
Commitment of Higher Education Institutions to Sustainability Agenda: Evidences from GCC Countries

ILYA BYSTROV^{1*}, SHRIKANT KRUPASINDHU PANIGRAHI²

^{1,2}University of Buraimi, Al Buraimi, Sultanate of Oman

*Corresponding Author

Email ID: ilya.bystrov@gmail.com

Abstract: Many higher education institutions have committed to the sustainability issues, however still these commitments unable to result with desired changes. It is crucial to recognize the changes in the education system that enable the institutions to understand the concept of sustainability. From the content analysis for each GCC country (United Arab Emirates, Kingdom of Saudi Arabia, Qatar, Sultanate of Oman, Kuwait and Kingdom of Bahrain), with selected 10 higher education institutions the authors found that only 5% of the universities opted to use sustainability in their mission statements. The extended analysis of the vision statements, institutional goals and values widened commitment to sustainable development to 11.5%. Analysis also showed that mostly UN Sustainable Development Goals 1, 8 and 9 are addressed. Higher education institutions of GCC are slowly incorporating sustainable development values into their strategic statements. Universities may take decade for the implication of sustainability development. The depiction of sustainability scenarios through various policy implementations and incentive measures would provide university scholars, leaders and government policy to strategize future developments.

Keywords: sustainability, sustainable development, mission statement, GCC, higher education.

INTRODUCTION

Higher education is considered as one of the major indicators of global competitiveness. Many countries have attempted to develop and modify their policies in order to strengthen international competition of the education sector in response to the so-called knowledge economy (Schwab, Sala-i-Martin, 2016). The problems related to sustainability gained intensive attention in the several last decades. Numerous conferences, workshops, webinars, symposia that are being organized all around the world is a good indicator of the interest demonstrated to this subject area and importance of the latter. This is reflected in multiple research publications, ranging from climate change impacts (Islam *et al.*, 2020) to corporate-social responsibility (Ikram *et al.*, 2020). On the institutional level, the United Nations formulated 17 sustainable development goals (Agenda for Sustainable Development) covering the entire range of developmental agenda – from problems associated with poverty, hunger and health to education, energy and climate. These goals set the direction for sustainable development and are considered as important and urgent for realization by multiple authors (Cebrián *et al.*, 2020; Trott *et al.*, 2018) There has been a noticeable progress in attaining these goals (according to the Sustainable Development Goals Report, 2020), especially in such areas as maternal and child health, expanding access to electricity and increasing women's representation in government. Still, the health crisis of 2020 followed by economic disruptions introduced considerable setback in the areas like poverty, economic growth and education.

The significance of higher education to sustainable development is similar to importance of a corner stone. As noted by Cebrián *et al.* (2020), there is an urgency to embed the principles of education for sustainable development into all levels of education. Multiple sources state a pivotal role of higher education institutions disseminating and mainstreaming sustainable thinking within society (Lozano *et al.*, 2015; Setó-Pamies, Papaioikonomou, 2016; Piza *et al.*, 2018). The study of Janmaimool and Khajohnmanee (2019) performed on 128 students that were taking an "Environment and Development" elective course revealed that environmental attitudes of students that had taken this course were significantly higher than that of those students who didn't take it. Moreover, diverse environmental knowledge significantly correlated with pro-environmental behaviors. In the same manner Esteban Ibáñez *et al.* (2020) suggest that universities are responsible for elaboration in students of knowledge, skills, attitudes, and values in, which, in turn, contributes to the search of effective solutions to environmental problems. Those who graduate from higher education institutions immediately start to practice what they have learned in their everyday work routine. Several years later the same actors will be taking operational decisions, while in 20-years perspective they will formulate strategies and in 30 years they

will be formulating and influencing the global agenda. From this perspective, gaining an understanding of commitment level to sustainable development from the side of higher education institutions allows to forecast the future tendencies. The same question about the progress in education for sustainable development that was acute a decade ago (Tilbury, 2011) stays current nowadays.

The article represents an attempt to study the level of interest and commitment of universities operating in the Gulf Cooperation Council (GCC) region to concepts of sustainable development. This is done through content analysis of strategic statements with primary attention dedicated to mission statements. Being a powerful instrument of strategic management for an enterprise (Cortés-Sánchez, Rivera, 2019; Lin *et al.*, 2019), mission statements (as well as vision statements and formalized values) play a noticeable role in operations of higher education institutions as well. National accrediting bodies that operate in the GCC region ensure, through the set of sophisticated procedures, that statements made in the strategic-level documents are consistent and aligned with graduate attributes, program learning outcomes and course intended learning outcomes.

Building upon combination of various universities environmental concerns and strategic statements, this study is aimed at analysis of sustainable developments and future directions that the universities might take to integrate sustainability into missions, and activities. It was accomplished by developing and applying a model that allowed authors to trace trends and conceptions of strategic statements to sustainable developments. Different studies have accomplished to articulate future scenarios for turning out the field of higher education in universities particularly. Table 1 illustrates the literature survey results analyzing the key focus of previous research in the education field. This table categorize different types of publication, scope of survey and the key theme of the research.

Table 1: Summary of key studies on sustainability agenda for universities

Author-year	Format	Country	Key focus
Beynaghi, Trencher, Moztarzadeh, Mozafari, Maknoon, and Leal Filho (2016)	Article	United Nations	Sustainable development, Education for sustainable development, economical oriented university
Vuuren, Kok, Girod, Lucas and de Vries (2012)	Article	Global	Global environmental assessments, Globalization, Climate, learning process, economic optimism
Cebrián and Segalàs (2019)	Article	Global	Sustainability, competence, education for sustainable development, evaluation
Curaj, Paunica, Popa, Holeab, and Jora (2020)	Article	Global	Sustainability, globalization, change, technology management, sustainable university, functional goals
Soini, Jurgilevich, Pietikäinen, and Korhonen-Kurki (2018)	Article	Global	Sustainability centres, sustainable transitions, knowledge production, societal challenges
Sisto, Sica and Cappelletti (2020)	Article	Italy	Strategic planning, environmental sustainability, Agenda 2030, innovation, learning
Franco, Saito, Vaughtner, Whereat, Kanie and Takemoto (2019)	Article	Global	Sustainable development, curriculum, stakeholders, knowledge and essential skills, social and environmental linkages

Although scenario based strategic planning is widely practiced in the individual sectors, our literature survey shows that most of the studies lack discussion of regional aspects of sustainable development implementation in their region.

METHODS

The research has been inspired by the study of Khan (2014) and has used methodology similar to the one used by Molchanova et al. (2020) in their analysis of environmental concerns of Russian businesses and is based on content analysis. For the purposes of analysis for each GCC country (United Arab Emirates, Kingdom of Saudi Arabia, Qatar, Sultanate of Oman, Kuwait and Kingdom of Bahrain), 10 higher education institutions have been randomly selected (60 institutions in total). Then, their key strategic statements – mission, vision, values, goals – have been accessed via internet.

The first step of the analysis is focused on mission statements and presence of such terms as “sustainability”, “sustainable” and similar. The second step widens the scope and the same terms are searched for in other strategic statements – vision, values and goals. The third step supposes deeper analysis of mission statements. Their content is mapped with the 17 sustainable development goals (SFGs) formulated by the United Nations that set out a vision for a better world that relies on cooperation and interdependence (Owen, 2017) and include:

- 1) No Poverty;
- 2) Zero Hunger;
- 3) Good Health and Well-Being;
- 4) Quality Education;
- 5) Gender Equality;

- 6) Clean Water and Sanitation;
- 7) Affordable and Clean Energy;
- 8) Decent Work and Economic Growth;
- 9) Industry, Innovation and Infrastructure;
- 10) Reduced Inequalities;
- 11) Sustainable Cities and Communities;
- 12) Responsible Consumption and Production;
- 13) Climate Action;
- 14) Life Below Water;
- 15) Life on Land;
- 16) Peace, Justice and Strong Institutions;
- 17) Partnerships.

For the purposes of analysis, the English versions of strategic statements are used, though Arabic versions are present in most of the cases. Minor differences between Arabic and English versions have been observed, however they don't significantly change the content of statements.

Results of analysis have been anonymized in such a way that findings and evaluations can't be related to a specific institution.

RESULTS

Out of selected 60 educational establishments 4 (about 6%) haven't made the mission statement easily available to the public. Analysis demonstrated that only about 5% (3 out of 60) of the studied mission statements of universities contained a word "sustainability" and its variations.

The extended analysis of the vision statements, institutional goals and values added 4 more cases, when the category of sustainability was mentioned. In the first case the university's web-site contained a separate University Sustainability section under About tab. Further on this page the detailed information regarding the institution's approach to sustainability in research, operations, governance, education and connectivity is provided. The invitation to share ideas in this regard is available as well. Three other examples contained mentioning of sustainability in the values that is formulated like "Sustainable environment", "... sustainable value in helping transform societies and communities" and even more elaborate "Sustainability: To nurture an appreciation of the shared responsibility of humankind to preserve planet Earth for future generations." Such extended point of view allowed to increase the share of institutions of higher education that consider sustainability as one of strategic priorities to 11.5% (7 out of 60).

Mapping of institutional mission statements to sustainable development goals allowed to make several important observations. First of all, the studied mission statements could be aligned with 3 sustainable development goals – SDG 1 (related to poverty), SDG 8 (related to economic growth and employment) and SDG 9 (related to industry, innovation and infrastructure). Such imbalance can be explained by the way the key strategic statements are formulated. Traditionally for academic institutions, strategic planning is carried out by committees that have representation from every academic unit and every key administrative department. Most of educational institutions, in the set of colleges/faculties that constitute them, have an academic unit that offers business degrees (more than 90% of the sample), while the second popular academic unit is related to engineering. As a result, representatives of these two areas tend to incorporate in mission statements the problem areas that they are familiar with. Another reason of this phenomenon is that strategic planning belongs to managerial knowledge domain and academicians or administrative staff that participates in such committees tend to delegate the leading role, at least to some extent, to those who specialize in this area. The results of the mapping of institutional missions to sustainable development goals is provided in Table 2.

Table 2: Mapping of Institutional Mission Statements to UN Sustainable Development Goals

Institution	Goal 1 (No Poverty)	Goal 8 (Decent Work and Economic Growth)	Goal 9 (Industry, Innovation and Infrastructure)
1		Yes	Yes
3		Yes	Yes
10	Yes		Yes
11		Yes	Yes
12			Yes
13	Yes	Yes	Yes
15		Yes	Yes
21			Yes
25			Yes
29			Yes
33		Yes	

46		Yes	Yes
47		Yes	Yes
50		Yes	Yes
51		Yes	Yes
54			Yes

Overall, the number of institutions that have their mission statements aligned with one or several goals of sustainable development is higher than those that use the “sustainable” or “sustainability” terms directly. The leadership in mapping exercise belongs to Qatar with 4 universities demonstrating commitment to sustainable development agenda. It is followed by Kuwait, Bahrain and Saudi Arabia with 3 universities each (Figure 1).

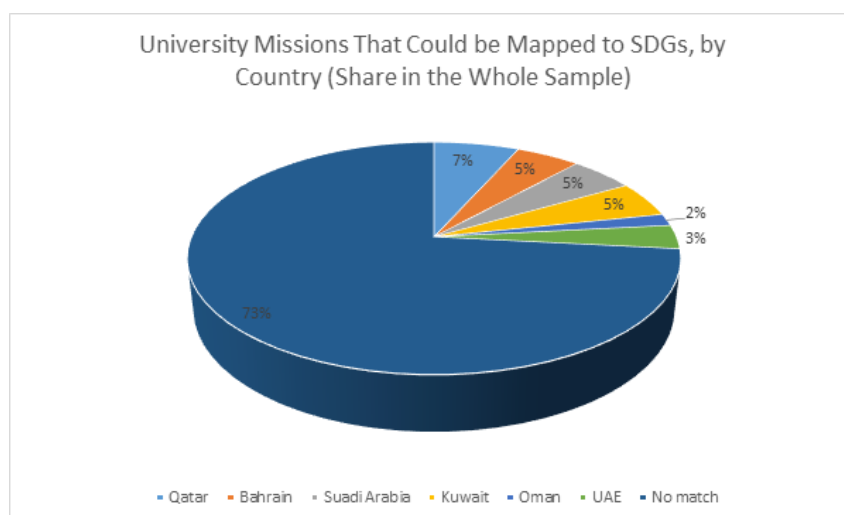


Fig.1: University Missions That Could be Mapped to SDGs, by Country (Share in the Whole Sample)

Slightly more than 26% (16 out of 60) of mission statements under consideration could be mapped to one or several goals of sustainable development. Focus on poverty-related problems is witnessed only in 2 cases (3.5%), while economic growth orientation can be seen in 16.5% of analyzed mission statements (10 out of 60). Industry, innovation and infrastructure are referenced in the leading number of institutional missions – 25% (15 out of 60). Only in one case all three goals are addressed. In Table 3 we provide distribution of encountered terms with respect to strength of its relationship with the corresponding goals.

Table 3: Terms that link institutional mission statements with UN Sustainable Development Goals

Category	Strongly Related	Related	Minimally Related
Goal 1 (No Poverty)			
Terms used	“Elevate the social and living standards”		
Frequency, cases	1	-	-
Share, %	1.5	-	-
Goal 8 (Decent Work and Economic Growth)			
Terms used		“Prosperity” (multiple), “economic growth and development” (multiple), “propelling ... knowledge-based economy”, “advance the development goals”, “social development”, “economic and social development”	“Address local and regional challenges”
Frequency, cases	-	9	1
Share, %	-	15	1.5
Goal 9 (Industry, Innovation and Infrastructure)			
Terms used		“Research ... contributes ... to the needs and aspirations of society”, “build science and knowledge society”, “solutions for ... problems in surrounding communities”,	“Rewarding innovation”, “leading edge technology and research”, “innovative research” (multiple), “shaping novel solutions”, “interdisciplinary research”,

			”create knowledge” (multiple), “development of knowledge”, “contribute to industrial development”, “quality scholarship”
Frequency, cases	-	3	12
Share, %	-	5	20

The set of terms that allows to map the mission statements to sustainable development goals is limited. Some terms – like “prosperity” and “economic growth and development” in case of SDG8, or “innovative research” and “create knowledge” in case of SDG9 – are met more often (2 and 3 times respectfully). The choice of such terms can also be an evidence of commitment to the old-fashioned cliches of “extractive economy” that we will discuss in the next section.

The direct and strong relation is witnessed only in one case, when institutional mission referred to UN Sustainable Development Goal number 1 – poverty. Even though the match to SDG 9 (Industry, Innovation and Infrastructure) is witnessed most frequently, the strength of such reference is minimal in majority of such cases – 12 out 15. The most strength is observed in case of matching the mission statements to SDG 8 (Decent Work and Economic Growth) – 9 cases out of 10 that are evaluated as medium. The universities don’t proclaim creation of new, decent work places, but rather refer to economic growth and social development.

DISCUSSION

The review paper of Rashid (2019) names entrepreneurship as a factor that has potential in reducing poverty, stimulation of economic growth and innovation, in addition to enhancing social and environmental sustainability and in this way entrepreneurship education and training has capacity to contribute to advancement of sustainable development goals. The study suggests that entrepreneurship education, through entrepreneurs, positively influences poverty alleviation (SDG 1), economic development and unemployment reduction (SDG 8), enhancement of infrastructure and innovation (SDG 9), social equality and inclusion (SDGs 5 and 10) and sustainable production and consumption (SDG 12). These results match our findings very well, as we have seen that in case an institution from the studied sample relates its key strategic statements to problems of sustainable development, it is usually SDG 1, 8 or 9. This observation, as noted earlier, can be explained by the fact that representatives of business-related academic structural units or programs play the leading (and sometimes decisive) role in tasks related to strategic development. Even though such approach can be called single-sided, as it removes a wide range of other strategic development goals from the equation, still its contribution can hardly be overestimated. Well-educated graduates contribute to creation of human capital that allows to enhance products and enable innovations (Baumol *et al.*, 2011), while specialized entrepreneurship education and training enhances entrepreneurship-related human capital, skills and behaviors (Martin *et al.*, 2013; Walter, Block, 2016).

The problem noted above is already seen by scholars that are engaged in higher education who witness the concept of sustainable development, as well as derivative concept of education for sustainable development, focuses mostly on economic and social sides of societal development and is excessively anthropocentric, ignoring the rights of the most biosphere objects (Kopnina, 2020). As a solution, the author suggests to inject into curricula a specialized course, that would focus on interrelation between environment, politics and business. Similar earlier point of view of Jackson (1993) mentions the “extractive economy” term under which the currently widely spread concept of extracting resources from the earth without concern for replenishment of those resources. A related idea that for many years we have been living under prevalence of neoclassical concepts and paradigms in the management education, which is based on the selfishness of human beings is expressed in another study (García-Feijoo *et al.*, 2020). To a certain extent our research demonstrates the same – the key strategic documents, if at all, focus on sustainable development goals that mostly cover economic development (Goal 8 of the UN sustainable development goals) and research, innovation and infrastructural issues (Goal 9 of the UN sustainable development goals). Even without going deeper into program curricula, it can be seen that the noticed anthropocentrism and selfishness is prevailing.

Multiple authors stipulate that principles of sustainability should be implemented throughout all activities of an institution, organization or company (Khudyakova *et al.*, 2020; Haessler, 2020; Peters, Simaens, 2020), starting with strategy. Special attention should be paid also to ensuring the desired transformation towards sustainability is effectively and sustainably implemented through a-whole-of-institution focus (Mader *et al.*, 2013). We share the same approach, as fragmented implementation of sustainable development principles can hardly be effective. The starting point of this endeavor is formulation of strategic perspectives that are reflected in strategic statements like mission, vision, goals and values.

Advancement of sustainable development goals in higher education is not something that is hard to implement. In many cases it is just a matter of accents. For instance, special attention to female entrepreneurs can contribute

to achievement of SDG 5 that focuses on gender equality (Kato, Kratzer, 2013; Huis *et al.*, 2019; Yunis *et al.*, 2019). In the same way, specific targeting of migrants and refugees also enhances social integration, empowerment and psychological wellbeing, creates employment opportunities for other newcomers and stimulates domestic entrepreneurship (Rashid, 2018; Wauters, Lambrecht, 2008; Brandt, 2010; Betts *et al.*, 2015) and contributes to advancement of SDG 10 (Reduction of inequalities). However, this is something that lacks in strategic statements of the sample institutions.

According to Duarte *et al.* (2017), the current sustainability-related problems – air, water and soil pollution, depletion of limited resources, deforestation – get the attention of communities slowly, which is indicated by the attitude changes towards the environment, as well as the shifts in behavioral patterns to those that are more pro-environmental and sustainable. At the same time, according to Hensley (2013), the existing ecological and demographic problems of the planet will make higher education institutions to be reinvented. Community and place-based education will become more of the rule than the exception and such practices as, for instance, service-learning, project-based learning, and bioregional education will be introduced. The opposite (global approach) is expressed by Amadei *et al.* (2009), who describe multiple projects of US-based universities that focus on creating global citizen engineers through international humanitarian engineering projects. They also conclude that similar projects of engineering for poverty reduction are becoming part of modern engineering education. The comparable diversity of opinions is seen in the studied strategic statements – some reflect the local peculiarities that are, however, still formulated within the paradigm of “extractive economy” mentioned above, while some talk about globalization.

Overall, it should be admitted that the higher education institutions in GCC do not have the leading positions relative to sustainable development in comparison with European schools. In the latter region some universities decided to support sustainability in their campuses and studies by joining the University Charter for Sustainable Development through the European Network on Higher Education for Sustainable Development as early, as middle of 1990s (as specified in COPERNICUS-Guidelines for Sustainable Development in the European Higher Education Area). With globalization processes being in power for the last two decades, the Western trends in the area of education gradually influenced the regional approaches either through expatriate instructors that originated from the Western countries, or local citizens that have been educated there. However, the two intricately interrelated transformations, namely societal transformation and university transformation, stipulated by Cai (2017), as well as socially-, environmentally-, and sustainability-oriented universities that pursue different SDGs (Beynaghi *et al.*, 2016) are still a future perspective in the GCC region.

CONCLUSION

In conclusion, we would like to underline the following key findings of the research:

- 5% of studied institutions opted to use the term “sustainability” and its variations in their mission statements.
- The extended analysis of the vision statements, institutional goals and values widened commitment to sustainable development to 11.5%.
- Mapping of institutional mission statements to sustainable development goals demonstrated reference mostly to SDG 1, SDG 8 and SDG 9 (in the increasing order of frequency). Overall, mission statements of about 26% of the studied institutions could be mapped to these goals.
- The highest number of universities that could be mapped to SDGs was delegated by Qatar (4, or 6.5% of the sample), followed by Kuwait, Bahrain and Saudi Arabia with 3 universities (5% of the sample) each.
- Higher education institutions of GCC are slowly incorporating sustainable development values into their strategic statements.
- Observations made in the study mostly correspond to the results of the latest research.

The further studies can focus on how, if at all, the commitment to sustainable development goals that has been revealed on the strategic level of mission, vision and values statements is implemented in curricula. Another possible research direction could be in comparative studies focusing on Europe, Asia, Africa, South and North America.

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