

Chapter 18

Sustainable Finance for Implementing the Sustainable Development Goals in West Asia

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Abstract

Implementing the 17 Sustainable Development Goals (SDGs) unarguably demands huge financial investments. However, the United Nations has acknowledged the huge financial gap militating against the implementation of the SDGs worldwide, leading experts to question the possibility of complete implementation of the goals by their terminal dateline of 2030. While the bulk of the finance currently outlaid on the SDGs comes from traditional sources including foreign direct investments (FDIs), there is the need to focus more attention on developing and exploiting impact investments that are more suitable for financing development programmes and projects. In this chapter, the SDG implementation profiles of the 12 Arab West Asia countries concerning the five most targeted SDGs were evaluated and sustainable finance issues were discussed. Secondary data were retrieved from World Bank's *DataBank*. The data were descriptively analyzed. Based on the profiles generated, debt relief is put forward as a possible impact investment mechanism suitable for funding the SDGs. Specifically, this chapter recommends that outright cancellation of debts based on the debt-for-SDG swap could serve as some of the impact investments needed to boost the global drive for a developed, peaceful, and just world.

Keywords: Sustainable finance; sustainable development goals; Arab West Asia; financial sustainability; economic development

1. Introduction

Sustainability promotes a simple principle: Satisfy the material needs of the present generation without jeopardizing the chances of coming generations to do the same (United Nations, 1987). Demand for resources to meet societal needs increases with the level of affluence attained by the society as well as its population size, with the latter accounting for the largest increase in global resource exploitation. Every ounce of resource extracted from the earth and used in the provision of goods and services leaves behind several footprints, which have economic, environmental, and social consequences (Liang et al., 2018). Researchers across a multitude of disciplines have grappled with understanding the economic, environmental, and social consequences of humanity's resource footprints (popularly known as the triple bottom line [TBL] of sustainability). In this regard, researchers focus on the interactions among the TBL with special emphasis on their impact on labor practices and natural resource utilization.

The global economy arguably operates on the wheels of exploitation: exploiting people and exploiting the planet Boyd (2022). The human labor employed by corporations and businesses is over-tasked and underpaid (Ahmed et al., 2022), and most of them are excluded from access to finance that would have ensured their equitable participation (Bashir & Qureshi, 2022; Milivojevic et al., 2020; Rai et al., 2019). Also, human activities leave behind costly carbon footprints and environmental degradation (Murshed, 2022; Saqib, 2022), thereby contributing to the current climate change crisis (Zhang et al., 2022). The trend is found in all sectors of the global economy, which makes development not only unsustainable in the long run but also socially unjust and contrary to the globally espoused human rights. Widespread uncertainty concerning stakeholders' financial commitment further compounds matters (Hunjra, Azam, & Al-Faryan, 2022). The need to act to pre-empt catastrophic consequences was clear.

Following decades of activities on addressing the deleterious effects of human and economic activities on the natural environment and human well-being, the United Nations on September 25, 2015 resolved on a development framework of 17 goals consisting of 169 indicators geared toward creating a developed, peaceful, and prosperous world by 2030 (United Nations, 2015). The goals came to be known as SDGs. The number of SDG indicators has been evolving and currently stands at 248, 231 of which are unique, 13 being repeated under three different goals (United Nations, 2022b). Since the debt of the SDG Agenda in 2015, scholars have researched its implementations across the signatory nations and from various perspectives. Several recent reviews (Aly et al., 2022; Bashir & Qureshi, 2022; Clemente-Suárez et al., 2022; Decouttere et al., 2021; Yeh et al., 2022) have shown mixed results, with most scholars agreeing that the 2030 Agenda may not be fulfilled as envisaged. However, the achievement profiles differed considerably across regions and countries, with regions populated by high-income countries (HICs) more likely to achieve more of the 17 SDGs than regions populated by low-income countries (LICs). It is in this regard, and following the cross-regional research example of Hunjra et al. (2023), that the

current study attempts to highlight the implementation profiles of the 12 Arab countries in the Western Asia region.

The Western Asia region is home to some of the world's largest oil-producing countries, especially Saudi Arabia and Iraq. However, oil production and utilization impact the environment in many adverse ways (Gossen & Velichkina, 2006; O'Rourke & Connolly, 2003), thereby placing oil-producing countries on the front regarding the SDGs, especially SDG 13 (McCullough & Murfree, 2021). However, the extant literature on how the Western Asia region commit to the achievement of the SDGs come 2030 is not only scanty (Awdeh & Jomaa, 2022; Taghvaei et al., 2022) but also mostly piecemeal on a country-by-country basis (Osman et al., 2021; Sabeeh et al., 2022), and focusing on just one SDG (Alabed et al., 2021; Sileem & Al-Ayouty, 2022). Also, with the possible exception of Moses et al. (2022), most researchers seldom evaluate the issue of SDG implementation profiles at the regional level. This study, therefore, partly addresses this issue by evaluating the country cum regional SDG implementation profile of five of the most targeted SDGs in the context of the Arab West Asia region.

Specifically, the study aims to evaluate SDG achievement against the backdrop of sustainable finance. This is novel as most of the extant literature studied the implementation of SDGs funded through traditional finance, which may not appropriately align with the long-term TBL-informed goals of the 2030 development agenda. Because of the foregoing, the current study highlights the SDG implementation profiles of the 12 Arab countries of Western Asia and the possible finance source that could be exploited in making the final pushes toward meeting the goals in 2030. Specifically, sought to provide answers to the following research question:

- What is the current level of SDG implementation in the 12 Arab countries of Western Asia?
- What new and impactful funding source could the countries exploit in pushing toward meeting the SDGs in 2030?

2. Literature Review

2.1 Sustainable Development Goals (SDGs)

Moore et al. (2017) synthesized several extant conceptualizations of sustainability and suggest that the term is more appropriately defined as the continuity of some programs or outcomes over some future time horizon that entails consistency in the purpose of stakeholders through maintaining an evolutionary or adaptive attitude to the programs or outcomes. Thus, the 2030 global agenda (known as SDGs) could be seen as exercises in pursuit of sustainability by the global community toward creating environmentally responsible peace and prosperity.

The SDGs are a group of 17 goals (see Fig. 18.1) with global reach crafted to bring about development across the world in terms of global peace, global prosperity, and a safe global environment. In other words, the SDGs are roadmaps for countries to attain sustainable development in the 5Ps area: namely,



Fig. 18.1. The 17 Sustainable Development Goals. *Source:* <https://sdg.iisd.org/sdgs/>.

“People, Planet, Prosperity, Peace and Partnership” (Milivojevic et al., 2020, p. 335). The SDGs were passed in the UN General Assembly in 2015, and are meant to be achieved by the year 2030. Two years after the establishment of the goals in July 2017, a global indicator framework was adopted by the UN General Assembly for measuring the implementation progress of the goals. This framework disaggregates the 17 goals into measurable indicators that countries could use in tracking implementation progress. The indicators have been continuously refined and updated by the Inter-Agency and Expert Group on SDG Indicators (IAEG-SDGs) and approved during the sessions of the UN Statistical Commission. The 53rd Session of September 2022 approved a total of 248 indicators, 231 of which are unique, with 13 being repeated under three different goals (United Nations, 2022b).

2.2 Sustainable Finance

Sustainable finance has been described as a contested concept due to the variety of perspectives from which the concept is treated in academic and practitioner literature (Dimmelmeier, 2021). In this chapter, however, the concept is defined based on the TBL approach to sustainability. Accordingly, sustainable finance is taken to mean development investments that factor in considerations for profit, planet, and people. Sustainable finance entails investments that support green economic activities (such as investments in renewable resources), mitigate the adverse impacts of climate change, and attenuates negative consequences on health and the environment (Rodriguez-Rojas et al., 2022). It is a development finance paradigm that seeks to attain a balanced interplay among economic, social, and environmental factors in the processes of investing and lending achieved through trade-offs between sustainable goals (Schoenmaker & Schramade, 2019). This is consistent with Schoenmaker’s (2017) model of sustainable finance

which envisaged investment decisions that balance the concerns of the triple stakeholder groups (economy, society, and the environment): profit maximization and economic growth, societal well-being and quality of life, and resource conservation and planet fidelity. Achieving this balance is at the heart of sustainable finance, finance for the common good (Newell, 2022).

There are various sources of funds for financing sustainable development (Mawdsley, 2021; United Nations, 2022c). However, the Spectrum of Capital model theoretically classified the sources into three broad groups, as depicted in Fig. 18.2: traditional sources, responsible investments, and philanthropy (Bridges Fund Management, 2015). The traditional sources are driven by the desire to maximize profit and minimize risks for the fund's owners. Examples of this source include international trade (Barros & Martínez-Zarzoso, 2022), foreign direct investment (FDI) (Awdeh & Jomaa, 2022), cross-border bank loans (Gurara et al., 2020), pension funds and insurance companies (Schoenmaker, 2018b), as well as private sources (Sarker & Cadman, 2022). However, using traditional sources of development financing generally lead to heavy debt burdens and very low development deliverables (Chaudhry & Mittal, 2022; World Bank, 2021). Such undesirable potentialities encourage countries to look for new sources of development finance generally classed as responsible investments (Bridges Fund Management, 2015). Thus, the second group of development finance options, the responsible investments group, is further classified into three sub-groups: merely responsible, sustainable, and impact groups, in the increasing order of their concern for holistic development.

The most cost-effective of the three classes of development finance according to the Spectrum of Capital model is the philanthropy class, such as grants that expect no returns on the financial outlays. Family, corporate, and operating foundations (e.g., Ford Foundation, Rockefeller Foundation, MacArthur Foundation, Flora Hewlett Foundation, David and Lucile Packard Foundation, Bill and Melinda Gates Foundation, Citi Foundation, and German Bertelsmann Stiftung) are at the

APPROACH	TRADITIONAL INVESTMENTS	RESPONSIBLE INVESTMENTS				PHILANTHROPY
		RESPONSIBLE	SUSTAINABLE	IMPACT INVESTMENTS		
FOCUS	Financial Only	Negative Screening	ESG Integration	Financial-First	Impact-First	Impact Only
FINANCIAL GOALS	Target competitive risk-adjusted financial returns				Accept low risk-adjusted returns	Accept partial/full capital returns
FEATURES	Manage ESG risks					
	Pursue ESG opportunities					
					Intentionally delivering impact is central to underlying assets/investments	
					Impact investment is measured and reported	
IMP INTENTIONS	May cause harm	Act to avoid harm				
	Benefit all stakeholders			Contribute to solutions		

Fig. 18.2. The Spectrum of Capital as a Framework for Understanding Sustainable Finance. *Source:* Adapted from Bridges Fund Management (2015, p. 3).

forefront in providing development finance as philanthropic grants. However, the combined resources raised through foundations were estimated at just around 1% of global development (Moran & Stone, 2016, p. 300), which is small indeed, but important. Sustainable investments in Europe, assessed based on the Spectrum of Capital model, reveal that 44% fall under negative screening investments, 12% under ESG integration, 19% under impact financial-first, 1% under impact-first, and only 0.4% under philanthropy impact (Schoenmaker, 2018b, p. 7). This suggests that economic consideration still exerts the greatest impact on investment decisions even regarding SDG financing.

3. Theoretical Framework

Three conceptual frameworks collectively underpin this study. They are the TBL (Elkington, 1994) and Schoenmaker's (2017) sustainable finance model, and Folke et al. (2016) SDG Wedding Cake. Coined by Elkington (1994) in connection with his study on the sustainable corporation where environmental concern serves as a global denominator to all economic, political, and social decisions, the TBL encapsulate three performance metrics (economic, social, and environmental) against which investments should be evaluated (Hunjra, Azam, Bruna, et al., 2022). In the context of development economics, these triple metrics stand for profit, people, and the planet, suggesting the integration of the three imperatives in taking investment decisions. Since then, the concept has been used as a framework for explaining the notion of sustainability and sustainable development at institutional, national, and global levels. For example, Dalibozhko and Krakovetskaya (2018) used it in explaining the three pivots of the SDG framework (see Fig. 18.3a).

The TBL concept was also used by Schoenmaker (2017) in developing his sustainable finance model. Schoenmaker (2017) model (see Fig. 18.3b) suggests that concerns of each of the three factors in investment decisions (economic, society, and environment) could be optimized. Thus, the model posits that economic returns and associated risks inherent in each investment decision, driven principally by the profit maximizing motive, should be optimized from the perspective of the economy; that investment decisions always impact the host society and, therefore, such decisions must be optimized society-wise; that the environment is always at the receiving end of economic and societal activities, and thus, investment decisions should equally be optimized *a la* the environment (Schoenmaker, 2018a). However, such optimization could be achievable only when the disparate and often conflicting concerns of the 3 factor-groups, as it were, were balanced against one another. This balancing requires a sort of synthesis of their concerns such that considerations unique to each of the 3 factor-constituencies are not neglected. Folke et al. (2016) SDG Wedding Cake (see Fig. 18.3c) provides a platform for such integration.

A cursory glance may suggest that most of the 17 SDGs align more with the social (people) than the environmental (planet) and economic (profit) aspects of the TBL sustainable development framework. Elkington (1994) had earlier

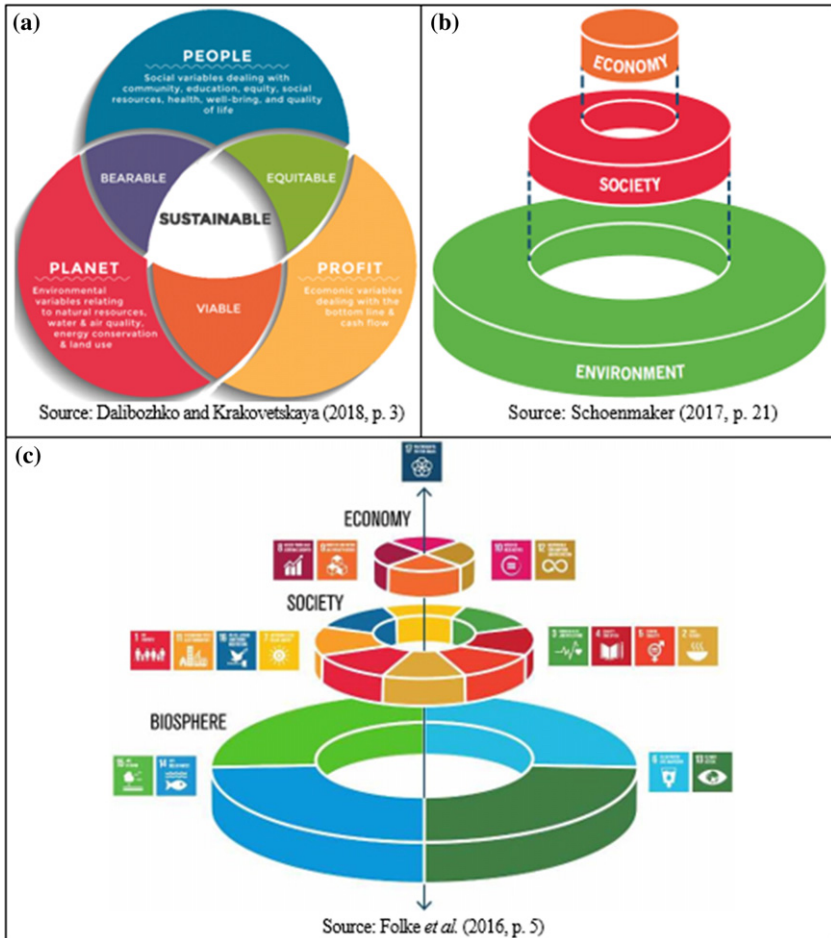


Fig. 18.3. Theoretical Frames: (a) TBL, (b) Sustainable Finance, (c) SDGs/Sustainable Finance Integration.

observed a confluence between the TBL and SDGs which suggests the “integration of environmental thinking into every aspect of social, political, and economic activity” (p. 90). Folke *et al.* (2016) SDG Wedding Cake seem to integrate the essences of Elkington’s (1994) TBL and Schoenmaker’s (2017) sustainable finance model, which provides researchers with a reference point concerning which of the 17 SDGs more closely aligns with which of the three elements of sustainability (economy, society, environment) (Schoenmaker, 2018a). According to Folke *et al.* (2016), SDG 8 (decent work and economic growth), SDG 9 (industry and infrastructure), SDG 10 (reduced inequalities), and SDG 12 (responsible consumption and production) are more about the economy than the other two SDG elements; that SDG 1 (no poverty), SDG 11 (sustainable cities and communities), SDG 16 (peace, justice, and strong institutions), SDG 7 (affordable and clean

energy), SDG 3 (good health and well-being), SDG 4 (quality education), SDG 5 (gender equality), and SDG 2 (zero hunger) are more society-oriented than the others; and that SDG 15 (life on land), SDG 14 (life below water), SDG 6 (clean water and sanitation), and SDG 13 (climate action) are the core goals relating to the environment. However, proper integration of the three groups of SDGs relies heavily on SDG 17 (partnerships for the goals). Thus, each SDG is innately related to, and to varying degrees underpinned by, some of the other SDGs. An extension of this thinking is that implementing the SDGs successfully requires the use of sustainable funding sources that balance the disparate but innately mutually inclusive ends pursued by stakeholders of the TBL.

4. Methodology

4.1 Review Approach

This study adopts the scoping review technique in mapping the scholarship on the interplay between sustainable finance and SDGs implementation in the context of the Arab states from the Western Asian region. [Hariharasudan and Kot \(2018\)](#) state that scoping review is employed where there is a need to garner research materials without limitations concerning sources and material types. In this spirit, this chapter drew materials from the World Bank's *DataBank* on SDGs as well as databases of the UN specialized bodies and agencies such as the UN Economic and Social Commission for Western Asia. Academic materials were sourced mainly from Clarivate's Web of Science and Elsevier's Scopus databases.

4.2 SDGs/Indicators Considered in This Work

It is unwieldy to address the entire 17 SDGs in a chapter-sized work. To delimit what could be handled, this chapter focused on the most targeted SDGs by countries worldwide. According to [Phenix Capital \(2022\)](#) (see [Fig. 18.4](#)), the five most targeted goals, and to which greater financial commitments were already made (as of 2021) include, in order of commitment scale, climate action (SDG 13), affordable and clean energy (SDG 7), industry, innovation and infrastructure (SDG 9), decent work and economic growth (SDG 8), and good health and well-being (SDG 3). It is, however, noteworthy that consistent with general practice among researchers, the five SDGs and their operating indicators selected and studied in this work do not imply that they carry greater weight on the importance scale than the others, as all the goals are equally important ([United Nations, 2022d](#)).

Indicators for each of the 17 SDGs (including the five covered in this study) were classified into three tiers: Tier I, Tier II, and Tier III ([United Nations, 2022e](#)). The classification is based on the triple criteria of conceptual clarity, methodological rigor, and regularity of data publication by countries about the SDGs. Tier I indicators meet the first two metrics and 50% of affected countries publish data on them; Tier II indicators meet the first two criteria but suffer from the irregular publication of data on the affected indicators; Tier III indicators are a work in progress and largely undeveloped. In this chapter, discussion on the SDGs is restricted to selected Tier I indicators only.

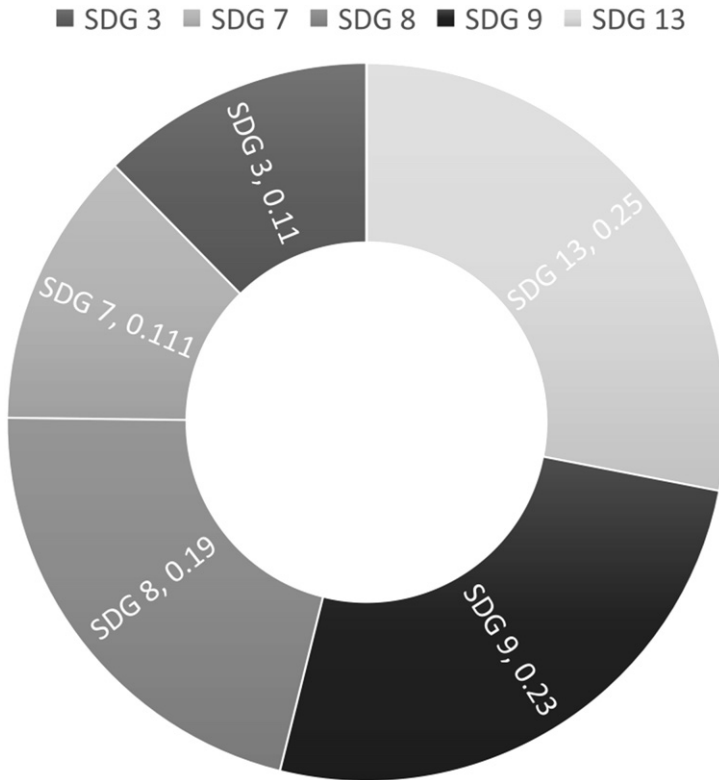


Fig. 18.4. Historical Commitments (in Trillion USD) to the SDGs 2015 to 2021. Source: Phenix Capital (2022, p. 15).

4.3 SDG Interconnectivity Analysis

The study employed (Obrecht et al., 2021) interconnectivity matrix in discussing the mutual influences that may subsist among the five most targeted SDGs evaluated in this study. Obrecht et al. (2021) and Pham-Truffert et al. (2020) matrixed the 17 SDGs in a quadrant with the horizontal axis representing positive (co-benefits) interactions and the vertical axis denoting negative (trade-offs) interactions between each pair of SDGs. As illustrated by Obrecht et al. (2021) in Fig. 18.5 and explained by Pham-Truffert et al. (2020), SDGs 1, 3 (large) as well as SDGs 5 and 10 (small) are buffers of both co-benefits and trade-offs; SDGs 2 and 8 (large) are buffer co-benefits but multipliers of trade-offs; SDGs 7, 11, 13 (large) as well as SDG 9 (small) are multipliers of both co-benefits and trade-offs; and SDGs 2 and 8 (large) are buffers of co-benefits and multipliers of trade-offs. This matrix provides a simple way for understanding the impacts associated with the implementation of SDGs by countries worldwide.



Fig. 18.5. Interconnectivity Among the 17 SDGs. Source: Obrecht et al. (2021, p. 7).

Furthermore, the magnitude of mutual influences (positive or negative) among the five most targeted SDGs was evaluated using Nilsson et al. (2016) SDG Interaction Scale. For positive influences, the scale assigns +3 to describe a positive association between two SDGs or two SDG indicators as *indivisible*, +2 was assigned where the association is *reinforcing*, +1 was assigned if the association is *enabling*. For negative influences, the scale assigns -3 to describe a negative association between two SDGs or two SDG indicators as *canceling*, -2 was assigned where the association is *counteracting*, -1 was assigned if the association is *constraining*. A neutral scale (0) interposes between the positive and negative sides of the goals-scoring scale. The rating scale is fully explained in Table 18.1.

4.4 Study Area

This chapter covers issues relating to the use of sustainable finance in promoting SDG implementation within the context of Western Asia, home to 12 of the World’s core Arab countries. It is noteworthy that varying classification standards have been used in geographically labeling regions, countries and areas, and each of the available methods was influenced by the objects the classification exercise was primarily meant to achieve. This study utilized the United Nations (1999, p. 14) classification schema which delineates Western Asia to include 18 countries (see Fig. 18.6). The region has a combined population of 283,688,472 as of 2021

Table 18.1. SDG Interaction Rating Scale.

Interaction	Label	Explanation
+3	Indivisible	“Inextricably linked to the achievement of another goal.”
+2	Reinforcing	“Aids the achievement of another goal.”
+1	Enabling	“Creates conditions that further another goal.”
0	Consistent	“No significant positive or negative interactions.”
−1	Constraining	“Limits options on another goal.”
−2	Counteracting	“Clashes with another goal.”
−3	Canceling	“Makes it impossible to reach another goal.”

Source: Nilsson et al. (2016, p. 321).



Fig. 18.6. Eighteen Countries of Western Asia Region.

(Sachs et al., 2022). However, classification in the *DataBank* assigned the 12 Arab countries (with a combined population of 171,469,127 as of 2021) to the Middle East and North Africa (MENA) region (<https://databank.worldbank.org/home.aspx>). Other UN bodies such as the UN Environment Programme (UNEP) considered the 12 Arab states as “West Asia” (<https://www.unep.org/ozonaction/networks/west-asia>). Armenia, Azerbaijan, Cyprus, and Georgia were assigned to the Eastern Europe and Asia region, while Israel and Turkey were included under the Organization for Economic Co-operation and Development (OECD) region.

Thus, the current study was delimited to the 12 Arab countries within the Western Asia region. These countries share more characteristics among them, principally ethnic identity than the other six Western Asia countries: Armenia (Armenians), Azerbaijan (Azeris), Cyprus (Greek Cypriots), Georgia (Georgians), Israel (Jews), and Turkey (Turks). The 12 Arab states are predominantly Muslim. The data in Table 18.2 shows that half of the 12 countries are categorized as HICs, three as upper middle-income countries (UMIC), one as a lower middle-income country (LMIC), and two as LICs. Thus, generally speaking, the countries studied are rich enough to be able to finance the implementation of the SDGs, with the possible exception of Syria and Yemen as LICs.

5. Results and Discussions

5.1 SDG Implementation in Arab West Asia

Table 18.3 shows the degree to which the 18 countries of Western Asia have individually implemented the five most targeted SDGs: namely, SDG 3 (good

Table 18.2. Arab Countries of Western Asia.

Countries	Population	Identity	Region	Income
Bahrain	1,748,295	Arab	MENA	HIC
Iraq	41,179,351	Arab	MENA	UMIC
Jordan	10,269,022	Arab	MENA	UMIC
Kuwait	4,328,553	Arab	MENA	HIC
Lebanon	6,769,151	Arab	MENA	UMIC
Oman	5,223,376	Arab	MENA	HIC
Qatar	2,930,524	Arab	MENA	HIC
Saudi Arabia	35,340,680	Arab	MENA	HIC
Palestine	4,922,749	Arab	MENA	LMIC
Syria	18,275,704	Arab	MENA	LIC
United Arab Emirates	9,991,083	Arab	MENA	HIC
Yemen	30,490,639	Arab	MENA	LIC
Total	171,469,127			

Data Source: CVS file of Sachs et al. (2022).

health and well-being), SDG 7 (affordable and clean energy), SDG 8 (economic growth), SDG 9 (resilient infrastructure), and SDG 13 (climate action). The data, drawn from the World Bank's *DataBank* on SDGs, were used in gauging the extent to which the SDGs and their corresponding Tier I indicators were implemented (United Nations, 2022e). *DataBank* curate hard facts about the SDG implementation profiles of countries worldwide. The current study extracted a 5-year performance profile of Western Asian countries (2016–2020) respecting the five most targeted SDGs. Missing data from the *DataBank* were sourced from the data file of Sachs et al. (2022).

The first is SDG 3 on good health and well-being. This addresses the question of universal health coverage where all people can easily gain access to basic healthcare services they need, including disease prevention, cure, and health rehabilitation services without financial hardship (Brymer & Lacaze, 2022). The current study focused on disease prevention and universal health coverage with the understanding that the absence of disease and access to health care does not fully capture the essence of the goal. Immunization for children aged 12–23 months against diphtheria, pertussis, and tetanus (DPT) (three doses of the vaccine) and against measles (one dose) are indicators of disease prevention. The data in Table 18.3 indicates that seven countries score above 90% implementation when it comes to disease prevention. Iraq and Lebanon fall midway on the implementation spectrum. Yemen falls below the expected average (50–96%). The situation is catastrophic regarding universal healthcare coverage. Out-of-pocket (OOP) healthcare expenditure (as a percentage of total household expenditure) in most of the states studied falls above the threshold of 25%, with only five states operating under the threshold. Indeed, in Iraq, households spent more than 50% of their income on OOP health expenditure. Consequently, universal healthcare coverage still has a great deal of room for improvement.

Regarding SDG 7 (affordable and clean energy), countries of the Western Asia region seem to have recorded their most impressive achievement (Table 18.3). Between 95% to 100% of both urban and rural populations in Western Asia have access to clean fuels (excluding kerosene) and their associated technologies for cooking. The same achievement was recorded for access to electricity. The exceptions are Syria and Yemen which achieve average to mid-way results. The former's rural populations enjoyed <80% access to electricity, while only about 60% of the latter's rural and urban people have access. There are no data regarding access to clean fuels/technologies for Lebanon and Palestine (as well as Yemen for the year 2018).

Annual GDP growth and GDP per capita growth are two indicators widely used in measuring SDG 8 (Heinze & Soderstrom, 2022) about which published data are readily available. GDP refers to an economy's gross value added by its internal producers plus any product taxes and minus any subsidies not including product prices. SDG 8 was crafted for "sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all" (Rai et al., 2019, p. 368). This goal is important because the inverse association between GDP growth and GDP per capita, two of the goals well-reported indicators, suggest that wealth is concentrated in a few hands and that the deliverables

Table 18.3. Most Targeted SDGs: Implementation Profiles of Western Asia Countries.

BAHRAIN						
SDGs	SDG Indicators	2016	2017	2018	2019	2020
Good Health and Well-Being (SDG 3)	DPT Immunisation (%)	99.00	97.00	99.00	99.00	98.00
	Measles Immunisation (%)	99.00	99.00	99.00	99.00	99.00
	OOP Expenditure (% of Current Exp.)	27.99	30.44	30.00	29.73	NA
Affordable and Clean Energy (SDG 7)	Clean cooking fuel access (% of pop.)	100.00	100.00	100.00	100.00	100.00
	Electricity access (% of rural pop.)	100.00	100.00	100.00	100.00	100.00
	Electricity access (% of urban pop.)	100.00	100.00	100.00	100.00	100.00
	Electricity access (% of population)	100.00	100.00	100.00	100.00	100.00
Economic Growth (SDG 8)	GDP growth (annual %)	3.56	4.29	2.11	2.17	-4.94
	GDP per capita growth (annual %)	-0.36	-0.48	-2.79	-2.30	-8.31
Resilient Infrastructure (SDG 9)	Air transport, freight (million ton-km)	387.31	390.39	420.98	311.15	191.96
	Air transport, passengers carried	5,220,218	5,190,484	5,877,003	6,440,562	1,451,359
Climate Action (SDG 13)	Disaster risk reduction score (1-5 scale)	NA	NA	NA	NA	NA
	Natural disasters (floods, droughts, etc)	NA	NA	NA	NA	NA
IRAQ						
SDGs	SDG Indicators	2016	2017	2018	2019	2020
Good Health and Well-Being (SDG 3)	DPT Immunisation (%)	71.00	81.00	86.00	84.00	74.00
	Measles Immunisation (%)	79.00	81.00	85.00	82.00	76.00
	OOP Expenditure (% of Current Exp.)	79.13	58.04	51.35	50.10	NA
Affordable and Clean Energy (SDG 7)	Clean cooking fuel access (% of pop.)	98.30	98.70	98.80	98.90	99.00
	Electricity access (% of rural pop.)	98.68	99.57	99.90	99.97	100.00
	Electricity access (% of urban pop.)	100.00	100.00	99.90	100.00	100.00
	Electricity access (% of population)	99.60	99.87	99.90	99.99	100.00
Economic Growth (SDG 8)	GDP growth (annual %)	13.79	-1.82	2.63	5.51	-11.32
	GDP per capita growth (annual %)	10.56	-4.28	0.28	3.16	-13.34
Resilient Infrastructure (SDG 9)	Air transport, freight (million ton-km)	0.95	15.59	16.20	0.00	0.00
	Air transport, passengers carried	2,019,816	1,591,490	4,812,610	5,434,292	764,661
Climate Action (SDG 13)	Disaster risk reduction score (1-5 scale)	NA	NA	NA	NA	NA
	Natural disasters (floods, droughts, etc)	NA	NA	NA	NA	NA

Table 18.3. (Continued)

JORDAN						
SDGs	SDG Indicators	2016	2017	2018	2019	2020
Good Health and Well-Being (SDG 3)	DPT Immunisation (%)	98.00	99.00	96.00	89.00	77.00
	Measles Immunisation (%)	96.00	93.00	92.00	87.00	76.00
	OOP Expenditure (% of Current Exp.)	30.62	30.43	31.21	30.29	NA
Affordable and Clean Energy (SDG 7)	Clean cooking fuel access (% of pop.)	99.90	99.90	99.90	99.90	99.90
	Electricity access (% of rural pop.)	99.57	100.00	98.89	100.00	98.83
	Electricity access (% of urban pop.)	100.00	100.00	100.00	100.00	100.00
	Electricity access (% of population)	99.96	100.00	99.90	100.00	99.90
Economic Growth (SDG 8)	GDP growth (annual %)	1.99	2.09	1.93	1.96	-1.55
	GDP per capita growth (annual %)	-1.08	-0.33	0.10	0.58	-2.53
Resilient Infrastructure (SDG 9)	Air transport, freight (million ton-km)	144.21	158.96	175.84	153.57	74.66
	Air transport, passengers carried	3,181,283	3,381,677	3,383,805	3,478,444	816,253
Climate Action (SDG 13)	Disaster risk reduction score (1-5 scale)	NA	NA	NA	NA	NA
	Natural disasters (floods, droughts, etc)	NA	NA	NA	NA	NA
KUWAIT						
SDGs	SDG Indicators	2016	2017	2018	2019	2020
Good Health and Well-Being (SDG 3)	DPT Immunisation (%)	99.00	99.00	91.00	91.00	NA
	Measles Immunisation (%)	99.00	99.00	98.00	98.00	NA
	OOP Expenditure (% of Current Exp.)	13.28	12.93	10.68	11.79	NA
Affordable and Clean Energy (SDG 7)	Clean cooking fuel access (% of pop.)	100.00	100.00	100.00	100.00	100.00
	Electricity access (% of rural pop.)	100.00	100.00	100.00	100.00	100.00
	Electricity access (% of urban pop.)	100.00	100.00	100.00	100.00	100.00
	Electricity access (% of population)	100.00	100.00	100.00	100.00	100.00
Economic Growth (SDG 8)	GDP growth (annual %)	2.93	-4.71	2.43	-0.55	-8.86
	GDP per capita growth (annual %)	-0.23	-7.04	0.42	-2.20	-10.21
Resilient Infrastructure (SDG 9)	Air transport, freight (million ton-km)	223.01	309.86	392.36	364.65	119.72
	Air transport, passengers carried	4,069,935	5,731,748	6,464,847	7,385,299	1,823,594
Climate Action (SDG 13)	Disaster risk reduction score (1-5 scale)	NA	NA	NA	NA	NA
	Natural disasters (floods, droughts, etc)	NA	NA	NA	NA	NA

Table 18.3. (Continued)

LEBANON						
SDGs	SDG Indicators	2016	2017	2018	2019	2020
Good Health and Well-Being (SDG 3)	DPT Immunisation (%)	83.00	83.00	83.00	83.00	71.00
	Measles Immunisation (%)	82.00	82.00	82.00	82.00	74.00
	OOP Expenditure (% of Current Exp.)	31.97	33.07	32.81	33.54	NA
Affordable and Clean Energy (SDG 7)	Clean cooking fuel access (% of pop.)	NA	NA	NA	NA	NA
	Electricity access (% of rural pop.)	97.66	98.96	97.37	99.78	100.00
	Electricity access (% of urban pop.)	100.00	100.00	100.00	100.00	100.00
	Electricity access (% of population)	99.73	99.88	99.70	99.97	100.00
Economic Growth (SDG 8)	GDP growth (annual %)	1.55	0.90	-1.88	-6.91	-25.91
	GDP per capita growth (annual %)	-1.19	-0.65	-2.46	-6.86	-25.58
Resilient Infrastructure (SDG 9)	Air transport, freight (million ton-km)	45.56	53.39	56.57	51.70	19.12
	Air transport, passengers carried	2,647,258	2,879,528	2,981,937	3,164,358	1,077,762
Climate Action (SDG 13)	Disaster risk reduction score (1-5 scale)	NA	NA	NA	NA	NA
	Natural disasters (floods, droughts, etc)	NA	NA	NA	NA	NA
OMAN						
SDGs	SDG Indicators	2016	2017	2018	2019	2020
Good Health and Well-Being (SDG 3)	DPT Immunisation (%)	99.00	99.00	99.00	99.00	99.00
	Measles Immunisation (%)	99.00	99.00	99.00	99.00	99.00
	OOP Expenditure (% of Current Exp.)	6.10	7.08	5.95	6.56	NA
Affordable and Clean Energy (SDG 7)	Clean cooking fuel access (% of pop.)	100.00	100.00	100.00	100.00	100.00
	Electricity access (% of rural pop.)	100.00	100.00	100.00	100.00	100.00
	Electricity access (% of urban pop.)	100.00	100.00	100.00	100.00	100.00
	Electricity access (% of population)	100.00	100.00	100.00	100.00	100.00
Economic Growth (SDG 8)	GDP growth (annual %)	5.05	0.30	1.29	-1.13	-3.20
	GDP per capita growth (annual %)	0.08	-3.71	-2.14	-4.02	-5.70
Resilient Infrastructure (SDG 9)	Air transport, freight (million ton-km)	425.20	434.92	510.43	566.92	51.92
	Air transport, passengers carried	7,709,851	9,035,230	10,438,241	11,239,996	2,496,069
Climate Action (SDG 13)	Disaster risk reduction score (1-5 scale)	NA	NA	NA	NA	NA
	Natural disasters (floods, droughts, etc)	NA	NA	NA	NA	NA

Table 18.3. (Continued)

QATAR						
SDGs	SDG Indicators	2016	2017	2018	2019	2020
Good Health and Well-Being (SDG 3)	DPT Immunization (%)	98.00	97.00	98.00	98.00	82.00
	Measles Immunization (%)	99.00	99.00	99.00	99.00	90.00
	OOP Expenditure (% of Current Exp.)	8.79	10.95	12.83	12.33	NA
Affordable and Clean Energy (SDG 7)	Clean cooking fuel access (% of pop.)	100.00	100.00	100.00	100.00	100.00
	Electricity access (% of rural pop.)	100.00	100.00	100.00	100.00	100.00
	Electricity access (% of urban pop.)	100.00	100.00	100.00	100.00	100.00
	Electricity access (% of population)	100.00	100.00	100.00	100.00	100.00
Economic Growth (SDG 8)	GDP growth (annual %)	3.06	-1.50	1.23	0.77	-3.64
	GDP per capita growth (annual %)	-0.38	-4.04	-0.84	-1.02	-5.28
Resilient Infrastructure (SDG 9)	Air transport, freight (million ton-km)	9206.17	10970.09	12666.71	12739.81	13543.51
	Air transport, passengers carried	31,209,097	29,949,181	29,178,923	32,953,297	10,640,789
Climate Action (SDG 13)	Disaster risk reduction score (1-5 scale)	NA	NA	NA	NA	NA
	Natural disasters (floods, droughts, etc)	NA	NA	NA	NA	NA
SAUDI ARABIA						
SDGs	SDG Indicators	2016	2017	2018	2019	2020
Good Health and Well-Being (SDG 3)	DPT Immunization (%)	98.00	98.00	96.00	96.00	95.00
	Measles Immunization (%)	98.00	96.00	98.00	95.00	96.00
	OOP Expenditure (% of Current Exp.)	15.71	14.32	15.90	16.50	NA
Affordable and Clean Energy (SDG 7)	Clean cooking fuel access (% of pop.)	100.00	100.00	100.00	100.00	100.00
	Electricity access (% of rural pop.)	100.00	100.00	100.00	100.00	100.00
	Electricity access (% of urban pop.)	100.00	100.00	100.00	100.00	100.00
	Electricity access (% of population)	99.90	99.93	100.00	100.00	100.00
Economic Growth (SDG 8)	GDP growth (annual %)	1.67	-0.74	2.51	0.33	-4.14
	GDP per capita growth (annual %)	-0.60	-2.71	0.68	-1.32	-5.64
Resilient Infrastructure (SDG 9)	Air transport, freight (million ton-km)	833.99	867.64	1085.47	2043.25	649.33
	Air transport, passengers carried	35,092,840	37,503,000	39,767,648	46,181,487	26,987,702
Climate Action (SDG 13)	Disaster risk reduction score (1-5 scale)	NA	NA	NA	NA	NA
	Natural disasters (floods, droughts, etc)	NA	NA	NA	NA	NA

Table 18.3. (Continued)

SYRIA						
SDGs	SDG Indicators	2016	2017	2018	2019	2020
Good Health and Well-Being (SDG 3)	DPT Immunisation (%)	42.00	48.00	47.00	54.00	NA
	Measles Immunization (%)	62.00	67.00	63.00	59.00	59.00
	OOP Expenditure (% of Current Exp.)	NA	NA	NA	NA	NA
Affordable and Clean Energy (SDG 7)	Clean cooking fuel access (% of pop.)	97.60	97.60	97.20	97.30	96.90
	Electricity access (% of rural pop.)	78.10	77.49	69.46	76.25	75.61
	Electricity access (% of urban pop.)	100.00	100.00	100.00	100.00	100.00
	Electricity access (% of population)	89.67	89.53	86.00	89.27	89.14
Economic Growth (SDG 8)	GDP growth (annual %)	-5.63	-0.73	1.48	NA	NA
	GDP per capita growth (annual %)	-2.76	1.42	2.38	NA	NA
Resilient Infrastructure (SDG 9)	Air transport, freight (million ton-km)	0.03	0.03	0.03	0.02	0.01
	Air transport, passengers carried	18,117	17,564	17,897	18,457	10,410
Climate Action (SDG 13)	Disaster risk reduction score (1-5 scale)	NA	NA	NA	NA	NA
	Natural disasters (floods, droughts, etc)	NA	NA	NA	NA	NA
UNITED ARAB EMIRATES						
SDGs	SDG Indicators	2016	2017	2018	2019	2020
Good Health and Well-Being (SDG 3)	DPT Immunization (%)	99.00	97.00	99.00	99.00	90.00
	Measles Immunization (%)	99.00	99.00	99.00	99.00	99.00
	OOP Expenditure (% of Current Exp.)	18.80	11.42	12.70	12.51	NA
Affordable and Clean Energy (SDG 7)	Clean cooking fuel access (% of pop.)	100.00	100.00	100.00	100.00	100.00
Economic Growth (SDG 8)	Electricity access (% of rural pop.)	100.00	100.00	100.00	100.00	100.00
	Electricity access (% of urban pop.)	100.00	100.00	100.00	100.00	100.00
	Electricity access (% of population)	100.00	100.00	100.00	100.00	100.00
Resilient Infrastructure (SDG 9)	GDP growth (annual %)	2.98	2.37	1.19	3.41	-6.13
	GDP per capita growth (annual %)	1.91	1.01	-0.32	1.93	-7.27
Climate Action (SDG 13)	Air transport, freight (million ton-km)	16138.87	16616.24	15962.90	14765.60	12171.56
	Air transport, passengers carried	91,763,598	95,306,195	95,758,342	93,995,208	26,116,897
Climate Action (SDG 13)	Disaster risk reduction score (1-5 scale)	NA	NA	NA	NA	NA
	Natural disasters (floods, droughts, etc)	NA	NA	NA	NA	NA

Table 18.3. (Continued)

PALESTINE						
SDGs	SDG Indicators	2016	2017	2018	2019	2020
Good Health and Well-Being (SDG 3)	DPT Immunization (%)	99.00	99.00	99.00	99.00	99.00
	Measles Immunization (%)	99.00	99.00	99.00	99.00	99.00
	OOP Expenditure (% of Current Exp.)	NA	NA	NA	NA	NA
Affordable and Clean Energy (SDG 7)	Clean cooking fuel access (% of pop.)	NA	NA	NA	NA	NA
	Electricity access (% of rural pop.)	100.00	99.07	100.00	100.00	100.00
	Electricity access (% of urban pop.)	100.00	99.90	100.00	100.00	100.00
	Electricity access (% of population)	100.00	99.70	100.00	100.00	100.00
Economic Growth (SDG 8)	GDP growth (annual %)	8.86	1.42	1.23	1.36	-11.32
	GDP per capita growth (annual %)	6.45	-0.58	-1.30	-1.15	-13.50
Resilient Infrastructure (SDG 9)	Air transport, freight (million ton-km)	NA	NA	NA	NA	NA
	Air transport, passengers carried	NA	NA	NA	NA	NA
Climate Action (SDG 13)	Disaster risk reduction score (1-5 scale)	NA	NA	NA	NA	NA
	Natural disasters (floods, droughts, etc)	NA	NA	NA	NA	NA
YEMEN						
SDGs	SDG Indicators	2016	2017	2018	2019	2020
Good Health and Well-Being (SDG 3)	DPT Immunization (%)	71.00	68.00	65.00	73.00	72.00
	Measles Immunization (%)	70.00	65.00	64.00	67.00	68.00
	OOP Expenditure (% of Current Exp.)	NA	NA	NA	NA	NA
Affordable and Clean Energy (SDG 7)	Clean cooking fuel access (% of pop.)	61.20	61.35	61.50	61.30	61.50
	Electricity access (% of rural pop.)	55.67	71.44	NA	60.68	61.94
	Electricity access (% of urban pop.)	92.93	92.98	NA	93.07	93.11
	Electricity access (% of population)	68.86	79.20	62.00	72.75	73.76
Economic Growth (SDG 8)	GDP growth (annual %)	-9.38	-5.07	0.75	1.40	-8.50
	GDP per capita growth (annual %)	-11.61	-7.35	-1.59	-0.91	-10.54
Resilient Infrastructure (SDG 9)	Air transport, freight (million ton-km)	NA	NA	3.27	0.00	2.48
	Air transport, passengers carried	242,723	132,571	336,310	NA	52,035
Climate Action (SDG 13)	Disaster risk reduction score (1-5 scale)	NA	NA	NA	NA	NA
	Natural disasters (flood, droughts, etc)	NA	NA	NA	NA	NA

Data Source: [https://databank.worldbank.org/source/sustainable-development-goals-\(SDGs\)#](https://databank.worldbank.org/source/sustainable-development-goals-(SDGs)#).
(Updated July 22, 2022); NA = Data not available.

of development are skewed among the populations. Data in [Table 18.3](#) on SDG 8 suggest that most of the countries studied experienced positive GDP growth and negative GDP per capita growth. Indeed, metrics for both indicators for 2020 are negative for all countries.

SDG 9 focuses on industry, innovation, and infrastructure ([United Nations, 2015](#)). Economic, social, and environmental developments hinge on the availability of resilient infrastructure. These include roads, rails, and airports. According to [United Nations \(2019\)](#), “the airport industry, also an important driver of economic development, faced the steepest decline in its history in the first five months of 2020, with a 51 per cent drop in airline passengers due to the global lockdowns.” Most of the 12 states studied possess excellent airport infrastructure. Data in [Table 18.3](#) reveal that only three (Syria, Palestine, and Yemen) of the states studied show very low levels of airport activities due to poor infrastructure.

Finally, regarding data on SDG 13 (climate action), the study noted the nonavailability of data from the *DataBank* on the metric across the 18 Western Asia countries for the evaluation period 2016–2020 ([Table 18.3](#)). The latest report on the SDGs (i.e., [Sachs et al., 2022](#)), however, gave a summary of the implementation profiles of the countries under study. The report shows that Armenia, Georgia, Syria, and Yemen scored between 90% and 100% on SDG 13; Azerbaijan, Iraq, Jordan, Lebanon, and Turkey scored between 70% and 89%; Cyprus, Israel, and Saudi Arabia scored between 50% and 69%; while Bahrain, Kuwait, Oman, Qatar, Palestine, and United Arab Emirates scored less than 50% ([Sachs et al., 2022](#)). While the lack of data may be attributed to the discontinuance of reporting on the metric in the *DataBank*, the extant literature on the matter suggests a poor commitment to SDG 13 by corporations which might have been coterminous with low prioritization of the metric by governments worldwide ([Moses et al., 2022](#)). This is highly problematic as matters concerning the environment are seen to underlie the entire structure of the TBL ([Elkington, 1994](#)); and [Schoenmaker’s \(2017\)](#) sustainable finance model, and [Folke et al. \(2016\)](#) SDG Wedding Cake, theoretical frames explaining the foundational principles of the SDGs. Thus, there is the need for researchers to report beyond the specific SDG they study into even tangential matters arising ([Al-Shaer et al., 2022](#); [Al-Shaer & Hussainey, 2022](#)).

5.2 Sustainable Finance for SDGs in Arab West Asia

[Boyd \(2022\)](#), reporting to the United Nations as a rapporteur, observed that “No State is on track to meet all of the Goals. Most States are likely to miss the vast majority of the targets, especially those focused on the environment” (p. 25). The sustainable development finance gap is one of the reasons adduced for this catastrophic eventuality ([United Nations, 2022a](#)). Also, there is a great financial divide regarding funding SDGs between the rich and poor countries of the world ([United Nations, 2022a](#)). This poses a major setback for sustainable development. According to [Boyd \(2022\)](#), about USD 4 billion is required annually to close the global finance gap and move toward actualizing the SDGs. As mentioned earlier,

traditional sources of funding including FDI, investment, and pension funds presently constitute the major sources of financing the SDGs. However, these sources, on top of being inadequate (Newell, 2022), also pose enormous fiscal and monetary challenges to beneficiary countries. Further, the available sustainability-friendly funding windows are at best negligible compared to the quantum of monies urgently needed to be invested in the SDGs.

The foregoing notwithstanding, there is the need to redouble efforts at exploring and exploiting alternative and innovative funding windows that are most suitable for sustainable development financing. A general yardstick employed in characterizing such sources is impact investment. Gutterman (2021) and Hand et al. (2022) define impact investing as investments aiming to generate positive and measurable financial as well as social and environmental impact alongside, thus aligning with the SDGs' TBL. They are investments "made to generate positive, measurable social and environmental impact alongside a financial return" (Gutterman, 2021, p. iii). Impact investing, as depicted in Fig. 18.2, span a spectrum ranging from negative screening investments (that screen out investment opportunities harmful to the environment and society) to philanthropy (investments that forego principal and other residuals of capital ownership) (Wendt, 2022).

Financing the SDGs is as gargantuan as the goals are ambitious. It calls for sustained outlays in trillions (Mawdsley, 2018). This fact has been noted ab initio by African Development Bank et al. (2015) in their joint document pithily heralding the shift from billions to trillions in development financing for the SDGs. However, most of the sources for providing and intermediating the trillions are generally motivated by competitive risk-adjusted financial returns, and thus hardly amenable to responsible financing principles. This realizing has spurred scholars and practitioners to search for better alternatives. Boyd (2022) in his report identified seven new sources of funds that could yield USD 7 trillion annually for financing the SDGs. The sources include global wealth tax, redirecting environmentally damaging subsidies, global carbon tax, reducing tax evasion and avoidance, special drawing rights for climate action, debt relief, and fulfilling official development assistance (ODA) commitments (Boyd, 2022, p. 20). While each of these alternative funding sources has its shortcomings (see: Allen et al., 2022; Essers & Cassimon, 2022; Gahman et al., 2021; Mazzullo, 2020; Prakash & Sethi, 2021; Quirici, 2020; Vinodkumar & Alarifi, 2022), they are nevertheless better than the traditional sources driven solely by competitive risk-adjusted financial returns only. The moral issues arising from debt relief initiatives cut both ways but general perceptions toward its fairness are increasingly tilting in favor of beneficiary countries in actual need (Chavanne, 2022).

This chapter takes a look at how the debt relief option could be used in financing the SDGs in Arab West Asia with the hope of achieving at least a satisficing outcome at the end of the 2030 agenda. Debt and debt servicing are known to eat away at the stock of capital available to countries for investment in human development, leaving behind poverty and underdevelopment (Stubbs et al., 2022). Accordingly, the debt relief mechanism could be used in to free national resources for investment in good health and well-being, affordable and

clean energy, economic growth, and resilient infrastructure in the Arab West Asia region. However, some of the counterproductive conditionalities accompanying debt relief programs have to be watered down or eliminated altogether to facilitate participation. It is known that such conditionalities greatly militate effective participation in debt relief programs (Allen et al., 2022). This chapter, therefore, considers total debt cancellation via a debt-SDG-swap program. No half measures here. As can be seen from Table 18.4 on the total external debts of the Arab West Asia countries, a 50% debt cancellation (or even a 90% cancellation) may still leave the countries greatly indebted. This approach will relieve the countries of about USD 1.5 trillion, an amount which could be directly tied to the execution of prespecified SDG indicators.

6. Discussion

Although the analysis in this chapter covers only a few of the Tier I SDG indicators related to the five most targeted goals, the respective trends in each of the 12 Arab counties of West Asia are clearly discernible. The overall implementation picture emerging from the data is that challenges remain toward achieving some of the SDGs in the West Asia countries studied. Specifically, the results from Bahrain, Jordan, Kuwait, Oman, Qatar, Saudi Arabia, United Arab Emirates, and Palestine indicate that implementation of SDG 3 regarding disease

Table 18.4. Total External Debt Stocks for 2020 (in USD Million)/Relief Scenarios.

Country	External Debt	Debt Relief Scenarios	
		90% Relief	50% Relief
Bahrain	45,000	40,500	22,500
Iraq	116,150	104,535	58,075
Jordan	38,016	34,214.4	19,008
Kuwait	51,578	46,420.2	25,789
Lebanon	68,865	61,978.5	34,432.5
Oman	48,800	43,920	24,400
Qatar	187,050	168,345	93,525
Saudi Arabia	229,000	206,100	114,500
Palestine	2,069	1862.1	1034.5
Syria	4,763	4286.7	2381.5
United Arab Emirates	144,980	130,482	72,490
Yemen	7,121	6408.9	3560.5
Total	1,496,066	1,346,459	748,033

Data Sources: <https://databank.worldbank.org/> and various other sources.

prevention has been achieved but challenges remain with universal health coverage. The states with significant challenges in this regard are Iraq, Lebanon, Syria, and Yemen. Overall, compared to disease prevention implementation reported in the relevant literature (see [Decouttere et al., 2021](#)), the Arab West Asia region has performed remarkably well and better. However, OOP health expenditure, used as an indicator in assessing healthcare coverage [OECD \(2009\)](#), seems to be problematic in many of the West Asia countries studied. The higher the percentage of income a population uses in meeting noncovered healthcare needs, the lower the universal healthcare coverage. According to [Sirag and Nor \(2021\)](#), high levels of OOP family health expenditure are directly implicated in the rising incidence of poverty.

SDG 7 is all about energy to power homes, factories, cities, and villages. Thus, the interconnection between SDG 7 and the other SDGs provides the thrust to focus more on achieving this critical goal. The results of this study revealed that all the countries studied (excluding Syria and Yemen) can provide affordable and clean cooking fuel and technologies to residents, including electricity in both rural and urban areas. Syria's performance was midway to goal achievement as the country was able to adequately provide lean cooking fuel and accompanying technologies to the entire populace but could do so in terms of electricity to urban areas only. Challenges still exist in taking electricity to Syrian rural areas. Yemen, however, is significantly underpowered in terms of electricity and clean cooking fuels/associated technologies. It is, however, noteworthy that Syria and Yemen, which were significantly challenged energy-wise, did better than their energy-buoyant sister countries. Why? The reason may be that there is never an absolutely clean energy source. In other words, all energy sources cost the environment in some ways. Perhaps, the absence of full energy sufficiency means a low adverse impact on the environment, hence the spectacular score of Syria and Yemen regarding SDG 13.

Regarding SDG 8, the results generally indicate positive GDP growth and negative GDP per capita growth in West Asia. However, even GDP growth suffered reverses in 2020 across the countries studied due to the impact of COVID-19. The COVID-19 explanation is corroborated by [Schluep et al. \(2021\)](#) that "one year after the first lockdown due to the COVID-19 pandemic in 2020, the global effort to build a more equal, inclusive and sustainable society will likely experience a serious setback" (p. 1). Additionally, high energy consumption results from high production levels with all its associated carbon footprint. In other words, GDP growth (SDG 8) is often accompanied by a rise in carbon footprints, resource depletion, and environmental degradation, which cost society dearly in the long run. This may explain the linkage between SDG 13 (climate action) and economic growth (SDG 8). However, the inverse relationship between GDP growth and GDP per capita among the countries studied suggests the concentration of national resources in a few rich hands (SDG 8). This may have significant effects on other SDGs, particularly SDG 1 (no poverty).

Going to SDG 9 (resilient infrastructure), the general conclusion is that West Asia's infrastructure is good enough to meet the need of the countries studied, though only air transport statistics were used in the current study. Thus, the

region's infrastructure seems to support adequate mobility of people and goods (domestic and international), thereby directly and positively impacting the level of economic activities in West Asia (SDG 8). Lastly, though data on SDG 13 for the region are not available in the *DataBank*, the report of [Sachs et al. \(2022\)](#) reveals that only Syria and Yemen archived the target. Major challenges remain for Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates. Meanwhile, the SDG 13 implementation challenges in Lebanon are significantly challenging, while Iraq and Jordan are on the way to achieving the goal. Nevertheless, it has been shown that climate change "poses a serious threat to macro-financial stability and economic development" ([Volz, 2022](#), p. 1), leading to many undesirable outcomes ([Tachiiri et al., 2021](#)). For example, [Abel et al. \(2019\)](#) survey implicates climate change and conflicts in the Western Asia region. The ongoing conflicts in Syria and Yemen may thus find continuity in climate-related triggers.

It is important to note that [Sachs et al.'s \(2022\)](#) evaluation of West Asia's performance in implementing these five specific targets concluded that significant challenges persist. This suggests differences between their assessment and the findings of the present study. However, the discrepancy may be due to the aggregation of a few indicator outcomes in this study versus the use of all indicators for each goal in [Sachs et al. \(2022\)](#) report. Thus, aggregate performance evaluation at the goal level may mask success stories at the indicator levels. In this vein, conclusions regarding SDG evaluations should consider such nuances. Nevertheless, several scholars ([Spinazzola & Cavalli, 2022](#)) have attributed the apparent specter of nonachievement of the 2030 global agenda to the proclivity among countries and their leaders to see the SDGs as aspirational that command no sense of accountability, and could, therefore, be safely ignored. This is dangerous as it may lead to lethargy and SDG fatigue among the critical support leadership group in the affected countries. Governance and policy re-orientation in this regard could help toward the achievement of the 2030 Agenda.

Another feature of the SDGs (specifically the most targeted five) is the interplay between them such that each SDG is connected to the others either synergistically (for positive impact) or conflictual (for negative influence). Thus, using [Obrecht's \(2021\)](#) interconnectivity matrix (see [Fig. 18.2](#)), we interpret the interactions that subsist among the SDGs ([Nilsson et al., 2016](#); [Pham-Truffert et al., 2020](#); [Tachiiri et al., 2021](#)). The current study seems to support the presence of synergy between SDG 3 (good health and well-being) and SDG 7 (affordable and clean energy), whereby the two goals serve as multipliers for each other. The specific country result that fails to support this interaction is an indication that energy challenges might have contributed to their health and well-being challenges. Similarly, economic growth (SDG 8), especially growth fueled by heavy industry activities), may contribute to health hazards (SDG 3). It is instructive that many of the West Asia countries have highly developed tourism industries that thrive upon infrastructures, including aviation facilities (SDG 9). These may indirectly contribute to health challenges, especially epidemiological diseases. The most direct interactions are between SDG 13 and all the other three SDGs studied due to the direct effects of climate on health and well-being (SDG 3). Overall,

states should carefully balance their national priorities with resource availability based on the possible synergistic effects that may subsist among the various SDGs.

7. Conclusions

The 2030 Global Agenda is in its midlife. However, indications abound hinting at the likelihood of missing the targets by 2030. Nevertheless, countries should re-strategize and pursue these worthwhile 17 goals based on their respective country, and relevant regional, learning curves. The countries of the Arab West Asia region have plenty of success stories (at least concerning the most targeted goals SDGs: 3, 7, 8, 9, and 13) to buoy up their determination to push toward greater commitment to the goals. Nevertheless, they also have challenges to surmount, some major and some significant. It is the position of this study that outright cancellation of debts in these countries based on the debt-for-SDG swap could serve as an impact investment needed to boost the global drive for a developed, peaceful, and just world.

References

- Abel, G. J., Brottrager, M., Cuaresma, J. C., & Muttarak, R. (2019). Climate, conflict and forced migration. *Global Environmental Change*, 54, 239–249. <https://doi.org/10.1016/j.gloenvcha.2018.12.003>
- African Development Bank, Asian Development Bank, European Bank for Reconstruction and Development, European Investment Bank, Inter-American Development Bank, International Monetary Fund, & World Bank Group. (2015). *From billions to trillions: Transforming development finance post-2015 financing for development: Multilateral development finance*. The World Bank. <https://thedocs.worldbank.org/en/doc/622841485963735448-0270022017/original/DC20150002EFinancingforDevelopment.pdf>
- Ahmed, S., Chapple, L., Christ, K., & Osborne, S. (2022). Modern slavery risk disclosures in business operations and supply chains. In *Environmental sustainability and agenda 2030: Efforts, progress and prospects* (pp. 67–104). Emerald Publishing Limited. <https://doi.org/10.1108/S1479-359820220000010005>
- Al-Shaer, H., Albitar, K., & Hussainey, K. (2022). Creating sustainability reports that matter: An investigation of factors behind the narratives. *Journal of Applied Accounting Research*, 23(3), 738–763. <https://doi.org/10.1108/jaar-05-2021-0136>
- Al-Shaer, H., & Hussainey, K. (2022). Sustainability reporting beyond the business case and its impact on sustainability performance: UK evidence. *Journal of Environmental Management*, 311, 1–13. <https://doi.org/10.1016/j.jenvman.2022.114883>
- Alabed, Q. M. Q., Said, F. F., Karim, Z. A., Zaidi, M. A. S., & Alshammery, M. D. (2021). Energy–growth nexus in the MENA region: A dynamic panel threshold estimation. *Sustainability*, 13(22), 1–18. <https://doi.org/10.3390/su132212444>
- Allen, J., Clark, R., Li, S., & Vincent, N. (2022). Debt-relief programs and money left on the table: Evidence from Canada’s response to Covid-19. *Canadian Journal of*

- Economics/Revue canadienne d'économie*, 55(S1), 9–53. <https://doi.org/10.1111/caje.12541>
- Aly, E., Elsawah, S., & Ryan, M. J. (2022). A review and catalogue to the use of models in enabling the achievement of sustainable development goals (SDG). *Journal of Cleaner Production*, 340, 1–17. <https://doi.org/10.1016/j.jclepro.2022.130803>
- Awdeh, A., & Jomaa, Z. (2022). Development finance, institutional quality and human development in the MENA region. *International Journal of Emerging Markets*, 1–30. <https://doi.org/10.1108/ijoen-01-2021-0108>
- Barros, L., & Martínez-Zarzoso, I. (2022). Systematic literature review on trade liberalization and sustainable development. *Sustainable Production and Consumption*, 33, 921–931. <https://doi.org/10.1016/j.spc.2022.08.012>
- Bashir, I., & Qureshi, I. H. (2022). A systematic literature review on personal financial well-being: The link to key Sustainable Development Goals 2030. *FIIB Business Review*, 12(1). <https://doi.org/10.1177/23197145221106862>
- Boyd, D. R. (2022). *The human right to a clean, healthy and sustainable environment: A catalyst for accelerated action to achieve the Sustainable Development Goals*. A/77/284: Report of the Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment. United Nations.
- Bridges Fund Management. (2015). *The bridges spectrum of capital: How we define the sustainable and impact investment market*. Bridges Fund Management Ltd.
- Brymer, E., & Lacaze, A.-M. (2022). An overview of Sustainable Development Goal 3. In B. P. McCullough, T. Kellison, & E. N. Melton (Eds.), *The Routledge handbook of sport and sustainable development* (pp. 69–81). Routledge. <https://doi.org/10.4324/9781003023968-8>
- Chaudhry, S., & Mittal, S. (2022). Financing for Sustainable Development Goals in India in post pandemic era: Challenges and way forward. *ECS Transactions*, 107(1), 16557. <https://doi.org/10.1149/10701.16557ecst>
- Chavanne, D. (2022). Debt perceptions: Fairness judgments of debt relief for individuals and countries. *Behavioural Public Policy*, 6(2), 283–302. <https://doi.org/10.1017/bpp.2019.21>
- Clemente-Suárez, V. J., Rodriguez-Besteiro, S., Cabello-Eras, J. J., Bustamante-Sanchez, A., Navarro-Jiménez, E., Donoso-Gonzalez, M., Beltrán-Velasco, A. I., & Tornero-Aguilera, J. F. (2022). Sustainable development goals in the Covid-19 pandemic: A narrative review. *Sustainability*, 14(13), 1–26. <https://doi.org/10.3390/su14137726>
- Dalibozhko, A., & Krakovetskaya, I. (2018). Youth entrepreneurial projects for the sustainable development of global community: Evidence from Enactus program. *SHS Web of Conferences*, 57, 1–9. <https://doi.org/10.1051/shsconf/20185701009>
- Decouttere, C., De Boeck, K., & Vandaele, N. (2021). Advancing sustainable development goals through immunization: A literature review. *Globalization and Health*, 17(1), 1–29. <https://doi.org/10.1186/s12992-021-00745-w>
- Dimmelmeier, A. (2021). Sustainable finance as a contested concept: Tracing the evolution of five frames between 1998 and 2018. *Journal of Sustainable Finance & Investment*, 1–24. <https://doi.org/10.1080/20430795.2021.1937916>

- Elkington, J. (1994). Towards the sustainable corporation: Win-win-win business strategies for sustainable development. *California Management Review*, 36(2), 90–100. <https://doi.org/10.2307/41165746>
- Essers, D., & Cassimon, D. (2022). Towards HIPC 2.0? Lessons from past debt relief initiatives for addressing current debt problems. *Journal of Globalization and Development*. <https://doi.org/10.1515/jgd-2021-0051>
- Folke, C., Biggs, R., Norström, A. V., Reyers, B., & Rockström, J. (2016). Social-ecological resilience and biosphere-based sustainability science. *Ecology and Society*, 21(3), 1–16. <https://doi.org/10.5751/es-08748-210341>
- Gahman, L., Thongs, G., & Greenidge, A. (2021). Disaster, debt, and ‘underdevelopment’: The cunning of colonial-capitalism in the Caribbean. *Development*, 64(1–2), 112–118. <https://doi.org/10.1057/s41301-021-00282-4>
- Gossen, L. P., & Velichkina, L. M. (2006). Environmental problems of the oil-and-gas industry (review). *Petroleum Chemistry*, 46(2), 67–72. <https://doi.org/10.1134/s0965544106020010>
- Gurara, D., Presbitero, A., & Sarmiento, M. (2020). Borrowing costs and the role of multilateral development banks: Evidence from cross-border syndicated bank lending. *Journal of International Money and Finance*, 100(102090), 1–18. <https://doi.org/10.1016/j.jimonfin.2019.102090>
- Gutterman, A. S. (2021). *Sustainable finance and impact investing*. Business Expert Press.
- Hand, D., Ringel, B., & Danel, A. (2022). *Sizing the impact investing market: 2022*. The Global Impact Investing Network (GIIN).
- Hariharasudan, A., & Kot, S. (2018). A scoping review on Digital English and Education 4.0 for Industry 4.0. *Social Sciences*, 7(11), 1–13. <https://doi.org/10.3390/socsci7110227>
- Heinze, K. L., & Soderstrom, S. (2022). An overview of Sustainable Development Goal 8. In B. P. McCullough, T. Kellison, & E. N. Melton (Eds.), *The Routledge handbook of sport and sustainable development* (pp. 197–204). Routledge. <https://doi.org/10.4324/9781003023968-23>
- Hunjra, A. I., Azam, M., & Al-Faryan, M. A. S. (2022). The nexus between climate change risk and financial policy uncertainty. *International Journal of Finance & Economics*, 00(0), 1–16. <https://doi.org/10.1002/ijfe.2739>
- Hunjra, A. I., Azam, M., Bruna, M. G., & Bouri, E. (2023). A cross-regional investigation of institutional quality and sustainable development. *Journal of International Financial Markets, Institutions and Money*, 84, 1–17. <https://doi.org/10.1016/j.intfin.2023.101758>
- Hunjra, A. I., Azam, M., Bruna, M. G., Verhoeven, P., & Al-Faryan, M. A. S. (2022). Sustainable development: The impact of political risk, macroeconomic policy uncertainty and ethnic conflict. *International Review of Financial Analysis*, 84, 1–11. <https://doi.org/10.1016/j.irfa.2022.102370>
- Liang, S., Lenzen, M., Zhang, L., & Wang, Y. (2018). Resource footprints of humanity. *Resources, Conservation and Recycling*, 132, 267–268. <https://doi.org/10.1016/j.resconrec.2018.01.005>
- Mawdsley, E. (2018). From billions to trillions’: Financing the SDGs in a world ‘beyond aid’. *Dialogues in Human Geography*, 8(2), 191–195. <https://doi.org/10.1177/2043820618780789>

- Mawdsley, E. (2021). Development finance and the 2030 goals. In S. Chaturvedi, H. Janus, S. K. L. Xiaoyun, A. d. M. e Souza, E. Sidiropoulos, & D. Wehrmann (Eds.), *The Palgrave handbook of development cooperation for achieving the 2030 agenda: Contested collaboration* (pp. 51–57). Palgrave Macmillan. https://doi.org/10.1007/978-3-030-57938-8_3
- Mazzullo, A. (2020). Rethinking taxation of impact investments. In M. La Torre & H. Chiappini (Eds.), *Contemporary issues in sustainable finance: Creating an efficient market through innovative policies and instruments* (pp. 37–59). Palgrave Macmillan. https://doi.org/10.1007/978-3-030-40248-8_3
- McCullough, B. P., & Murfree, J. R. (2021). An overview of Sustainable Development Goal 13. In B. P. McCullough, T. Kellison, & E. N. Melton (Eds.), *The routledge handbook of sport and sustainable development* (pp. 315–327). Routledge. <https://doi.org/10.4324/9781003023968-38>
- Milivojevic, S., Hedwards, B., & Segrave, M. (2020). Examining the promise and delivery of Sustainable Development Goals in addressing human trafficking and modern slavery. In J. Blaustein, K. Fitz-Gibbon, N. W. Pino, & R. White (Eds.), *The Emerald handbook of crime, justice and sustainable development* (pp. 335–353). Emerald Publishing Limited. <https://doi.org/10.1108/978-1-78769-355-520201019>
- Moore, J. E., Mascarenhas, A., Bain, J., & Straus, S. E. (2017). Developing a comprehensive definition of sustainability. *Implementation Science*, 12(1), 1–8. <https://doi.org/10.1186/s13012-017-0637-1>
- Moran, M., & Stone, D. (2016). The new philanthropy: Private power in international development policy? In J. Grugel & D. Hammett (Eds.), *The Palgrave handbook of international development* (pp. 297–313). Palgrave Macmillan. https://doi.org/10.1057/978-1-137-42724-3_17
- Moses, O., Nnam, I. J., Olaniyan, J. D., & Tariquzzaman, A. T. M. (2022). Sustainable Development Goals (SDGs): Assessment of implementation progress in BRICS and MINT. In V. Taurigana & O. Moses (Eds.), *Environmental sustainability and agenda 2030* (Vol. 10, pp. 11–44). Emerald Publishing Limited. <https://doi.org/10.1108/S1479-359820220000010002>
- Murshed, M. (2022). The impacts of fuel exports on sustainable economic growth: The importance of controlling environmental pollution in Saudi Arabia. *Energy Reports*, 8, 13708–13722. <https://doi.org/10.1016/j.egyr.2022.09.186>
- Newell, P. (2022). Finance for the common good: Re-thinking the relationship between finance, poverty and sustainability. In A. Antoniadou, A. S. Antonarakis, & I. Kempf (Eds.), *Financial crises, poverty and environmental sustainability: Challenges in the context of the SDGs and Covid-19 recovery* (pp. 17–24). Springer Nature Switzerland AG. https://doi.org/10.1007/978-3-030-87417-9_2
- Nilsson, M., Griggs, D., & Visbeck, M. (2016). Policy: Map the interactions between sustainable development goals. *Nature*, 534(7607), 320–322. <https://doi.org/10.1038/534320a>
- O'Rourke, D., & Connolly, S. (2003). Just oil? The distribution of environmental and social impacts of oil production and consumption. *Annual Review of Environment and Resources*, 28(1), 587–617. <https://doi.org/10.1146/annurev.energy.28.050302.105617>
- Obrecht, A., Pham-Truffert, M., Spehn, E., Payne, D., de Bremond, A., Altermatt, F., Fischer, M., Passarello, C., Moersberger, H., Schelske, O., Guntern, J., Prescott,

- G., & Geschke, J. (2021). Achieving the SDGs with biodiversity. *Swiss Academies Factsheets*, 16(1), 1–11.
- OECD. (2009). Burden of out-of-pocket health expenditure. In *Health at a glance 2009: OECD indicators* (pp. 146–148). OECD Publishing. https://doi.org/10.1787/health_glance-2009-62-en
- Osman, T., Kenawy, E., Abdrabo, K. I., Shaw, D., Alshamndy, A., Elsharif, M., Salem, M., Alwetaishi, M., Aly, R. M., & Elboshy, B. (2021). Voluntary local review framework to monitor and evaluate the progress towards achieving sustainable development goals at a city level: Buraidah City, KSA and SDG11 as a case study. *Sustainability*, 13(17), 1–16. <https://doi.org/10.3390/su13179555>
- Pham-Truffert, M., Metz, F., Fischer, M., Rueff, H., & Messerli, P. (2020). Interactions among Sustainable Development Goals: Knowledge for identifying multipliers and virtuous cycles. *Sustainable Development*, 28(5), 1236–1250. <https://doi.org/10.1002/sd.2073>
- Phenix Capital. (2022). *2022 Impact Fund Universe Report*. Phenix Capital Group.
- Prakash, N., & Sethi, M. (2021). A review of innovative bond instruments for Sustainable Development in Asia. *International Journal of Innovation Science*, 14(3/4), 630–647. <https://doi.org/10.1108/ijis-10-2020-0213>
- Quirici, M. C. (2020). The Increasing importance of green bonds as instruments of impact investing: Towards a New European standardisation. In M. La Torre & H. Chiappini (Eds.), *Contemporary issues in sustainable finance: Creating an efficient market through innovative policies and instruments* (pp. 177–203). Palgrave Macmillan. https://doi.org/10.1007/978-3-030-40248-8_8
- Rai, S. M., Brown, B. D., & Ruwanpura, K. N. (2019). SDG 8: Decent work and economic growth – A gendered analysis. *World Development*, 113, 368–380. <https://doi.org/10.1016/j.worlddev.2018.09.006>
- Rodriguez-Rojas, M. d. P., Clemente-Almendros, J. A., El Zein, S. A., & Seguí-Amortegui, L. (2022). Taxonomy and tendencies in sustainable finance: A comprehensive literature analysis. *Frontiers in Environmental Science*, 10, 1–18. <https://doi.org/10.3389/fenvs.2022.940526>
- Sabeeh, H. K., Ali, S. H., & Al-Jawaldeh, A. (2022). Iraq is moving forward to achieve global targets in nutrition. *Children*, 9(2), 1–12. <https://doi.org/10.3390/children9020215>
- Sachs, J. D., Lafortune, G., Kroll, C., Fuller, G., & Woelm, F. (2022). *Sustainable development report 2022: From crisis to sustainable development: The SDGs as roadmap to 2030 and beyond*. Cambridge University Press. <https://ris.org.in/newsletter/sdr/2023/REPORT-REVIEW.pdf>
- Saqib, N. (2022). Nexus between the renewable and nonrenewable energy consumption and carbon footprints: Evidence from Asian emerging economies. *Environmental Science and Pollution Research*, 29(38), 58326–58340. <https://doi.org/10.1007/s11356-022-19948-8>
- Sarker, T., & Cadman, T. (2022). Private finance for sustainable development. In C. Timothy & S. Tapan (Eds.), *De Gruyter handbook of sustainable development and finance* (pp. 251–264). De Gruyter. <https://doi.org/10.1515/9783110733488-012>
- Schluep, I., Aerni, P., & Stavridou, M. (2021). Preface to transitioning to decent work and economic growth. In P. Aerni, M. Stavridou, & I. Schluep (Eds.), *Transitioning to decent work and economic growth* (pp. 1–7). MDPI.

- Schoenmaker, D. (2017). *From risk to opportunity: A framework for sustainable finance*. Rotterdam School of Management, Erasmus University. <https://ssrn.com/abstract=3066210>
- Schoenmaker, D. (2018a). *A framework for sustainable finance* (pp. 1–31). Centre for Economic Policy Research. <https://doi.org/10.2139/ssrn.3125351>. Discussion Paper DP12603.
- Schoenmaker, D. (2018b). *Sustainable investing: How to do it*. Bruegel Policy Contribution, No. 2018/23 (pp. 1–12). Bruegel. <http://hdl.handle.net/10419/208023>
- Schoenmaker, D., & Schramade, W. (2019). *Principles of sustainable finance*. Oxford University Press.
- Sileem, H., & Al-Ayouty, I. (2022). The effect of gender equality on the carbon intensity of well-being: Panel data analysis for the MENA economies 1995–2018. *Journal of Chinese Economic and Foreign Trade Studies*, 1–22. <https://doi.org/10.1108/jcefts-09-2021-0060>
- Sirag, A., & Nor, N. M. (2021). Out-of-pocket health expenditure and poverty: Evidence from a dynamic panel threshold analysis. *Healthcare*, 9(5), 1–20. <https://doi.org/10.3390/healthcare9050536>
- Spinazzola, M., & Cavalli, L. (2022). The 2030 agenda for sustainable development and the Wef nexus. In L. Cavalli & S. Vergalli (Eds.), *Connecting the sustainable development goals: The Wef nexus: Understanding the role of the Wef nexus in the 2030 agenda* (pp. 3–12). Springer Nature Switzerland AG. https://doi.org/10.1007/978-3-031-01336-2_1
- Stubbs, T., Kentikelenis, A., Ray, R., & Gallagher, K. P. (2022). Poverty, inequality, and the international monetary fund: How austerity hurts the poor and widens inequality. *Journal of Globalization and Development*, 13(1), 61–89. <https://doi.org/10.1515/jgd-2021-0018>
- Tachiiri, K., Su, X., & Matsumoto, K. i. (2021). Identifying key processes and sectors in the interaction between climate and socio-economic systems: A review toward integrating earth–human systems. *Progress in Earth and Planetary Science*, 8(1), 1–23. <https://doi.org/10.1186/s40645-021-00418-7>
- Taghvaei, V. M., Nodehi, M., Arani, A. A., Jafari, Y., & Shirazi, J. K. (2022). Sustainability Spillover effects of social, environment and economy: Mapping global sustainable development in a systematic analysis. *Asia-Pacific Journal of Regional Science*, 00(0), 1–25. <https://doi.org/10.1007/s41685-022-00231-0>
- United Nations. (1987). *Report of the world commission on environment and development: Our common future*. United Nations. https://digitallibrary.un.org/record/139811/files/A_42_427-EN.pdf?ln=en
- United Nations. (1999). *Standard Country or Area Codes for Statistics Use, 1999*. Department of Economic and Social Affairs, Statistics Division, United Nations. [https://unstats.un.org/unsd/publication/SeriesM/Series_M49_Rev4\(1999\)_en.pdf](https://unstats.un.org/unsd/publication/SeriesM/Series_M49_Rev4(1999)_en.pdf)
- United Nations. (2015). *Transforming our world: The 2030 agenda for sustainable development [Resolution Adopted by the General Assembly on 25 September 2015]*. United Nations.
- United Nations. (2019). *Industry, innovation and infrastructure – Why it matters*. https://www.un.org/sustainabledevelopment/wp-content/uploads/2019/07/9_Why-It-Matters-2020.pdf

- United Nations. (2022a). *Financing for sustainable development report 2022: Bridging the finance divide*. United Nations. <http://desapublications.un.org/file/955/download>
- United Nations. (2022b). *Global indicator framework for the sustainable development goals and targets of the 2030 agenda for sustainable development*. United Nations. https://unstats.un.org/sdgs/indicators/Global%20Indicator%20Framework%20after%202022%20refinement_Eng.pdf
- United Nations. (2022c). *Scaling SDG finance for the sustainable development goals: Foreign direct investment, financial intermediation and public-private partnerships*. United Nations Global Compact.
- United Nations. (2022d). *The sustainable development goals report 2022*. United Nations. <https://unstats.un.org/sdgs/report/2022/The-Sustainable-Development-Goals-Report-2022.pdf>
- United Nations. (2022e). *Tier classification for global SDG indicators*. United Nations. <https://unstats.un.org/sdgs/iaeg-sdgs/tier-classification/>
- Vinodkumar, N., & Alarifi, G. (2022). Environmental social governance: A core value to responsible stakeholders and stock market sustainability in the Kingdom of Saudi Arabia. *Journal of Sustainable Finance & Investment*, 12(4), 1085–1101. <https://doi.org/10.1080/20430795.2020.1827602>
- Volz, U. (2022). Climate-proofing the global financial safety net. *Journal of Globalization and Development*, 13(1), 1–30. <https://doi.org/10.1515/jgd-2020-0085>
- Wendt, K. (2022). *Social stock exchanges: Catalyst for impact investing*. Springer Nature Switzerland AG.
- World Bank. (2021). *MENA economic update—Living with debt: How institutions can chart a path to recovery in the Middle East and North Africa*. International Bank for Reconstruction and Development/The World Bank.
- Yeh, S.-C., Hsieh, Y.-L., Yu, H.-C., & Tseng, Y.-H. (2022). The trends and content of research related to the Sustainable Development Goals: A systemic review. *Applied Sciences*, 12(13). <https://doi.org/10.3390/app12136820>
- Zhang, R., Tang, X., Liu, J., Visbeck, M., Guo, H., Murray, V., McGillicuddy, C., Ke, B., Kalonji, G., Zhai, P., Shi, X., Lu, J., Zhou, X., Kan, H., Han, Q., Ye, Q., Luo, Y., Chen, J., Cai, W., . . . Zhou, L. (2022). From concept to action: A united, holistic and one health approach to respond to the climate change crisis. *Infectious Diseases of Poverty*, 11(1), 1–6. <https://doi.org/10.1186/s40249-022-00941-9>