

**Campaign of Sustainable and Resilient Universities for the incorporation
of Reduction Risk of Disasters on Superior Education on America and the
Caribbean**

Victor Manuel García Lemus,

**President of the Board of Directors, University Network of the America and the
Caribbean for Disaster Risk Reduction -REDULAC / DRR-, Guatemala City, Guatemala**

We begin this article by making a definition of what a sustainable and resilient university is, indicating that we have relied on the intergovernmental working group of open-ended experts on indicators and terminology related to disaster risk reduction at the United Nations, approved on December 01, 2016.

Sustainable University is one that meets the demand for higher education services of current generations and has development plans to ensure its survival into the future, so that competitively provide educational services to the next generations.

Resilient university is the one that has the capacity to be exposed to a threat and can resist, absorb, adapt, transform and recover from its effects in a timely and efficient manner, in particular through the preservation and restoration of its basic structures and functions through of risk management.

It is very important to indicate that In 2000, six schools participated in the Federal Emergency Management Agency's (FEMA) Disaster Resistant Universities pilot initiative. The intent of FEMA's initiative was to support university efforts to reduce and manage vulnerability to hazards. The pilot initiative yielded a grant program and a how-to guide focused on mitigation and risk reduction. The grant program was short-lived—there was only one funding cycle, and fewer than 20 schools receiving grant funding for campus mitigation planning.

When FEMA cut the funding, several institutions of higher education kept the core concept of the DRU alive. They saw the need for a practical, common-sense approach to disaster planning on their campuses. In 2005, after a national meeting of DRU campuses at the University of Washington, the University of Oregon started the Disaster Resilient Universities® (DRU) listserv. The listserv quickly became the cornerstone of the DRU Network® and served as a multidisciplinary, practitioner-based communication resource. The goal was simple: facilitate open communication, discussion, and resource sharing among university/college practitioners charged with making America's campuses more disaster resilient.

As of December 2015 the DRU listserv had more than 1400 members representing approximately 800 institutions. Today, the DRU Listserv provides a simple resource for increased communication, coordination, and collaboration among universities to mitigate, prepare for, respond to, operate during, and recover from natural disasters, acts of terrorism, or other crises.

The DRU Network® and concept has continued to evolve over time. Key to the evolution was the formation of the University & College Caucus (UCC) under the International Association of Emergency Managers

(IAEM). The DRU Network® and UCC have developed a number of tools and resources on a peer-to-peer multidisciplinary basis. These include:

- UCC annual workshops and webinar series;
- Practitioner-based training and course development;
- Standards & resilience crosswalk tool;
- Emergency Management Accreditation Program (EMAP) for Higher Education;
- University Incident Management Teams (IMT) concept and development;
- National Intercollegiate Mutual Aid Agreement (NIMAA); and
- National DRU Incident tracking and support

After Hurricane Sandy in 2012, DRU members helped affected Institutions of Higher Education via the Emergency Management Assistance Compact (EMAC) process and their own expertise. The DRU Network® also provided real-time data to the U.S. Department of Education on campus closures and other issues. In 2015, the DRU and UCC members developed first National Intercollegiate Mutual Aid Agreement (NIMAA) for all intuitions of higher education to establish more formal partnerships between schools and other mutual-aid groups to help IHEs develop simple, open-source data-collection tools that assess the effects of disasters.

Creating a disaster-resilient campus is an exceedingly complex problem. It requires communication, coordination, cooperation, and a focused effort from the entire university, including the executive leadership, faculty/researchers, staff, students, and external partners. The DRU Network® helps this effort because its interdisciplinary approach leverages members' knowledge and expertise to provide technical assistance and resources.

André Le Duc, Chief Resilience Officer University of Oregon, in December 11, 2015, he published that... Creating a disaster-resistant campus is an extremely complex problem. It requires communication, coordination, cooperation and a focused effort of the entire university, including executive leadership, teachers / researchers, staff, students and external partners. The concept is to develop the DRU - Technical Assistance Center (DRU - TAC) located at the University. from Oregon. DRU - TAC would take advantage of the strengths and experience of both, the disaster at the national level. The network of resilient universities and the knowledge and experience currently in practice in Oregon. The base of the model is the collaboration and the exchange of resources throughout Oregon. campus to increase emergency preparedness, threat assessment capabilities, mitigation,

response effectiveness and general safety and organizational resilience. Specifically, DRU - TAC would link the skills, experience, resources and innovation of higher education, state and federal agencies, and professional and commercial organizations to strengthen prevention, preparedness, and overall resiliency...

The University Network of Latin America and the Caribbean for Disaster Risk Reduction is founded on September 28, 2006 in the City of Manizales, Colombia with the objective of strengthening the commitments of superior education for the impetus of the Hyogo Framework for Action . It is integrated by national chapters, which currently operate in Mexico, Honduras, Nicaragua, Costa Rica, Panama, the Dominican Republic, Venezuela, Colombia, Ecuador, Peru, Bolivia, Paraguay, Uruguay, Argentina and Chile. The chapters of Belize, Guatemala, El Salvador, Brazil, Haiti and Jamaica are in the process of formation.

During its Ordinary General Assembly, held on June 19, 2018 in the City of Cartagena, it was approved to incorporate to the United States and Canada, for which reason its name was changed to the University Network of the Americas and the Caribbean for the Reduction of the Risk of Disasters In addition, it is authorized to hold events under the Ibero-American territorial coverage, including Portugal and Spain.

Since its creation REDULAC / RRD has held three regional forums, in 2012 Panama City, 2014 Bogotá city in Colombia, 2016 in Ciudad de Antigua Guatemala, with the participation of politicians, scientists, researchers, technicians, students from all over the region, addition it has been transmitted in virtual way to Latin American universities. The IV Forum will be in the City of Santo Domingo, in the Dominican Republic from October 24 to 26, 2018.

In 2016, REDULAC / RRD received an allocation of funds from the United States Agency for Cooperation Abroad -USAID / OFDA-, whose implementation began in October 2016 and ended in December 2017. During its implementation, it was financed 8 investigations, disaster risk management capacities were developed in 8 universities, 17 buildings were evaluated to diagnose the level of disaster safety in Strategic buildings of the participating universities, and a Risk Management course was given in Superior Education Institutions directed to 30 officials and high-level authorities. During the implementation of the project, the Campaign of Sustainable and Resilient Universities was made with the technical support of the United Nations Regional Office of the United Nations for Disaster Risk Reduction -UNISDR-.

In the second phase of the project for the incorporation of Disaster Risk Management in superior Education from January 2018 to December 2019, a public call was made for universities to commit themselves to

implement the Campaign of Sustainable and Resilient Universities . 32 applications were received and through an Interinstitutional Technical Committee 10 universities were selected that will receive funding to implement at least three components of the Campaign, which include: a) conducting an institutional diagnosis of disaster risk that includes a georeferenced map of the threats, vulnerability, exposure and capabilities / resilience; b) evaluation of the security level at least 4 buildings; and Development of a Sustainable and Resilient University Plan.

The Campaign of Sustainable and Resilient Universities includes 28 activities that favor the fulfillment of the 4 priorities of the Sendai Framework in the university. The universities that will participate in the implementation of the project are: 1) Veracruzana University of México; 2) San Carlos de Guatemala University of Guatemala; 3) Technological University of Costa Rica; 4) Caribbean University of the Dominican Republic; 5) the Pontificia Bolivariana University and 6) Colegio Mayor de Antioquia of Colombia; 7) National University of San Marcos and 8) San Luis Gonzaga de ICA University of Peru; 9) Catholic University of Cordoba, Argentina and 10) the superior Institute of Education Raul Peña of Paraguay.

The campaign promotes in Superior Education Institutions develop competencies for the incorporation of DRR, in a systematic and gradual manner through the following interventions:

Activity 1: Incorporate the DRR in the Curriculum (articulated with the Sustainability, Climate Change, Humanitarian Assistance and Habitat): the United Nations Organization is promoting, starting in 2015, the articulation of 5 frameworks that contribute to sustainability and achieve synergy of the political-strategic efforts of the same. It is recommended to integrate them into the curricula of universities in order to train professionals with a holistic view of sustainable and resilient development, for which it is recommended that ISE make efforts to incorporate into their curriculum the international frameworks of: 1. Development Sustainable, 2. Climate Change, 3. Habitat, 4. Humanitarian Assistance and 5. Reduction of Disaster Risk.

This activity is the responsibility of the vice-rectories, general directorates or academic planning offices. Each IES must identify in what way it can be done according to its context and organizational culture. It can be incorporated as an elective activity, a course within the curriculum, transversal contents, practice seminars, workshops, etc. The campaign will support the exchange of experiences, materials, etc. between the universities, and even give direct technical assistance to identify a strategy for its implementation.

It is recommended that the contents to be incorporated are at least the following:

A. PRIORITY 1: UNDERSTAND THE RISK OF DISASTERS:

Essential 1: Identify, understand and use current and future risk scenarios in the planning processes of IES.

Content 1. World summits and conceptual framework related to: Sustainability, Habitat, Climate Change, Disaster Risk Reduction, Humanitarian Assistance, interactions and inter-agendas complementarity.

Content 2. Natural and anthropogenic dynamics associated with disasters: multiple threats, biological threats, environmental threats, geological / geophysical threats, hydrometeorological threats, technological threats.

Content 3. Impulsor factors / underlying disaster risk: poverty and inequality, climate change and climate variability, rapid and unplanned urbanization and the lack of considerations related to disaster risk in land use planning and management. the environmental and natural resources.

Content 4. Aggravating factors of disaster risk: demographic changes, policies not informed by disaster risk, lack of regulation and incentives for private investments in disaster risk reduction, complex supply chains, limited availability of technology, unsustainable uses of natural resources, weakening of ecosystems, and pandemics and epidemics.

Content 5. Disaster Risk Analysis.

Content 6. Incorporation of DRR in development planning processes, Disaster Risk Management: Prospective, Corrective, Compensatory, Disaster Management: Emergencies and Contingencies.

Activity 2: Incorporate DRR into the institutional research agenda: it is recommended to incorporate into the agenda of institutional research the topics of Disaster Risk Reduction, articulated to those of Sustainability, Habitat, Climate Change and Humanitarian Assistance. Research funds must allocate resources for their realization and coordination with International Cooperation offices to identify external opportunities for research funding. This activity corresponds to the vice-rectories, general directorates or research offices, research centers, thesis committees, editorial committees, among others.

It is important that the research agenda includes at least:

- Priority 1: Impulsor factors and aggravating disaster risk.
- Priority 2: scenarios of risk, disasters and current, present and future recovery.
- Priority 3: monitoring of indicators and national risk reports.
- Priority 4: ancestral knowledge.

Activity 3: Strengthen their capacity to propose risk scenarios at institutional level and for society (prospective, corrective, response and transformation): decision-making depends on having pertinent, reliable and timely information on the scenarios and your past, present and future tendencies. Cost-benefit analysis, territorial scenarios, environmental trends, etc. They are very important elements for decision-making and contribute to foresee reduction, governance and investment measures for the reduction of disaster risk, contributing significantly to the modeling of a resilient society.

Activity 4: Form human resources for planning, teaching, extension, research in DRR: it is recommended that IES prioritize training periods for their professionals at different levels. Decision makers are particularly high-priority, because they define the short, medium and long-term institutional strategy. The second level is constituted by the teachers who will teach the curricular contents. Third, teachers responsible for academic extension and researchers.

Activity 5: Approve and implement a communication strategy for Disaster Risk to the university and national community: the role of IES to understanding risk is vital for governance and investment in disaster risk reduction. The perception of risk is fundamental for the decision making of people exposed to dangerous phenomena. The communication of the threat, vulnerability and exposure are fundamental for the processes of capacity building for risk management and disaster response. The communication units of universities should take advantage of all opportunities for communication of disaster risk by spoken, written, visual and communication means for special or vulnerable groups.

Messages should be structured according to the target group and take advantage of scientific events, fairs, exhibitions, meetings of scientists, activities of professional associations, community activities. Vulnerable groups such as migrants, people with disabilities, children, youth, seniors, women, among others, should be a priority in disaster risk communication.

Activity 6: Participate as an observer in the monitoring of compliance with the indicators of the Sendai Framework: the disaster risk observatories are a fundamental activity for the social auditing of compliance with the Sendai Framework. The research centers of the universities are called upon to verify that the data used for

their calculation are correct and that their magnitude and trends are expressed by transfer. There are civil society networks that also carry out this social audit, so their relationship with them can be important.

B. PRIORITY 2: STRENGTHEN THE GOVERNANCE OF DISASTER RISK TO MANAGE SUCH RISK:

Essential 2: Organize for institutional disaster resilience.

Activity 7: Approve and implement strategies / institutional political, legal and regulatory frameworks for DRR (policy, law, plan, regulations and budget for the incorporation of DRR in planning): risk governance is essential to achieve resilient institutions, therefore, the preparation of the strategic instruments for Disaster Risk Reduction should be planned for the short term, since they constitute the basis for the implementation of the USR Campaign. It is very important that they are aligned with international, regional and national frameworks.

Activity 8: Create or strengthen an office responsible for leading, leading and articulating DRR in the institution: this activity is very important, because you need a responsible leadership, that exercises a proactive leadership and coordinates all the dependencies of the institution in the development of all the activities necessary for the implementation of the USR Campaign. The IES, particularly the universities that have created this office, show results in the short term. Having full-time and specialized staff is essential for proper orientation of the activities of the USR Campaign. The integration of a multidisciplinary team that allows the holistic approach to DRR and institutional resilience is recommended.

Activity 9: Appointing full-time specialized personnel for the implementation of DRR: compliance with safety regulations before natural and anthropogenic phenomena is a legal imperative to guarantee the continuity of administrative, educational, extension and research activities of IES. Especially in the university cities that host a large amount of university population, high turnover and very complex and specialized infrastructure, of great value.

Essential 3: Strengthen institutional financial capacity to improve resilience in IES.

Activity 10: Approve a specific fund to invest in DRR / resilience and introduce DRM in investments and institutional development processes: DRR is a vital element for institutions and for this, resources are needed to

prevent risk construction , correct existing risk, compensate residual risk, respond effectively to disasters and recover from them by rebuilding in a better way. Among the fundamental elements that budgets must support to achieve resilient institutions, we have:

- The project cycle of the institutions is the instrument of greater value or lower cost, for the prospective management and construction of resilient territories, it must include the evaluation of the sites, the construction regulations and the preventive maintenance.

- The evaluation of the built environment is another important element in the corrective risk management, however, it is usually of a high cost.

- Preparation activities are necessary, especially simulations that allow users to be educated in protective behaviors of life and institutional goods.

- Having well-trained and equipped response teams reduces the impact of disasters and also supports the response at the national and subnational levels.

- Disaster assessments to understand their dynamics and factors that have facilitated the negative impact, allows us to build scenarios to rebuild in a better way.

- Strengthen the training processes of teaching, extension and research.

Activity 13: Incorporate DRR in the administration of the institution's natural and cultural heritage: IES have high-value natural and cultural collections, such as insectaries, butterfly gardens, collections of geological materials, libraries, cultural centers, museums, old value buildings intangible, so their protection is very important, since a disaster constitutes a serious threat to them. Many of these are part of the institutional image and are important not only for the institution, but for humanity, so that their protection must be an institutional priority. Evaluations and management plans should be developed.

Essential 5: Understand and strengthen the capacity of the university community to improve resilience.

Activity 14: Implement a Socialization Strategy of the DRR Plan for the entire university community: its purpose is for the university community to be prepared, understand the existing risk, respect the regulatory frameworks and practice safe behavior habits. The DRR Plan is the instrument of negotiation and administration of the risk and disaster management processes in the institution. It must be known by all sectors and users of the institution. It must be articulated with the related national and sectoral plans. (Sustainability, Climate Change,

Humanitarian Assistance, Habitat, etc.). It is important to be part of the induction processes of officials, professionals, workers, students and visitors.

Activity 15: Conduct recognition for university leaders that promote DRR and resilience: REDULAC / DRR created the Noé Award, with the purpose of recognizing and making visible the institutions, officials and scientists who have made significant contributions to DRR and resilience in the region. IES is encouraged to create its own recognitions, including honorary degrees, create galleries of honorees, etc. According to the culture of the organization and the country.

Activity 16: Incorporate DRR into university extension programs or university social responsibility to contribute to resilience in communities: the Academic Extension and Social Responsibility programs constitute an important means to achieve the transmission of knowledge and practices for social protection and environmental that facilitate reducing disaster risk, especially informed decision-making and organized social mobilization to take participatory and inclusive measures that promote resilience. Teachers and students who have contact with communities can achieve very valuable change processes and strengthen social processes, especially in the updating of risk maps, land use planning and institutional strengthening.

Activity 17: Actively participate in thematic networks related to DRR (Sustainability, Climate Change, Humanitarian Assistance, Habitat, others.): IES should be linked to national, regional and international processes related to these agendas that can allow them to have a comprehensive vision of processes that are taking place, that can help them to have integral plans of development, and to exchange experiences. At present there are indexes that classify sustainable, sustainable, green, resilient, etc. universities. They include support and often financing to improve their management processes.

C. PRIORITY 3: INVEST IN THE REDUCTION OF DISASTER RISK FOR RESILIENCE:

Essential 6: Promote a resilient university design and development.

Activity 18: Incorporate DRR and resilience, as a criterion of quality in the evaluation and accreditation systems of university careers: there are important experiences that include the assessment of DRR and Resilience in the accreditation of undergraduate and postgraduate university careers, and Increasingly, accrediting agencies are using this criterion to evaluate the quality of education. This has to do with the continuity of the educational service and the contribution that IES can make before, during and after a disaster. Each university, according to its country and region, should consult that they include accreditation processes and incorporate them into their careers.

Activity 19: Integrate DRR standards in the design of university infrastructure: respect for building regulations guarantees the resilience of buildings, however, many countries have scattered regulations related to sustainability, climate change, habitat, humanitarian assistance , etc. The IES must conduct a thorough investigation of all the regulations and compile it in a mandatory design manual. If there is no approved regulation in your country, it is suggested to use international regulations.

One factor that must be considered is that the current regulations related to hydrometeorological aspects must be updated since the extreme and erratic events caused by climate change require the updating of hazard maps and construction regulations with these new standards.

Essential 7: Strengthen the capacity of IES to improve resilience.

Activity 20: Integrate a multisectoral and multidisciplinary collegiate group that facilitates the discussion and approval of strategies to incorporate DRR into all its units (administrative, teaching, research or extension and sale of services).

A collegiate group, a council, platform, commission or other mechanism authorized by a high-level agreement is understood to formulate, approve and modify strategies for incorporating DRR in IES. Integrated by representatives of the planning, teaching, extension, research, services, administration, budget, human resources, etc. units. It is a decision-making group of high level, of a binding nature in the functions delegated to it. Approves the DRR plans and projects of the Risk Management Unit of the institution. It is recommended that the DRM unit be your Executive Secretary.

Activity 21: Approve risk governance instruments that allow a defined strategy and action framework to guide the institution's actions in DRR: the UNISDR Office recommends that an Institutional DRR Strategy be composed of: 1. Politics; 2. Plan, 3. Budget; 4. DRR regulations; and 5. Unit responsible for its implementation. This goal in the Sendai Framework is set to be achieved in 2020. It is a key element for the institution to have a firm scaffolding for DRR.

Activity 22: Articulate the Sustainable and Resilient University Plan with other university policies (such as environmental, sustainability and climate change, inclusiveness, gender, etc.). As already mentioned an institution that aims for its sustainability, it must have clear, precise and achievable management tools. Sustainability is the theme that articulates the other agendas, so that each contributes to the achievement of it. Its formulation must be the product of a participative, inclusive, and inductive process that enhances the management and leadership capacities of the institution. It comprises a preparatory period to 2020, an implementation phase from 2021 to 2030.

Essential 8: Increase the resilience of the university infrastructure.

Activity 23: Develop a program of preventive and corrective maintenance: this aspect is essential to maintain an optimum level of operation of the university facilities and to avoid accidents and damages to basic services such as fire detection, electricity, water, cleaning, etc. It is very important to assign the appropriate resources and keep logbooks of each activity.

Activity 24: Evaluate and correct the existing risk in the built institutional environment: The built environment, especially the one with the longest antiquity, was developed with different regulations from the current one and with load capacities different from the current ones, so its constant evaluation is necessary to detect possible gaps between its design, use and useful life. To support this activity, the University Facilities Safety Index (ISIU for its acronym in Spanish) has been formulated, which identifies four components of disaster safety: the quality of the site, structural safety, non-structural safety, and functional safety.

- Site quality: it is an instrument developed by the Architect Francisco Mendoza, which provides a rapid, low cost and very effective identification to identify problems in the land where it is planned to build. It uses 6

components: Bioclimatic, Geology, Ecosystems, Built Environment, Interaction (contamination) and the Social Institutional. Give an evaluation of 1 to 3 points, where: a) Values between 1 and 1.5 means that the area where the infrastructure is located is very vulnerable, with a high hazard component in the face of disasters and / or with a severe deterioration in quality environmental can result in the loss of investment or harm the health of people. Therefore, it is recommended that a more detailed study be carried out to identify mitigation measures to be carried out or take the decision to move the building. The evaluation considers that it is at a VERY HIGH RISK level. 2) Values between 1.6 and 2.0 means that the area where the infrastructure is located is susceptible to affectation since it has some risks to disasters and / or there are environmental limitations that can eventually harm the health of the people who inhabit the site. Therefore, the search for measures to mitigate the risk or another area for the transfer of the building is suggested. The evaluation considers that it is at a HIGH RISK level. 3) Values between 2.1 and 2.5 means that the area is not very vulnerable, with a very low risk component to disasters and / or low deterioration of environmental quality despite isolated limitations. The evaluation considers that it is at a level of AVERAGE RISK, ALWAYS AND WHEN E = 1 ratings are not obtained in any of the following aspects: Seismicity, Landslides, Winds / hurricanes / storms, Vulcanism, Lakes / river / sea , High voltage power lines, Explosion and fire hazard, Legal framework, Territorial conflicts. If so, the risk will rise to HIGH RISK. 4) Values higher than 2.6 means that the area is not vulnerable, so the evaluation considers that it is at a LOW RISK level.

- Structural resistance of the building: it has a weight of 50% of the total ISIU, it evaluates the capacity to resist a negative event, that is, it will not collapse the building.

- Non-structural building capacities: it has a weight of 30%, it does not indicate the capacity to continue running all the essential service areas of the building.

- Functional capacity to use the building: it weighs 20% and evaluates the ability of personnel to operate or react to a disaster, without interruption in the provision of essential and emergency services.

PRIORITY 4: INCREASE PREPARATION FOR DISASTER CASES TO GIVE AN EFFECTIVE RESPONSE AND TO "REBUILD BETTER" IN THE AREAS OF RECOVERY, REHABILITATION AND RECONSTRUCTION:

Essential 9: Ensure the effectiveness of preparedness and response to disasters in the IES and in the country.

Activity 25: Articulate the institutional plan with the plan of the national development system: the national planning systems define the approval criteria for public investment projects. In the last 10 years, efforts have been made to incorporate instruments that guarantee security in the face of disasters in public investment processes. IES must comply with these regulations and must constantly evaluate the instruments to strengthen them, both at the institutional and national levels. If they do not exist in the country, those from other countries can be taken as reference.

The main planning instruments are the National Development Plan and the Land Management Plans. IES should evaluate their integrality and propose measures to update and regulate, including through the modification of laws, policies, plans, regulations and instruments for the incorporation of DRR into public and private development and investment processes.

Activity 26: Integrate its capabilities into the National Emergency and Disaster Response Management System: IES must integrate teams with the capacity to participate in all the activities of the emergency and disaster response phase: social awareness through preparation for the response, development and operation of multi-threat warning systems, monitoring of dangerous phenomena, damage assessment, shelter management, medical and psycho-social care, specialized analysis of damaged infrastructure, organization of volunteer groups for classification and delivery of humanitarian aid, rescue, etc.

Essential 10: Accelerate recovery and better reconstruction in IES and the country.

Activity 27: Prepare and approve institutional recovery plans with transformation: when there are negative impacts due to natural or anthropogenic events in the university facilities, it is necessary to carry out evaluations to determine what factors intervened for these damages to occur and from that analysis design recovery plans that transform the conditions that facilitated the damage, that is, rebuild in a better way. The regulations of the institution must indicate that it can not be reconstructed if there is no prior evaluation that allows the vulnerability to be corrected.

Activity 28: Elaborate scenarios of institutional recovery prior to disasters: refers to the risk assessments of the institution indicate possible risk scenarios, with future impacts on university facilities, which can not be resolved and therefore constitute a residual risk , before which it is necessary to formulate reconstruction

scenarios in a better way, in case the event happens. This allows having plans that ensure a quick recovery of the institution.

During the first year of the project, eight investigations were carried out, the creation or strengthening of 8 Risk Management units was supported, 15 buildings were evaluated and 30 high-level university officials were trained. The results of the evaluation of the 17 buildings are: 2 buildings in high security level (13.3%), 9 buildings with medium security level / 60%) and 4 buildings with low security level (26.7%). This is very interesting because these buildings house a large number of people among officials, workers, students and visitors, in addition to a great economic value in specialized equipment.

We conclude that the critical elements for the functioning of a university facing disasters are: Resistant buildings, have a socialized response plan with the entire university community, have resources to rehabilitate their life lines if they are affected, have a trained team and equipped for response.