

**RESULTS OF FOUR NATIONAL ASSESSMENTS ON THE INSTITUTIONALIZATION
OF THE ENVIRONMENTAL COMMITMENT AT LATIN AMERICAN UNIVERSITIES
2014-2015**

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The Alliance of Ibero American Networks of Universities for Sustainability and Environment is a network of networks. In the first semester of 2017, ARIUSA get together 19 networks with 327 higher education institutions (HEIs) in 13 countries of Latin America and the Caribbean region.

Since April 2014, ARIUSA developed a series of national assessments about “Institutionalization of the Environmental Commitment at Latin American Universities”. Until September 2015, 228 higher education institutions responded the survey in four Latin American countries: Perú (37), Colombia (47), Ecuador (17) and México (127).

The survey considered 25 basic questions organized in five areas of university action. These areas are:

- 1) Government and participation
- 2) Teaching and training
- 3) Research and technology
- 4) Outreach or social projection
- 5) Management and planning

The Partner Network 2 of UNESCO for the implementation of the Global Action Programme (GAP) on Education for Sustainable Development (ESD) defined the same areas as:

- 1) Governance, policy and management
- 2) Curriculum, teaching and learning
- 3) Research and action research
- 4) Community, partnership, outreach and communication
- 5) Campus and facilities

The Coordinator of ARIUSA presented the results of the four national assessments at the workshop “How green is your campus? Developing sustainability indicators for Universities”, during the UNESCO Week for Peace and Sustainable Development: The Role of Education, that took place in Ottawa, on March 2017.

The main results of the surveys applied about institutionalization of the environmental commitment in 228 higher education institutions in the four Latin American countries mentioned before, between April 2014 and September 2015, are the following:

Table 1
**Institutionalization of the environmental commitment
 in 228 HEIs of Peru, Colombia, Ecuador and Mexico.
 2014 - 2015**

Total answers of 228 universities in a questionnaire with 25 basic questions	5,700
Total positive answers of the 228 universities that responded the survey	3,075
Percentage of positive answers of the total of possible answers	53.9%

Sources: CARDENAS, 2015; TORRES & CALDERÓN, 2015; CECADESU & ANUIES, 2016; SÁENZ *et al*, 2017.

According with these data, in general, the universities in Perú, Colombia, Ecuador and México have reached a medium level in the process of institutionalization of their environmental commitment. The 228 HEIs that responded the survey, accomplished, on average, the 53.9% of the 25 indicators defined in the five areas of the university action.

Table 2
**Institutionalization of the environmental commitment
 in 228 HEIs of Peru, Colombia, Ecuador and Mexico,
 by areas of university action.
 2014 - 2015**

Areas of university action	Possible answers	Positive answers	Percentage
Government and participation	1,140	663	58.2%
Teaching and training	1,140	659	57.8%
Research and technology	1,140	562	49.3%
Outreach or social projection	1,140	549	48.2%
Management and planning	1,140	642	56.3%

Sources: CARDENAS, 2015; TORRES & CALDERÓN, 2015; CECADESU & ANUIES, 2016; SÁENZ *et al*, 2017.

The areas with a higher level of institutionalization of the environmental commitment are Government and participation, and Teaching and training. Of the 1,140 possible answers in each area of institutional action, the universities had responded affirmatively the 58.2% and 57.8% in these two

areas, respectively. The lowest level (48.2%) of the environmental commitment is the area of Outreach or social projection. However, the differences between the five areas of university action are not so big. The difference between the higher and lower level is only 10 percentage points.

Table 3
**Institutionalization of the environmental commitment
 in 228 HEIs of Peru, Colombia, Ecuador and Mexico,
 in the area of government and participation.
 2014 - 2015**

Indicators or questions in the area of Government and participation	Possible answers	Positive answers	Percentage
1. Does the University have a document that defines its policy in the field of sustainability or environment?	228	146	64.0%
2. Does the university organize activities toward sustainability in an institutional action plan or environmental system?	228	138	60.5%
3. Does University have a unit, office or service, with a technical and administrative character, exclusively devoted to issues of environment or sustainability?	228	139	61.0%
4. Does the unit, office or service of environment or sustainability have its own budget to perform activities or investments in this area?	228	84	36.8%
5. Are the teachers, students or administrative staff involved in the design and implementation of the environmental or sustainability policy of the university?	228	156	68.4%

Sources: CARDENAS, 2015; TORRES & CALDERÓN, 2015; CECADESU & ANUIES, 2016; SÁENZ *et al*, 2017.

In the area of Government and participation, the 64.0% of the universities that responded the questionnaire already have a document that defines its policy in the field of sustainability or environment. Besides, the 61.0% has a unit, office or service, with a technical and administrative character, exclusively devoted to issues of environment or sustainability.

Nevertheless, only 84 of the 228 HEIs allocate a budget for their unit, office or service of environment or sustainability. This data shows that the majority of the higher education institutions in the four countries of the study, has not developed their environmental commitment investing monetary resources, necessary to finance their activities and projects in this field.

Also must be highlighted that the 68.4% of the universities in the survey facilitate the participation of teachers, students or administrative staff in the design and implementation of the environmental or sustainability policy of the institution.

Table 4
**Institutionalization of the environmental commitment
 in 228 HEIs of Peru, Colombia, Ecuador and Mexico,
 in the area of teaching and training.
 2014 - 2015**

Indicators or questions in the area of Teaching and training	Possible answers	Positive answers	Percentage
6. Does the environmental or sustainability policy of the university have a clear reference to teaching or training activities?	228	111	48.7%
7. Does some of the academic curriculums of the different courses incorporate an environmental or sustainability perspective?	228	144	63.2%
8. Does the university defined explicitly basic competencies or transversal skills concerning to environment or sustainability in any of the courses?	228	129	56.6%
9. Does the university offer specific undergraduate professional programs in environment or sustainability?	228	147	64.5%
10. Does the university offer specific postgraduate programs (specialization, master´s degree or doctorate) in environment or sustainability?	228	128	56.1%

Sources: CARDENAS, 2015; TORRES & CALDERÓN, 2015; CECADESU & ANUIES, 2016; SÁENZ *et al*, 2017.

It is well known that the Latin American universities started the integration of the environmental dimension in the area of teaching and training several decades ago, especially with the creation of academic programs in the undergraduate level (SAENZ & BENAYAS, 2012). As a result of this process, the survey shows that the 64.5% of the universities offer undergraduate professional programs in environment or sustainability. In a minor percentage (56.1%), also offer postgraduate programs (specialization, master´s degree or doctorate) in the same field of knowledge.

However, barely the 48.7% of the HEIs have a clear reference to teaching or training activities in their environmental policy. With regard of the definition of explicitly competencies or transversal skills concerning to environment or sustainability in any courses, the 56.6% of universities in Peru, Colombia, Ecuador and Mexico had defined them.

Table 5
**Institutionalization of the environmental commitment
in 228 HEIs of Peru, Colombia, Ecuador and Mexico,
in the area of research and technology.
2014 - 2015**

Indicators or questions in the area of Research and technology	Possible answers	Positive answers	Percentage
11. Does the environmental or sustainability policy of the university have a clear reference to research and transfer of technology?	228	98	43.0%
12. Does the university have a formally established research group about environment or sustainability?	228	156	68.4%
13. Does the university implement strategies for promoting the development of environmental research (grants, competitions, others)?	228	138	60.5%
14. Does the university take into account criteria of sustainability and assessment of environmental impact to approve research projects and transfer of technology?	228	84	36.8%
15. Does the university use its campus or facilities to perform research on environmental or sustainability issues?	228	86	37.7%

Sources: CARDENAS, 2015; TORRES & CALDERÓN, 2015; CECADESU & ANUIES, 2016; SÁENZ *et al*, 2017

More than two-thirds (68.4%) of the HEIs have a formally established research group about environment or sustainability. A 60.5% of the universities implement strategies, like grants, competitions and others, to promoting the development of research on environment or sustainability.

The lower level in this area is related with the criteria of sustainability and assessment of environmental impact to approve research projects and transfer of technology. Only the 36.8% of the HEIs in these surveys have this kind of criteria.

The results in the use of the campus or facilities to perform research on environmental or sustainability issues are also low. Barely, 86 of the 228 higher education institutions consulted, answered affirmatively to this question.

Table 6
**Institutionalization of the environmental commitment
in 228 HEIs of Peru, Colombia, Ecuador and Mexico,
in the area of outreach or social projection.
2014 - 2015**

Indicators or questions in the area of Outreach or social projection	Possible answers	Positive answers	Percentage
16. Does the university implement a specific plan, a strategic axis of management or a plan of action for social and environmental responsibility, approved by any managerial organ?	228	101	44,3%
17. Does the university develop programs of intervention in order to contribute to the solution of environmental problems or sustainability in communities?	228	107	46,9%
18. Does the university develop collaboration programs with governments (local, regional or national) for the formulation or implementation of public environmental policies?	228	118	51,8%
19. Does the university develop programs of entailment with the local business sector concerning environment or sustainability?	228	78	34,2%
20. Does the university participate in national or international networks of universities for environment or sustainability?	228	145	63,6%

Sources: CARDENAS, 2015; TORRES & CALDERÓN, 2015; CECADESU & ANUIES, 2016; SÁENZ *et al*, 2017

As was showed in the table 2, the area of Outreach or social projection has the worst performance of all five areas of university action. This area includes the question with the lowest percentage of all 25 basic indicators of the environmental commitment of the HEIs. The question refers to the entailment with the local business sector concerning environment or sustainability. The positive answers for this question are scarcely, 34, 2%.

This specific result does not surprised. With important exceptions, in general, the higher education institutions in Latin American and the Caribbean have not developed a strong relationship with the private sector.

On the other hand, it was expected a higher level of entailment of the universities with local communities to develop programs of intervention in order to contribute to the solution of

environmental problems. In effect, the results of these surveys show that the 46, 9% of the HIEs have a relationship with communities in this field of action. A little higher (51, 2%) is the collaboration of the HEIs with governments (local, regional or national) in the process of formulation or implementation of public environmental policies.

As it was expected, the higher answer in this area is the entailment of the university in national or international networks of universities for environment or sustainability. The 63, 6% of the HEIs, that responded the questionnaire, participate in this type of networks.

Table 7
**Institutionalization of the environmental commitment
 in 228 HEIs of Peru, Colombia, Ecuador and Mexico,
 in the area of management and planning.
 2014 - 2015**

Indicators or questions in the area of Management and planning	Possible answers	Positive answers	Percentage
21. Does the university implement a specific plan of management or a line of action on sustainability that includes aspects of saving water, sanitation for human, irrigation and wastewater?	228	134	58,8%
22. Does the university implement a specific plan, a strategic axis of management or a line of action on sustainability that includes aspects related with lighting, air conditioning or renewable energy?	228	137	60,1%
23. Does the university implement a specific plan, a strategic axis of management or a line of action on sustainability for the minimization, selective collection and proper management of solid waste?	228	159	69,7%
24. Does the university implement a specific plan, a strategic axis of management or a line of action of sustainability related with the environmental management of green areas and biodiversity?	228	106	46,5%
25. Does the urban planning of the university include sustainability or environmental criteria?	228	106	46,5%

Sources: CARDENAS, 2015; TORRES & CALDERÓN, 2015; CECADESU & ANUIES, 2016; SÁENZ *et al*, 2017

Since decade of nineties, higher education institutions in Latin America began to assume their commitments with sustainability by developing new activities of environmental management. Now, this is an important area of university action in the field, with a level of 56.3%.

The higher percentage of all 25 basic questions is for the management of solid waste: 69.7% of the HEIs that answered the surveys declare to have a specific plan, a strategic axis of management or a line of action on sustainability for the minimization, selective collection and proper management of solid waste. Similar are the results for the questions about energy and water, with answers of 60.1% and 58.8%, respectively.

Below those percentages, is found the management of biodiversity in the campus and the urban planning for the buildings and university facilities. Both have 46.5% of positive answers.

In conclusion, after more than six decades of integration of environmental dimension, the higher education institutions in Latin America have reached a medium level (53.9%) in their commitment with sustainability. All the five areas of university action have important results in this field with differences that not exceed the 10%. The process of institutionalization of environmental commitment of HEIs in the region is progressing in a way relatively well balanced.

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