



University of Babylon Performance in Setting and Infrastructure Indicator through UIGreenMetric 2017-2020. (A comparative study)

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Abstract. The category of setting and infrastructure indicator (SI) is chosen in this comparative study referring to the fact file scores obtained by the University of Babylon during the last four participations into the UI Green Metric Rankings. In general, the scores indicated an escalation in the university performance of the whole six sub-indicators of the setting and infrastructure criterion (SI) from 2017-2020. These results confirmed that the university; by its leadership, staff and students, focused on upgrading and developing its infrastructure for setting a green and safe educational environment for most employees and students. That is to achieve a green campus contributing in the global efforts for achieving the UN agenda of SDGs 2015-2030. Furthermore, all practices of university performance coped with its vision, mission, and objective goals of university strategic plan from 2018-2022, which contained the commitments to set up with most of SDGs, especially related to sustainable cities or campuses. The results also showed an ascending and remarkable progress from 2017 to 2020 with an unexpected regression in 2019, which required the development of an improvement plan to address weaknesses, maintain and enhance strengths, to get good results for university in the 2020 edition of UI GreenMetric Ranking.

Keyword:

Green university, practices, Sustainable Development Goals (SDGs), SI, setting and infrastructure indicator, University of Babylon.

1. Introduction

The world's universities face many great future challenges including the ability of these universities to achieve the goals of sustainable development and a green, clean and safe educational environment.

The University of Babylon is committed, in accordance with its vision, mission, and objectives to creating a green environment for students, faculties and administrative staff [1]. The university is also committed to adopting sustainable development goals by improving curricula that comply with the requirements of the twenty-first century and the fourth industrial revolution in order to achieve educational outcomes capable of solving the problems of the labor market and society and meeting their requirements.

In recent years the university has sought to participate in most of the important international rankings with different orientations according to its quantitative or qualitative criteria including UI Green Metric, which is concerned with the green environment and sustainable development [2].

The university has been able to enter many important international rankings and achieve good results in some others. The university has participated in the UI Green Metric since 2017 and achieved good results in it [3].

We annually analyze the results obtained in this ranking to achieve better results in the future.

This study is a descriptive, analytical and comparative that aims to: -

1. Identify the university's performance in the field of green environment and sustainable development.
2. Determine the standard by which the university obtained good scores for its enhancement or poor scores for its treatment.
3. Formulate a roadmap to improve the university's continuous performance in this criterion in addition to the other ranking criteria.

2. Literature Review

The idea of Ranking the performance of universities began in 1983 when the US news took the initiative to rank the performance of American Universities [4]. The Shanghai (Chinese) Ranking was launched in 2003, the QS, THE Ranking in 2004, and then the rest of the international ranking followed [5]. UI Green Metric was launched in 2010 [2]. The international Ranking Expertise Group was formed in 2009 to monitor and follow up the work of the international Ranking of Universities and to ensure their professionalism and fairness in the ranking of international universities [4].

Although there are many objections to international Rankings it has become a reality that cannot be ignored or dispensed within evaluating the performance of universities, each according to their specialization. Some ranking were concerned with high-level criteria, such as the number of Nobel Prizes and international prizes in the field of specialization, the number of papers published in the international scientific repositories (Scopus & Clarivate), the number of citations for those published papers, research income, educational programs; the teaching and learning strategy, international diversity (foreign students, and foreign faculty members), and the ratio of the students to the academic staff), and the other. Some rankings focus on academic reputation, reputation of employers, and the employment of graduates.

There are also ranking concerned with the goals of the United Nations for sustainable development, and there are other rankings, also concerned with the Ranking of the quality of

universities websites and the other ranking focused on the subjects and the age of universities or on the creative universities by presenting innovative projects in industrial applications, entrepreneurship spirit, ethical values, student mobility and openness, and crisis management and other international rankings.

The results of rankings have become a reflection of the universities interest in adhering to quantitative or qualitative international standards for evaluating their performance and measuring the degree of their compatibility with standards of educating quality and academic accreditation. The international rankings have played an important and distinctive role in raising the reputation of universities nationally and globally.

3. Methodology

The method of work included three stages:

The first stage: the formation of the main and supportive teamwork to study criteria and indicators of UI Green Metrics. And then start collecting data, documents, evidence, and photos from all departments of the university. A Drone plane was also used to photograph the large areas covered with forest, plant and vegetation in the university.

The second stage: included holding workshops and meetings (traditional and virtual) on the importance of international ranking and university's program in improving the educational environment and raising the university's reputation locally and globally.

The third stage: included standardizing, organizing, and arranging data according to ranking standards and indicators, and sending it to the ranking institution UI Green Metrics electronically.

4. The results and discussion

The study is descriptive and comparative to the results of the university of Babylon obtained in the UI GreenMetric ranking of the first standard with all its required indicators and focusing on its six indicators that have limited scores in the ranking since the university's participation in 2017.

In general, Table 1 showed that the university ranked second in Iraq in the years 2017 and 2018, while it obtained the first place in the following two years 2019 and 2020. On the other hand, the university ranked globally (256, 173, 163, and 128) respectively.

Table 1. University of Babylon UI Green Metrics rank locally and globally over the last 4 years

Year	Local rank	Global rank
2017	2	256
2018	2	173
2019	1	163
2020	1	128

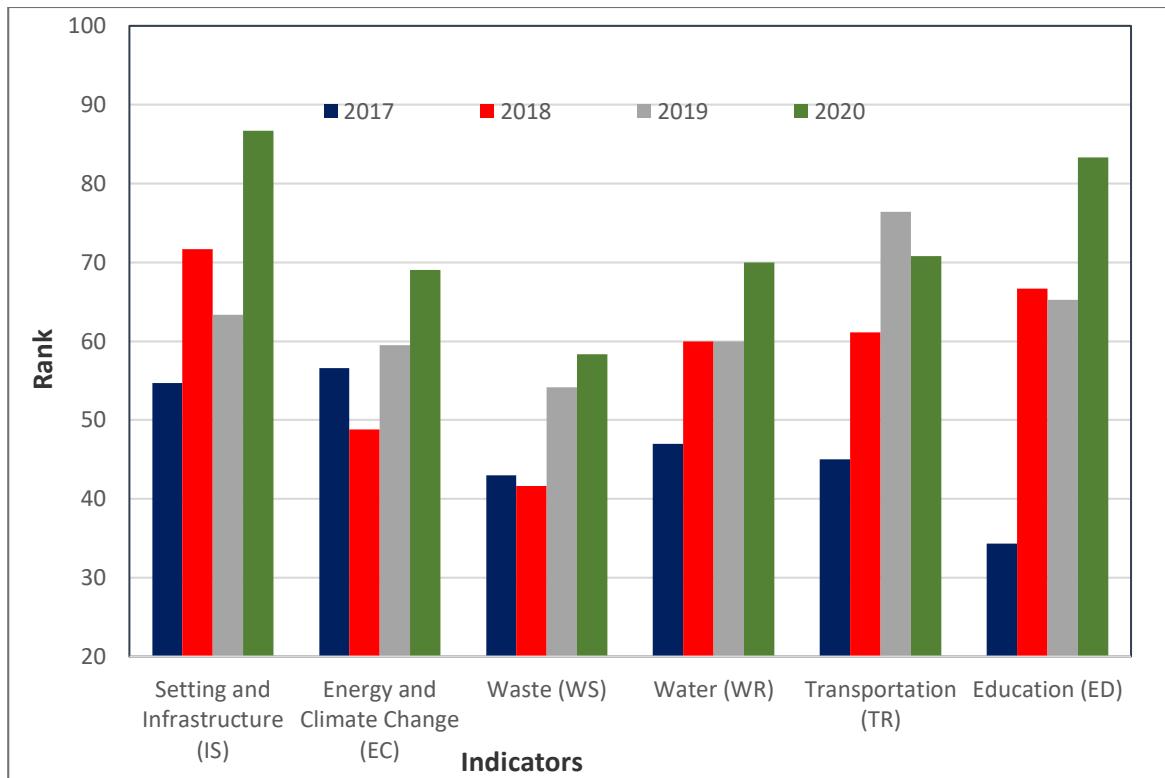


Figure 1. University of Babylon rank for each indicator (2017-2020)

When looking at the results of the University of Babylon in the ranking of the six main standards for the years of participation, we note that there is a continuous and ascending improvement in the overall scores of the percentage rate of each major criterion from 2017 to 2020 with some exceptions (Fig. 1).

The results of the first standard (setting and infrastructure) which included required indicators were fully covered by the university. As for the other, six indicators of it, the ranking made specific grades for each of them; where the rate of their ratios for the last three years available to us are (57.5; 63.2; 72.7) (Fig. 2).

The scores of the first indicator (SI.1, The ratio of open space area towards total area) and the fifth indicator (SI.5: The ratio of open space area divided campus population) showed that the university obtained a full score (300/300) for each of the last three years of UI GreenMetric Ranking (Fig. 2).

The score of the second indicator (SI.2: Area on campus covered in a forest). It was noted that there was no change in the degree, as the university maintained the same degree (150/200) for the same three years (Fig. 2).

The grade of the fourth indicator (SI.4: Area on campus for water absorbance) and the sixth indicator (SI.6: University budget for sustainability effort). They showed a continuous rise and similarly in the score (50, 100, and 200) for the years ending with obtaining the full score in both indicators, which is 200/200 in the 2020 edition (Fig. 2).

The only indicator of those six indicators which is the third indicator (SI.3: Area on campus covered in planted vegetation), showed a decline in 2019 which the degree was zero compared to the year before 2018, in which the degree was (225) and then the university was able to correct the path in 2020 by obtaining a score of 150/300. (Fig.2).

These results clearly indicate that the university of Babylon is moving at a steady and

confident pace in order to achieve its vision, mission, and goals outlined in its strategic plan 2018-2022 [1].

The university has also developed a number of related policies and procedures according to the goals of the United Nations for sustainable development, which required follow-up of their implementation by university leaders to achieve an appropriate and safe educational environment for students and all campus workers [6, 7].

Therefore, the university is serious about adopting and implementing international Ranking standards that are concerned with the application of clean and green environment standards as UI Green Metric or those concerned with sustainable development criteria as THE impact Ranking [8].

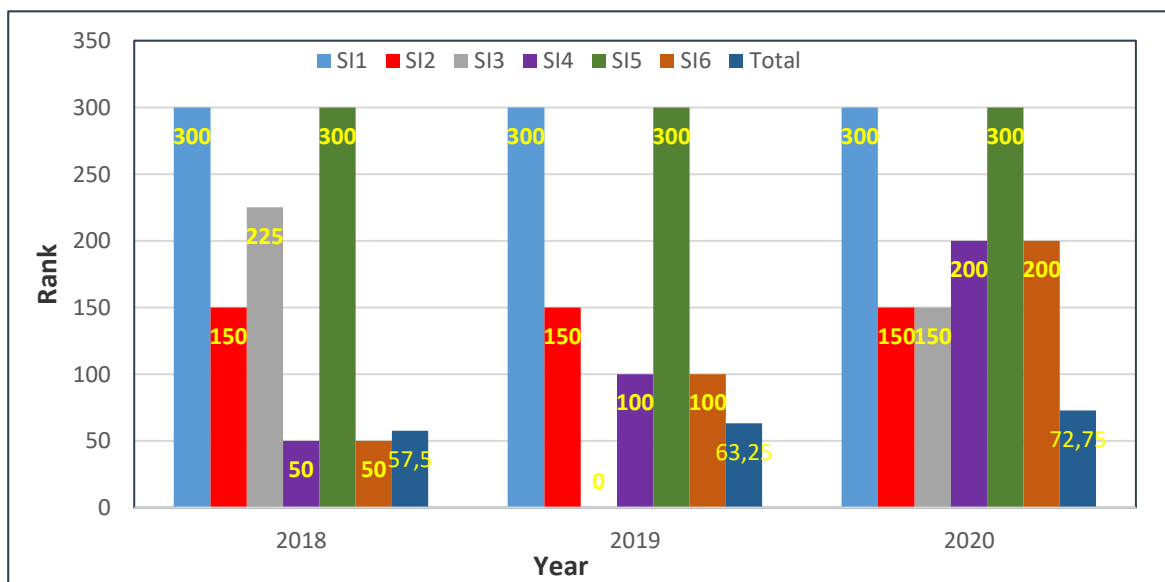


Figure 2. University of Babylon Setting and infrastructure (2017-2020)

The economic and security problems that our country is currently facing have negatively affected the performance of all Iraqi universities, including ours (UOB), due to the lack of financial allocations needed to implement their program in the field of sustainable development, in addition to the other negative effects by the corona pandemic, but with the insistence of the university leadership, faculty members, and voluntary work. It helped a lot in minimizing the effects of these crises, and it is also striving to achieve its strategic plan despite all the difficulties it faces.

5. Conclusions

The paper can be concluded as follows:

1. The university has a strategic plan that deals with a clean and green environment and the sustainable development goals of the United Nations.
2. The University has policies and procedures that are consistent with the goals of sustainable development and a green environment.
3. The university focuses on participating in important international rankings related to the green environment and sustainable development.

4. Despite the difficult economic situation, the university has made clear progress in the UI GreenMetric Ranking and others.

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