LIFE BELOW WATER IN A DOUBLY LANDLOCKED COUNTRY: THE LEAST-ENTERED SDG TABLE WHERE UZBEK UNIVERSITIES PERFORM BEST

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Abstract. *Sustainability-focused university rankings allow institutions to choose which Sustainable Development Goal (SDG) tables to enter, so national participation patterns reveal how systems read both the ranking and their own comparative advantages. Drawing on a complete national participation matrix covering all 50 Uzbek higher education institutions across all 17 SDG tables of the Times Higher Education (THE) Sustainability Impact Ratings 2026, this paper examines an apparent paradox: SDG 14 (Life Below Water) is the least-entered table in the national matrix, with only 9 participants in a doubly landlocked country, yet it carries the best mean rank score of any goal (345 on a midpoint scale) and includes a world rank of 55 achieved by an economics university with a score of 82.7. The paradox dissolves on inspection of the methodology: SDG 14 indicators reward education, policy engagement and stewardship of aquatic ecosystems generally, not marine research alone, which makes the goal accessible to institutions in a country whose defining environmental question is the Aral Sea. The inversion generalises across the matrix: the four goals with the best national mean scores are all in the lower half of the participation distribution, while the two most crowded elective goals carry markedly weaker means. The paper discusses self-selection as a partial explanation, the unrealised potential of Aral-region institutions in this goal, and the implications for SDG-table selection as a strategic decision.*

Keywords: *THE Sustainability Impact Ratings; SDG 14; Aral Sea; university rankings; participation strategy; Uzbekistan*

1. Introduction

The Times Higher Education Sustainability Impact Ratings differ from research-intensive league tables in a structural respect: participation is voluntary and selective. An institution chooses which SDG tables to enter, subject to a minimum eligibility rule [1], and the published tables therefore record reporting choices as much as performance. For a national system, the pattern of those choices is itself evidence: it

shows which goals institutions consider to be within their reach and which they rule out, correctly or not.

This paper examines one cell of that pattern in depth. SDG 14, Life Below Water, would appear to be the least promising goal for Uzbekistan, one of only two doubly landlocked countries in the world. Consistent with that intuition, it is the least-entered table in the national participation matrix for the 2026 edition. Yet the same table contains the single set of results with the best national mean, and one of the country's strongest individual positions, a world rank of 55 with a published score of 82.7, held not by an environmental institute but by an economics university. The purpose of this paper is to explain why the intuition fails, to show that the failure is systematic rather than anecdotal, and to draw the strategic implication for institutions deciding where to report.

The analysis draws on the author's complete national participation matrix for the 2026 edition, compiled from the official published tables and validated in three independent steps, continuing the author's research line on ranking methodologies [8], covering all 50 ranked Uzbek institutions across all 17 SDG tables, with 471 filled observations of 850 possible cells.

The paper speaks to two audiences at once. For the sustainability education community, it offers a concrete case of how indicator design in SDG-oriented assessment opens participation to institutions that a naive geographic reading would exclude, a point with direct relevance to landlocked and water-stressed regions well beyond Central Asia [9], [10]. For the rankings and higher education policy community, it adds a national-level illustration of a mechanism the literature has begun to document internationally: that participation choices in voluntary, goal-selective ratings are driven as much by institutional self-perception as by measured capability, and that the two can diverge sharply [2], [3], [11].

2. Data

For each institution-goal cell the matrix records the published result, which THE reports either as an exact rank position, for institutions in the top 100 of a table, or as a rank band. For comparison across goals, banded results are converted to a midpoint scale (101-200 = 150; 201-300 = 250; 301-400 = 350; 401-600 = 500; 601-800 = 700; 801-1000 = 900; 1001-1500 = 1250; 1501+ = 1700; open bands 401+, 601+ and 801+ = 480, 680 and 900), with exact ranks taken at their own value; lower is better throughout. An empty cell indicates observed non-participation, an interpretation supported by the methodology's explicit selectivity and verified for this matrix through cross-checks against each institution's published profile of its three strongest goals (150 of 150 entries reconciled) and against the methodology's minimum-participation rule.

The SDG 14 table of the 2026 edition contains 561 institutions worldwide. Nine of them are Uzbek, out of 50 ranked nationally [7], making SDG 14 the least-entered goal in the national matrix by a wide margin: the next smallest tables are SDG 15 with 18 and SDG 11 with 20 national participants, while SDG 4 attracts 39.

Two features of the collection design protect the inventory against the most common errors in working with this rating's public data. First, the exact-score regularity: across all 150 verifiable cases in the national matrix, the display of an exact published score corresponded to a top-100 rank position without exception, so exact and banded results can be separated mechanically rather than by judgement. Second, initially uncertain cells were resolved by name search on the rating website rather than by table scrolling, which eliminates the truncation errors that arise when long tables are read visually. The SDG 14 column reported here was additionally reconciled against the total participant count displayed by the site for the country filter.

3. Results

Table 1 lists the nine national participants. The national leader is Tashkent State University of Economics at world rank 55 with a score of 82.7, one of only two positions in the national SDG 14 field expressed as an exact rank or band above 300. Two further institutions sit at 201-300 (Tashkent State Technical University and Termez State University) and one at 101-200 (Termez University of Economics and Services); the remaining five occupy the 401+ band. The national mean rank score of the table is 345, the best of all seventeen goals in the national matrix.

The inversion generalises. The four goals with the best national means, SDG 14 (345), SDG 15 (384), SDG 13 (408) and SDG 2 (417), are all in the lower half of the participation distribution. The two most heavily entered elective goals, SDG 4 with 39 participants and SDG 5 with 36, carry means of 678 and 676 respectively. Where the national system crowds, it performs modestly; where few enter, those few perform comparatively well.

One absence in Table 1 deserves explicit note. Karakalpak State University, the principal university of the Aral Sea region, participates in SDG 14 but occupies the 401+ band, while no other institution of the Aral zone enters the table at all. The goal most directly connected to the region's defining environmental catastrophe is thus represented nationally by institutions from the capital and the south, with the region's own flagship in the lowest reported band.

Table 1. Uzbek institutions in the SDG 14 (Life Below Water) table, THE Sustainability Impact Ratings 2026 (561 participants worldwide).

Rank / band	**Institution**	**Overall band**
55 (score 82.7)	Tashkent State University of Economics	101-200
101-200	Termez University of Economics and Services	101-200
201-300	Tashkent State Technical University	401-600
201-300	Termez State University	401-600
401+	Alfraganus University	601-800
401+	Andijan State Pedagogical Institute	1001-1500
401+	Bukhara State Pedagogical Institute	1500+
401+	Karakalpak State University	1001-1500
401+	Law Enforcement Academy of the Republic of Uzbekistan	801-1000

4. Discussion

Why does a doubly landlocked country perform best precisely where geography seems most prohibitive? The answer lies in the indicator design. The SDG 14 assessment rewards education on aquatic ecosystems, engagement with water stewardship policy, and community outreach on sustainable use of water resources, not marine research capacity alone. For a country whose central environmental question is the desiccation of the Aral Sea, and whose universities teach, research and advise on water across many disciplines, the goal is far more accessible than its name suggests. The economics university at rank 55 is not an anomaly of the metric; it is a demonstration that the metric measures something Uzbek institutions actually do; the accessibility of SDG-focused instruments to non-traditional entrants is itself an emerging theme of the critical literature [12], [13].

Two interpretive cautions bound the finding. First, goal-level means are shaped by self-selection [4]: tables entered by few institutions are entered disproportionately by institutions with something to show, so a favourable mean partly reflects who chose to enter rather than how easy the goal is. The 401+ cluster in Table 1 shows that entry alone guarantees nothing. Second, a single edition cannot distinguish durable comparative advantage from one strong reporting cycle; a panel across editions would resolve this.

With those cautions stated, the strategic reading remains. Forty-one of fifty Uzbek institutions treat SDG 14 as out of reach, apparently on the strength of a geographic intuition that the indicator design does not support. For institutions with genuine water-related teaching, research or outreach, and in Uzbekistan these are many, the least crowded table in the national matrix is also the one where the national mean is best and where a top-100 position has been demonstrated to be attainable. The under-entry of Aral-region institutions in particular represents an unrealised alignment between institutional identity, national environmental agenda and an international visibility instrument [6].

The finding also carries a comparative lesson for other landlocked systems. Central Asia contains five landlocked states, all with significant water agendas centred on transboundary rivers, irrigation economies and the Aral basin, and all with growing participation in sustainability-oriented rankings. If the Uzbek pattern generalises, and the indicator design gives every reason to expect that it does, then SDG 14 represents a systematically under-entered, low-competition visibility channel for the entire region: 561 participants worldwide is among the smallest fields of any goal table, and the marginal institution faces far weaker competition there than in the crowded education and gender tables. Regional cooperation on aquatic-ecosystem curricula, already an object of intergovernmental programmes around the Aral basin, would in this light produce not only substantive benefit but measurable international visibility for its participants.

5. Conclusion

The least-entered SDG table in Uzbekistan's national participation matrix is also the one with the best national results, and the pattern extends beyond a single goal: sparsely entered tables systematically outperform crowded ones in national means. The explanation combines indicator design, which rewards aquatic-ecosystem education and stewardship rather than marine research, with self-selection among entrants. The practical implication is that SDG-table selection deserves the status of an explicit strategic decision informed by indicator content rather than by geographic intuition, and that for water-focused institutions of the Aral region the Life Below Water table is an open, demonstrably winnable field.

Beyond the single goal, the case illustrates a general property of voluntary, goal-selective assessment instruments: they measure not only what institutions do but what institutions believe themselves capable of [5], and the second measurement can lag the first by years. Correcting such perception lags is among the cheapest interventions available to national higher education policy [15], since it requires information rather than investment: making indicator definitions, participation statistics and demonstrated national successes visible to institutional decision-makers. The Aral paradox

documented here is, in that sense, not primarily a story about water; it is a story about how systems learn what they are good at [14].

References

[1] Times Higher Education, Sustainability Impact Ratings Methodology 2026, Version 1.1. London, U.K.: Times Higher Education, 2026.
[2] N. Bautista-Puig, E. Orduna-Malea, and C. Perez-Esparrells, “Enhancing sustainable development goals or promoting universities? An analysis of the Times Higher Education Impact Rankings,” International Journal of Sustainability in Higher Education, vol. 23, no. 8, pp. 211-231, 2022.
[3] V. M. Urbano, M. Arena, G. Azzone, and M. Mayeres, “Sustainable development in higher education: An in-depth analysis of Times Higher Education Impact Rankings," Journal of Cleaner Production, art. no. 145302, 2025.
[4] E. De la Poza, P. Merello, A. Barbera, and A. Celani, “Universities’ reporting on SDGs: Using THE Impact Rankings to model and measure their contribution to sustainability,” Sustainability, vol. 13, no. 4, art. no. 2038, 2021.
[5] W. N. Espeland and M. Sauder, “Rankings and reactivity: How public measures recreate social worlds,” American Journal of Sociology, vol. 113, no. 1, pp. 1-40, 2007.
[6] F. van Vught, "Mission diversity and reputation in higher education," Higher Education Policy, vol. 21, no. 2, pp. 151-174, 2008.
[7] Ministry of Higher Education, Science and Innovation of the Republic of Uzbekistan, “24 higher education institutions of Uzbekistan entered the top-1000 of the THE Sustainability Impact Ratings-2026,” Jun. 25, 2026. [Online]. Available: https://gov.uz/oz/edu/news/view/184051
[8] M. M. Mamajonova, “Decoding international university rankings: A comparative analysis of THE and QS methodologies,” American Journal of Economics and Business Management, vol. 8, no. 5, pp. 2368-2380, 2025.
[9] W. Leal Filho et al., “Sustainable Development Goals and sustainability teaching at universities: Falling behind or getting ahead of the pack?,” Journal of Cleaner Production, vol. 232, pp. 285-294, 2019.
[10] F. Caputo, L. Ligorio, and S. Pizzi, “The contribution of higher education institutions to the SDGs: An evaluation of sustainability reporting practices,” Administrative Sciences, vol. 11, no. 3, art. no. 97, 2021.
[11] B. A. Dickson, “Meaningful measurement of sustainable development or gaming the system? Patterns in submission to Times Higher Education’s Impact Ranking,” Sustainable Development, 2025, doi: 10.1002/sd.70419.

[12] J. Torabian, “Revisiting global university rankings and their indicators in the age of sustainable development,” Sustainability: The Journal of Record, vol. 12, no. 3, pp. 167-172, 2019.
[13] K. K. Weicht and I. T. Chen, “A maturity model for authentic SDG engagement in higher education: An institutional ideal-type framework beyond audit-based rankings,” European Journal of Education, vol. 61, art. no. e70617, 2026.
[14] W. N. Espeland and M. L. Stevens, “A sociology of quantification,” European Journal of Sociology, vol. 49, no. 3, pp. 401-436, 2008.
[15] A. Calderon, "Sustainability rankings: What they are about and how to make them meaningful," Journal of Studies in International Education, vol. 27, no. 4, pp. 674-692, 2023.

