جامعة بيروت العربية
BEIRUT ARAB UNIVERSITY

SUSTAINABLE DEVELOPMENT GOALS

SDG 17: PARTNERSHIPS FOR THE GOALS



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BEIRUT ARAB UNIVERSITY

SDG 17

PARTNERSHIPS FOR THE GOALS

THE IMPACT RANKINGS INDICATOR 17.2.3

International Collaboration on SDG Data

Does the University as a body participate in international collaboration on gathering or measuring data for the SDGs?

Executive assessment

Beirut Arab University should answer YES to Indicator 17.2.3. The evidence demonstrates institutional, international participation in both the infrastructure for SDG data and completed cross-border measurement. The strongest institutional mechanism is BAU's three-year memorandum with the Arab Institute for Training and Research in Statistics in Jordan. The agreement expressly covers improvement of data collection, analysis and dissemination in Arab countries, joint statistical research, capacity building and exchange of technical expertise.

BAU also contributes data to an international SDG collaboration. As the institutional lead for SDG 9 in the International Association of Universities Global Cluster on Higher Education and Research for Sustainable Development, BAU reports and analyses its SDG-related research activity. Its 2025 cluster report quantifies SDG 9 publications and faculty contributions and documents an institutional system in which researchers and postgraduate students identify the SDGs, targets and indicators connected to their work.

Completed international research confirms practical data gathering and measurement. Two 2025 health studies included BAU researchers and international university partners. One gathered and compared survey data from 881 adult athletes in Italy and Lebanon. The other analysed 1,351 adults using body-mass index and dual-energy X-ray absorptiometry to test the accuracy of a widely used health classification. BAU researchers held documented roles in investigation, methodology and formal analysis.

The claim is deliberately bounded. The evidence proves international collaboration on institutional SDG research mapping and on SDG-relevant data collection and measurement. It does not establish that BAU maintains Lebanon's official UN indicator database, nor that every international study produces an official national SDG indicator.

Original evidence BAU–AITRS cooperation agreement | Official university record | 4 September 2025

Original evidence IAU Global HESD Cluster | Official international association | Current international network page

Original evidence BAU SDG 9 activity report to the IAU, 2025 | International cluster report | 2025

Original evidence Italy–Lebanon athlete study | Peer-reviewed open-access research | 4 January 2025

Original evidence International BMI–DXA assessment study | Peer-reviewed open-access research | 29 June 2025

Indicator test	Verified evidence	Assessment
University as a body	The AITRS memorandum was signed institutionally; BAU serves as an institutional lead in the IAU cluster.	Met
International collaboration	Partners include a regional statistical institute in Jordan, a worldwide university network and universities and hospitals in Italy.	Met
Gathering or measuring data	The evidence covers statistical data systems, SDG research-output measurement, a two-country survey and a quantitative diagnostic-classification study.	Met
SDG relevance	Outputs relate directly to SDGs 3, 4, 9 and 17, with sex-disaggregated findings also relevant to SDG 5.	Met
Current evidence	The principal agreement, reports and research outputs date from 2023–2025 and remain current within the review period.	Met

Indicator test	Verified evidence	Assessment
Claim precision	Official SDG research mapping is distinguished from thematic SDG-relevant research and from national UN indicator reporting.	Appropriate

Assessment scope and evidence standard

What qualifies for this indicator

The report treats the indicator as satisfied where three conditions are evidenced: BAU participates institutionally or through formally identified researchers; at least one partner is located outside Lebanon or represents an international network; and the activity includes the collection, analysis, comparison, classification, reporting or dissemination of data that supports understanding or delivery of one or more SDGs.

Evidence is ranked by strength. Formal agreements and international network records establish the institutional mechanism. Published international reports establish SDG-specific measurement and reporting. Peer-reviewed research establishes completed data collection and quantitative analysis. General conferences, rankings and broad partnership statements are not used as the primary basis for the YES response.

Evidence hierarchy

Evidence level	Role in the assessment	Verified example
Formal international mechanism	Establishes continuing organisational commitment to statistical cooperation	BAU–AITRS three-year memorandum
International SDG reporting	Shows systematic measurement and sharing of SDG-aligned institutional data	IAU HESD Cluster and BAU SDG 9 reports
Completed cross-national research	Shows actual data gathering, analysis and comparison	Italy–Lebanon athlete study
International measurement validation	Shows BAU participation in testing a measurement method against a reference standard	BMI compared with DXA in an international research team
Institutional data infrastructure	Shows how BAU embeds SDG tagging and analysis in research management	BAU Research Report 2023–2024

SDG interpretation used in this report

Not every dataset must be an official UN global-indicator series to be relevant. Universities contribute to SDG measurement by producing comparable evidence on health, infrastructure, education and other target areas, and by mapping their research and outputs to SDG targets and indicators. The report therefore distinguishes three categories: official statistical capacity, institutional SDG reporting and SDG-relevant research measurement.

Category	Meaning	Evidence in this report
Statistical capacity	Cooperation that improves how data are collected, analysed and disseminated	AITRS agreement
Institutional SDG measurement	University data mapped and reported against SDGs	IAU cluster reporting and BAU research-output mapping
Thematic SDG measurement	Research data measuring an outcome connected to an SDG target	Athlete health survey and BMI–DXA classification study

Formal regional collaboration in statistics

Three-year agreement with AITRS, Jordan

On 4 September 2025, BAU and the Arab Institute for Training and Research in Statistics signed a three-year memorandum of understanding. The official BAU record states that the agreement seeks to strengthen statistical cooperation across Arab countries and enhance the statistical capacities of Arab states by improving data collection, analysis and dissemination. It also provides for joint specialised research in statistical sciences and in fields relevant to statistical agencies.

The cooperation is operational rather than ceremonial. Its scope includes joint training courses, workshops and conferences; exchange of technical and administrative expertise; publication of research and studies; development of joint strategies and plans; and periodic evaluation of implementation. These elements create a regional mechanism through which methods, competencies and evidence can be shared and improved.

AITRS describes its mission as supporting Arab statistical offices through training, publications, research programmes and consultations. This independent institutional description confirms that BAU's partner is a specialist regional statistics organisation and not merely a general education provider.

Original evidence BAU official record of the AITRS agreement | Official university record | 4 September 2025

Original evidence Arab Institute for Training and Research in Statistics | Official partner record | Current institutional page

Cooperation Agreement between Beirut Arab University and the Arab Institute for Training and Research in Statistics Jordan



Beirut Arab University, represented by its President, Professor Wael Nabil Abdel Salam, signed a three-year Memorandum of Understanding with the Arab Institute for Training and Research in Statistics in the Hashemite Kingdom of Jordan, represented by its Director General, Dr. Ziad Abdullah. The agreement aims to strengthen academic, research, and training cooperation in the field of statistics and related sciences across Arab countries, while addressing the regional need for specialized trainers in statistics and its various branches.

The memorandum also outlines the commitment to enhancing statistical capacities in Arab states by improving data collection, analysis, and dissemination. This will be achieved through joint efforts in conducting specialized research in statistical sciences and fields relevant to the work of statistical agencies, as well as by designing joint training programs, organizing workshops, conferences, and training sessions.

Furthermore, the agreement provides for the exchange of technical and administrative expertise, the publication of research findings in print and electronic journals, and the development of joint strategies and plans with periodic evaluations of the effectiveness of this collaboration.

Arab Institute for Training and Research in Statistic

Brief History

The Institute was initially founded in the sixties by an initiative from UNDP as a regional center for training on agricultural statistics in the Arab Region. In 1971, the Institute's interests expanded to include all statistical areas (Ref. Document No. REM/71/174/D/01/12) and named the "Regional Institute for Training and Research in Statistics for the Near East". The Institute was based in Baghdad-Iraq with membership of all Arab countries and few regional ones (Pakistan, Iran, Afghanistan and Cyprus).

In April, 1973, and based on satisfactory achievements of phase I, the Board of Trustees expressed its intention to have the Institute deal with all type of statistics by the end of phase I in 1974. In summer of 1973, a committee from the UN, FAO and UNDP carried out an evaluation for phase I and submitted suggestions for phase II (Project No. REM/73/003//01/01). In its meeting in Baghdad on April 30, 1977, the Board of Trustees decided to change the institute name to the "Arab Institute for Training and Research in Statistics" (AITRS) to serve only the Arab countries.

Objectives

Generally, AITRS aims to contribute to the implementation of comprehensive socioeconomic development in the region by promoting opportunities for the formulation of better development policies through building the capacities of the statistical systems in the Arab Countries to carry out their development duties at the national and regional level. The specific objectives can be summarized as follows:

- Work with the Arab Statistical Offices to enhance their capabilities and meet their needs for training and technical assistance in the area of methodologies, concepts and management of the official statistics work.
- Develop and implement statistical research and studies programs that are related to the interests of the Arab statistical offices and can serve their needs.
- Raise awareness of statistical work through participating in or organizing relevant seminars or conferences at various levels.

Activities

Since its establishment in 1997, AITRS has made available training services at the central and local level for all Arab countries in the area of demographic and socioeconomic statistics; sampling; computer usage; and databases. Every year, AITRS implements an advanced one academic year program in applied and population statistics for college graduates where graduates obtain a high diploma in applied and population statistics at the end of such program.

AITRS also organizes seminars to discuss various important statistical topics and provides technical consultancies to the Arab statistical offices upon their request for developing statistical work.

In addition, AITRS attends regional and international conferences, seminars and meetings and conducts researches and studies.

AITRS also offers annual fellowships to Arab statisticians to get high diploma or master degree in statistics and related fields.

It is worth mentioning, that AITRS policies and annual work plans are endorsed by its Board of Trustees that is constituted of head of the Arab Statistical Offices and AITRS Director General. Representatives of Arab and international organizations usually attend the Board of Trustees meetings.

Pillars of AITRS Activities

1. Making sure that its activities are stemmed from the actual needs of the Arab statistical offices on one hand and being internally coordinated and complementary on the other.
2. Upgrading the capabilities and skills of employees at the Arab statistical offices in all statistical areas and specialties in relation to international standards.
3. The mode of training is based on:
    1. Organizing central short training courses at AITRS host country through physical attendance of trainees or through e-courses.
    2. Organizing or assisting in organizing local training courses upon requests from the Arab statistical offices and in accordance to AITRS regulations.
    3. Offering long-term training opportunities (nine months) through a high diploma or fellowships program.
4. Paying attention to technical consultancies while covering various statistical areas.
5. Strengthening research through:
    1. Focusing on field and applied statistical researches.
    2. Addressing hot issues that are regionally and internationally discussed with focus on the new measurement methods.
    3. Developing means that can help apply the international methodologies within the framework of encouraging mutual Arab statistical work.
6. Promoting the new technologies in statistical work.
7. Pursuing the support of cooperation and coordination relationship with Arab, regional and international organizations to serve AITRS objectives and activities.





Agreement component	Data function	SDG contribution
Data collection	Improves the capacity and methods used to obtain statistical evidence	Supports the evidence base needed across all SDGs
Analysis	Builds the ability to interpret and compare collected information	Supports diagnosis, target setting and evaluation
Dissemination	Improves the communication and availability of statistical findings	Supports accountability and knowledge exchange
Joint research	Creates shared studies in statistics and fields relevant to statistical agencies	Produces comparable regional knowledge
Training and expertise exchange	Develops human and institutional capacity	Contributes to SDGs 4 and 17
Periodic evaluation	Provides a mechanism to review implementation	Supports learning and adaptive management

Evidential significance and boundary

This agreement is the strongest evidence of a formal international mechanism dedicated specifically to statistical data. It establishes BAU's organisational commitment and a route for regional work on collection, analysis and dissemination. The published source does not yet identify a completed joint SDG dataset arising from the agreement; accordingly, the memorandum is presented as an active collaboration framework, while completed outputs are evidenced separately below.

International SDG research measurement through the IAU

BAU as the institutional lead for SDG 9

The International Association of Universities' Global Cluster on Higher Education and Research for Sustainable Development is a consortium of universities working internationally on the 2030 Agenda. The cluster assigns an institutional lead and supporting universities to each SDG, enabling members to share practices, report activity and develop joint initiatives. BAU is identified by the IAU and by the University as the lead institution for SDG 9: Industry, Innovation and Infrastructure.

Original evidence IAU Global HESD Cluster and institutional leads | Official IAU record | Current international network page

Original evidence BAU SDG 9 cluster role | Official university record | Current university page

Global Cluster on HESD

Global Cluster on HESD



Launched in 2018, the IAU Cluster on HESD promotes the role of higher education institutions in building more sustainable societies. It is a consortium of IAU Member universities from all parts of the world, working in collaboration to develop existing and new exciting initiatives to achieve the Sustainable Development Goals (SDGs) adopted by all United Nations Member States in the framework of the 2030 Agenda for Sustainable Development.

The Cluster encourages a holistic approach to the SDGs, promoting the whole institution approach, where institutions aim to embed sustainable development in their strategic planning, academic and organizational work.

Discover more about the work of the Cluster the latest activity report (2025-2026).

How do Cluster Members work together?

Each of the 17 Sustainable Development Goals is assigned an institutional team leader, joined by a group of Satellite Universities. The IAU is responsible for leading the work on SDG 17 - Partnerships for the goals. The full list of Cluster Members can be found here.

Peer-to-peer learning amongst the HESD Cluster sparks new ideas and creativity among the Members of the Cluster and encourages other universities to enhance their performance towards achieving a more sustainable future. The Cluster helps generate joint and collaborative projects and other initiatives.

Cluster Meetings

The IAU, as Cluster Coordinator and lead for SDG 17: Partnerships for the Goals, regularly convenes meetings with the subclusters. These meetings may be held exclusively for members of a single subcluster or bring together representatives from all subclusters, and take place either virtually or in person.

The most recent in-person Cluster meeting was held in Carthage, Tunisia, in April 2026. Learn more about the meeting here and read the resulting position paper: *Building Global Partnerships for Sustainable Development: Higher Education and the Road Ahead to 2030*.

Cluster Leads



SDG 1: No Poverty: University of Ghana, Ghana
SDG 2: Zero Hunger: Antonio Nariño University, Colombia
SDG 3: Good Health and Well-Being: Western Sydney University, Australia
SDG 4: Quality Education: York University, Canada
SDG 5: Gender Equality: University of Bologna, Italy
SDG 6: Clean Water and Sanitation: University de la Manouba, Tunisia
SDG 7: Affordable and Clean Energy: Assam Don Bosco University, India
SDG 8: Decent Work and Economic Growth: University of Gothenburg, Sweden
SDG 9: Industry, Innovation and Infrastructure: Beirut Arab University, Lebanon
SDG 10: Reduced Inequalities: Catholic University of Lille, France
SDG 11: Sustainable Cities and Communities: Siam University, Thailand
SDG 12: Responsible Consumption and Production: University of Regina and Luther College, Canada
SDG 13: Climate Action: University of the West Indies, Jamaica/Caribbean
SDG 14: Life Below Water: University of Bergen, Norway
SDG 15: Life on Land: University of Costa Rica, Costa Rica
SDG 16: Peace, Justice and Strong Institutions: University of Nairobi, Kenya
SDG 17: Partnerships for the Goals: International Association of Universities (IAU)

BAU SDG Home



The International Association of Universities IAU has launched a global cluster on Higher Education and Research for Sustainable Development (HSED) to advocate for the Key role that Higher education institutions play in achieving agenda 2030. The global endeavour directly engages universities in addressing all 17 sustainable development goals SDGs.

The IAU HESD cluster consist of 16 lead universities, one for each SDG; IAU leads the work on SDG 17th goal on "Global Partnership". The Lead universities, which are based in all world regions, will work with satellite universities to advance on a particular SDG, all the while ensuring synergies among all goals.

The cluster aims to promote SDGs and Agenda 2030 as well to address the use of SDGs through Higher Education as holistic institution approach. Thus Beirut Arab University strives to help young generations to mobilize and take a part in this global change.

BAU was selected to represent and lead SDG 9 Industry, innovation and infrastructure. Which aims mainly to promote inclusive and sustainable industrialization, enhance scientific research, and support economic development and human well-being, with a focus on affordable and equitable access for all.

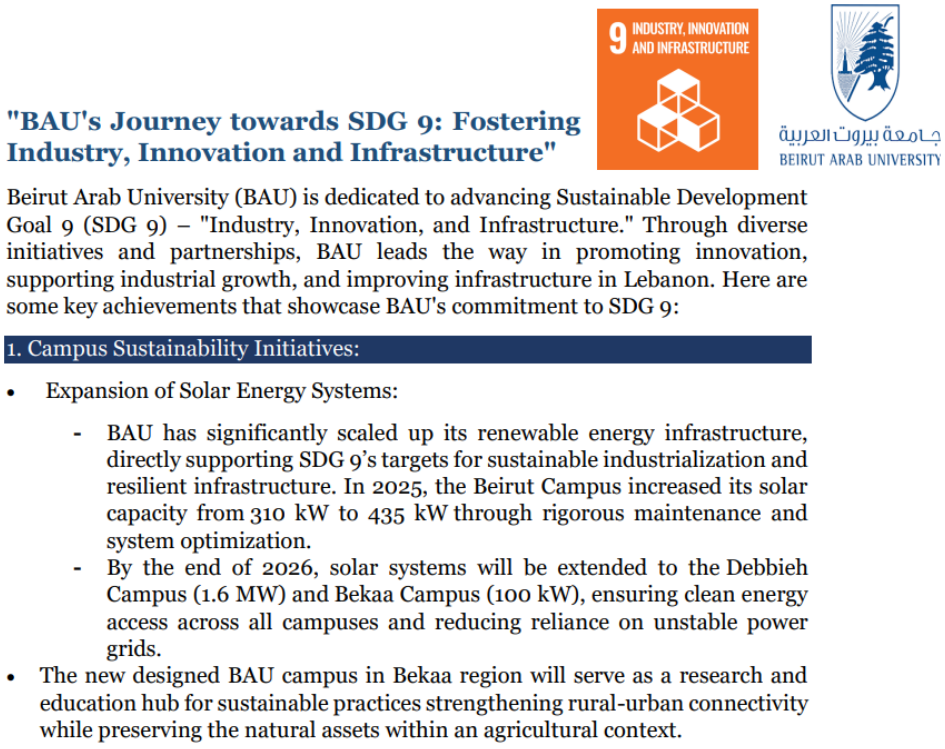
It's worth mentioning that the University has developed its strategy 2007-2012 and carried on for the years 2013-2020 focusing on research excellence, innovation, and international relations. Grounding on these strategic areas BAU joined the Global Compact Network Lebanon GCNL that was launched in 2015 and one further step with joining IAU- Cluster in 2019.

Measured outputs in the 2025 international cluster report

BAU's 2025 report to the IAU cluster contains measurable institutional evidence rather than only narrative participation. BAU reported that it had gathered data on research supporting SDG 9. For the 2024–2025 academic year, 35% of publications across the principal contributing faculties were classified as SDG 9-related, and the Faculty of Engineering accounted for 60% of the University's SDG 9 research output.

The report also documents changes to the data system used to produce and improve these measurements. BAU's publication-submission form asks researchers to identify the SDGs connected to their work; research subthemes were revised to improve SDG alignment; and postgraduate theses are systematically linked to a selected SDG, its targets and relevant indicators. This creates a repeatable process for collecting SDG metadata rather than relying on retrospective description alone.

Original evidence BAU SDG 9 activity report submitted through the IAU cluster | International cluster report | 2025



"BAU's Journey towards SDG 9: Fostering Industry, Innovation and Infrastructure"

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

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Beirut Arab University (BAU) is dedicated to advancing Sustainable Development Goal 9 (SDG 9) – "Industry, Innovation, and Infrastructure." Through diverse initiatives and partnerships, BAU leads the way in promoting innovation, supporting industrial growth, and improving infrastructure in Lebanon. Here are some key achievements that showcase BAU's commitment to SDG 9:

1. Campus Sustainability Initiatives:

- Expansion of Solar Energy Systems:
  - BAU has significantly scaled up its renewable energy infrastructure, directly supporting SDG 9's targets for sustainable industrialization and resilient infrastructure. In 2025, the Beirut Campus increased its solar capacity from 310 kW to 435 kW through rigorous maintenance and system optimization.
  - By the end of 2026, solar systems will be extended to the Debbieh Campus (1.6 MW) and Bekaa Campus (100 kW), ensuring clean energy access across all campuses and reducing reliance on unstable power grids.
- The new designed BAU campus in Bekaa region will serve as a research and education hub for sustainable practices strengthening rural-urban connectivity while preserving the natural assets within an agricultural context.

- LED Lighting Upgrade for Energy Efficiency:
    - As part of its commitment to sustainable infrastructure (SDG 9), BAU has replaced 15% to 40% of conventional lighting with LED systems at the Beirut Campus, with plans to reach 80% coverage by end-2026. This initiative enhances energy efficiency, cuts operational costs, and reduces the university's carbon footprint.
- Artificial Lake for Water Conservation:
    - The excavated artificial lake on the Debbieh Campus stores rainwater for irrigation, addressing water scarcity while promoting sustainable land use (linked to SDG 9's infrastructure resilience goals).
- Beehives for Biodiversity:
    - The installed beehives on the Debbieh Campus support pollination and local ecosystems, aligning with SDG 9's emphasis on environmentally sound industrialization.

Therefore, key SDG 9 Contributions can be demonstrated as:

- Renewable Energy Infrastructure: Solar expansions and LED upgrades demonstrate BAU's investment in clean energy technologies (SDG 9.4).
- Resilient Campus Systems: Rainwater harvesting and energy-efficient lighting reflect climate-resilient infrastructure (SDG 9.1).
- Innovation in Sustainability: Projects like solar energy scaling and smart lighting exemplify applied technological innovation (SDG 9.5).

These initiatives showcase BAU's leadership in translating SDG 9 into actionable, measurable outcomes for sustainable development.

2. Research and Innovation for Sustainable Development:

Through the ongoing refinement of our strategy and platform, we have successfully gathered data on research that supports SDG 9, as outlined below:

2.1- Research Driving Industrial Innovation

Beirut Arab University has demonstrated significant commitment to advancing SDG 9 through impactful research and practical applications during the 2024-2025 academic year.

The university's research portfolio shows strong engagement with industrial innovation, with SDG 9-related work accounting for **35%** of total publications across key faculties. The Faculty of Engineering leads this effort, contributing **60%** of all SDG 9 research output, while the Faculties Science, Business Administration, and Health Sciences provide important complementary contributions as well.

2.2- Practical Research with Direct Industry Impact

A compelling example of BAU's practical work comes from the Faculty of Health Sciences, where researchers partnered with the Ministry of Economy and Trade to conduct a market study on tomato paste adulteration. This rigorous investigation analyzed local and imported products, developed new testing methodologies, and established quality benchmarks that are now informing national food safety standards. The project exemplifies BAU's ability to translate academic research into tangible industry benefits.

2.3- Fostering Innovation Through Strategic Partnerships

The university actively cultivates innovation through programs like the LIRA Innovation Program 2025, which connects researchers with EU funding opportunities to develop solutions for Lebanon's agricultural and healthcare sectors. This initiative reflects BAU's strategic focus on bridging academic research

with market needs, with current participation from 18 faculty researchers exploring 32 potential projects.

2.4- Research Output Driving Sustainable Development

Research output reveals particular strengths in digital transformation and smart infrastructure. Engineering disciplines show especially strong alignment, with 60% of their total publications addressing SDG 9 objectives. These scholarly contributions, combined with practical industry collaborations, position BAU as a key driver of sustainable industrialization in Lebanon, effectively supporting national progress toward SDG 9's goals of resilient infrastructure, inclusive industrialization, and technological innovation.

Measured element	Reported result or method	Why it matters
SDG 9 research share	35% of publications across key contributing faculties were reported as SDG 9-related in 2024–2025	Quantifies the scale of SDG-aligned research
Faculty contribution	Engineering produced 60% of the University's reported SDG 9 research output	Identifies where institutional capacity is concentrated
Publication metadata	Researchers identify associated SDGs when submitting publications	Creates structured, reusable SDG data
Research taxonomy	Research subthemes were revised to align more clearly with SDGs	Improves consistency of classification
Postgraduate research	Theses are linked to a selected SDG, targets and key indicators	Connects student research to measurable SDG frameworks

Continuity of international reporting

The 2025 report is not an isolated submission. BAU also filed an SDG 9 activity report to the IAU cluster in April 2023, describing research mapping and the University's role as cluster lead. In addition, the IAU published BAU's Research Report on the SDGs 2023–2024 through its international platform. These records demonstrate continuity in BAU's production and international dissemination of SDG-aligned institutional information.

Original evidence BAU SDG 9 report to the IAU cluster | International cluster report | 17 April 2023

Original evidence IAU publication of BAU's Research Report on the SDGs 2023–2024 | Official IAU record | 2024

Original evidence BAU Research Report 2023–2024 | Official university report | 2024

Activity Report submitted on the 17th of April 2023 for SDG 9: Industry, Innovation, and Infrastructure, within the IAU HESD Cluster

***Activity Report submitted on the 17th of April 2023 for SDG 9:* Industry, Innovation, and Infrastructure,**

within the IAU HESD Cluster

Lead: Beirut Arab University (BAU), Lebanon

This report highlights the main achievements of Beirut Arab University during 2022/2023 in addressing SDGs in general and in promoting and leading SDG 9 in particular. BAU participated in The Impact Ranking which assesses Universities against the United Nations' Sustainable Development Goals (SDGs). BAU is delighted to be ranked first in Lebanon on Quality Education, as its aim is to provide inclusive education quality and empower our community with education, knowledge, and lifelong learning opportunities. This ranking is based on a global performance indicator which demonstrates how BAU continues to embraces the United Nations' SDGs within its strategy and is keen to continue aligning its research themes with these SDGs to guide BAU's research production.

The below paragraph focused on how BAU is implementing SDGs within the university strategy reflecting on SDG9, by integrating SDG9 into the university courses, fostering innovation and entrepreneurship, and mapping research to the SDG9, and strengthening local and global partnerships for SDG9.

BAU continues its accomplishments on five levels:

1. Addressing SDG 9 through **Education**

SDG9 is mapped and integrated within undergraduate and graduate courses. As mentioned above, Beirut Arab University ranked First in Lebanon and Eleventh in the Arab World According to Times Higher Education Arab University Rankings (29/11/2022). https://www.bau.edu.lb/First-in-Lebanon

BAU, the Faculty of Architecture - Design and Built Environment has been participating in designing and coordinating a Massive Open Online Course (MOOC) entitled "Healthy Urban Systems" in the University of Lausanne. BAU has been preparing this MOOC Course on "Healthy Urban Systems" with the International Science Council (ISC), International Society for Urban Health (ISUH), World Health Organization (WHO) and about 25 other professionals and practitioners, and organizations invited and supported by University of Lausanne (UNIL) using "Coursera" platform. https://www.bau.edu.lb/Public-Relations/News/BAU-the-Faculty-of-Architecture-Design-and-Built-Environment-participated-in-designing-and-coordinating-a-MOOC

The Faculty of Health Sciences at BAU presented by Dr. Leila Itani, Assistant Professor at the Nutrition & Dietetics Department delivered a lecture on the 8th of April 2022 entitled "Sustainable Healthy Dietary Patterns". This participation was part of 8 modules offered through the educational activities of the series of SDGs Courses organized by the university of Pavia /Italy for Spring 2021-2022 (https://sites.google.com/unipv.it/unipv-sdgs-courses/nutrition).

Dr Osama Omar from the Faculty of Architecture participated in MED TEST III - Mainstreaming RECP and sustainability principles in industrial zones Introductory training on Eco-Industrial Parks.

2. Addressing SDG 9 through **Research**

The Faculty of Architecture - Design and Built Environment organized the 10th international scientific conference (ASCAAD2022) entitled “Hybrid Spaces of the Metaverse - Architecture in the Age of the Metaverse: Opportunities and Potentials” in partnership with the Arab Society for Computer Aided Architectural Design (ASCAAD). The conference aimed to provide an in-depth insight on the future of architecture in the age of the Metaverse by discussing a range of topics related to artificial intelligence, information management, parametric design, digital manufacturing, real and virtual environments, computer design theory, and hybrid cities. The conference also intended to find practical solutions for the emerging issues in the discussed matters, which could benefit a large number of researchers, architects, design professors and consulting firms working in the fields of planning and the construction industry. The number of researchers participating in the conference exceeded 100 researchers from the Middle East, Europe, Asia, North America, South America and Australia. https://www.bau.edu.lb/Public-Relations/News/Hybrid-Spaces-of-The-Metaverse-Architecture-in-the-Age-of-the-Metaverse-Opportunities-and-Potentials

The Faculty of Architecture Dean Prof. Ibtihal Y. El-Bastawissi presenting SDG9 at BAU has collaborated with faculty staff member Dr Osama Omar on writing a chapter in a book focusing on SDGs in Higher Education entitled the following: Bringing the SDGs to life by 2030: Best Practices in Higher Education within the Middle East Region, Book series "SDGs in Africa and the Middle East Region" edited by Prof. Walter Leal Filho, Springer Nature Switzerland AG, Gewerbestrasse 11, 6330 Cham, Switzerland.

A project proposal entitled Urban acupuncture “A strategy of catalytic interventions” was accepted by DAAD program for funding during the period from March 2023 – December 2025. This project is a collaborative work between the “Faculty of Architecture, Urban Planning and Landscape Planning - Universität Kassel”, “Faculty of Fine Arts – Alexandria University”, “Faculty of Architecture-Design and Built Environment – BAU” and “College of Engineering, Architectural Engineering Department - University of Babylon”. This project will be implemented on four case studies from Germany, Egypt, Lebanon, and Iraq.

In collaboration with Elsevier's Digital Commons Platform, BAU continues to publish six scholarly journals and books supported by the university. Moreover, BAU developed its own digital platform to map how BAU activities align with SDG9 and its indicators by organizing them into 4 categories: Research Projects & Initiatives, Published Articles, Conferences & Workshops, and Patents to the BAU database. https://www.bau.edu.lb/SDG9/Mapping-Tool

3. Engaging with **Community**
    a) Within the framework of "Light Your Street" initiative, BAU in cooperation with Rebirth Beirut and Medco, under the slogan "From Our Energy...To Our Region", lightened the streets surrounding BAU Beirut Campus of 18,500 square meters and 1,040 linear meters. 21 February 2023. https://www.bau.edu.lb/Public-Relations/News/From-Our-Energy-To-Our-Region
    b) Beirut **Governor** praised the efforts accomplished by the Faculty of Architecture at BAU for the redevelopment of Tariq Al-Jadida and Cola Region and expressed his willingness to implement the project staring with the first phase of improving the traffic circulation in this urban area.
    c) **Strengthening the Regional Networking** - Since February 2021, the dean Prof. Ibtihal Y. El-Bastawissi, representing BAU, has been selected to be the Director of the Scientific Chair for Creative Sustainability at the Secretariat of the Executive Council and the General Conference / National Committees Section, Affiliated to the Arab League Educational, Cultural and Scientific Organization - ALECSO.

https://www.bau.edu.lb/Public-Relations/News/Dean-of-the-Faculty-of-Architecture-Design-and-Built-Environment-representing-BAU

d) **Heritage Digital Documentation** – BAU is considered one of the first Lebanese universities that had digitally documented historical sites using innovative tools, such as 3D Scanner and VR technology. A square in Old Saida – Bab El Saray square had been 3D scanned through a specialized team from Faculty of Architecture, BAU.

4. Addressing SDG9 by activating the **BAU Incubator**

BAU hosted a national exploitation seminar at Debbieh campus within the framework of the Erasmus+ CBHE ELEGANT Project "Enhancing Teaching, Learning and Graduate Employability through University-Enterprise Cooperation" on March 7th, 2023. The seminar covered the dissemination of the project's achievements and celebrated the launching of Innovation HUB, which is directly related to the ELEGANT project. The seminar included discussions on all the topics presented to reach the project's desired goals, which aim to enhance university enterprise cooperation in Lebanon in order to improve the teaching and learning experience of students and enhance the employability of graduates.
https://www.bau.edu.lb/Public-Relations/News/Erasmusplus-ELEGANT-Project-at-BAU
https://www.bau.edu.lb/SDG9/Innovation-hub

5. Addressing and Mapping SDG9 through **Operations & Governance**

BAU Strategy (2020-2030) has addressed UN SDGs in general and SDG 9 in particular through disseminating SDG 9 to BAU community, integrating the related SDG 9 to the University activities, and providing opportunities to students to participate in SDG 9 related activities and community projects.

Beirut Arab University Research Report on SDGs 2023-24

Beirut Arab University (BAU) has consistently demonstrated a strong commitment to research excellence, earning its place as a leading academic institution in Lebanon and the region. In the 2023–2024 academic year, the university achieved meaningful advancements in expanding its research capabilities and promoting innovation across a wide range of disciplines.

Notably, BAU introduced new subthemes within its existing research framework, underscoring its adaptability to emerging trends and technological progress.

The integration of artificial intelligence into multiple research domains has been particularly impactful, driving forward innovative methodologies and reinforcing BAU's position at the cutting edge of academic research. Read the report here



Completed cross-national data gathering: athlete health

Italy–Lebanon study of disordered eating

A peer-reviewed study published in January 2025 investigated disordered-eating risk among adult athletes in Italy and Lebanon. The research team included BAU's Dima Kreidieh and Leila Itani together with researchers from the University of Verona, the University of Modena and Reggio Emilia, Azienda Ospedaliero-Universitaria di Modena and IRCCS Reggio Emilia. The published contributor statement identifies BAU researchers in investigation, methodology and formal analysis roles.

Data were gathered between May and October 2024 using sport-related questions and the validated 26-item Eating Attitudes Test. Following exclusions, the comparative sample contained 881 adult athletes. The design therefore generated a harmonised two-country dataset using a common instrument and allowed researchers to compare prevalence and associated characteristics across national contexts.

The study reported elevated EAT-26 scores in 6.1% of the Italian sample and 21.3% of the Lebanese sample and presented findings by sex. The authors concluded that screening and early intervention are important, especially for groups with higher observed risk. The evidence contributes to SDG 3 through measurement of health-related risk and to SDG 5 through sex-disaggregated analysis.

Original evidence Original peer-reviewed Italy–Lebanon athlete study | Publisher record | 4 January 2025

Original evidence Permanent open-access copy in PubMed Central | US National Library of Medicine | 2025

The Prevalence of and Factors Associated with Disordered Eating Among Adult Athletes in Italy and Lebanon

Abstract

Background/Objectives: Disordered eating (DE) is a wide-spectrum condition, represented by altered eating patterns, behaviors, and attitudes aimed at controlling food intake, body weight, and shape, which does not necessarily satisfy the diagnostic criteria for an eating disorder of clinical severity. DE is frequently reported among athletes, but its prevalence and associated factors have not been fully elucidated. In this study, we intended to assess the prevalence of DE among adult athletes from different sports disciplines in Italy and Lebanon and to identify the factors associated with DE. Methods. A validated questionnaire (Eating Attitude Test [EAT-26]) was administered to determine the prevalence of DE, which was indicated by a score ≥ 17. Sport-related information, such as the type of sport, level of competition, training volume, and years of athletic experience, was also collected. Results: Among the total sample of 881 athletes, 78 were identified as having DE, with a prevalence of 6.1% (7.8% of females and 4.9% of males) in Italian athletes and 21.3% (27.3% of females and 17.0% of males) in Lebanese athletes. In addition, among male athletes, the risk of having DE was more than threefold in those practicing weightlifting or bodybuilding (odds ratio [OR] = 3.23; 95% confidence interval [CI] = 1.03–10.08, and $p < 0.05$), while females with more athletic experience had almost 10% less risk of having DE (OR = 0.92; 95%CI = 0.86–0.98, and $p < 0.05$). Conclusions: DE is a prevalent condition among athletes. Therefore, it is crucial that sports federations and committees consider adopting standardized practical guidelines that focus on routinely screening for the early identification of DE in this population and implementing strategies for its timely management. In the future, longitudinal studies are also needed to clarify the impact of DE on athletes' clinical condition as well as their physical fitness and sports performance.

Indicator element	Documented evidence
International partnership	BAU researchers worked with universities, a university hospital and a research institute in Italy.
Data gathering	A common validated questionnaire and sport-related variables were collected in Italy and Lebanon.

Indicator element	Documented evidence
Measurement	Researchers calculated prevalence and compared results by country and sex.
BAU contribution	BAU authors held investigation, methodology and formal-analysis roles; BAU ethical approval is recorded.
SDG value	The study provides evidence for prevention, screening and wellbeing under SDG 3 and offers sex-disaggregated insight relevant to SDG 5.

Claim boundary

This study measures an SDG-relevant health outcome and demonstrates completed international data gathering. It is not presented as Lebanon's official measure for a UN global indicator. Its value for Indicator 17.2.3 is the documented international method, dataset, comparison and BAU analytical role.

International measurement validation: BMI and DXA

Testing the accuracy of a common health classification

A second peer-reviewed study, published in June 2025, assessed whether the World Health Organization body-mass-index classification accurately represents adiposity when compared with dual-energy X-ray absorptiometry. The research team involved the University of Verona, BAU, the University of Modena and Reggio Emilia and associated clinical institutions. BAU researcher Leila Itani is credited with methodology and formal analysis, in addition to writing the original draft.

The study analysed 1,351 adults aged 18–98 years in Northern Italy. Researchers compared BMI categories with body-fat classification derived from DXA and quantified agreement and misclassification. More than one-third of participants were misclassified by BMI. This is international collaboration on measurement quality: the project tests whether a widely used metric accurately identifies the condition it is intended to represent.

The study is relevant to SDG 3 because reliable measurement affects obesity surveillance, risk identification and clinical or public-health decisions. It also illustrates BAU's contribution to international methodological work, not merely access to a foreign dataset. BAU's role is explicitly recorded in the publication's contributor statement.

Original evidence Original peer-reviewed BMI–DXA study | Publisher record | 29 June 2025

Original evidence Permanent open-access copy in PubMed Central | US National Library of Medicine | 2025

Original evidence BAU Faculty of Health Sciences publication record | Official university record | 2024–2025

Original evidence BAU news on the international BMI research | Official university record | 2026

The WHO BMI System Misclassifies Weight Status in Adults from the General Population in North Italy: A DXA-Based Assessment Study (18–98 Years)

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Study at BAU > Faculties > Health Sciences > Research > Publications

List of Publications by Department for the Academic Year The WHO BMI System Misclassifies Weight Status in Adults from the General Population in North Italy: A DXA-Based Assessment Study (18-98 Years)

Abstract

Background/Objectives: The body mass index (BMI) is considered a key method for the classification of individuals' weight status, according to cut-off points proposed by the World Health Organization (WHO); however, the use of this classification is still the subject of debate and criticism. We aimed to evaluate the accuracy of the WHO BMI classification in reflecting true adiposity in the Italian general population. Methods: This cross-sectional study included 1351 adults of mixed gender aged between 18 and 98 years, comprising 19 (1.4%) underweight individuals, 787 (58.3%) normal weight, 354 (26.2%) overweight, and 191 (14.1%) with obesity according to the WHO BMI. After that they were re-categorized according to adiposity based on body fat percentage (BF%) measured by dual-energy X-ray absorptiometry (DXA). The agreement between the two classification systems was tested using the kappa statistic (κ), with the system based on BF% being considered the gold standard. Results: According to the BMI classification, 78.1% of the individuals who were in the normal weight range were correctly classified. However, 53.4% of the overweight group and 68.4% of the underweight group were misclassified according to the BMI, as the majority of those misclassified fell within the normal weight range according to their BF%. Finally, regarding the obesity group, 34% who were classified as having obesity according to the BMI were misclassified, since they were revealed to be only affected by overweight according to adiposity status. Conclusions: Despite the fact that the BMI seems to be reliable in determining body weight status in the normal weight range, over a third of the general population was misclassified, as the current BMI classification appears to inflate the prevalence of underweight, overweight, and obesity among the general population. Accordingly, this may warrant consideration of revising the National Guidelines in Italy related to weight status classification. Healthcare practitioners should be advised not to rely solely on the BMI, and should integrate its use with adiposity measures (i.e., BF%) or alternative surrogate indicators (i.e., waist-based) in routine evaluations, especially in those with a BMI below or above 18.5 kg/m2 or 25 kg/m2.

Journal/Conference Information

nutrients ,DOI: DOI: 10.3390/nu17132162, ISSN: 2072-6643, Volume: 17, Issue: 13, Pages Range: 2162-2175,

BMI paper





Dr. Leila Itani from Beirut Arab University participated in an international scientific study examining the limitations of relying on Body Mass Index (BMI) as a tool for assessing obesity. This study was conducted as part of an international research collaboration led by Dr. Marwan Al-Ghoch from the University of Modena in Italy, with the participation of a distinguished group of researchers specializing in nutrition and public health.

The study revealed that relying on BMI as a sole measure for evaluating obesity may lead to the misclassification of at least one-third of the population. This raises important concerns about its validity and accuracy as a standalone indicator for estimating obesity and its associated health risks.

The study received wide scientific and media attention, being covered by several leading international media outlets, including The Independent, Daily Mail, Sky News, La Repubblica, Medscape, and Daily Mirror, in addition to Al Arabiya, along with more than 70 other media organizations.

The study findings are scheduled to be officially presented at the European Congress on Obesity (ECO 2026), which will be held in Istanbul, Republic of Turkey, from May 12 to May 15, 2026, under the auspices of the European Association for the Study of Obesity (EASO). This conference is considered one of the leading international scientific events in this field.

Measurement feature	Evidence	Significance
Reference comparison	BMI classification was compared with body-fat status measured by DXA	Tests validity rather than assuming accuracy
Sample	1,351 adults aged 18–98 years	Provides a substantial adult dataset
Analytical output	Agreement and misclassification were quantified	Identifies measurement error affecting surveillance
BAU role	Methodology and formal analysis	Confirms substantive participation in measurement design and interpretation
International structure	BAU collaborated with Italian academic and clinical institutions	Demonstrates cross-border expertise and data analysis

How the evidence operates as one institutional system

The evidence forms a coherent chain rather than a collection of unrelated activities. The AITRS agreement develops regional statistical capacity. BAU's IAU cluster role turns institutional research information into internationally shared SDG reporting. Cross-national studies demonstrate that BAU researchers apply common instruments, reference standards and analytical methods to real datasets. Together, these activities cover capacity, collection, classification, analysis, comparison, reporting and dissemination.

Stage	BAU mechanism	Verified output
Build capacity	AITRS partnership	Regional framework for statistical training, research and expertise exchange
Define and classify	SDG-tagged publication and thesis processes	Research linked to SDGs, targets and relevant indicators
Gather	Italy–Lebanon athlete project	Common survey data collected across two countries

Stage	BAU mechanism	Verified output
Measure and test	BMI–DXA research	Quantified agreement and classification error
Aggregate and report	IAU SDG 9 activity reports	Institutional SDG 9 research proportions and faculty contribution
Disseminate internationally	IAU platform and peer-reviewed open-access journals	Reports, methods and findings available to global audiences

SDG coverage

SDG	Contribution demonstrated
SDG 3 — Good Health and Well-being	Cross-national measurement of disordered-eating risk and validation of obesity classification methods
SDG 4 — Quality Education	Statistical training, workshops, postgraduate research alignment and research-capacity development
SDG 5 — Gender Equality	Sex-disaggregated analysis in the athlete-health study
SDG 9 — Industry, Innovation and Infrastructure	BAU's institutional leadership, research mapping and quantitative reporting through the IAU cluster
SDG 17 — Partnerships for the Goals	International institutional agreements, global university-network participation and shared research methods

Participation across the University

The activities operate at several institutional levels. University leadership formalises statistical cooperation through the AITRS memorandum. The Faculty of Engineering leads BAU's SDG 9 cluster activity and contributes the largest reported share of SDG 9 research. The Faculty of Health Sciences supplies methodological and analytical expertise to international studies. Researchers and postgraduate students add SDG metadata to publications and theses. This breadth supports treatment of the evidence as University-level participation rather than a single isolated project.