

## INVOLVING OF STUDENTS IN THE SUSTAINABLE DEVELOPMENT OF ROMANIAN UNIVERSITIES

Ina NIMERENCO<sup>1</sup>, Bianca Eugenia LEOVEANU SOARE<sup>2</sup>

<sup>1</sup>PhD Student, Bucharest University of Economic Studies, Romania

Email: ina.nimerenco@eam.ase.ro

<sup>2</sup> PhD Student, Bucharest University of Economic Studies, Romania

Email: bianca.soare@eam.ase.ro

### Abstract

*The environmental problems we face bring us great challenges. Institutions at the highest level adopt strategies to mitigate the human's impact on nature and the environment. The institutions that can contribute significantly to the development of strategies and the promotion of sustainability are higher education institutions. The academic community, especially students, can be promoters of innovative values and solutions that would contribute to a sustainable development of everything around us. This research will answer the question "How can students be involved in the work of universities to contribute ideas and solutions, but also to motivate the local community?". Following the research carried out, it was stated that student associations are little involved in the sustainability activities of universities, although they can make a real contribution to promoting sustainable development with universities through the projects they organize. In addition, while all sectors of civil society have been moving towards sustainable development for some time, few higher education institutions are engaged in this process.*

**Keywords:** sustainability, students, university, student association, civic involvement

**DOI:** 10.24818/CAFEE/2022/11/12

### Introduction

Sustainability means future – future assured for the next generations, better and more prosperous future for the whole environment. It was only in the 2000s that this subject began to be researched and took over more and more attention and importance from world insistence. Thus, at the moment, most of the UN member countries have adopted the 17 Sustainable Development Goals (SDGs) that comprise the 3 important spheres of sustainability – social, economic and environmental. Annually, worldwide, the degree of implementation of SDGs for each country is reported and various rankings are made.

Efforts are currently being made to achieve the indicators proposed by the UN by 2030, but the main aim is to perceive the importance of sustainable development, to create sustainable behaviour for public and private institutions, companies and civil society. Thus, the completion of the UN 2030 Agenda requires the involvement of all society parties. An important responsibility rests with the Higher Education Institutions (HEIs).

HEIs have a particularly important role in the growth of future generations and the formation of their values. The large number of people who choose to continue their studies in a Higher Education Institution obliges them to implement strategies adapted to the current needs and problems of society. Green HEIs secure their future, attracts students and partners. They

represent a neutral ground where public and private institutions can collaborate in the best way, and the winners in this competition are students and the local community.

Students can be the future promoters of sustainable development if they are educated in this regard, if they will be involved in sustainable development activities and if they are given the opportunity to create and test new ideas and solutions.

Thus, the aim of this paper is to analyze the connection between students and the concept of sustainability, to identify concrete solutions for collaboration and involvement of students in the process of Romanian universities to become sustainable.

## **1. Literature review**

Universities have a large academic community, and for its proper functioning a lot of resources are needed: water, electricity, gas, oil and other resources. The exploitation of resources in the long term will lead to their depletion. The sustainable behavior adopted by the university in its management represents the best example for the academic community, especially the students, who represent the largest and ever-changing share, generation after generation, but also for the civil society in general. According to Butt et al. (2014) the benefits of universities being sustainable are much greater than they seem at first glance. In addition to the stronger competitive advantage, they can obtain partners who represent fields like infrastructure, obtaining of grants for innovative projects, commercialisation of research and, last but not least, a very good reputation, positioning and visibility on the market.

Even if the sustainable solutions implemented are very expensive, they require the involvement and engagement of resources available to universities in a smaller number, in the long term, maintenance and operating costs will register a significant decrease. Thus, universities will be able to allocate considerable budgets for their main activities.

To analyze the literature we used the Web of Science database. We've selected the key terms as *sustainable development*, *students*, *university*. Thus, 11,156 publications were identified, the majority of which (63,706%) are articles.

In 1997 have appeared the first publications in the field of sustainable development applicable within universities. Since 2010, there have been very large increases in research, reaching a record number of 1540 publications in 2021. This may also be due to the fact that since 2014 cohesion policy has been adopted at European Union level 2014-2020, and the first objective of the policy is "to strengthen research, technological development and innovation".

The most numerous researches are carried out by authors from the USA (1812), followed by China (1608), and on the 3rd place is Spain (929). It is gratifying that Romania is in the top 10, having 348 publications.

The most relevant publications are: "University students of UNESPAR-Brazil: their perceptions about sustainable development" by Gallardo-Milanes Olga, Olivera-Pataro Cristina Statie and Mezzomo Frank Antonio (2019); "Measuring sustainable development knowledge, attitudes, and behaviors: evidence from university students in Mexico" by Teodoro Rafael Wendlandt Amézaga, José Luis Camarena, Roberto Celaya Figueroa and Karla Alejandra Garduño Realivazquez (2021); "Sustainable Development at Higher Education in China: A Comparative Study Students' Perception in Public and Private Universities" by Jiawen Wang, Minghui Yang and Petra Maresova (2020). All three articles research students' perception of sustainable development within their universities.

Wang et al. (2020) bring up the limited or non-existent involvement, in some HEIs, of students in sustainability issues. It also encourages the development of incentives that attract students, but also the provision of a wide range of sustainable courses.

As interest in green universities is growing, a study was conducted by Dagiliūtė et al. (2018) which analysed students' perception of two universities – one green and the other non-green. Thus, it was found that respondents did not perceive a significant difference between the two types of universities. This being the cause of the fact that the university that declares itself to be "green" only scriptically or students are not informed and involved in actions about and sustainability.

Wendlandt Amézaga et al. (2022) strengthens the interest, importance and awareness that students present to the problems we face nowadays: gender equality and equity for opportunities, but especially for environmental issues.

The International Alliance of Research Universities together with the Copenhagen Climate Council, which became Sustainia in 2009, developed a Green Guide for Universities that includes sustainable solutions for universities in terms of campus organization, campus-wide operations, buildings, laboratories, green purchasing, transportation, communication, employee and student engagement. This guide can be accessed by all universities for free and can be a starting point in turning them into green universities.

To encourage universities to increase the civic engagement of the academic community, there is currently only one ranking at the global level, at the fourth edition, which evaluates their work in relation to the 17 SDGs.

This ranking has a different approach compared to traditional rankings and evaluate universities on the basis of new concepts such as the degree of innovation, the promotion of entrepreneurship, accountability and crisis management. At the top of The 2022 Impact Rankings is a university from Australia - Western Sydney University. Bucharest University of Economic Studies and Babeş-Bolyai University are the universities from Romania with the best results and they are on the position 301–400<sup>th</sup>.

**Tabel 1. The Times Higher Education Impact Rankings 2022, Romania**

No. Crt.	Rank	University	SDG - Best scores by rank				Overall
			4	5	13	17	
1	301–400	Babeş-Bolyai University	4	5	13	17	72.0-76.7
2	301–400	Bucharest University of Economic Studies	5	8	1	17	72.0-76.7
3	401–600	University of Bucharest	5	16	4	17	65.0-71.9
4	601–800	Lucian Blaga University of Sibiu	8	4	5	17	57.3-64.9
5	801–1000	Lower Danube University of Galati	8	16	4	17	50.3-57.2
6	801–1000	Polytechnic University of Bucharest	4	5	9	17	50.3-57.2
7	801–1000	USAMV Cluj-Napoca	1	5	4	17	50.3-57.2
8	1001+	George Emil Palade University of Medicine, Pharmacy, Science, and Technology of Targu Mures	3	16	4	17	9.2-50.2

No. Crt.	Rank	University	SDG - Best scores by rank				Overall
9	1001+	Grigore T. Popa University of Medicine and Pharmacy	3	5	1	17	9.2-50.2
10	1001+	Ion Mincu University of Architecture and Urbanism	4	5	11	17	9.2-50.2
11	1001+	Ștefan cel Mare University of Suceava	4	8	1	17	9.2-50.2
12	1001+	Technical University of Cluj-Napoca	7	4	11	17	9.2-50.2
13	1001+	Transilvania University of Brașov	1	4	5	17	9.2-50.2

*Source: The Times Higher Education Impact Rankings 2022*

It can be noted that in the ranking of The Times Higher Education Impact Rankings 2022 there are no universities from one very important university center of Romania, namely Timisoara.

Analyzing the frequency of the appearance of SDGs according to rank, it can be seen (Table 2.) that, in 2022, universities in Romania paid the most attention to the following top 3 SDGs:

1. SDG 17 – Partnerships for the Goals;
2. SDG 4 – Quality Education;
3. SDG 5 – Gender Equality.

This ranking can confirm the importance of collaboration and partnership between all parts in order to achieve the Sustainable Development Goals. Also, Quality Education – SDG 4 is a priority for HEIs in Romania, but also for national public authorities – ministry, government, parliament. According to the Sustainable development report (2022), for SDG 4 Romania still has significant challenges.

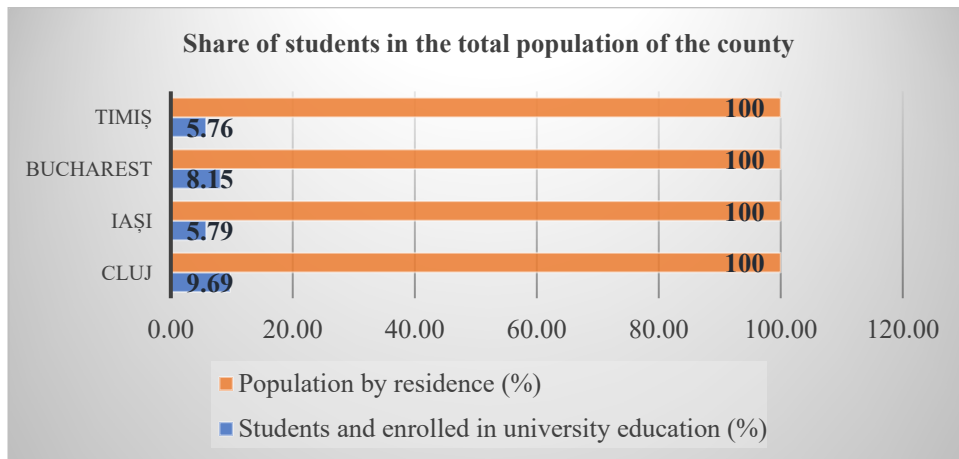
**Table 2. Frequency**

SDG	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
<b>Frequency</b>	5	0	2	11	9	0	1	4	1	0	2	0	1	0	0	3	13

*Source: Edited by the authors based on The Times Higher Education Impact Rankings 2022*

According to the National Institute of Statistics in 2021, in Romania, the number of students enrolled in university education (bachelor, master, postgraduate courses, doctorate and postdoctoral programs for advanced research) was 554 007, the number of teaching staff in higher education at national level was 26 555, and the number of bachelor's degree education units (public and private) was 88.

Universities contribute to a significant increase of population in cities. The largest and most important university centers can be found in the Municipality of Bucharest, Iasi, Cluj and Timisoara. We represented graphically the share of students enrolled in higher education from the total population of the county (Figure 1.). Thus, we can observe that students have a significant share within the county (about 5-9%). This can represent a very good opportunity for both universities and the local community to collaborate and involve students in extracurricular, civic actions that contribute to increasing their sustainability.



**Figure 1. Share of students in the total population of the county**

*Source: Edited by the authors based on INS data*

It is also well known that young people are a catalyst for change. By promoting sustainable actions and activities, they can be an example and a motivating factor for younger generations. Moreover, this way we can ensure that the current generation will also grow more informed and aware generations about the importance of sustainability and the global problems we are currently facing.

For the first 3 universities that are in *The Times Higher Education Impact Rankings 2022* we have identified the following aspects that aim to promote and support sustainable development:

- a) The Bucharest University of Economic Studies Strategy 2020 - 2030 provides sustainability aspects, especially for scientific research "Creating an adequate framework for the conduct of scientific research, by ensuring the sustainable infrastructure of the scientific research and innovation process". Also, the Faculty of Agrifood and Environmental Economics within the Bucharest University of Economic Studies is involved in various research projects on sustainable development, the UN 2030 Agenda, but also events carried out by the Department of Sustainable Development. At the same time, it organizes the Competitiveness off Agro-Food and Environmental Economy Conference, which has among its main topics sustainable development.
- b) University Babeș-Bolyai has a strategy - *UBB Goes Green Strategy* which was adopted in 2016. The university is also oriented towards a sustainable development, but also to become an example to follow. In 2020 UBB hosted the National Conference "Education for Sustainable Development in Higher Education".
- c) The University of Bucharest aims to identify opportunities in the involvement of the academic and research structures of the university in order to achieve SDGs. It also carries out various events related to the implementation of the Gender Equality Plan in UB within the European project *Athena*.

Butt et al. (2014) in their paper mentions that universities can directly contribute to promoting sustainable development in society, mostly, by carrying out strategies. Also, universities must

focus their resources on sustainability research in partnership with public and private institutions empowered to do so, adopt teaching-learning practices that form conscious students with a sustainable behavior and, last but not least, encourage and support sustainability actions in the academic community, but also locally through information information, awareness raising and involvement campaigns.

## **2. Research methodology**

The research involves analyzing the degree of involvement of students in the sustainable approaches that Romanian universities adopt. Thus, we have identified student associations from various university centers in the country to find out what their opinion is on the subject being investigated.

For this study we chose qualitative research because it is a subject still unknown among students. Even if they are involved in various activities and projects that contribute to a sustainable and sustainable development of what surrounds us, unfortunately students do not know all the aspects that sustainability implies. Thus, the research was a qualitative one, type interview with 15 open questions, the respondents being 10 student associations from all over the country represented by the president. We believe that the activity carried out by the associations can be classified to some extent as sustainable.

Student associations arose from the desire of some students to make a change, to make their voices heard, to help themselves and their colleagues in relation to the leadership of the faculties and universities to which they belong.

Later, through collaboration they found that they were facing common problems. Thus, in order for them to be able to solve the common problems of all students at the national level, they united by forming student federations. Currently, there are 3 national federations in Romania – the Students' Union of Romania (2001), the National Union of Students in Romania (2007) and the National Alliance of Student Organizations in Romania (2000).

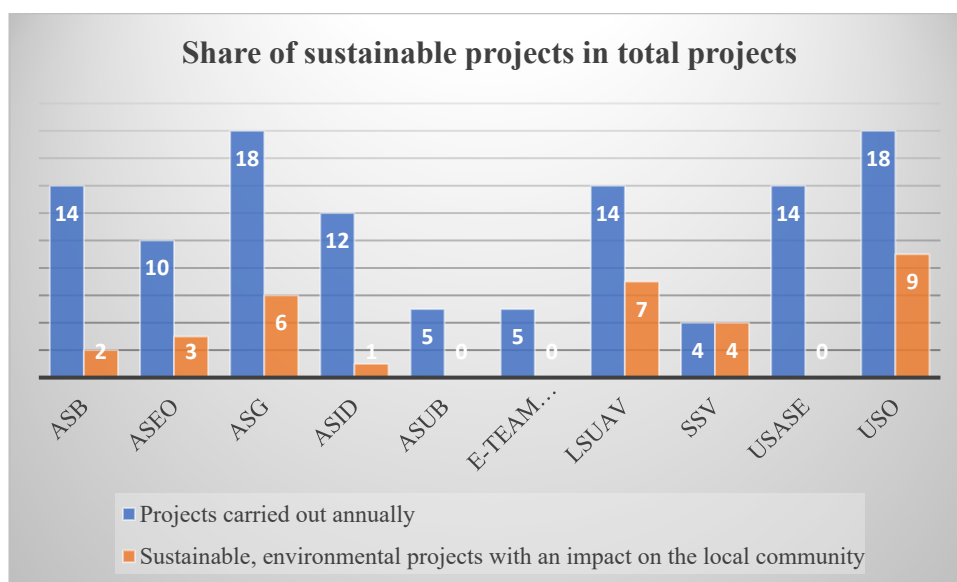
## **3. Results**

Regardless of the year in which the student associations were established (1999, 2005, 2008, 2012, 2016), their main purpose, as stated by the participants in the interview, but can be generalized, is to represent the rights and needs of students in relation to the dean's office and/or rectory. In addition to this, we can also add "the personal and professional development of students through projects" and "to organize and promote social and cultural actions for students".

Asked how they appreciate the collaboration between the association and the management of the faculty/ university, most of the associations enjoy a fruitful collaboration, although there are also situations in which this partnership is not a healthy one. In addition to the regular meetings with the faculty management and the openness shown by the professors, the associations receive support in organizing the projects. Moreover, the associations see this collaboration as being beneficial for both parties, being part, through its representatives, in the committees that concern the students (accommodation, admission, scholarships), offering in turn the support in all the processes and activities in which the faculty so requests.

The graph below shows the number of projects carried out annually by each association participating in the research. Thus, we can declare that student associations organize on average 12 projects per year, and the average number of volunteers in an association is 130.

Usually, the projects carried out are complementary to the teaching activity. They are adapted and fitted according to the specifics of the faculties to which they belong. Thus, associations provide context to students to participate in activities with which they will acquire competencies and learn skills necessary for any student for personal and professional development. The fields in which the associations organize projects are diverse: formal and non-formal education, sustainability, sustainable development, entrepreneurship, economics, geography, history, culture, charity, career guidance, job fair, sports, healthy lifestyle, nutrition, environment, psychology.



**Figure 2. Share of sustainable projects in total projects**  
*Source: Made by the authors based on the answers obtained*

Regarding the organization of projects that have an impact on the local community, which are sustainable or environmental, the situation is very different among the associations. Some associations do not organize any such projects, others carry out 1, 6, 9 projects per year. However, associations that do not have sustainable, environmental projects for their own local community have stated that they are involved in projects organized by other partner associations or the federation to which they belong - the Students' Union of Romania. Thus, on average, student associations annually organize 3 such projects.

It is to be appreciated that all student associations carry out donation campaigns. They collect clothes, food, various things that they choose to donate to social cases. The associations also carry out information campaigns and blood donation.

Moving to the level of faculties and universities, respondents were interviewed about the existence of a sustainable development strategy within the universities to which they belong and about the organization by faculties/universities of sustainability activities. Thus, it has been found that most faculties/universities do not have a strategy on sustainable development,

although they carry out or are involved in such projects and take steps in this regard, for example:

- University of Bucharest - carries out the annual report on the Sustainable Development Goals, offers the opportunity to participate in Erasmus+ projects on the topic of sustainability, carries out the project "Digital ecosystem for sustainable learning at the University of Bucharest – EDIS-UB";
- The Bucharest University of Economic Studies - organizes various conferences, events, partnerships that bring to the foreground the importance of sustainable development. There are also master's programs specializing in sustainable development. In addition, a new amphitheater using sustainable materials was renovated;
- University of Oradea - at the moment, 50% of the buildings on campus are heated with water that is recirculated through the ceiling that comes from the other half of the campus that is heated from the city;
- "Alexandru Ioan Cuza" University of Iasi - both in the faculty, in the lecture and seminar rooms, and in the dormitories of the university there is the possibility of separate waste collection.

However, there are also situations in which students are not involved in extracurricular activities that make a contribution to the awareness of the importance of sustainability at the university/faculty level.

As separate collection and recycling is no longer a new topic for either students or universities, we interviewed respondents about the possibility of separate waste collection in the university/faculty, its campuses and all the spaces it manages. Thus, it was found that there are faculties/universities where recycling boxes are found, and in the session of examinations the students bring the used paper materials and are sent on to a recycling center. The associations also draw attention to the fact that the places arranged for separate collection are very few, and the students do not respect this.

Reducing carbon emissions is a topical issue and both global institutions and private companies are thinking and adopting solutions in this regard. It is to be appreciated that universities settle 50% of the passes for public transportation. This measure encourages students to use public transport and thus contributes to the reduction of carbon emissions. However, universities should campaign alongside students for free transportation by train and subway. In addition, it could arrange places in the university campus for bicycle parking. The mission of universities is to educate and train generations of students. Up to the recent past we all wanted to evolve, discover new things or invent them. Now we want the same thing, but to everything is added sustainability: sustainable evolution, sustainable inventions. Under these conditions, universities must adapt their university curriculum and include a subject, at least optional, dedicated to sustainable development because we need it in all fields of activity. Research participants mention that only certain programs have a single subject dedicated to this topic or only subchapters of some courses reach this side of sustainability. Master's programs such as "Environmental Geography", "Ecological Economy", "Sustainable Development of Business and Economic Organizations", "Ecology" give great importance to this topic.

Last but not least, the research participants were asked about concrete solutions or projects that they could carry out together with the university in order to contribute together to the



promotion of sustainability both inside and outside the university. Thus, the following ideas were sketched: awareness campaigns with teachers or specialists in the field, conferences on sustainability dedicated to students, greening and planting campaigns, arrangement of special spaces for recycling and selective waste collection, realization of projects already existing at national level in partnership with faculties that have the same specialization, digitization of various administrative activities and switching to electronic format for all materials/projects, bachelor's/master's/PhD theses, so to reduce the use of printed papers, construction of amphitheaters using sustainable materials, training of disadvantaged students, education towards a more balanced and sustainable lifestyle and by making a guide for the reuse of food waste, the use of green energy.

### **Conclusions**

We believe that student associations can make a real contribution in promoting sustainable development alongside universities. Moreover, they must be involved in the development of sustainable strategies of universities and projects of this kind. In addition, student associations organize projects with an impact on the local community, and universities can support them in their good realization.

It is recommended to adopt a sustainable development strategy at university level in the realization of which representatives of all parties that make up the academic community participate, namely: students, professors, administrative staff, and partners. Later, the faculties should adopt this strategy and be directly involved in achieving the proposed sustainable objectives.

Selective waste collection could be the first step in raising awareness and educating the academic community on sustainability. Associations feel the need for accountability and awareness campaigns for students in this regard, so students, professors and administrative staff can learn a sustainable behavior that they can pass on to family members, friends, children. They can become promoters of selective collection for the whole of society.

In view of the adopted 2030 Agenda of Romania, we are of the opinion that the inclusion of an optional course on sustainability in the university curriculum would motivate students to participate in it. In this way, universities would help to promote sustainable development and the 2030 Agenda could have much greater chances of achievement. Also, after participating in this course, students could carry out research, bachelor's and master's theses on this topic as it is actual. Moreover, universities, in partnership with private companies, could carry out studies involving students.

In conclusion, students are a resource for universities. A good collaboration between the two parties, in the long term, means a win for the whole of society.

### **Funding**

This paper was co-financed by The Bucharest University of Economic Studies during the PhD program. The funder had no role in the design of the study; in the collection, analyses, or interpretation of data; in the writing of the manuscript, or in the decision to publish the results.

## References

1. Butt, L., More, E., & Avery, G. C. (2013). The myth of the 'green student': Student involvement in Australian. *Research Gate*. Retrieved November 5, 2022, from [https://www.researchgate.net/publication/262605979\\_The\\_myth\\_of\\_the\\_'green\\_student'\\_Student\\_involvement\\_in\\_Australian\\_university\\_sustainability\\_programmes](https://www.researchgate.net/publication/262605979_The_myth_of_the_'green_student'_Student_involvement_in_Australian_university_sustainability_programmes)
2. Dagiliūtė, R., Liobikienė, G., & Minelgaitė, A. (2018). Sustainability at universities: Students' perceptions from Green and non-green universities. *Journal of Cleaner Production*. Retrieved November 5, 2022, from <https://www.sciencedirect.com/science/article/pii/S0959652618302415>
3. Gender Egalitate Plan - <https://unibuc.ro/o-noua-serie-de-evenimente-legate-de-implementarea-planului-de-egalitate-de-gen-in-ub-in-cadrul-proiectul-european-athena/>
4. Green Guide for Universities - [https://sustainability.berkeley.edu/sites/default/files/iaru\\_final\\_web.pdf](https://sustainability.berkeley.edu/sites/default/files/iaru_final_web.pdf)
5. <https://planinvatamant.ase.ro/SelectiePlan1.aspx?pp=18>
6. Strategy of the Academy of Economic Studies in Bucharest 2020 – 2030 - [https://www.ase.ro/ase-responsive/strategia-ASE/Strategia-ASE-\(ro\).pdf](https://www.ase.ro/ase-responsive/strategia-ASE/Strategia-ASE-(ro).pdf)
7. Sustainable development report 2022 – Romania <https://dashboards.sdindex.org/static/profiles/pdfs/SDR-2022-romania.pdf>
8. UBB Goes Green - <http://green.ubbcluj.ro/en/>
9. Wang, J., Yang, M., & Maresova, P. (2020, March 11). *Sustainable Development at Higher Education in China: A Comparative Study of Students' Perception in Public and Private Universities*. MDPI. <https://www.mdpi.com/2071-1050/12/6/2158/htm>
10. Wendlandt Amézaga, T.R., Camarena, J.L., Celaya Figueroa, R. *et al* Measuring sustainable development knowledge, attitudes, and behaviors: evidence from university students in Mexico. *Environ Dev Sustain* **24**, 765-788 (2022). <https://doi-org.am.e-nformation.ro/10.1007/s10668-021-01467-0>