

Alliance of Networks for the Environmental Sustainability of Higher Education Institutions in Ibero-America

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Introduction

In September 2015, the United Nations General Assembly passed the 2030 Agenda for Sustainable Development as an action plan in favour of humanity and the planet. As stated in the second paragraph of the preamble to resolution A/RES/70/1, "All countries and all stakeholders, acting in collaborative partnership, will implement this plan" (UN, 2015: 1).

The 2030 Agenda defines 17 Sustainable Development Goals (SDGs) and 169 targets that make up this new global action plan, which is a continuation of the Millennium Development Goals. The new universal agenda identifies five major spheres of action: people, the planet, prosperity, peace and partnership.

Goal 17 proposes the need to "Revitalise the Global Partnership for Sustainable Development". According to target 17.16, this new Partnership must be "complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the sustainable development goals in all countries". In turn, target 17.17 specifies the duty to "encourage and promote effective public, public-private and civil society partnerships, building on the experience and resourcing strategies of partnerships" (UN, 2015: 31).

Although the revitalization of a "Global Partnership for Sustainable Development" is presented as the last of the SDGs, in practice it is a necessary condition for the achievement of all the others. The 2030 Agenda is universal and therefore requires contributions from all national governments, international agencies, public organisations and citizens of the world.

Higher Education Institutions (HEIs) need to be among the first stakeholder in civilian society to respond to the United Nations' call to "Transform our world". In compliance with their social and environmental responsibility, universities and other HEIs can be assumed to be "interested parties" in the worldwide effort to achieve the Sustainable Development Goals. They should therefore become leading actors in the new universal partnership being called upon by the United Nations in the form of the 2030 Agenda.

The contributions by HEIs to the new Global Partnership for Sustainable Development can be described in similar terms to target 17.16: the exchange of specialised knowledge, technologies and financial resources. They can also contribute through their rich and extensive experience in the creation and operation of partnerships in order to achieve shared goals. Universities and other HEIs participated in global action plans that predated the SDGs and were aimed both at promoting development in general (Millennium Development Goals) and the achievement of universal targets in specific sectors (Health for All by 2000, Agenda 21, Global Action Programme and Decade on Education for Sustainable Development, and others). The specific fields of action in which higher education institutions have made a significant contribution especially include the environment and sustainability.

Universities and other HEIs were among the main institutions to answer the call of the Stockholm Conference in 1972 to support the action plan proposed in the Swedish capital, especially in relation to environmental education and training. Thanks to the support and promotion of certain international organizations, Latin America and the Caribbean was one

of the first regions of the world in which higher education institutions started to organise themselves into partnerships to cooperate in making significant contributions to international efforts to overcome the environmental crisis.

This work was initiated by the *Centro Internacional de Formación en Ciencias Ambientales* (International Environmental Education Centre – CIFCA) in 1975 and continued by the *Red de Formación Ambiental para América Latina y el Caribe* (Environmental Training Network for Latin America and the Caribbean – RFA-ALC) from 1981 (Sáenz, 2012). As a result of more than three decades of on-going work to foster the incorporation of the environmental dimension in higher education institutions, the *Alianza de Redes Iberoamericanas de Universidades por la Sustentabilidad y el Ambiente* (Alliance of Ibero-American University Networks for Sustainability and the Environment – ARIUSA) was constituted in 2007.

ARIUSA is a network of university environmental networks in Latin America, the Caribbean and the Iberian Peninsula that coordinate their activities and cooperate to promote commitments to sustainability among HEIs. Its creation involved participation by six university environmental networks grouping 96 HEIs in Ibero-America.

A decade later, there are 25 university environmental networks in the alliance, with 431 universities and other HEIs from 19 countries in the region: Colombia, Guatemala, Mexico, Cuba, Argentina, Brazil, Costa Rica, Peru, Dominican Republic, Venezuela, Chile, Ecuador, Nicaragua, Panama, Bolivia, Jamaica, Trinidad and Tobago, Spain and Portugal.

In its first ten years of operation as regional network of networks, ARIUSA has gained major experience of collaboration between national networks of universities, researchers, HEIs and international cooperation organisations to foster commitment to sustainability and the environmental efforts of universities and other HEIs. In undertaking this experience, it has constructed a model for the coordination of actions and academic cooperation that could well serve as a reference for similar organizations of university networks.

ARIUSA has yet to agree to a common position of its university environmental networks with regard to the 2030 Agenda. It is close to doing so via the decision of its Coordinating Committee, made up of representatives of all the networks. At present (March 2018), a special

commission is working to propose an official alliance document “on universities and their role in contributing to the Sustainable Development Goals” (Sáenz, 2017b: 16).

As occurs with respect to many other issues, the decision of the ARIUSA Coordinating Committee on the SDGs will be based on the approaches and positions as previously agreed by the networks of universities and higher education institutes that form the alliance. Long before the passing of the 2030 Agenda, a large number of Latin American networks and universities had already assumed, through documents such as those of the *Misión, Visión y Proyecto Educativo Institucional* (Institutional Educational Mission, Vision and Project), their commitment to sustainable development and specifically environmental sustainability.

This article presents a summary of the historical background of ARIUSA, its basic guidelines for association and cooperation between university environmental networks, its main actions to promote the sustainability of higher education institutions and the current procedure to assume a shared position and commitment with regard to the Sustainable Development Goals (SDGs). It ends by formulating a series of recommendations for HEIs, university networks and other institutions with a vested interest and invites them to join the new Global Partnership that the United Nations is calling for in order to comply with the 2030 Agenda.

Brief History of the Construction of the Alliance of Networks

In the first decade of operations of ARIUSA, a series of important events can be identified in the process of its construction as a network of university environmental networks in Ibero-America (see graph 1).

Four events were landmarks for establishing the different stages of the history of this network of university environmental networks: the meeting at which ARIUSA was created in 2007, the first Workshop in 2010, the meeting to launch GUPES-LA in 2012 and the celebration in 2017 of the alliance’s tenth anniversary. These events mark the beginning and ending of the three main stages in the history of ARIUSA, and which correspond to its periods of formation, growth and consolidation. The other important events have been the ARIUSA Ibero-American Workshops held in 2012, 2013 and 2016.

Graph 1

Main events in the history of ARIUSA. 2007 – 2017



Source: Sáenz 2017

The formation stage spanned between October 2007 and March 2010. The Agreement on the creation of ARIUSA was drafted by the representatives of two international and four national university environmental networks. Their names are shown in table 1.

Table 1

Founding networks of ARIUSA in 2007

| No. | Acronym | Network | Category | Region or Country |
|-----|-----------|---|----------|---------------------------------|
| 1 | RFA-ALC | Red de Formación Ambiental para América Latina y el Caribe | Founder | Latin America and the Caribbean |
| 2 | OIUDSMA | Organización Internacional de Universidades por la Sustentabilidad y el Medio Ambiente | Founder | Ibero-America |
| 3 | RCFA | Red Colombiana de Formación Ambiental | Founder | Colombia |
| 4 | REDFIA | Red Nacional de Formación e Investigación Ambiental | Founder | Guatemala |
| 5 | COMPLEXUS | Consortio Mexicano de Programas Ambientales Universitarios para el Desarrollo Sustentable | Founder | Mexico |
| 6 | RC-GAU | Red Cubana de Gestores Ambientales en las Universidades | Founder | Cuba |

Source: Sáenz 2017

During the formation stage, basic standards were gradually agreed on for the organization and operation of ARIUSA. These standards were passed as an “Acuerdo sobre Principios y Organización” (Agreement on Principles and Organisation – ARIUSA, 2010), which defined this alliance as a “network of academic – scientific cooperation relations and of coordination of actions between networks and universities acting in Ibero-America and with an explicit environmental commitment” (Ariusa, 2010: 1).

The ARIUSA growth stage began in March 2010, with the alliance’s first Ibero-American Workshop. As well as passing the *Acuerdo sobre Principios y Organización*, this meeting also accepted the incorporation of new university environmental networks. From this time on, the alliance started to grow with the adhesion or creation of 15 new networks. These networks are presented in table 2.

The ARIUSA consolidation stage commenced on 3 December 2012 with the launch of the Latin American Chapter of the Global Universities Partnership on Environment for Sustainability (GUPES-LA). This meeting agreed on a common agenda for Latin America and the Caribbean between ARIUSA and GUPES, which was supported by funding from the Regional Office of the United Nations Environment Programme (UNEP, also known as UN Environment).

Table 2
Founding networks of ARIUSA in 2007

| No. | Acronym | Network | Category | Region or Country | No. |
|-----|----------|--|-----------|-------------------|--------------------|
| 1 | MADS | Red de Universidades en Medio Ambiente y Desarrollo Sostenible | Project | 2009 | Ibero-America |
| 2 | PICyTA | Red del Postgrado Iberoamericano en Ciencias y Tecnologías Ambientales | Project | 2009 | Ibero-America |
| 3 | RAUSA | Red Argentina de Universidades por la Sostenibilidad y el Ambiente | Adherent | 2010 | Argentina |
| 4 | ACUDES | Asociación Continental de Universidades de Desarrollo Sustentable | Adherent | 2010 | America |
| 5 | REASul | Red Sur Brasileira de Educación Ambiental | Adherent | 2010 | Brazil |
| 6 | CTIE-AMB | Red de Investigación sobre Ciencia, Tecnología, Innovación y Educación Ambiental en Iberoamérica | Project | 2010 | Ibero-America |
| 7 | CADEP | Comisión Sectorial para la Calidad Ambiental, Desarrollo Sostenible y Prevención de Riesgos | Adherent | 2011 | Spain |
| 8 | REMEPPAS | Red Mexicana de Posgrados Pluridisciplinarios en Ambiente y Sostenibilidad | Adherent | 2011 | Mexico |
| 9 | RINSA | Red Iberoamericana de Investigación sobre Sustentabilidad y Ambiente | Project | 2011 | Ibero-America |
| 10 | REDIES | Red Costarricense de Instituciones Educativas Sostenibles | Adherent | 2011 | Costa Rica |
| 11 | RAI | Red Ambiental Interuniversitaria del Perú | Adherent | 2012 | Peru |
| 12 | RISU | Red de Indicadores de Sostenibilidad en las Universidades | Operative | 2012 | Ibero-America |
| 13 | RAUDO | Red Ambiental de Universidades Dominicanas | Adherent | 2012 | Dominican Republic |
| 14 | AMBIENS | Red de la Revista Iberoamericana Universitaria en Ambiente, Sociedad y Sostenibilidad | Project | 2012 | Ibero-America |
| 15 | JUSTA | Red de Justicia, Sostenibilidad y Ambiente | Project | 2012 | Latin America |

Source: Sáenz 2017

Table 3

ARIUSA adherent and project networks. 2013 - 2017

| No. | Acronym | Network | Category | Region or Country | No. |
|-----|------------|---|-------------|-------------------|---------------|
| 1 | REDVUA | Red Venezolana de Universidades por el Ambiente | Adherent | 2013 | Venezuela |
| 2 | RAUS | Red de Universidades Sostenibles | Adherent | 2013 | Colombia |
| 3 | RCS | Red Campus Sustentable | Adherent | 2013 | Chile |
| 4 | RIMAS | Red Internacional de Estudios sobre Medio Ambiente y Sostenibilidad | Researchers | 2015 | Ibero-America |
| 5 | RedMA | Red de Medio Ambiente | Adherent | 2016 | Ecuador |
| 6 | REDDCA | Red Ecuatoriana de Carreras de Ciencias Ambientales | Adherent | 2016 | Ecuador |
| 7 | RENUA | Red Nicaragüense de Universidades por el Ambiente | Adherent | 2017 | Nicaragua |
| 8 | PAIs | Red de Planes Ambientales Institucionales | Adherent | 2017 | Mexico |
| 9 | RedSA | Red de Sustentabilidad Ambiental | Adherent | 2017 | Mexico |
| 10 | RUPADES | Red de Universidades Panameñas para el Desarrollo Sostenible | Adherent | 2017 | Panama |
| 11 | UAGAIS | Red de Universidades Argentinas para la Gestión Ambiental y la Inclusión Social | Adherent | 2017 | Argentina |
| 12 | RASES | Red de Ambientalización y Sostenibilidad en la Educación Superior | Adherent | 2017 | Brazil |
| 13 | ReLaC-GeRS | Red Latinoamericana y Caribeña para la Gestión Sostenible de Residuos Sólidos | Project | 2017 | Latin America |

Source: Sáenz 2017

This most recent stage brought the creation and adhesion to the alliance of 13 new national and international university environmental networks. The networks that joined ARIUSA between 2013 and 2017 are shown in table 3.

The most recent ARIUSA event, its fifth Ibero-American Workshop, was held in Santa Marta (Colombia) in October

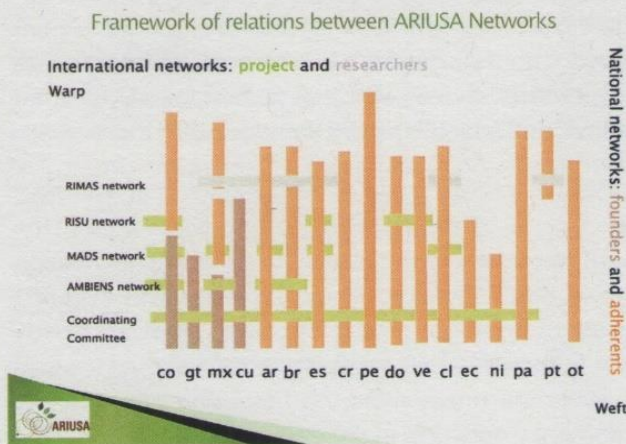
2017. It was also a celebration of the first ten years of the alliance of university environmental networks and the first five years of the shared agenda with GUPES. The meeting of its Coordinating Committee decided to put together a new work agenda for the forthcoming years that should include "an approach to universities and their role in contributing to the Sustainable Development Goals" (Sáenz, 2017b).

Association and Cooperation Scheme in the Network of Networks

On the basis of its efforts as a network for more than a decade, ARIUSA has been constructed as a framework for communication, coordination, cooperation and co-managerial relations between different types of university environmental networks working together to foster the institutionalization of the environmental commitments of universities and other HEIs in Ibero-America. This general idea is represented in graph 2.

Like any such framework, ARIUSA is formed by weaving two sets of threads: the weft and the warp. The first set, or weft, is the solid base of the framework and is made up of 20 national university networks in 15 Latin American, Caribbean or Iberian countries. There are additionally universities in another four countries that participate in one of the international project networks. In total, these are the 19 countries that were listed in the introduction.

Graph 2
Framework of relations between networks in ARIUSA



Source: Sáenz 2017

The warp is the second set of threads that are weaved into the weft. At ARIUSA, the warp is made up two types of international networks: project networks and a network of environmental researchers. At present, ARIUSA has four international project networks and an Ibero-American network of academics that are working on environmental and sustainability issues, all of which have already been mentioned in the tables in the previous section.

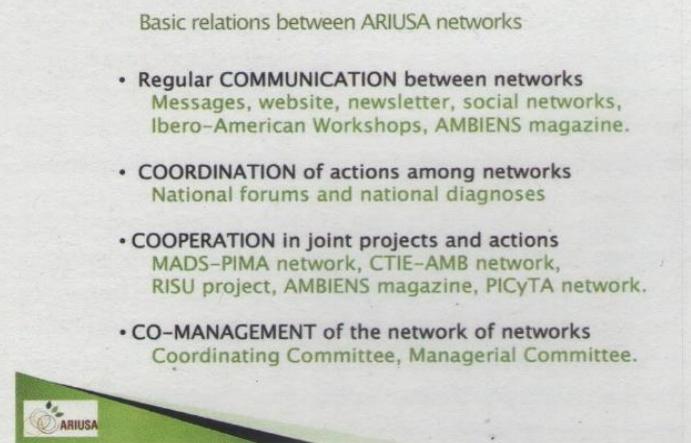
There are basically four types of relations that weave these two groups of networks or threads into the ARIUSA framework: Communication, Coordination, Cooperation and Co-Management. Each type of relation has a variety of corresponding functions and activities in ARIUSA, as presented in a summarised manner in graph 3.

Like any social network or organization, no matter how simple or complex, the fundamental relation at ARIUSA is that of communication.

The basis of all social relationships is the exchange of information and ideas in order to coordinate group actions and this network of networks is no exception to the general rule. Likewise, it shares two types of communication with any other network of social relations: formal and informal. Given the importance of ITCs in the modern world, communication via internet is also more frequent among networks of networks than direct interaction and face-to-face meetings.

The most important spaces for forging personal relationships in the framework of the alliance have been the ARIUSA Ibero-American Workshops. As reported earlier, in the first ten years there have been five such meetings. ARIUSA Workshops are face-to-face meetings held over several days involving as many representatives of networks and other interested colleagues as possible, which take the chance to conduct different academic activities related to environmental sustainability.

Graph 3
Basic relationships between networks within ARIUSA.



Source: Sáenz 2017

Since the decision to create the alliance and in its reference documents, the two most prominent types of relationships between networks have been those involving coordination and cooperation. According to the *Acuerdo sobre Principios y Organización*, "ARIUSA is a multi-centre and pluri-directional system of horizontal relations for academic and scientific cooperation and the coordination of actions between Ibero-American environmental networks and universities" (Ariusa, 2010, p. 1).

All of the networks in ARIUSA are, at the bare minimum, expected to regularly report on their activities and to try to coordinate some of their mutually coinciding actions.

This basic coordination of events is achieved by producing an annual agenda that compiles the main activities scheduled by each of the networks in the alliance to ensure that they do not interfere with each other.

The last of the basic relationships between member networks of ARIUSA is that of Co-Management. From the first version of the *Acuerdo sobre Principios y Organización*, it was established that "in order to guarantee the democratic nature of the cooperative relationships that it constitutes, ARIUSA is organised in a decentralised manner and with no type of hierarchy between its members, thus creating as horizontal an organisational structure as possible" (Ariusa, 2010, p.1). Therefore, the main decisions in this network of networks are made collectively and, preferably by consensus, by the ARIUSA Coordinating Committee. This Committee is made up of the representatives of each of the networks forming the alliance, irrespective of whether they are founders, adherents, projects or researchers. On this Coordinating Committee, all networks carry the same weight and importance: each representative has a right to speak and vote (when necessary), regardless of whether they are national or international networks, large or small, or members from the beginning or recently joined.

As agreed since 2010, the Coordinating Committee chooses "an ARIUSA Coordination that shall be undertaken by one or several of the representatives of active networks that express an interest, commitment and the possibility to dedicate the necessary time to fulfilling their functions" (Ariusa: 2013: 5). These include representation before other networks and organizations, enquiries to the Committee from network representatives, any internal or external communications required, the coordination of joint projects, and the procurement of resources to fund the alliance's activities.

Since the creation of ARIUSA in 2007, its coordination has been collective. Throughout the first decade, this was the duty of the representatives of the *Red Colombiana de Formación Ambiental* (Colombian Environmental Training Network – RCFA) and the *Organización Internacional de Universidades por la Sostenibilidad y el Medio Ambiente* (International Organization of Universities for Sustainable Development and Environment – OIUDSMA). At its meeting in October 2017, the Coordinating Committee decided to create a Managerial Committee made up of three representatives of networks, which would be elected every two years, to thereby "progressively renew and, at the same time, maintain Coordinators with experience of ARIUSA management" (Sáenz, 2017b: 16). So now, in addition to the RCFA representative, the Managerial Committee also involves participation of representatives from the *Red Campus Sustentable* (Sustainable Campus Network – RCS) in Chile and of the *Red de Sostenibilidad Ambiental* (Environmental Sustainability Network – RedSA) in Mexico.

Although not expressed in writing in any of its documents, an important principle that is always applied by the ARIUSA Coordinating Committee, when making decisions on its action plans, has been that: "Whoever proposes commits and whoever commits complies". Through application of this principle, a high level of compliance has been achieved with the alliance's work agendas, because all of its activities have a team that is responsible for their execution, and which is led by the proposers themselves.

This principle is directly related with another that appraises the work done by the members of the alliance over the financial resources, as the means for achieving its mission and goals. ARIUSA has conducted intense activity in its first ten years of operation, but it has never received steady finance. Although some networks receive annual funding from associate universities, participation of university environmental networks in the alliance does not imply the payment of any kind of fees. From very early on, it was made clear that its activities would mainly be conducted "on the basis of the contribution of time and work by the representatives of universities, through the national or international networks of which it consists" (Ariusa, 2010: 6).

In a small number of cases, the dedication of time to the alliance's activities is supported institutionally by universities to which the representatives of networks on the Coordinating Committee are associated. This was the case from 2007 with the ARIUSA Coordinator, who dedicated almost half of his workshop to coordination

activities, as part of his academic activities at the University of Applied and Environmental Sciences (U.D.C.A). This university offers the same support to the *Red Colombiana de Formación Ambiental* by assigning to another of its professors the functions of Executive Secretary of this university environmental network.

On the basis of the work of the members of the Coordinating Committee, of the Managerial Committee and of some close colleagues, ARIUSA has often managed to receive funding from international cooperation agencies. In its first years it received small amounts from the Spanish Agency for International Development Cooperation (AECID) and the *Asociación Universitaria Iberoamericana de Postgrado* (Ibero-American Postgraduate University Association – AUIP). Of much greater importance has been the funding for pre-degree student mobility grants provided since 2010 by the Organization of Ibero-American States (OEI) and the Regional Government of Andalusia, Spain. Thanks to the *Red de Ciencia, Tecnología, Innovación y Educación Ambiental en Iberoamérica* (Network of Science, Technology, Innovation and Environmental Education in Ibero-America – CTIE-AMB) major funding was obtained from the *Programa Iberoamericano de Ciencia and Tecnología para el Desarrollo* (Ibero-American Science and Technology for Development Programme – CYTED) and the *Departamento Administrativo de Ciencia, Tecnología e Innovación* (Science, Technology and Innovation Administrative Department – COLCIENCIAS) in Colombia (Sáenz, 2012b). Since 2013, a joint ARIUSA – GUPES agenda has been in development, which is co-funded by resources provided by the Environmental Training Network for Latin America and the Caribbean (RFA-ALC), of the regional office of the United Nations Environment Programme (UNEP, otherwise known as UN Environment).

Promotion of Sustainability in Higher Education

Although the creation of ARIUSA was formalised in 2007, this alliance of university environmental networks in Ibero-America cannot be understood as anything other than the result of a prolonged collective effort by Latin American academics and the employees of international organisations that, since the mid-seventies, started to promote “the incorporation of the environmental dimension in higher education”, shortly after the

Stockholm Conference. Two of the main international organisations that took on this task in the early years in Latin America were the *Centro Internacional de Formación de Ciencias Ambientales* (International Environmental Science Training Centre – CIFCA), based in Spain, and the Environmental Training Network for Latin America and the Caribbean (RFA-ALC) that was first based in Mexico and later in Panama (Sáenz, 2012).

The initial work of CIFCA was continued by the RFA-ALC and one of the first results was the creation of the *Red Colombiana de Formación Ambiental* (RCFA) in 1985. Over the following years, similar networks were formed in other Latin American countries, but most of these ceased functions very quickly. In 1994, the *Red Cubana de Formación Ambiental* was set up in Cuba and in 1996 the *Red de Formación e Investigación Ambiental* (REDFIA) in Guatemala. These three national networks, together with the regional network, would be joined by two others in forming ARIUSA in October 2007.

According to its constitutional agreement, the initial goals of ARIUSA were to “develop academic cooperation activities aimed at coordinating events of common interest, the realization of collaborative research projects and support for the creation and strengthening of postgraduate programmes on environment and sustainability” (Ariusa, 2007: 2). These goals were formulated more broadly in 2010 when the *Acuerdo sobre Principios y Organización* was passed, which established as a “fundamental mission or objective the promotion and support for academic and scientific cooperation and the coordination of actions, in the environmental field, between Iberian, Latin American and Caribbean universities, through their university environmental networks” (Ariusa, 2010: 2).

In compliance with its mission and goals, ARIUSA has developed a series of projects aimed at promoting the institutionalization of the environmental commitments of universities and other HEI in the region. All the activities have been articulated since 2013 through a joint agenda with the Latin American Chapter of the Global Universities Partnership on Environment for Sustainability (GUPES-LA).

On the joint GUPES – ARIUSA agenda, the most prominent activities have included two series of National and Latin American Forums of Universities and Sustainability. The first was held throughout 2013, when national forums were held in ten different countries. It ended with the I Latin American Forum of Universities and Sustainability, at Viña del Mar (Chile), in December of the same year.

On the basis of the reports of the six national forums and the Latin American one, a book was published titled “*Universidades y Sostenibilidad en América Latina y el Caribe*” (Sáenz, 2015a). The second series was brought forward to between 2014 and 2017. Until the end of last year, a total of 24 national forums or equivalent events had been recorded and it closed with the II Latin American Forum of Universities and Sustainability.

Another international collaborative project that generated major dynamics at ARIUSA was focused on the “Definition of indicators for the evaluation of the sustainability indicators at Latin American universities”. By late 2013, this project had agreed on a total of 114 indicators and these were then put to the test in the first half of 2014 with a group of 65 universities, from 11 national networks, in ten Latin American countries (Benayas et al, 2014 and Sáenz, 2015b).

From 2014, and on the basis of a selection of a smaller group of indicators, a series of National Diagnoses on the Institutionalisation of Environmental Commitment in Higher Education were put forward. This ARIUSA initiative was adopted by the RFA-ALC and UNEP, and thanks to its efforts, achieved the support of the Forum of Ministers of Environment of Latin America and the Caribbean.

By the end of October 2017, responses had been received from 355 universities and other HEIs in ten Latin American countries. From these, four national reports have been published (Cárdenas, 2014; Torres and Calderón, 2015; Cesadesu and Anuies, 2016; and Sáenz et al, 2017). Several networks in other countries have expressed an interest in their respective diagnoses. On the basis of the information that has been compiled, and that will continue to be obtained from different surveys, the plan is to set up an Observatory of Sustainability in Higher Education (Sáenz, 2015d).

Commitment of HEIs and Networks to the Sustainable Development Goals

When ARIUSA was created, almost two decades had already passed since the concept of sustainable development had been coined by the Brundtland Commission and been institutionalised within the United Nations system in the wake of the Rio Summit. This concept has been the object of much criticism and resistance from major sectors of the academic community in the region that, since the seventies, has

been in charge of environmental matters, particularly that which is identified with the so-called “Latin American Environmental Thinking” (Ángel, 1997 and Leff, 2009).

Sharing or taking into consideration these positions, when deciding on the name of its alliance of university environmental networks, the founders of ARIUSA opted for the term ‘sustainability’ as opposed to ‘sustainable development’. This concept was joined by that of the ‘environment’, which has always been the centre of interest both for the representatives of Latin American environmental thinking and those who have promoted the incorporation of the environmental dimension in the region’s higher education institutions.

Another of the considerations behind ARIUSA’s name including the term sustainability is that it is a characteristic or condition that many social processes can have. Cities need to be sustainable, and so do institutions, the future, society, development, consumption and any economic sector or activity. Such a broad concept means that many university and higher education institution networks in Latin America and the Caribbean easily identify with what this alliance represents.

For these and other reasons, the ARIUSA name has never been questioned by proposals that it should include the term ‘sustainable development’.

In general, the concept of sustainability has been widely accepted to describe the most general objectives of the work done by the university and HEI environmental networks belonging to ARIUSA.

Without being discussed or agreed on in any explicit manner, the term ‘sustainability’ is understood at ARIUSA to mean the environmental sustainability of contemporary societies in general and of Latin American ones in particular. Hence, from the passing in 2010 of the *Acuerdo sobre Principios y Organización* it was established that “all cooperation and coordination actions conducted by ARIUSA shall be aimed at promoting respect for the environment and the sustainability of systems for the social and productive organization that each of our countries decides upon democratically” (Ariusa, 2010: 2).

Though not promoted from ARIUSA, the concept of sustainable development has been adopted by an increasing number of environmental networks of higher education institutions and universities belonging to the alliance. There has been an even stronger tendency in recent years towards public manifestation of the commitment of many institutions and university networks in Ibero-America to the Sustainable Development Goals (SDG) approved by the United Nations in 2015.

A representative case of this tendency is that of the University of Applied and Environmental Sciences (U.D.C.A), based in Bogota (Colombia). Since 1994, this university has been proposing the mission of "development of academic excellency through the generation and diffusion of knowledge, respect for constitutional human rights, and sustainable human development, in benefit of Colombian society" (Anzola and Cabrera, 2005: 48). The current version of this mission ratifies its commitment to "sustainable human development on a local, regional, national and international level" (U.D.C.A, 2018).

In coherence with this commitment, the U.D.C.A also adopted the Sustainable Development Goals and is incorporating them in different aspects of its academic life. The most prominent of all is the inclusion of the SDG as a central theme of the so-called *Cátedra Ambiental* (Environmental Chair). This is a compulsory course for students at the university and forms part of the syllabuses of all training programmes on a pre-degree level. The issue of the SDGs was incorporated in *Cátedra Ambiental* courses from the first semester of 2017. To date, 75 of these courses have been given, attended by more than 1,500 students. By 2021, all pre-degree students at the university will have good knowledge of the Sustainable Development Goals due to having taken the *Cátedra Ambiental* course and some other subjects on their syllabuses.

The University of Los Andes is another Colombian institution of higher education that has recognised the importance of the Sustainable Development Goals. In March 2018, it created the *Centro de los Objetivos del Desarrollo Sostenible para Latinoamérica y el Caribe* (Sustainable Development Goals Centre for Latin America and the Caribbean) in association with the Sustainable Development Solutions Network (SDSN). This centre has been conceived as a "regional hub for research and training on the SDGs, and for public policies related with sustainable development" (Uniandes, 2018).

This process whereby some Colombian universities have started to express and put into practice their decision to support the achievement of the SDGs has also been extended to their university environmental networks. Colombia has two such networks. The first is the *Red Colombiana de Formación Ambiental* (Colombian Environmental Training Network -RCFA), one of the founding networks of ARIUSA. It was created in 1985 and since then has operated in uninterrupted fashion. It is, without a doubt, the oldest such network in Latin America and the Caribbean. The other Colombian network is the *Red Ambiental de Universidades Sustentables* (Environmental Network of Sustainable Universities) that was created in 2010 and joined the alliance in 2013. In 2014, both networks signed a cooperation agreement whereby they agreed to develop a series of joint actions to foster the institutionalization of the environmental commitment of Colombian universities (RCFA, 2018).

The events that the two networks convene include the National Forums on Universities and Sustainability. These events are held every two years and form part of the broader series of national forums coordinated by ARIUSA and GUPES-LA in a large number of countries of Latin America and the Caribbean. The II Colombian Forum was held in Bogota in August 2015 and the issues covered especially included that of the Sustainable Development Goals. There were two talks on the matter: "*Universidades: ¿A la zaga o a la vanguardia de la sostenibilidad? Su papel ante la Agenda de Desarrollo Post 2015*" (Universities: At the rearguard or forefront of sustainability? Their role before the Post 2015 Development Agenda - Martínez, 2018) and "*Universidades Colombianas y Objetivos de Desarrollo Sostenible*" (Colombian Universities and the Sustainable Development Goals - Franco, 2018). On the basis of these presentations, certain recommendations were proposed whereby Colombian universities can contribute to the 2030 Agenda and compliance with the Sustainable Development Goals.

In consideration of this background and the fact that some universities are already working on their commitment to the SDGs, the *Red Colombiana de Formación Ambiental* decided at its most recent assembly to include the issue in its work plan for this year (Beltrán, 2018).

Peru is another Latin American country in which a large number of higher education institutions are organised into a very important university environmental network belonging to ARIUSA. The *Red Ambiental Interuniversitaria* (Inter-University Environmental Network - RAI) groups a

total of 75 Peruvian universities and is supported by the country's Ministry of the Environment. Although it has yet to agree on an official stance with regard to the SDG, the RAI plans to do so at the *VII Foro Universidades, Gestión Ambiental y Desarrollo Sostenible* (Universities, Environmental Management and Sustainable Development Forum) to be held in May 2018 (Cárdenas, 2018).

Some universities in Peru have already begun work on the implementation of their commitment to the Sustainable Development Goals. Such is the case of Universidad Peruana Cayetano Heredia (UPCH), which defines its vision as a "University integrated with leadership and global presence, which grows, researches, innovates and diversifies, with highly qualified and committed teachers and researchers, which proposes and promotes public policies and technology transfer, contributing to the country's sustainable development" (UPCH, 2018). To put this vision into practice, it has formed "a nucleus of teachers from all faculties that have been working reflexively on education for sustainability" and that shall be in charge of "analysing graduate profiles and syllabuses of the programmes offered by the UPCH from the 17 SDG" (Vidal, 2018).

Mexico also has a major tradition of networks of universities and higher education institutes that are committed to the environment and sustainability. In fact, three such Mexican networks are members of ARIUSA. In May 2007, the University of Campeche hosted the HEI members of the *Red de Programas Ambientales Institucionales* (Network of Institutional Environmental Programmes – PAIs) of the *Consejo Regional Sur-Sureste* (South-Southeast Regional Council – CRSS) of the *Asociación Nacional de Universidades e Instituciones de Educación Superior* (National Association of Universities and Higher Education Institutes – ANUIES) and agreed to a declaration whereby "HEIs play a preponderant role in the implementation of education and research strategies to support the transition towards sustainable societies" (Red PAIs, 2007). The document will be updated at a meeting of this network scheduled for next April (Ramos, 2018). The same month, a meeting of the *Consortio Mexicano de Programas Ambientales Universitarios para el Desarrollo Sustentable* (Mexican Consortium of University Environmental Programs for Sustainable Development – COMPLEXUS) is being planned at which it is expected that proposals shall be analysed for support of the 2030 Agenda and the inclusion of the SDGs in its work agenda (Escalona, 2018).

Other university environmental networks belonging to ARIUSA are in similar situations. The recently created

Red Latinoamericana and Caribeña para la Gestión Sostenible de Residuos Sólidos (Latin American and Caribbean Network for Sustainable Management of Solid Waste – ReLaC-GeRS) reported that it will be dealing with the issue of the 2030 Agenda at its next meeting, scheduled for May, and that it will be defining there the Sustainable Development Goals that it will be prioritising in its work (Espinosa, 2018). The *Red de Medio Ambiente* (Environmental Network – REDMA) of Cuban universities, coordinated by the Ministry for Higher Education (MES), already has a draft document titled "*Integración de las Metas de Desarrollo Sostenible y Objetivos de Desarrollo Económico-Social del País al 2030 en Planificación Estratégica de la Educación Superior Cubana*" (Integration of the Sustainable Development Goals and the Country's Economic-Social Development Goals for 2030 in the Strategic Planning of Cuban Higher Education). This document is "circulating among the member universities of REDMA for their approval next month at the national workshop" (Merino, 2018). Meanwhile, the coordinator of the *Red Venezolana de Universidades por el Ambiente* (Venezuelan Network of Universities for the Environment – REDVUA) reports that there shall shortly be a consultation with the higher education institutions in this network on the commitment they shall be assuming in terms of the SDGs (Hidalgo, 2018). Finally, in Guatemala, the *Red Nacional de Formación e Investigación Ambiental* (National Network of Environmental Training and Research – REDFIA) proposes that it shall work specifically on "SDGs related to matters of climate change" (Rodríguez, 2018).

For the last two years, some networks in ARIUSA have taken the initiative to define a standpoint with regard to the 2030 Agenda and its Sustainable Development Goals.

In turn, other networks are beginning this process motivated by the decision of the Coordinating Committee of this alliance with respect to the SDGs in October 2017.

At the meeting of this Committee in Santa Marta (Colombia) a special commission was appointed that shall be responsible for proposing a document to the Regional Conference on Higher Education in Latin

America and the Caribbean (CRES 2018), which should present “an approach to universities and their role as contributors to the Sustainable Development Goals” (Sáenz, 2017b: 16). The first meeting of this Committee agreed to the “development of a base document with the lines of strategic action that could consider the SDGs in terms of the duties of universities in ARIUSA” (Arguedas, 2018: 2). To assist with the work of this special commission, the representatives of the networks of universities and higher education institutions are being asked to report to the Coordination on their positions and progress with respect to the SDG.

Recommendations to stakeholders with an interest in the 2030 Agenda

Based on the experience of more than 40 years of collaboration in the network of Ibero-American higher education institutes and, especially, ARIUSA's work in the last decade, the following recommendations can be formulated to the different stakeholders with an interest in contributing to compliance with the Sustainable Development Goals:

- Higher education institutions are called upon to respond positively to the call by the United Nations General Assembly to form a new global partnership to articulate efforts of national governments, other interested institutions and the people of all regions of the world to achieve compliance with the Sustainable Development Goals agreed upon in the 2030 Agenda.
- In this revitalised Global Partnership for Sustainable Development, universities and other HEIs can make significant contributions on the basis of their traditional functions of higher education, scientific research and innovation and direct liaison with society. They can also put greater effort into their educational work by leading by example the assumption of complying with social and environmental compliance.
- The contribution by HEIs to the achievement of the specific targets proposed for each sustainable development goal can and must be done without neglecting their reflexive and critical attitude to the economic and social systems that are generating the global problems that the 2030 Agenda seeks to resolve. *In the case of Latin America and the Caribbean, the contribution to compliance with the SDGs is possible, even when maintaining the observations and doubts*

that have been expressed for decades by several academic sectors with regard to the concept of sustainable development.

This possibility is approached by the very same resolution of the United Nations General Assembly that passed the Sustainable Development Goals. Point number 59 of the said document recognises that “there are different approaches, visions, models and tools available to each country, in accordance with its national circumstances and priorities, to achieve sustainable development” (UN, 2015: 15). Different approaches, models and views of current and future societies are also present among higher education institutes, which have always been bastions for free thought and expression of ideas.

Recommendations to university networks for the environment and sustainability

- Latin American and Caribbean university networks can provide the Global Partnership with rich and broad experience of the coordination of actions and cooperation in joint projects, especially in the field of environmental sustainability. This experience goes back to the mid-seventies, with joint projects in the framework of the *Centro Internacional de Formación de Ciencias Ambientales* (CIFCA) and the Environmental Training Network for Latin America and the Caribbean (RFA-ALC), which in the last decade have been continued by the *Alianza de Redes Iberoamericanas de Universidades por la Sustentabilidad y el Ambiente* (ARIUSA).
- This also includes the experience of academic partnership with many other university networks in the region. Prominent among these are the: *Asociación de Universidades Grupo Montevideo* (Montevideo Group University Association – AUGM), *Asociación de Universidades Confiadas a la Compañía de Jesús en América Latina* (Association of Universities Entrusted to the Society of Jesus in Latin America – AUSJAL), the Association of Universities of Latin America and the Caribbean (UDUAL), the Inter-American Organization on Higher Education (OUI-IOHE) and the Association of Universities of Latin America and the Caribbean for Integration (AUALCPI).
- Some of these university networks have already expressed their wish to contribute to compliance with the SDGs and others are on the verge of doing so. This favourable circumstance should be exploited by calling on all

university networks working in Latin America and the Caribbean to coordinate their actions and develop joint ventures to contribute to the implementation of the 2030 Agenda in the region.

Whatever the scale of the partnership of university networks being built, one of the first steps needs to be the establishment of a baseline or assessment of the initial status of the process of associating higher education institutions to achievement of the Sustainable Development Goals. Knowledge of this process is even more incipient and differentiated for the different aspects of economic, social and environmental sustainability to which universities contribute. In order to overcome this situation, there is a need to construct a basic system of indicators to be able to assess the contribution made by HEIs to the goals of the 2030 Agenda.

Recommendations for other institutional stakeholders

- National governments and international cooperation agencies with an interest in compliance with the Sustainable Development Goals will find higher education institutions and their university networks to be reliable allies with a tried and tested capacity to make significant contributions to global action plans like that proposed by the 2030 Agenda.
- HEIs and their university networks are in fine condition to provide the Global Partnership for Sustainable Development with critical and reflexive thought, scientific knowledge, technological innovations and proposals for public policy to make effective contributions to compliance with the Sustainable Development Goals and the agreed targets.
- To contribute to compliance with the 2030 Agenda, national and international stakeholders must provide institutional and financial support to universities, HEIs and the networks grouping them for their activities and projects undertaken in order to help to achieve the SDGs on different scales, from the local to the global.
- As a whole, all stakeholders from national governments, international agencies and civilian organizations must work together to transform the current relationships between human beings and mankind with the planet, to make them much more equitable and sustainable.

References

- ANGEL, Augusto. (1997). *Desarrollo Sostenible o Cambio Cultural*. Universidad Autónoma de Occidente y Fondo para la Promoción de la Cultura y las Artes del Valle del Cauca. 291 pp.
- ANZOLA, Germán and CABRERA, Luz Marina. (2005). *Contribución de la Universidad de Ciencias Aplicadas y Ambientales al Desarrollo Humano Sostenible*. In SÁENZ, Orlando (Editor). (2005). *Memorias del Tercer Seminario Internacional Universidad y Ambiente*. Bogota: Universidad de Ciencias Aplicadas y Ambientales. Pp. 47-57.
- ARGUEDAS, Manrique. (2018). *Minuta de la reunión de la Comisión Especial de ARIUSA sobre la CRES 2018 y los ODS*. San José: Red Costarricense de Instituciones Educativas Sostenibles. 3 pp.
- ARIUSA. (2007). *Acuerdo No. 1 para la Constitución de ARIUSA*. Bogota: Alianza de Redes Iberoamericanas de Universidades por la Sustentabilidad y el Ambiente. 2 pp.
- ARIUSA. (2010). *Acuerdo No. 2 sobre Principios y Organización de ARIUSA*. Corrientes: Alianza de Redes Iberoamericanas de Universidades por la Sustentabilidad y el Ambiente. 8 pp.
- ARIUSA. (2013). *Acuerdo No. 3 sobre Principios y Organización de ARIUSA*. Viña del Mar: Alianza de Redes Iberoamericanas de Universidades por la Sustentabilidad y el Ambiente. 6 pp.
- BELTRÁN, Luis Eduardo. (2018). *Respuesta a consulta formulada desde la Coordinación de ARIUSA*. Bogota: Red Colombiana de Formación Ambiental.
- BENAYAS, Javier et al. (2014). *Resumen Ejecutivo del Proyecto RISU. Definición de indicadores para la evaluación de las políticas de sustentabilidad en universidades latinoamericanas*. Madrid: Universidad Autónoma de Madrid and Alianza de Redes Iberoamericanas de Universidades por la Sustentabilidad y el Ambiente. 56 p.
- CÁRDENAS, José Martín (2015). *Evaluación de la Incorporación de la Dimensión Ambiental en las Universidades del Perú*. In *Revista Iberoamericana Universitaria en Ambiente, Sociedad y Sustentabilidad*. (1-2) 161-178.

- CÁRDENAS, José Martín (2018). Respuesta a consulta formulada desde la Coordinación de ARIUSA. Lima: Ministerio del Ambiente. Dirección de Educación y Ciudadanía Ambiental.
- CECADESU and ANUIES. (2016). *Diagnóstico sobre la incorporación de la perspectiva ambiental en las funciones sustantivas de la Instituciones de Educación Superior en México*. Mexico: Centro de Educación y Capacitación para el Desarrollo Sustentable and Asociación Nacional de Universidades e Instituciones de Educación Superior.
- ESCALONA, Miguel Ángel. (2018). Respuesta a consulta formulada desde la Coordinación de ARIUSA. Veracruz: Consorcio Mexicano de Programas Ambientales Universitarios para el Desarrollo Sustentable.
- ESPINOSA, Marco Tulio. (2018). Respuesta a consulta formulada desde la Coordinación de ARIUSA. Bogota: Red Latinoamericana y Caribeña para la Gestión Sostenible de Residuos Sólidos.
- FRANCO, Lina. (2018). *Universidades Colombianas y Objetivos de Desarrollo Sostenible*. In SÁENZ, Orlando et al. *Universidades y Sostenibilidad. Experiencias de las Instituciones de Educación Superior en Colombia*. Bogota: Equipo Universidad, Ambiente y Sustentabilidad. Pp. 112-117.
- HIDALGO, Carelia. (2018). Respuesta a consulta formulada desde la Coordinación de ARIUSA. Barquisimeto: Red Venezolana de Universidades por el Ambiente.
- LEFF, Enrique. (2009). *Pensamiento Ambiental Latinoamericano: Patrimonio de un Saber para la Sustentabilidad*. ISEE Occasional publication No. 6. 15 pp.
- MARTINEZ, Isabel (2018). *Universidades: ¿A la zaga o a la vanguardia de la sostenibilidad? Su papel ante la Agenda de Desarrollo Post 2015*. In SÁENZ, Orlando et al. *Universidades y Sostenibilidad. Experiencias de las Instituciones de Educación Superior en Colombia*. Bogota: Equipo Universidad, Ambiente y Sustentabilidad. Pp. 118-126.
- RAMOS, Silvia (2018). Respuesta a consulta formulada desde la Coordinación de ARIUSA. Chiapas: Red de Programas Ambientales Institucional de la Región Sur-Sureste de la ANUIES Mexico.
- RCFA – RAUS. (2014). *Acuerdo de Cooperación entre la RCFA y RAUS*. Red de Formación Ambiental y Red Ambiental de Universidades Sostenibles. Viewed 16 March 2018, at <http://redcolombianafa.org/es/novedades/acuerdo-rcfa-raus>.
- RED PAIs. (2007). *Declaratoria de Campeche por la Sustentabilidad*. Campeche: Red de Programas Ambientales Institucional de la Región Sur- Sureste de la ANUIES Mexico.
- RODRÍGUEZ, Germán. (2018). Respuesta a consulta formulada desde la Coordinación de ARIUSA. Guatemala: Red Nacional de Formación e Investigación Ambiental.
- SÁENZ, Orlando (Editor). (2005). *Memorias del Tercer Seminario Internacional Universidad y Ambiente*. Held in Bogota, November 8, 9 and 10. Bogota: Universidad de Ciencias Aplicadas y Ambientales. 301 pp.
- SÁENZ, Orlando and BENAYAS, Javier. (2011). *Higher Education, Environment and Sustainability in Latin America and the Caribbean*. In GUNi, Higher Education in the World 4. Higher Education's Commitment to Sustainability: from Understanding to Action. Barcelona: Global University Network for Innovation (GUNi) and Palgrave MacMillan. Pp. 161-176.
- SÁENZ, Orlando. (2012a). *La Formación Ambiental Superior. 1948 – 1991*. Bogota: Universidad de Ciencias Aplicadas y Ambientales y Red Colombiana de Formación Ambiental. 248 pp.
- SÁENZ, Orlando. (2012b). *Presentación de la Alianza de Redes Iberoamericanas de Universidades por la Sustentabilidad y el Ambiente*. In Guerra A.F.S. et al (Coordinators) II Jornada Ibero-Americana da Ariusa: compromisso das universidades com a Ambientalização e sustentabilidade. Itajaí: Editora da Universidade do Vale de Itajaí. Pp. 20-25.
- SÁENZ, Orlando. (2014). *Panorama de la Sustentabilidad en las Universidades de América Latina y El Caribe*. In Ruscheinsky, Aloiso et al (Organizers). *Ambientalização nas Instituições de Educação Superior no Brasil: Caminhos Trilhados, Desafios e Possibilidades*. São Paulo: Universidade de São Paulo. Pp. 23-38.

SÁENZ, Orlando (Editor). (2015a). *Universidades y Sostenibilidad en América Latina y el Caribe*. Bogotá: Universidad de Ciencias Aplicadas y Ambientales y Red Colombiana de Formación Ambiental. 130 pp.

SÁENZ, Orlando. (2015b). *Trayectoria y resultados del Proyecto RISU en el contexto de ARIUSA*. In Revista Magazine Vol. 15 No. 2. May - August. Itajaí: Universidade do Vale de Itajaí. Pp. 137-164.

SÁENZ, Orlando. (2015c). *Diagnósticos Nacionales sobre la Inclusión de Consideraciones Ambientales en las Universidades de América Latina y El Caribe*. In Revista iberoamericana Universitaria en Ambiente, Sociedad y Sustentabilidad. Vol. 1 No. 1. January - June. Buenos Aires: Alianza de Redes Iberoamericanas de Universidades por la Sustentabilidad y el Ambiente. Pp. 13-36.

SÁENZ, Orlando. (2015d). *Propuesta para la creación del Observatorio de la Sustentabilidad en la Educación Superior (OSES)*. Working paper published in ResearchGate. 7 pp.

SÁENZ, Orlando. (2017a). *Diagnósticos Regionales sobre la Institucionalización del Compromiso Ambiental en la Educación Superior de América Latina y el Caribe*. In Revista Contrapontos. Vol. 17 No. 4. October - December. Itajaí: Universidade do Vale de Itajaí. Pp. 654-671.

SÁENZ, Orlando. (2017b). *Informes y Acuerdos en el Comité de Coordinación de ARIUSA*. Santa Marta: Alianza de Redes Iberoamericanas de Universidades por la Sustentabilidad y el Ambiente. 8 pp.

SÁENZ, Orlando. (2017c). *Results of four National Assessments on the Institutionalization of the Environmental Commitment at Latin American Universities*. 2014 - 2015. Working paper published in ResearchGate. 8 pp.

SÁENZ, Orlando. (2018a). *Primera década de la Alianza de Redes Iberoamericanas de Universidades por la Sustentabilidad y el Ambiente*. In Revista Educación Superior y Sociedad. Caracas: Instituto Internacional para la Educación Superior en América Latina y el Caribe (IESALC).

SÁENZ, Orlando et al. (Editors). (2018b). *Universidades y Sostenibilidad. Experiencias de las Instituciones de Educación Superior en Colombia*. Bogotá: Equipo Universidad, Ambiente y Sustentabilidad. 150 pp.

TORRES, Rossana and CALDERÓN, Edison (2015). *Diagnóstico sobre la Inclusión de Consideraciones Ambientales y de Sostenibilidad en las Universidades del Ecuador - Primera fase*. Revista Iberoamericana Universitaria en Ambiente, Sociedad y Sustentabilidad (1-2) 110-119.

UN. (2015). *Transforming our world: the 2030 Agenda for Sustainable Development*. Resolution passed by the General Assembly on 25 September 2015. New York: United Nations. 40 pp.

U.D.C.A (2018). *Misión de la Universidad de Ciencias Aplicadas y Ambientales*. Viewed 16 March 2018, at <https://udca.edu.co/historia-mision-vision/>

UNIANDES. (2018). *Centro de Desarrollo Sostenible para Latinoamérica y El Caribe tendrá Sede en Los Andes*. Viewed 18 March 2018, at <https://uniandes.edu.co/noticias/ambiente-y-sostenibilidad/conferencia-objetivos-de-desarrollo-sostenible-para-america-latina>

UPCH. (2018). *Visión de la Universidad Peruana Cayetano Heredia*. Viewed 18 March 2018, at <http://www.cayetano.edu.pe/cayetano/es/nosotros> VIDAL, Marcela. (2018). Respuesta a consulta formulada desde la Coordinación de ARIUSA. Lima: Universidad Peruana Cayetano Heredia.