

Limassol Marina, Cyprus. Cyprus recognizes that health is a necessary component for socio-economic stability, and an essential aspect of sustainable development.



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Islands and the 2030 Sustainable Development Goals:

Learning lessons to transform our world — A health perspective

ABSTRACT

In 2015, global leaders adopted the resolution, Transforming our world: The 2030 Agenda for sustainable development, driven by the Sustainable Development Goals (SDGs). Most island states, and some island jurisdictions, seized the opportunity to use these goals to ‘transform’ their islands’ development process. This chapter highlights some key lessons of

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islands on their journey of development transformation using SDG3 — good health and well-being — and its interactions with other health-related SDGs (HRSDGs). Firstly, the genesis and intent of the 2030 Sustainable Development Agenda is introduced. The call for an integrated approach to implementing the SDGs is highlighted and the Six Transformations Framework (STF) is proffered as a framework for analysis. A systematic review of ten island states’ Voluntary National Reviews (VNRs) and, for comparative purposes, the SDG-related plans of two island territories, is conducted and analyzed using the ‘health, well-being, and demography’ Transformation of the STF. The overall analysis reveals lessons, including in public health services and innovation, from an integrated or holistic manner congruent with the intent of the 2030 Agenda. The chapter concludes with some suggestions on how island policy makers can achieve deeper interactions with the SDGs while establishing policy, goal-based development, and improved stakeholder engagement in the era of COVID-19.

INTRODUCTION: THE SUSTAINABLE DEVELOPMENT GOALS, INTERACTIONS, AND TRANSFORMATIONS

In 2015, global leaders adopted the resolution *Transforming our World: The 2030 Agenda for Sustainable Development* (United Nations [UN], 2015), driven by the Sustainable Development Goals (SDGs) (see Appendix A; UN, n.d.). According to the United Nations (2015, p. 3), “the 17 Sustainable Development Goals and 169 targets ... are integrated and indivisible and balance the three dimensions of sustainable development: the economic, social and environmental.” Moreover, heads of states have “set a supremely ambitious and transformational vision,” that “envisage[s] a world free of poverty, hunger, disease and want, where all life can thrive” (UN, 2015, p. 5). This new global agenda is focused on a holistic approach to transform our world and local societies.

The SDGs “are intended to be universal, in the sense of embodying a universally shared common global vision of progress towards a safe, just and sustainable space for all human beings to thrive on the planet” (Osborn et al., 2015, p. 2). However, global attempts at implementing global goals such as the Millennium Development Goals (MDGs), which expired in 2015, have met limited success and unintended outcomes (Sheppard et al., 2015). Recognizing the shortcomings of the MDGs, the United Nations (UN, 2013, p. iii) argued that “a new development agenda should carry forward ... the best of the MDGs.” However, Griggs et al. (2013, p. 305) contended that a mere extension of the MDGs will be insufficient in the current context of humans’ transformation of “the planet in ways that could undermine development gains.” Moreover, Eisenmenger et al. (2020) noted that the economic growth imperative of the SDGs has overshadowed the focus on “sustainable resource use.” Further, Stafford-Smith (2014, p. 281) pointed out that the SDGs have moved “the strategy from a list of priorities to an

unwieldy and impractical catch-all.” He further argued that, “most importantly, the goals must work towards a common purpose, thus avoiding ... perceived trade-offs between securing the long-term stability and health of the Earth system and securing water, food and energy security in the short term” (Stafford-Smith, 2014, p. 281). From this perspective, recent research has focused on finding synergies, while addressing trade-offs, leading to analyses of how the SDGs interact and integrate (Alcamo et al., 2020; Griggs et al., 2014; International Science Council, 2017; Nilsson et al., 2016; Prajal et al., 2017; Spangenberg, 2016; Weitz et al., 2018). This chapter focuses on SDG3 — *good health and well-being* — and, in this regard, Asma et al. (2020, p. 240) identified twelve “health-related SDGs (HRSDGs)” that interact with SDG3 to ensure healthy lives and promote well-being for all ages (see Appendix B; UN, n.d.).

Sachs and colleagues (2019) moved beyond merely analyzing interactions by proposing six Transformations that might be able to provide a deeper (yet less complex) consideration of the interactions and relationships among SDGs. According to Sachs et al. (2019), the proposed six Transformations (see Table 5.1), referred to in this chapter as the Six Transformations Framework (STF), are intended to focus on how the implementation of the SDGs must be organized; a gap that exists with the extant research on interactions. In this regard, Sachs et al. (2019) concluded that the six Transformations organize the SDG interventions into discrete but interacting pillars.

In this chapter, therefore, the STF is used to analyse the interactions and relationships of SDG3 with the HRSDGs and the Transformations presented in Table 5.1 (next page). An analysis of the Voluntary National Review (VNR) reports of ten island states and similar reports developed by two subnational island jurisdictions (SNIJs), Guam and Aruba, is conducted. The argument is presented in the following sections: the first considers the SDGs in the context of island jurisdictions, introduces the VNRs, and describes the rationale for selecting the particular island cases. The ensuing results section presents the findings from the reviews. In the discussion section, some key lessons from the findings that demonstrate the relational and transformative nature of the SDGs in the context of the STF are presented. The paper ends by presenting suggestions for improving the relational approach for further implementing the SDGs and in the context of COVID-19. The main points are summarized in the conclusion.

FROM THIS PERSPECTIVE, recent research has focused on finding synergies, while addressing trade-offs, leading to analyses of how the SDGs interact and integrate.

TABLE 5.1: The Six Transformations of the Sustainable Development Goals

Transformation	SDG Interventions	Intermediate Outputs
1. Education, gender, and inequality	Early childhood development Primary and secondary education Vocational training and higher education Social protection system and labour standards Research and development	Education and human capital Decent work and income support to vulnerable groups Innovation
2. Health, well-being, and demography	Universal health coverage Healthy behaviours and social determinants of all health and well-being	Public health services
3. Energy, decarbonization, and sustainable industry	Access to clean energy Zero carbon electricity generation Curbing pollution	Energy access for all Energy decarbonization Clean air and water
4. Sustainable food, land, water, and oceans	Efficient and resilient agricultural systems and fisheries that support healthy diets and farm livelihoods Healthy food promotion and regulation	Sustainable land use, oceans, and food systems
5. Sustainable cities and communities	Urban access to water, sanitation, and waste management	Transport, water, and sanitation infrastructure
6. Digital revolutions for sustainable development	Universal broadband and information technology infrastructure	Digital technologies and infrastructure

Source: Author's adaptation of the Six Transformation Framework from Sachs et al. (2019).

ISLANDS AND THE SUSTAINABLE DEVELOPMENT GOALS

At the United Nations Sustainable Development Summit held in New York in 2015, the leaders of many island states delivered passionate and compelling speeches regarding adopting the Sustainable Development Agenda 2030. Subsequently, Sachs and colleagues (2020) have been preparing the *Sustainable Development Report*, which presents a dashboard of how countries are progressing towards meeting each of the SDGs. The report uses data from the World Bank, for example, as well as from “non-official sources” (Sachs et al., 2020, p. 23) such as research institutes and non-governmental organizations to create a composite SDG score that can be used to gauge how jurisdictions are achieving the SDGs. Each of the SDGs are weighed equally and “the score signifies a country’s position between the worst (0) and the best or target (100) outcomes” (Sachs et al., 2020, p. 25). The SDG scores and the rankings of all island states in the report are shown in Table 5.2. To illustrate the utility of the SDGs score, that Cyprus has an overall score of 75, for example, “suggest[s] that the country is on average [75]% of the way to the best possible outcome across the 17 SDGs” (Sachs et al., 2020, p. 25). According to the *Sustainable Development Report*, the lack of data in many jurisdictions hindered the assessment (Sachs et al., 2020). However, these rankings do provide an overview of the relative success of islands in meeting the SDGs. For comparative purposes, the SDG scores of the metropole associated with the two island territories are used as proxies and are shown in Table 5.2 (next page).

All countries are provided with the opportunity to conduct a self-assessment on how they are implementing and achieving the SDGs, and these assessments are reported in their VNRs. In essence, these reviews provide a comprehensive picture at one point in time on how countries are progressing with the implementation of the SDGs. In other words, it allows countries to gauge their progress on achieving their local goals enshrined in their national plans and, indirectly, the SDGs. According to the United Nations Department of Economic and Social Affairs (UN DESA; 2019, p. 2), “the VNRs are intended to track progress in implementing the 2030 Agenda, including the SDGs and targets in all countries, in a manner that respects their universal and integrated nature and all dimensions of sustainable development.” Moreover, and in accordance with the requirements for review contained in the outcome document on the adoption of the SDGs (UN DESA, 2019, p. 2), “reviews will be substantive and knowledge based, as well as open, inclusive, participatory and transparent for all people, with a particular focus on the poorest, most vulnerable and those further behind.”

TABLE 5.2: Island States Ranked by SDG Scores

Island State	Island Ranking	World Ranking	SDG Score
United Kingdom	1	13	79.6
Ireland	2	14	79.4
New Zealand	3/4 (Tied)	16/17 (Tied)	79.2
Japan	3/4 (Tied)	16/17 (Tied)	79.2
Iceland	5	26	77.5
Malta	6	32	76.0
Cyprus	7	34	75.2
Cuba	8	65	72.6
Dominican Republic	9	73	70.2
Fiji	10	74	69.9
Bahrain	11	82	68.8
Jamaica	12	84	68.7
Barbados	13	87	68.3
Brunei Darussalam	14	88	68.2
Maldives	15	91	67.6
Cabo Verde	16	92	67.2
Singapore	17	93	67.0
Trinidad and Tobago	18	98	65.8
Philippines	19	99	65.5
Indonesia	20	101	65.3
Mauritius	21	108	63.8
São Tomé & Príncipe	22	115	62.6
Vanuatu	23	122	60.9
Comoros	24	146	83.1
Haiti	25/26 (Tied)	154/155 (Tied)	51.7
Papua New Guinea	25/26 (Tied)	154/155 (Tied)	51.7
Madagascar	27	161	49.1
Aruba (Netherlands)	n/a	9	80.4
Guam (USA)	n/a	31	76.4

NOTES: Island rankings were determined by the author. Metropole scores were used as proxies for the two island territories (Aruba and Guam). Green highlights are the islands selected for review in this chapter.

Source: Compiled based on data from Sachs et al. (2020).

SELECTION OF CASE STUDY ISLANDS

To select a cross-section of island states, four measurements were chosen as suggested indicators of the country's economic (GDP), social (life expectancy at birth), and environmental (population, population density) status (Randall & Brimacombe, 2020; see Table 5.3, next page). Although one might question the selection of these indicators, they have the advantages of being readily available for all jurisdictions and understood by most people. Island states with the highest and lowest GDP/capita were selected from each of the continental regions. The SDG scores from Sachs and colleagues' (2020) report, as noted in Table 5.2, were then highlighted in green. The final criterion used for selection was the availability of a VNR (in English) for each of the states. Since VNRs are rarely prepared for subnational island jurisdictions, they were formally omitted from the selection process. However, several of these SNIJs have developed sustainable development roadmaps and action plans. Given the importance of many of these islands for overall goals of sustainability, two such SNIJs (Aruba and Guam) are included in this analysis.

The island states selected represent, to some extent, the heterogeneity of islands. In this regard, the population density, which features in debates on island development (e.g., Baldacchino, 2010; Randall & Brimacombe, 2020), ranged from 7,953 persons/km² to 24 persons/km². Similarly, there was a wide range of GDP/capita. However, using the *World Bank Classification of Economies* (The World Bank Group, 2020), eight of the islands are classified as 'upper income' while four are in the 'upper/lower middle income' group: the classifications in which the majority of island states and territories belong. Relating to the SDG scores for island states, three rank at the top, three in the middle category, and one in the lowest grouping. There were no scores for the three remaining island states in the report.

TABLE 5.3: Proxy Indicators of Economic, Social, and Environmental Status of Islands

	Island state	GDP/capita (USD)	Population (Million)	Population density (per km ²)	Life expectancy at birth (years)
Asia	Singapore	94,100	6.209	7,953	85.5
	Timor-Leste	6,500	1.382	85	68.7
Europe	Cyprus	37,200	1.266	129	79.1
	Ireland	73,200	5.176	70	81.0
Africa	Cabo Verde	7,000	0.583	135	72.7
	Seychelles	29,200	0.096	210	75.2
Oceania	New Zealand	39,000	4.925	19	81.4
	Vanuatu	2,700	0.298	24	74.0
Caribbean/ Americas	Jamaica	9,200	2.808	271	74.5
	Bahamas, The	32,400	0.337	39	72.9
Island Territories	Aruba	37,500	0.119	663	76.0
	Guam	35,600	0.168	310	80.0

NOTE: Island states and territories selected by author for the study.

Sources: Randall & Brimacombe (2020); Central Intelligence Agency (2020); The World Bank (<https://data.worldbank.org/indicator>).

RESULTS FROM THE CASE STUDIES: A HEALTH PERSPECTIVE

For the purposes of this study, and given the theme of this volume, the analysis of these twelve island states and territories focuses on SDG3 (see Appendix B; UN, n.d.) and Transformation 2: ‘Health, well-being, and demography’ (see Table 5.1). An initial analysis of the global reports on how the data driven approach has ranked the ‘status’ and ‘trend’ of SDG3 in these islands is provided in Table 5.4. The *status/trend* column suggests that the majority of these islands have challenges with health, with only moderate improvements having been made over time. However, we should be cautious about drawing conclusions from this assessment, because only Vanuatu conducted an overall self-assessment of their progress with the SDGs, and reported steady progress on SDG3. A more comprehensive summary of the findings from the reviews of the countries’ VNRs follows.

TABLE 5.4: Overall Assessment of Status and Trend Regarding the SDGs

Islands	Status/trend on SDG3 ¹	Country’s self-assessment of status/trend on SDG3 ²
Cabo Verde	Major challenges/moderately improving	No overall assessment
Cyprus	Challenges remain/moderately improving	No overall assessment
Ireland	Challenges remain/moderately improving	No overall assessment
Jamaica	Significant challenges/moderately improving	No overall assessment
The Bahamas	Significant challenges/moderately improving	No overall assessment
New Zealand	Challenges remain/moderately improving	No overall assessment
Singapore	Challenges remain/moderately improving	No overall assessment
Seychelles	No assessment	No overall assessment
Timor-Leste	No assessment	No overall assessment
Vanuatu	Major challenges/moderately improving	Steady progress

1 Compiled based on data from Sachs et al., 2020c.

2 Based on VNR Reports. ‘No overall assessment’ indicates that the country’s VNR did not include an overall status or trend assessment.

Aruba

Aruba developed *A Roadmap for SDG Implementation* (Government of Aruba, 2018). According to the roadmap, ‘youth empowerment, quality of life, and wellbeing’ was identified “as one of nine accelerators ... to catalyze progress towards the SDGs” (Government of Aruba, 2018, p. 5). A number of challenges relating to health were identified, including “the need for increasing community health and wellbeing” and “lack of professional health capacity and a monolithic health care system” (Government of Aruba, 2018, p. 6). In this regard, a number of interventions were proffered, including an integrated approach on vulnerable groups, programs with a focus on NCDs, and improved mental and physical health (Government of Aruba, 2018, pp. 6-7).

The Bahamas

The Bahamas reported on some important challenges and opportunities relating to meeting SDG3, including the significant contribution of newborn and infant deaths

THE REPORT BY THE GOVERNMENT OF THE BAHAMAS (2018) NOTED THAT SOME KEY CHALLENGES TO IMPLEMENTING SDG3 INCLUDED SUSTAINABLE FUNDING FOR THE HEALTH CARE SYSTEM, THE HIGH COST OF HEALTHY FOOD, AND A PREDOMINANTLY SEDENTARY LIFESTYLE FOR SOME RESIDENTS.

to the 2016 mortality rate, and a high prevalence of non-communicable diseases (NCDs; due mainly to the changing demographics and lifestyles), also noting the urgent need to arrest the frequency of road accident fatalities (Government of The Bahamas, 2018, pp. 52-53). The report noted, however, that the incidence of tuberculosis has steadily declined since 1990 (Government of The Bahamas, 2018, p. 53). The country has introduced some key strategies, plans, and policies to address some of these issues, including a national health insurance plan for universal access to primary care, a national road safety strategy (which aims to reduce road fatalities), and a national multi-sectoral

NCD strategy and plan “to halt and reverse the climbing NCD statistics” (Government of The Bahamas, 2018, pp. 54-55). The report further noted that some key challenges to implementing SDG3 included sustainable funding for the health care system, the high cost of healthy food, and a predominantly sedentary lifestyle for some residents (Government of The Bahamas, 2018, p. 57).

Cabo Verde

Cabo Verde’s VNR (National Directorate for Planning, 2018, p. 46) reported that, in the health field, the country “has had a successful journey and has made great progress,” particularly in terms of under-five and maternal mortality rates, and attributed this success to the “preventative aspect,” especially the “high vaccination coverage of children.” Another area of significant importance noted in the report was in the area of reproductive health, where investments in education have made significant impacts.

Cabo Verde also indicated that, due to its high vaccination coverage of children, it has avoided inequalities in the health care system. The VNR further noted that chronic diseases such as cardiovascular diseases and cancers, which are the leading causes of death, pose a cost challenge to the country due to the “prolonged treatment” (National Directorate for Planning, 2018, p. 47) needed for these diseases. Another challenge reported is that of dealing with vector-borne diseases and the emergence of malaria in 2017. Recognizing the importance of health, the government of Cabo Verde pledged health sector reform that ensures “the availability of health care for all” (National Directorate for Planning, 2018, p. 48).

Cyprus

Cyprus attributes its success in meeting SDG3 to achieving a number of the targets in full, including maternal mortality ratio (SDG 3.1.1) and under-five mortality rate (SDG 3.2.1), and having a number of policies and strategies in place to aid in their implementation (Republic of Cyprus, 2017). Additionally, related to Target 3.7 and Target 3.3, respectively, the country has strategic plans on sexual and reproductive health and the control of HIV/AIDS (Republic of Cyprus, 2017, p. 19). However, the report further noted that “despite high scores in the majority of SDG3 targets, ... a major challenge is the absence of Universal Health Coverage” (Republic of Cyprus, 2017, p. 18), an issue which the country is addressing through its legal system. The Republic of Cyprus recognizes that health is a necessary component for socio-economic stability, and an essential aspect of sustainable development (SDGs 1, 3, and 5).

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Guam

One of the five categories of action identified in *The Guam Green Growth Plan* (University of Guam and the Office of the Governor of Guam [UG/OGG], 2020, p. 5) was “healthy and prosperous communities,” which focuses on SDGs 1,2,3, and 9 (UG/OGG, 2020, p. 7). In this regard, some key proposed actions were “increasing food security and accessibility to local nutritious food” and “creating an environment for innovative cottage industries” (UG/OGG, 2020, p. 7) that will assist with reducing reliance on imports and waste generation. Guam further recognizes that “achieving sustainable development will be impossible without a healthy community that can meet its basic needs” (UG/OGG, 2020, p. 7).

Ireland

Ireland ranks high on the SDG score (see Table 5.2) but, according to information in Table 5.4, the country has challenges with meeting SDG3. However, comparing itself to the EU indicators, the VNR identified several areas in which it was doing well. For example, the death rate due to chronic disease was “below the EU average in 2015 for both females and males,” (Government of Ireland, 2018, p. 31) and life expectancies for both females and males at birth were above the EU average. However, the country noted that “health and social care services continue to face demographic pressures and a rising burden of chronic diseases” (Government of Ireland, 2018, p. 31). These “demographic pressures” and the “changing nature and complexity of care required” (Government of Ireland, 2018, p. 31) are placing pressures on the system. The report further indicated under its ‘Healthy Ireland’ framework that a number of targets, such as SDG 3.3 and 3.4, are addressed “to improve the health and well-being of the people of Ireland” (Government of Ireland, 2018, p. 32).

Jamaica

‘Significant challenges, but moderately improving’ is how Jamaica’s status and trend are described in Table 5.4. However, according to the VNR (Planning Institute of Jamaica, 2018, p. 28), Jamaica is at an “advanced stage of the demographic transition,” characterized by a decline in the 0-14 age group and an increase in both the working age population and dependent elderly age groups, thus affecting “social and economic development particularly as it relates to provision of and access to health” (Planning Institute of Jamaica, 2018, p. 28). Additionally, the country reported on some significant activities that have occurred in the health sector, vis-à-vis the achievement of universal health coverage and health financing, reduction of maternal and child mortality, and promotion of healthy lifestyle practices (Planning Institute of Jamaica, 2018, pp. 29-30). However, some key challenges were noted, including the lack of significant resources in high dependency care for newborns (as well as external issues, e.g., indirect maternal deaths from complications of chronic diseases), aged infrastructure, and strengthening of rehabilitation services for vulnerable persons (Planning Institute of Jamaica, 2018, p. 33).

New Zealand

New Zealand ranks third in the SDGs scores (see Table 5.2), but still has challenges with SDG3 (see Table 5.4). However, as a high-income country, New Zealand claimed to have achieved SDG3 targets at an aggregate level and is well-placed internationally (New Zealand Ministry of Foreign Affairs and Trade, 2019, p. 31). The country also recognized the synergistic nature of the SDGs, noting that the achievement of health outcomes contributes to achieving other goals. The national VNR also noted that “achieving good health is reliant on social, cultural and economic factors enshrined in

many of the SDGs” (New Zealand Ministry of Foreign Affairs and Trade, 2019, p. 31). In this regard, the report further noted that “initiatives to reduce greenhouse gas emissions and improve individual health by some of its national health boards have been successful” (New Zealand Ministry of Foreign Affairs and Trade, 2019, p. 34). Four key priorities of the country are noted to be in alignment with SDG3: achieving equity, child well-being, mental health, and primary health care (New Zealand Ministry of Foreign Affairs and Trade, 2019, p. 31). However, New Zealand recognizes two major challenges to achieving the goal: (1) the “strong inequalities [that] still exist between sub-populations,” (New Zealand Ministry of Foreign Affairs and Trade, 2019, p. 31) and (2) the achievement of universal health care.

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Seychelles

Linking health to economic growth, the Seychelles VNR report notes that “as the Seychelles has made great strides in economic development, including achieving high-income status, the country has also acquired better health status” (Economic Planning Department, 2020, p. 30). However, a few challenges were noted: despite the fact that access to sexual reproductive health services is widely available, the adult fertility rate remains high; there are signs of poor quality in the delivery of health services; and there is a shift from communicable diseases to non-communicable diseases (Economic Planning Department, 2020, p. 32). The Seychelles also recognized the need to address the social determinants of health, and noted that some of these are addressed through policy, “such as providing universal education, maintaining low unemployment and empowering youth” (Economic Planning Department, 2020, p. 32). The report acknowledged, however, that critical gaps such as the “urgent need to improve collection, analysis, sharing and use of data for health” must be addressed (Economic Planning Department, 2020, p. 33).

Singapore

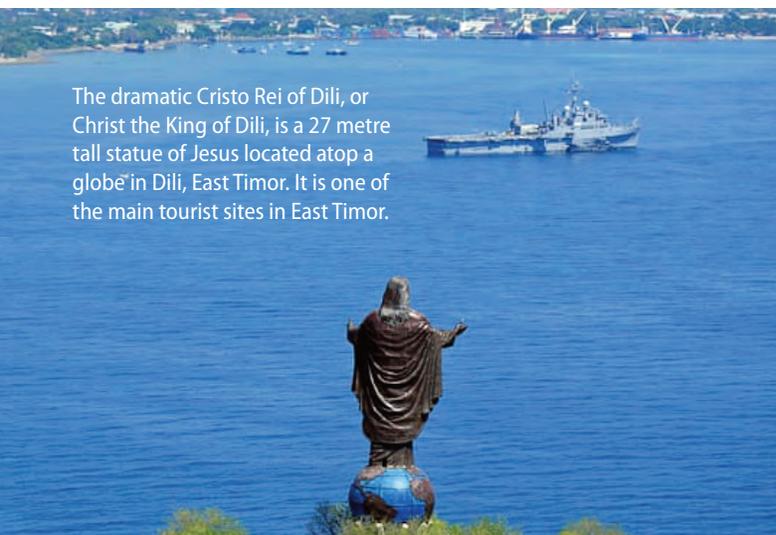
Singapore ranks at the top of all the indicators in Table 5.3 and, maybe not surprisingly, declared in the VNR report (Ministry of Foreign Affairs, 2018, p. 10) that “Singaporeans are living longer in full health than people of other nationalities,” which they attribute to “the accessibility of quality and affordable basic medical services for all, the active promotion of preventative health programmes and medicine, high standards of living, clean water, hygiene, and a culture of healthy living.” In this regard, three bright spots in the health system were highlighted: (1) accessible and improved health care, (2) control of non-communicable diseases, and (3) control of communicable diseases (Ministry of Foreign Affairs, 2018, pp. 10-11). In the latter, it is noted that Singapore

has “enhanced its surveillance and response on disease outbreak, drawing on its experiences with SARS and H1N1 outbreaks in 2003 and 2009, respectively” (Ministry of Foreign Affairs, 2018, p. 11). The report noted the challenge in the future of meeting health care cost as the population ages.

Timor-Leste

Timor-Leste reported significant progress with improving child and maternal health, attributed partly to “investment in the health workforce and system” (Government of Timor-Leste, 2019, pp. 55, 58). The report also noted that the decline in fertility rates was significant and that the country was on track to eliminate malaria by 2021 (Government of Timor-Leste, 2019, p. 58). A number of challenges were noted, including

increases in the number of HIV/AIDS cases, a considerable increase in the number of tuberculosis cases, and the fact that 45% of deaths are attributed to non-communicable diseases, “highlighting the importance of looking ahead to future healthy lifestyle challenges” (Government of Timor-Leste, 2019, pp. 58-59).



The dramatic Cristo Rei of Dili, or Christ the King of Dili, is a 27 metre tall statue of Jesus located atop a globe in Dili, East Timor. It is one of the main tourist sites in East Timor.

Vanuatu

As noted in Table 5.4, Vanuatu is the only island country that has rated itself on achieving each of the SDGs and, in this regard, claimed to be making “steady progress” (Republic of Vanuatu, 2019, p. 23) with SDG3. Vanuatu used its VNR to report mainly on the progress with its National Plan and alignment with the SDGs, and focused mainly on targets. For example, the national maternal mortality ratio target (SDG Target 3.1, indicator 3.1.1) is set at less than 70 deaths/100,000, but in 2017 it was 122 deaths/100,000 (Republic of Vanuatu, 2019, p. 25). Secondly, the country is focused on targets on three non-communicable diseases: diabetes, tuberculosis, and malaria (SDG Target 3.3, indicators 3.3.1-4) (Republic of Vanuatu, 2019, p. 25). The country also has a focus on the promotion of healthy lifestyles and the building of health sector capacity and systems to ensure the delivery of efficient and effective services (SDG Target 3.c) (Republic of Vanuatu, 2019, p. 26).

DISCUSSION: TRANSFORMATION LESSONS

In this section, we re-examine these islands in the context of the STF, as shown in Tables 5.5 and 5.6 (following pages). The pivotal Transformation pillar of *health, well-being, and demography* is intended to focus on two intermediary interventions: *universal health coverage and healthy behaviors* and *social determinants of all health and well-being* (see Table 5.1), which may be achieved through the intermediate output of *public health services*. Tables 5.5 and 5.6 show all of the relevant intermediary outputs for the six Transformations and their relations to the SDGs. The numbers in the metrics of both tables indicate the strength of relationship between the SDGs and the outputs. In this regard, 3 means ‘directly targets the SDG’; 2 ‘reinforces the SDG’; 1 denotes ‘enabling the SDG’; and the value 0 suggests no interaction at all with the SDG (Sachs et al., 2019, p. 805). Table 5.5 demonstrates how the outputs on the ‘health’ Transformation relate to all of the other SDGs, while Table 5.6 suggests how SDG3 interacts with the other five Transformations. For example, as shown in Table 5.5, ‘public health services’ relates directly to SDG2 (*zero hunger*) and SDG5 (*gender equality*), all denoted by ‘3’. Alternatively, when assessing Table 5.6, SDG3 relates directly to intermediate outputs on ‘clean air and water’ and ‘sustainable land use, oceans, and food systems’. Analysis of the case study islands focuses on the two intermediate outputs: ‘innovations’ and ‘public health services’. However, the other outputs with a direct and sometimes enabling relationship as identified in the case countries’ VNRs under SDG3 are also featured. The island case studies provide several key lessons on SDG interactions and their relationships in the STF.

Public health services

First, the need to provide accessible and high-quality public health services has been recognized by a number of these case study islands. For example, Cabo Verde, a lower-middle income economy, has pledged health sector reform that ensures availability, while the high-income countries of New Zealand and Cyprus have also recognized the lack of achievement of universal health care as a major challenge. Universal health care can assist with the improvement of health services. Moreover, some of the islands, such as The Bahamas and Singapore, have noted the future cost challenges for the health system associated with changing demographics and the prevalence of NCDs. Aruba identified the need to focus on NCDs and “lack of professional capacity and a monolithic health care system” (Government of Aruba, 2018, p. 6) as a challenge. In this regard, islands such as Cabo Verde, Vanuatu, and Aruba have pledged to provide the necessary improvements to supply high-quality health services. Despite the challenges, some bright spots are being reported. For example, high-income Singapore attributed the long life of its citizens to “quality and affordable basic medical services for all” (Ministry of Foreign Affairs, 2018, p. 10). Timor-Leste, a lower-middle income economy,

has also reported that investments in its health care system have improved child and mental health. Finally, upper-middle income Jamaica declared the “achievement of universal health coverage and health financing” (Planning Institute of Jamaica, 2018, p. 29).

Public health services also relate directly to SDG2 (*zero hunger*) and SDG5 (*gender equality*) and reinforce SDG10 (*reduced inequalities*). A number of the case study islands have demonstrated these relationships. For example, Ireland reported that the death rate from chronic diseases for both males and females was below the EU average, while the life

TABLE 5.5: Relationships between SDGs and 'Health' Transformation Pillar Output (Public Health Services)

Sustainable Development Goals (SDGs)		Relationship with 'Health' Transformation output
1	No poverty	2
2	Zero hunger	3
3	Good health and wellbeing	3
4	Quality education	2
5	Gender equality	3
6	Clean water and sanitation	0
7	Affordable and clean energy	0
8	Decent work and economic growth	2
9	Industry, innovation, and infrastructure	1
10	Reduced inequalities	2
11	Sustainable cities and communities	1
12	Responsible consumption and production	1
13	Climate action	0
14	Life below water	0
15	Life on land	0
16	Peace, justice, and strong institutions	1
17	Partnership for the goals	0

Strength of relationships between all SDGs and STF 'Health' Transformation pillar output, where 3=directly targets the SDG, 2=reinforces the SDG, 1=enabling the SDG, and 0=no interaction.

Source: Adapted from Sachs et al., 2019 (p. 805).

expectancy for both genders was above the EU average, which ‘reinforces’ SDG10. Cabo Verde and New Zealand have also demonstrated this relationship, with the former noting the avoidance of inequalities in its health care system due to the high vaccination rate of children. New Zealand has also recognized the need to address the inequalities that exist within its sub-populations. Finally, Aruba identified the need for an integrated approach in dealing with public health service delivery to vulnerable groups.

TABLE 5.6: Relationships between all Transformation Pillar Outputs and SDG3

Transformation and intermediate outputs	Relationship with SDG3
Education, gender, and equality	
Education and human capital	2
Decent work and income support to vulnerable groups	2
Innovation	1
Health, well-being, and demography	
Public health services	3
Energy, decarbonization, and sustainable industry	
Energy access for all	2
Energy decarbonization	2
Clean air and water	3
Sustainable food, land, water, and oceans	
Sustainable land use, oceans, and food systems	3
Sustainable cities and communities	
Transport, water, and sanitation infrastructure	2
Digital revolutions for sustainable development	
Digital technologies and infrastructure	2

Strength of relationships between SDG3 and all STF Transformation pillar intermediate outputs, where 3=directly targets the SDG, 2=reinforces the SDG, 1=enabling the SDG, and 0=no interaction.

Source: Adapted from Sachs et al., 2019 (p. 805).

Innovations

While innovation can enable the performance of the health care system, an analysis of SDG3 in the islands' VNRs has not revealed many examples of this interaction — although these may have been addressed under the relevant SDG9 (*industry, innovation, and infrastructure*). However, the island territory of Guam has indicated that they have incorporated innovations that will reduce waste and provide more local foods to support a “healthy and prosperous community” (UG/OGG, 2020, p. 5).

Education and gender equality

As shown with the example of the Seychelles, there is a need to address the social determinants of health. In this regard, it is noted in their VNR that the provision of universal education, maintenance of low unemployment, and youth empowerment are important for a healthy nation (Economic Planning Department, 2020). Aruba also identified targeting single parents with dependent children for vocational training and adult education (Government of Aruba, 2018, p. 7). These examples demonstrate the enabling relationship between SDG3 and the intermediate output on ‘education and human capital’ and ‘decent work and income support for vulnerable groups’.

Energy decarbonization and sustainable industry

New Zealand addressed this Transformation from the perspective of health by acknowledging the work done by some of its District Health Boards (DHBs) on reducing emissions of greenhouse gases. For example, their VNR (New Zealand Ministry of Foreign Affairs and Trade, 2019, p. 34) noted: “A growing number of DHBs employ sustainability officers and also measure and take action to reduce their greenhouse gas emissions.” These initiatives can improve individual health through reduced local pollution. Additionally, since one of the SDG interventions of this Transformation was ‘curbing pollution by achieving cleaner air and water’, it is noted that Singapore also identified clean water as an important attribute of health (Ministry of Foreign Affairs, 2018, p. 10).

THERE IS A CLEAR AND DIRECT cause-and-effect relationship between SDG2 (*zero hunger*) and health care services.

Sustainable land use, oceans, and food systems

There is a clear and direct cause-and-effect relationship between SDG2 (*zero hunger*) and health care services. This is considered within the intermediary outcome of ‘sustainable land use, oceans, and food systems’. The Bahamas addressed this relationship from the perspective of SDG3, indicating that the high cost of healthy

foods may hinder the implementation of SDG3. Additionally, Guam identified the need for food security and access to local nutritious foods as a means to achieve a healthy community through SDG3.

POLICY, GOAL-BASED DEVELOPMENT, STAKEHOLDER ENGAGEMENT, AND COVID-19

Policy and goal-based development

Notwithstanding the lessons stated above, there is still room to improve on the goal of achieving a better and deeper understanding of the interaction of the SDGs, in turn improving policy making, goal setting, and stakeholder engagement during the implementation of the SDGs. In the VNRs of five of the case study island states, the integration between SDG3 and other SDGs was demonstrated. For example, under Jamaica's national outcome, "a healthy and stable population" (Planning Institute of Jamaica, 2018, p. 17), SDG3 is grouped with SDG2 (*zero hunger*) and SDG6 (*clean water and sanitation*). Two of the islands simply aligned the SDGs and SDG Targets with their national targets, and in three others there was no evidence of integration or alignment to national plans. In the cases of the two SNIJs, there was evidence of SDG interactions. However, as was discussed earlier, interactions may be insufficient for effective implementation or even for designing policies to drive this implementation (Sachs et al., 2019). Also, the need to mobilize efforts and stakeholders to implement the SDGs in this "decade of action" (UN, 2019) and during the current COVID-19 pandemic is critical.

Sachs (2015, p. 489) coined the phrase "goal-based development" to highlight the importance of the SDGs and the role they can play in focusing policy makers on sustainable development, while Le Blanc (2015) further suggests that the integration of strategies and policies are critical for sustainable development. In this regard, island policy makers may be well advised to consider the Six Transformations Framework as an approach to creating goal-based policies and strategies that will not only consider the interactions among the SDGs but also their interaction with all of the Transformation pillars. Sachs and colleagues (2019, p. 805) noted that "many policy interventions ... are needed to achieve each SDG, and each intervention generally contributes to several goals." For example, The Bahamas introduced a non-communicable diseases strategy and plan that aims to halt the surge in the prevalence of NCDs. This strategic approach is encompassed within the 'health, well-being, and demography' pillar. However, it relates directly to and reinforces other Transformations, such as 'digital revolution for sustainable development', which was absent from The Bahamas integration of SDG3 with SDGs 1, 2, 4 5, 6, and 10. Additionally, the majority of islands do not indicate a relationship between SDG3 and innovation. In this regard, the STF, which indicates that there is a reinforcing relationship between SDG3 and the output 'digital technologies and infrastructure', allows island policy-makers to approach policy design, planning, and goal-setting with a deeper understanding of SDG interactions, thus producing improved policies and plans for sustainable development.

Another important aspect of the STF proposed by Sachs et al. (2019, p. 805) is to "organize SDG interventions through a semi-modular action agenda that can be

designed by discrete, yet interacting, components of government. Each Transformation engages a different subset of business and civil society, facilitating targeted problem-solving, clear communication and mobilization of stakeholders.” The Ministries of Health, or related government departments, will most likely have oversight for SDG3. According to Sachs and colleagues (2019), different government ministries will have the responsibility to develop and implement policies to ensure that the SDGs, which are mostly aligned to local plans, are being implemented. However, using the STF, the Health Ministry will now have “discrete” responsibility — not just for SDG3, but for the larger package of interactions under the ‘health, well-being, and demography’ Transformation. In this regard, responsible ministries will now have a better and deeper understanding regarding how the discrete package of SDGs contained in the Transformation related to their ministry is interacting with all other SDGs. Therefore, the STF provides a more systematic approach for island policy makers to continue the implementation of the SDGs, allowing them to engage all influential stakeholders, even outside of the realm of health.

Stakeholder engagement

The United Nations (2019) recently called for a “Decade of Action” in which global action, local action, and people action — the latter appealing to civil society, youth, and academia, among others — will galvanize to achieve the intended Transformations to implement the SDGs. In this time span, stakeholder engagement and involvement with the implementation of the SDGs will be critical and, in this regard, there will be a need for island governments to make a concerted effort to engage all stakeholders to achieve the SDGs locally. Therefore, with smaller and discrete but integrated Transformation packages, stakeholders may be more inclined to participate. Also, this approach will be more manageable by the governments. In other words, the Ministries of Health will be better placed to engage stakeholders with a more streamlined and integrated approach, as opposed to the presentation of a whole plan or parts of the plan that may not have taken into consideration all the relationships between the SDGs.

Integrate COVID-19 into VNRs

Finally, the COVID-19 pandemic has presented a challenge with meeting the SDGs by 2030 (e.g., Naidoo & Fisher, 2020; Nature, 2020). In this regard, Naidoo and Fisher (2020, p. 198) noted: “Progress across the SDGs was slow even before COVID-19. Now it is even more likely that many of the 169 targets will not be met by 2030.” Specifically relating to SDG3, it is reported that several health gains, such as the reduction in maternal and child mortality rates, may be reversed due to COVID-19 (The Lancet Public Health, 2020; UN DESA, 2019) and that “health service disruptions could reverse decades of improvement” (The Lancet Public Health, 2020, e460), for example with vaccinations. This disruption may have negative consequences for meeting SDG3 and

other HRSDGs, as case numbers in islands may distract from the targets established by the SDGs. For example, as of December 8, 2020, seven out of the twelve case study islands had reported five thousand or more cases of COVID-19 (see Appendix C; World Health Organization, 2020). Sachs, Schmidt-Traub, and Lafortune (2020b; 2020a, p. 3), however, offer an optimistic argument, concluding that “the SDGs can be achieved through a combination of policies” and that “ambitious goals, if assiduously and creatively pursued, can unleash human innovation to accelerate progress beyond previously unimaginable rates.”

The optimism expressed by Sachs and colleagues (2020a, 2020b) may be seen in the VNR report of the Seychelles, the only island in the sample that released its report during the pandemic. In their VNR, the country elaborated a number of measures, spanning the economy, society, and environment, to address the impacts of COVID-19 (Economic Planning Department, 2020). Like the Seychelles, it is recommended that island states and territories integrate COVID-19 impacts into their VNRs, paying specific attention to the HRSDGs, and build on the Transformation lessons such as those reported in this chapter. In this regard, the STF may be an adequate tool to assist island policy makers achieve this integration into future VNRs.

CONCLUDING REMARKS

In 2015, the majority of island states adopted the 2030 Sustainable Development Agenda. Since then, island states and territories have provided some key lessons as they implemented SDG3 and other HRSDGs. Using a Six Transformations Framework, these lessons provided a ‘discrete but interactive’ approach to implementing the SDGs. However, notwithstanding these lessons, there were specific strategies that islands can employ to assist with developing a deeper understanding of the interactions among SDGs and how these interactions can be linked to policy planning and goal setting. It was also shown that the STF could be used by line ministries to engage key stakeholders during implementation. Although SDG implementation may be interrupted by the COVID-19 pandemic, island leaders should consider the impacts of the pandemic in future VNRs as they plan to achieve the SDGs by 2030.

ADDITIONAL RESOURCES

For an overview and interactive list of all Sustainable Development Goals, Targets, and indicators: <http://sdgs.un.org/goals>

For an overview of SDG3 (*good health and well-being*) and interactive list of Targets and indicators: <http://sdgs.un.org/goals/goal3>

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SOURCES AND NOTES FOR APPENDICES

- Appendix A:** United Nations SDGs and number of targets, compiled from United Nations (2015).
- Appendix B:** SDG3 and all targets, from United Nations (2015).
- Appendix C:** Cumulative COVID-19 cases in the twelve case study islands, as of 8 December 2020 (World Health Organization, 2020).

APPENDIX A: United Nations Sustainable Development Goals and Number of Targets

SDG	Description	No. of targets
1	End poverty in all its forms everywhere.	7
2	End hunger, achieve food security and improved nutrition, and promote sustainable agriculture.	8
3	Ensure healthy lives and promote well-being for all at all ages.	13
4	Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.	10
5	Achieve gender equality and empower all women and girls.	9
6	Ensure availability and sustainable management of water and sanitation for all.	8
7	Ensure access to affordable, reliable, sustainable, and modern energy for all.	5
8	Promote sustained, inclusive, and sustainable economic growth, full and productive employment, and decent work for all.	12
9	Build resilient infrastructure, promote inclusive and sustainable industrialization, and foster innovation.	8
10	Reduce inequality within and among countries.	10
11	Make cities and human settlements inclusive, safe, resilient, and sustainable.	10
12	Ensure sustainable consumption and production patterns.	11
13	Take urgent action to combat climate change and its impacts*.	5
14	Conserve and sustainably use the oceans, seas, and marine resources for sustainable development.	10
15	Protect, restore, and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.	12
16	Promote peaceful and inclusive societies for sustainable development, provide access to justice for all, and build effective, accountable, and inclusive institutions at all levels.	12
17	Strengthen the means of implementation and revitalize global partnership for sustainable development.	19

*Acknowledging that the United Nations Framework Convention on Climate Change is the primary international, intergovernmental forum for negotiating the global response to climate change.

APPENDIX B: Sustainable Development Goal 3 and its Targets

SDG3: *Ensure healthy lives and promote well-being for all at all ages*

Targets	
3.1	By 2030, reduce the global maternal mortality ratio to less than 70 per 100,000 live births.
3.2	By 2030, end preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under-5 mortality to at least as low as 25 per 1,000 live births.
3.3	By 2030, end the epidemics of AIDS, tuberculosis, malaria, and neglected tropical diseases, and combat hepatitis, water borne diseases, and other communicable diseases.
3.4	By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment, and promote mental health and well-being.
3.5	Strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol.
3.6	By 2030, halve the number of global deaths and injuries from road traffic accidents.
3.7	By 2030, ensure universal access to sexual and reproductive health care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programmes.
3.8	Achieve universal health coverage, including financial risk protection, access to quality essential health-care services, and access to safe, effective, quality, and affordable essential medicines and vaccines for all.
3.9	By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water, and soil pollution and contamination.
3.a	Strengthen the implementation of the World Health Organization Framework Convention on Tobacco Control in all countries, as appropriate.
3.b	Support the research and development of vaccines and medicines for the communicable and non-communicable diseases that primarily affect developing countries, provide access to affordable essential medicines and vaccines, in accordance with the Doha Declaration on the TRIPS Agreement and Public Health, which affirms the right of developing countries to use to the full the provisions in the Agreement on Trade-Related Aspects of Intellectual Property Rights regarding flexibilities to protect public health, and, in particular, provide access to medicines for all.
3.c	Substantially increase health financing and the recruitment, development, training, and retention of the health workforce in developing countries, especially in the least developed countries and small island developing States.
3.d	Strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction, and management of national and global health risks.

APPENDIX C: Cumulative COVID-19 Cases in the 12 Case Study Islands (as of December 8, 2020)

	Cumulative cases	Cumulative cases per one million population	Cumulative deaths	Cumulative deaths per one million population
Island states				
Cabo Verde	10,626	19,112	105	189
Cyprus	12,181	10,089	59	49
Ireland	7,3948	14,976	2,099	425
Jamaica	11,063	3,736	261	81
The Bahamas	7,570	19,250	163	415
New Zealand	1,722	357	25	5
Singapore	58,255	9,958	29	5
Seychelles	182	1,851	0	0
Timor-Leste	31	24	0	0
Vanuatu	1	3	0	0
Island territories				
Aruba	4,923	46,110	45	421
Guam	6,845	40,557	113	670

Source: World Health Organization, 2020.