                                              | *             | *   | *                 | *               | *         | *                        | *          | *                                               | THEMATIC CAPACITY AT UNIVERSITIES RESPONSIVE TO NATIONAL CHALLENGE IN ECUADOR |
|                                    | Food                                                                                                                                                                                                      |             |                                                                                                                   | *                                              | *             | *   | *                 | *               | *         | *                        | *          |                                                 |                                                                               |
|                                    | Nutrition                                                                                                                                                                                                 |             |                                                                                                                   | *                                              | *             | *   | *                 | *               | *         | *                        | *          |                                                 |                                                                               |
| Thematic network Education -       | Educational research research and teacher                                                                                                                                                                 | national    | UNAE/Ucuena, other universities                                                                                   |                                                |               |     |                   |                 |           |                          |            |                                                 | THEMATIC CAPACITY AT                                                          |

|                                                 |                                                                                                                                                                                                           |          |         |                                                                       |   |   |                                                |   |  |                   |   |                                          |                                                          |                                                                     |
|-------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|---------|-----------------------------------------------------------------------|---|---|------------------------------------------------|---|--|-------------------|---|------------------------------------------|----------------------------------------------------------|---------------------------------------------------------------------|
| country level activity in cooperation with VVOB | training                                                                                                                                                                                                  |          |         | *                                                                     | * | * | *                                              | * |  |                   |   | *                                        | UNIVERSITIES RESPONSIVE TO NATIONAL CHALLENGE IN ECUADOR |                                                                     |
|                                                 |                                                                                                                                                                                                           |          |         |                                                                       |   |   |                                                |   |  |                   |   |                                          |                                                          |                                                                     |
|                                                 |                                                                                                                                                                                                           |          |         |                                                                       |   |   |                                                |   |  |                   |   |                                          |                                                          |                                                                     |
| TRANSVERSAL AND CROSS-CUTTING THEMES            |                                                                                                                                                                                                           |          |         |                                                                       |   |   |                                                |   |  |                   |   |                                          |                                                          |                                                                     |
| Transversal strengthening academic capacity     | scientific writing, library, ICT, statistics, academic English, curriculum development, institutional development, leadership, university management, human resources management, basic research training | national | various | *                                                                     | * |   | *                                              |   |  |                   | * | *                                        | *                                                        | SUPPORTIVE ENABLING ENVIRONMENT (SENIOR MANAGEMENT OF UNIVERSITIES) |
| EFFECT                                          |                                                                                                                                                                                                           |          |         | NEW PROGRAMMES, IMPROVED TEACHING QUALITY, IMPROVED QUALITY ASSURANCE |   |   | STRONGER RESEARCH CAPACITY, CULTURE AND OUTPUT |   |  | IMPACT IN SOCIETY |   | PROFESSIONAL ORGANISATION AND PROCEDURES |                                                          |                                                                     |