Chapter 2
Global Tourism Value Chains, Sustainable Development Goals and COVID-19

Abstract This chapter presents a conceptual framework and setting for the book. This is informed by the desire to link three critical thematic areas, namely, (i) the global tourism value chains, (ii) COVID-19 and (iii) the 2030 Agenda for Sustainable Development (AfSD) and the 17 embedded sustainable development goals (SDGs). Bringing in the SDGs adds value given that there are three SDGs (SDGs 8, 12 and 14) that make specific reference to tourism. Furthermore, COVID-19 negatively impacted many SDGs leading to governments, civic and private organisations revising budgets to channel resources towards “flattening” both the COVID-19 and economic curves. Understanding the global tourism value chains assists in opening up the complex tourism space and to systematically document COVID-19 impacts along with the industries within the value chain nodes. To this end, this chapter comes across mainly as an essay with heavy dependence on value add from the document and critical discourse analysis, as well as a meta-analysis of secondary data sources. The chapter is useful from both a theoretical and practical application points of view. A section bringing the nexus of the thematic focus areas is slotted in towards the end, with a critique of how the tourism sector should address shortfalls in relation to the SDGs within the COVID-19 pandemic.

Keywords Value chains · Tourism · COVID-19 · SDGs · Conceptual framework

2.1 Introduction

The purpose of this chapter is to demonstrate the nexus of the global tourism value chains, SDGs and the COVID-19 pandemic. This is done in the interests of developing a (conceptual) framework in which the entire book is located. The concept of the value chains is not new, and its current popularity is traceable to Michael Porter’s 1985 book titled Competitive Advantage, which applied it to the firm level and related follow-up work (Porter 1985, 2001). This firm-level approach to value chains later evolved to wider applications, including the analysis of global value chains (Gereffi et al. 2001) and the creation of shared value by firms (Porter and Kramer 2018). The global value chain analysis comprises four key dimensions that include (1) the input–output structure, (2) geographic scope, (3) governance, and (4)
institutional context. The governance types include market, modular, relational, captive and hierarchy, while the institutional context looks at how local, national and international policies and conditions shape globalisation across the value chain (Gereffi and Fernandez-Stark 2011). Yilmaz and Bititci (2006) present the existing opportunity to study the tourism industry as a value chain, arguing that this leads to the development of a systemic-oriented performance management and measurement framework. They posit that using this approach and the framework would enable the tourism sector stakeholders to communicate, coordinate and share processes and activities effectively. In this way, the forward and backward linkages in the value chain could be fine-tuned, presenting a (tourism) firm with a competitive edge (Ensign 2001).

In a background paper for the 2020 World Development Report, Antràs (2020) opens up conceptual aspects of the global value chains. The author draws attention to the dying “Made in such and such a county” labels in manufactured goods, as most goods are now effectively “Made in the World”. This transformation is informed by the first globalisation production approaches that began and grew rapidly in the period 1870–1914, resulting in a notable increase in international trade that was propelled by the invention of the steamship and the internal combustion engine (Nhamo 2014). Included in traded goods and services is the tourism sector with its service products traversing international boundaries. The movement of people within a globalised world is highlighted among other essentials that include financial capital, data and information (Tang et al. 2020). Although some authors distinguish between tourism and hospitality (Jones et al. 2017), unless stipulated, in this chapter and book, the term “tourism” is used broadly to also include hospitality. Why then the value chain approach? The value chain approach provides a holistic view enabling the identification of challenges, as well as the quick and big wins for a rapid recovery in the entire tourism sector post-COVID-19.

Gereffi and Fernandez-Stark (2011) are of the view that global value chains in sectors such as tourism have significant implications on global trade, production and employment. They also determine how firms from developing countries, producers and workers get absorbed into the global economy. Integration developing countries into global value chains is important for their development. However, integration in itself is not enough. Instead countries need to seek integration through activities that generate high returns. Hence, it is not just a matter of participating in the global economy but how it is done. For example, and from a tourism perspective, Jamaica has advantages in that it has good natural attractions including great beaches, crystal-clear seas and climate, is close to the USA market, has a cultural affinity with both the UK and the USA and has a reputation as a great vacation destination (Fernandez-Stark and Bamber 2018). However, there are set-backs that the country needs to rectify to remain competitive in the global tourism value chains. These setbacks include poor soft and hard transportation infrastructure, high crime rates and general tourist harassment (Ibid.). In addition, the local economy needs to participate and own part of the means that carry and host facilities used by the tourists.

While upbeat about the value of the tourism sector to national and global economies, most notably through contributions such as job creation across gender and age
2.2 Understanding Global Tourism Value Chains

This section has three subsections. The first subsection focuses on Michael Porter’s value chain propositions, while the second subsection deliberates on the global tourism value chains. The third subsection discusses the concept of the carbon footprint in the global tourism value chain. Each of these subsections will now be considered in turn.

2.2.1 On Michael Porter’s Value Chain Propositions

Discussions on global tourism value chains will not make much sense if one does not start with Porter’s (1985) generic value chain model. In the model, Porter identifies three main segments, including primary activities, support activities and firm margin (Fig. 2.1). The primary activities involve the physical creation of products and their sale and transfer to the buyer, including sale assistance (Porter 2001). For a firm to maintain and/or grow its profit margin, there is a need to coordinate both internal and external activities. From the model, the external environment deals mainly with inbound logistics and sourcing, whereas the internal linkages imply...
smooth coordination between and among the support activities and the primary activities. Lui et al. (2020) refer to primary activities as basic value-added activities, and the support activities as auxiliary value-added activities. Drawing from Porter’s work, Kaplinsky and Morris (2001) bring up a simple and generic value chain made up of four links, namely, (1) design, (2) production, (3) marketing and (4) consumption and recycling. In the production phase, there is Porter’s inward logistics but also additional aspects such as transformation, inputs, packaging and other activities. The value chain is then defined as:

The full range of activities, which are required to bring a product or service from conception, through the different phases of production (involving a combination of physical transformation and the input of various producer services), delivery to final consumers, and final disposal after use. (Kaplinsky and Morris 2001: 4)

A firm must maintain a competitive advantage that comes from activities it performs “in designing, producing, delivering and supporting its products” (Porter 2001: 50). The firm also looks for the cost advantage that arises from a low-cost physical distribution system, highly efficient assembly processes and/or superior sales utilisation. The value chain, therefore, disaggregates the firm into relevant activities that enable it to understand the behaviour of costs, as well as existing and potential sources of differentiation. Hence, the firm has a competitive advantage if it performs strategic activities cheaper and/or better than its competitors. The value chain for a firm is further embedded into a value system that can be illustrated by a single-industry firm or a diversified firm. Suppliers bring upstream value resulting in a firm’s product becoming an integral element of its buyer’s value chain. Porter sums up value as “measured by total revenue, a reflection of the price a firm’s product commands and the units it can sell” (Ibid.: 52). Hence, although usually portrayed as a vertical chain, there are intrachain linkages that come up in a two-way nature.
For example, a specialised design firm may not only influence the nature of production processes and the manner in which the finished product gets marketed but also constraints in downstream links in the value chain (Kaplinsky and Morris 2001).

Given the foregoing, it is important to note that the tourism global value chain is made up of competing and, at times, collaborating firms, which have been and will still continue to be affected differently by COVID-19. The firms are also bound to respond in ways that at times call for partnerships but mainly in ways that make them retain their competitive advantages through their value chains. Seeing competing companies fold due to COVID-19 is a situation that some firms, which may have good strategies to cope with the COVID-19 storm, may look forward to. A new value for shareholders needs to be created, including through mergers and hostile takeovers. To this end, Porter and Kramer (2018) revisit the value chain within the context of shared value. The authors highlight that opportunities in shared value creation pivot on three things: (1) reconceiving products and markets, (2) redefining productivity in the value chain and (3) enabling local cluster development. Once each firm looks at decisions and opportunities through shared value lenses, this will result in new opportunities that generate greater innovation and growth for companies. The shared value creation approach brings together the long-missing connectivity between the firm’s competitive advantage and social concerns (Porter and Kramer 2018). To this end, the configuration of company productivity changes. Company productivity becomes a function of several parameters that include looking at the environmental impact, energy use, water use, employee health, worker safety, employee skills as well as supplier access and viability. The issues raised herein remain significant to the tourism industry.

What Michael Porter did not accurately foresee 30 years later, which was evident during the preparation of this chapter, is the strong advancements in technology, as epitomised by the emergence of the Industry 4.0 (4th Industrial Revolution or 4IR) phenomenon and the centrality of the Smart Factory and Artificial Intelligence (Nhamo et al. 2020; Lee et al. 2018). Industry 4.0 became very visible in Germany in 2014, where the country was battling with ageing workers. Since then, the world has warmed up to the concepts of the Internet of Things, Internet of Services, Internet of Places and Internet of Data (PWC 2016; Kamble et al. 2018), which are all essential in the tourism value chains. As of 2020, the world reached a point where one could accept that it had truly become a global village through industry 4.0. With the Internet of Things, managing the supply chains, in particular, Porter’s inbound logistics, has become smarter (Ben-Daya et al. 2017). Furthermore, with Artificial Intelligence, it has become feasible that robots can check guests into hotels and assist in directing other entities. Frederick et al. (2018) come to the party and highlight how the digital economy is influencing industrial equipment. In the authors’ view, there are three disruptions in the GVC from the digital economy. These include (1) new industries and stages created in the GVC that change the distribution of value within existing GVCs; (2) significantly different skills requirements, demanding changes to traditional job roles and a greater emphasis on digital skills; and (3) the expansion of company value creation through collaborative ecosystems.
Michael Porter could also not foresee the growing pressure from the environmentalists who demand global stewardship to save the dying planet, particularly addressing climate change (Bramwell et al. 2017; Hall 2019). There is also overwhelming evidence of the increasing frequency of natural disasters and their increasing intensity and propensity to be more destructive. In the context of this book, growing environmentalism meant that the tourism value chain had to do something to protect the environment, particularly through the reduction of carbon footprints (Fang et al. 2018; Dube and Nhamo 2020a). Major global aircraft manufacturers raced to produce low carbon-emitting aircraft and harness biofuels to blend with petrochemicals (Dube and Nhamo 2020a).

Technological advancements also leap-frogged in information communication technologies (ICT). Whereas in the 1990s the most common, quickest and yet expensive mode of communication was the telephone, this changed drastically after a few years. The emergence of the Internet, email, Wi-Fi, mobile phones, social media (Facebook, Twitter, WhatsApp, etc.) and fibre optics all enhanced the global value chains, including in the tourism sector. Tourists can self-book their travel online and can also check in online, joining the travel agents’ value chain. Tourism destinations are profiled online and virtually, including on social media, thereby impacting tourists’ perceptions (Dube and Nhamo 2020b). Tourists use social media to rate their experiences at certain destinations and accommodation establishments. This impact on the rated establishments (Alonso-Almeida et al. 2019) at times leads to over-tourism where some destinations become overcrowded due to good reviews. Within minutes of incidences occurring, the world can be in the know due to the connectivity that now exists. Across the SDGs, there are several indicators that make reference to ICT, namely, indictors 4.4.1, 4.a.1, 5.b.1, 9.c.1, 17.6.2 and 17.8.1 (IAEG-SDGs 2019). Further details regarding these indicators of importance in the tourism value chains are shown in Box 2.1.

**Box 2.1: ICT-Related Indicators of Relevance to the Global Value Chains**

- 4.4.1: Proportion of youth and adults with information and communications technology skills, by type of skill
- 4.a.1: Proportion of schools with access to the Internet for pedagogical purposes and/or computers for pedagogical purposes
- 5.b.1: Proportion of individuals who own a mobile telephone, by sex
- 9.c.1: The proportion of the population covered by a mobile network by technology
- 17.6.2: Fixed Internet broadband subscriptions per 100 inhabitants, by speed
- 17.8.1: Proportion of individuals using the Internet (from any location), all individuals (%)

Source: authors, based on IAEG-SDG (2019: 12–38)
Having focused on the generic global value chains, the next section reviews the
global tourism value chain. An attempt will be made to develop a simplified global
value chain as a framework informing further developments of the book chapters.

### 2.2.2 Global Tourism Value Chains

Antràs (2020: 5) defines a GVC as “a series of stages involved in producing a prod-
uct or service that is sold to consumers, with each stage adding value, and with at
least two stages being produced in different countries”. Gereffi and Fernandez-Stark
(2011: 2) see the GVC as focusing on:

The sequences of value-added within an industry, from conception to production and end-
use. It examines the job descriptions, technologies, standards, regulations, products, pro-
cesses, and markets in specific industries and places, thus providing a holistic view of
global industries both from the top-down and the bottom up.

Tourism has become the largest branch of service trade, contributing to the global
economy through its value chains (Wang 2018; Daly and Gereffi 2017). A firm inte-
grates in a GVC if it produces at least one stage in a GVC. The GVC provides a
framework to understand how global firms are arranged. This is done by evaluating
the structure and dynamics of the key actors involved (Gereffi and Fernandez-Stark
2011). In the modern world, there are complex firm interactions to which the GVC
methodology assists in tracing the shifting patterns of global production. Christian
et al. (2011) observe that tourism is labour-intensive, demanding skills from the
lower to the upper range of expertise. Workers are needed in multiple sectors that
work together to build the tourism industry and participate in the (global) tourism
value chain. In many developing countries, the tourism jobs are of the lower grades
such as groundskeepers, housekeeping and cleaning services. Many managerial and
skill positions end up in the control of expatriates. This needs to change if tourist
attractions in developing countries are to contribute more to the economies of those
countries.

For one to understand the global tourism value chain, the entry point is the tourist
“footprint” (Christian et al. 2011). The tourist footprint is characterised by the inter-
actions made with firms in the value chain. The firms cover services and products
that include transportation distribution, accommodation, excursions and the tourist
attractions such as viewing nature, engagement in religious tours, medical tourism,
sports tourism and cruise ships (Szpilko 2017). Daly and Gereffi (2017) identify
two broad categories of travel tourism: leisure and business (Table 2.1).

As highlighted earlier, several jobs (positions) exist within the global tourism value
chain. These include those in distribution, intermediaries and the service providers
(Daly and Gereffi 2017). Under the distribution intermediaries are global tour opera-
tors, inbound tour operators and travel agents. From the service providers are accom-
modation establishment managers, airlines agents, accommodation front offices,
restaurant/bar staff, retail, local guides, drivers and housekeepers. Jobs in the distribu-
tion intermediaries require medium to high skill levels. Apart from lodging management staff that may require medium to high skill levels in the service providers segment, most jobs in this category require low to medium skills. Such skills include on-the-job training, technical education and certificate programmes. Figure 2.2 shows a simplified global tourism value chain for both out- and inbound countries.

Drawing from cruise tourism in Shenzhen, China, Lui et al. (2020) identify a typical cruise company value chain. The authors’ highlight company infrastructure, human resource management, technological development, procurement and source of tourists as part of the value chain. Covered in firm infrastructure are daily operations management, investment promotion and financial accounting activities. From

**Fig. 2.2** Simplified global tourism value chain. (Source: authors, based on Porter (1985); Christian et al. (2011))
the human resource management angle, activities include recruitment, capacity development and training, as well as labour dispatch. The design and development of cruise lines, research and innovative tourism attractions are included within the technological development segment of the value chain. The procurement segment looks after liaison, negotiation, ordering and maintenance. The tourists’ source segment in the cruise company value chain includes customer contact, communication, marketing, planning, operations and after-sales services (Spencer et al. 2014). Daly and Fernandez-Stark (2017) focus on Barbados as it takes part in the cruise tourism global value chain. The travel agents perform outbound activities that include travel package bookings. The cruise ships host hospitality activities, lodging facilities, entertainment and transport onboard. Activities in an inbound country cover port agents, hospitality, shopping and lodging, excursions and domestic transport. A similar cruise tourism global value chain was observed in St. Lucia by the same authors (Daly and Fernandez-Stark 2018). All points of value addition in the global tourism value chain aim to enhance competitiveness at both firm and country level.

From the transport sector, most international tourists use air and cruise services (Christian et al. 2011). Rail and road are also common in other set-ups such as in Europe and Asia. These forms are not common in linking up small island states. To this end, rail and road largely remain applicable to the domestic and regional tourist. However, technological advances such as the underwater train-link between Britain and mainland Europe are changing the reach of rail and road transport. Nevertheless, the international tourist still largely arrives through the airport and thereafter is taken to the local attractions. The attractions include natural site viewing such as the Victoria Falls (shared between Zambia and Zimbabwe), Mount Kilimanjaro of Tanzania and Kruger National Park and Table Mountain of South Africa (Dube and Nhamo 2019a, b). Beach tourism, sailing and wine tourism are other attractions, while religious tourism, including the Hajj and Umrah of Saudi Arabia, are also in the mix. Additional tourism attractions include sports and sites of historical and dark tourism significance such as the 9/11 Twin Towers Memorial Site in the USA and Rwanda’s 1994 Genocide monuments (Parry 2018; Potts 2012).

The tourism global value chain entails a country becoming a tourist destination (Antràs 2020). As has been happening the world over, and especially in Mecca, the host city for the Muslin Hajj and Umrah pilgrimages (Ladki and Mazeh 2017), hotel beds, transport and other infrastructure including ICT is developed and expanded by companies, venture capitalists and through Sovereign Wealth Funds to handle growing tourist arrivals (Abuhjeeleh 2019). Relevant to this chapter and book is that all these services and firms act to provide a good experience to the tourist. Any event that impacts any part of this system diminishes this experience. What is of interest to this book from the global tourism value chain perspective is that COVID-19 affected both the mega- and microenterprises. The extent to which these businesses got impacted may have differed, but the bottom line remains, the negative disruptions were massive. In the tourism industry, there is a complex interlink between big corporates on one hand and small, medium and microenterprise (SMMEs) (Christian et al. 2011). Therefore, the ongoing economic stimulus packages have had to routinely and carefully consider the needs of both the SMMEs and the bigger entities.
2.2.3 Carbon Footprint in the Global Tourism Value Chain

The UNWTO realised the damage the transport sector was causing to the environment, as goods and services provided within the global tourism value chain result in carbon emissions. The carbon emissions are known to cause global warming that leads to climate change and ultimately causes extreme weather events such as droughts, wildfires, extreme frost and floods (UNWTO 2019). Climate change concerns peaked in 2015 during the United Nations Framework Convention on Climate Change (UNFCCC) 21st Conference of the Parties (COP21) meeting, which concluded the Paris Agreement (UNFCCC 2015). The Paris Agreement placed on the table a number of intervention measures to both mitigate (reduce the emissions of GHG) and build adaptation capacity for nations (learn to live with the changing climate). From a GHG (carbon) emissions perspective, every sector of the economy had to bring up measures to mitigate the emissions. Hence the UNWTO’s initiative to audit how firms within the tourism value chain contributes to carbon emissions.

As of 2019, the UNWTO (2019) realised that tourism had grown to represent 10% of total global employment and 10% of global gross domestic product (GDP), thereby assisting in the attainment of the 2030 AfSD. From a baseline on carbon emissions done by the UNWTO in partnership with the United Nations Environment in 2008, it emerged that the tourism sector contributed an estimated 5% of total global emissions, with the transport sector taking up 75% of the sector contributions (UNWTO 2019). A summary of carbon emissions from the tourism sector is shown in Fig. 2.3.

While travel contributes the majority of the industry’s carbon emission, other sectors also contribute notably. For instance, the accommodation has a significant share accounting for 21% of the emissions meaning that travel and accommodation make up 96% of the industry GHG emissions.

![Fig. 2.3 Carbon emissions from the global tourism sector (as of 2005). (Source: authors, data from UNWTO (2019: 12))](image-url)
In 2016, the UNWTO (2019) narrowed down the profile of carbon emissions in the transport sector. The boundaries applied in calculating the carbon footprint were set to include both passenger transport (car, rail, air) and freight transport (maritime, air, surface). The total emissions stood at 7,230 million tonnes (23% of all global human-induced emissions in the transport sector). Of the tourism sector total, 64% was from passenger transport. What the UNWTO also noted was that although there were improvements in fuel efficiency and advancements in cleaner and greener modes of transport (including electric vehicles), the growth in passenger and freight transport demand would still lead to an increase in carbon emissions by 2030. To this end, carbon emissions from the transport sector of the tourism value chain are expected to grow by 21% compared to 2016. This represents 23% of all global human-induced carbon emissions in the entire transport sector (Ibid.).

The growth in the transport sector carbon emissions mirrors similar findings from the broader tourism sector in one of China’s provinces. Ren et al. (2019) conducted a carbon footprint survey for the tourism sector in the Sichuan Province of China. The results show that from 2004 to 2018, the carbon footprint increased 20-fold from about 427.59 million tonnes to about 9.51 billion tonnes. Effectively, this pushed the province to a 2013 carbon deficiency compared to the years 2004 to 2012 when there was a carbon surplus. Following on with air travel, Ştefănică (2017) highlighted that tourism represented 60% of all air travel. To mitigate carbon emissions from air travel, some airlines entered into partnerships to procure sustainable biofuels (Hong et al. 2019). Added to the equation has been the growth in carbon neutral airports, including their accreditation. Airports have been increasing their environmental credentials through commitments to go greener by reducing their carbon emissions. One example is the Brussels Airport in Belgium (Boussauw and Vanoutrive 2019).

Carbon emissions from hotels also prompted the environmental sustainability debate in the tourism industry. Abeydeera and Karunasena (2019) focused on carbon emissions from five hotels in Sri Lanka, arguing that although the subject matter was receiving more attention in developed countries, this had not been the case for developing countries. The results were that each of the case study hotels released more than 7,000 tonnes of GHG emissions annually. Furthermore, purchased electricity, usually from the national grid, contributed the bulk of the carbon emissions. It is a common matter, and many hotels that wish to reduce their carbon footprint end up installing solar energy. Reducing carbon emissions in hotels is but one of the interventions in environmental sustainability. Other interventions include sustainable waste management and water and energy efficiency (Wang et al. 2019). These and other interventions assist in adding value to the hotels and related entities in the tourism value chain and ultimately impact on the firm margin. In Japan, Kitamura et al. (2020) looked into the entire Japanese tourism carbon footprint. The authors found that the sector contributed 136 million tonnes annually, with 56.3% of total emissions from the sector coming from transport. The next section addresses the impact of COVID-19 on the broader 2030 AfSD.
2.3 Impact of COVID-19 on the SDGs

Following the outbreak of COVID-19, the United Nations (2020) presented a quick and consolidated view on how, overall, the pandemic had and was going to negatively impact the attainment of the 2030 AfSD and the SDGs. The anticipated consequences were to be profound, with women, children, the elderly and informal workers being among the most vulnerable stakeholders. However, despite the negative impact, there were also positive outcomes. In the short term, gains were anticipated from rescued GHG emissions as economic activities came to a halt in many countries and territories (Stone 2020). The airline, cruise ship and land-based transportation industries also came to a virtual standstill during the early COVID-19 pandemic era. In China, carbon emissions went down an estimated 18% of normal between early February and mid-March 2020. This was attributed to reductions in the burning of coal to generate electricity against a background of dwindling industrial activity. This represented forgone carbon emissions estimated at 250 million metric tonnes. Reduction of carbon emissions was also witnessed in Europe, which recorded an estimated 400 million metric tonnes, accounting for about 9% of the region’s cumulative 2020 emission targets (Ibid.). In one of the publications in the journal, Nature Climate Change, Quéré et al. (2020) observe that drastic reductions in energy demand due to the COVID-19 pandemic witnessed daily carbon dioxide emissions reduced by $-17\%$ by early April 2020 compared to the 2019 average.

As for the overall impact of COVID-19 on the SDGs, this was mainly negative (United Nations 2020). For example, the loss of employment and income was likely to push more individuals and families below the poverty line (SDG 1). Furthermore, during the initial stages of COVID-19, out-of-pocket expenditure presented an additional burden to the poor, including that of limited health insurance. Food production and distribution were also disrupted (SDG, 2). This was especially so during the first phases of lockdown when factories closed as governments and companies instructed workers to stay home (Nicola et al. 2020). This was eventually relaxed as some countries identified the agriculture sector and related industries as essential industries that could remain open. However, operations remained under strict health and hygiene conditions, including massive use of masks and hand sanitisers. Farmers of specialised seasonal crops, like grapes and those from the horticulture subsector, lost income as there were minimal logistics available, including limited labour. Bottlenecks in the food supply system were likely to aggravate matters of nutrition, thereby directly impacting on the health (Veldhuizen et al. 2020).

Concerning health (SDG 3), a new challenge was presented to the world that was already under distress from the chronic challenge of HIV/AIDS, TB, malaria, cholera and other diseases (United Nations 2020). Apart from those who were infected and those who passed away, the world was left with a huge health insurance bill. Systems could not cope as the COVID-19 burden threatened to overrun existing capacities. The need for makeshift hospitals was addressed by converting sports and showgrounds into hospitals. This presented a challenge to already strained financial,
human and times resources that had to be redirected from other sources specifically to fight the pandemic (Wang and Tang 2020). This effectively reduced the capacity of governments, organised labour, the corporate sector and other social partners to deploy resources towards the attainment of some SDGs.

COVID-19 did not leave the education sector untouched (SDG 4) either. Schools closed, resulting in makeshift online and homeschooling for the privileged (United Nations 2020). However, many from the less developed countries – such as is typical in Africa – had to completely shut doors for months. The impact was felt from the preparatory level, through to primary, secondary and tertiary levels. From a gender perspective (SDG 5), there were increased reports of violence against women during lockdowns (de Lima et al. 2020). Women in rural areas were also identified to be at increased risk, with the main aggressor being the spouse. Campbell (2020) highlights the fact that many countries were reporting increased levels of domestic violence, yet there were no known protocols on how to deal with such incidences during natural disasters like COVID-19. The United Nations (2020) also observed that women made up the bulk of social care and health workers and, as such, were at the forefront of the COVID-19 battle.

The work environment and economic growth (SDG 8) were placed under severe strain too. Economic activities were suspended, and people lost jobs (United Nations 2020). After lockdowns, there was a staggered opening of sectors of the economy, with the tourism industry at the back of the queue (Nicola et al. 2020). Linked to SDG 8 negative impacts are matters pertaining to inequality (SDG 10). As more and more individuals were relegated to unemployment statistics, so did the levels of inequalities rise. Inequalities further rose due to school closures (Armitage and Nellums 2020). From an SDG 11 angle, people living in densely populated areas, including those in informal settlements and refugee camps, remained at high risk (United Nations 2020). Apart from huge numbers, these areas usually have poor water and sanitation facilities. To this list, Ahmed et al. (2020) added prisons, which are usually overcrowded.

What comes out from the discussions herein confirms that the SDGs are intertwined, thus, all in one and one in all (United Nations 2015). As one SDG is negatively impacted, such as was the case with the health SDG from COVID-19, all other SDGs are also impacted in one way or another. Although it was still early for a solid call, it was emerging as a mixed bag for SDG 17 that addresses partnerships. Good partnerships emerged to finance and provide resources for fighting COVID-19 at national, regional and international levels. Yet, threats of cutting funds to the WHO by USA President Donald Trump also emerged (Mahase 2020). The USA president accused the WHO, especially its head of mission, of being “China-centric”, thereby conniving to cover up the extent of the potential global damage COVID-19 had caused. Although all member states contribute towards the WHO budget, the USA always contributed a greater portion averaging over 20%. The next section is dedicated to addressing the linkages between tourism and SDGs.
2.4 A Focus on Tourism and the SDGs

In 2019, the Group of Twenty (G20) nations’ tourism ministers and some invited countries and organisations – including the UNWTO, Organisation of Economic Cooperation and Development (OECD), International Labour Organisation (ILO) and the World Travel and Tourism Council (TTC) – took notice of the desire to advance tourism’s contribution to the SDGs (G20 2019). The G20 also noted that tourism creates jobs for people of all ages and skill levels.

The experiences emerging from across the global tourism industry in response to COVID-19 are not new. The COVID-19 pandemic presents a challenge to the world’s quest to attain the 2030 AfSD, with its interlocked 17 SDGs (United Nations 2015). Included among these SDGs are three that make explicit reference to the tourism industry (Table 2.2). Although SDG 14 indicators are not explicit in term of tourism, Target 14.7 mentions tourism. In addition, SDG 17 can be added as this remains generic across all the SDGs. Hence the reason why the G20 (2019) includes it under SDGs to which tourism could make significant contributions is highlighted in the introduction to this chapter.

In its publication on tourism and the SDGs, with a focus on good practices from the Americas, the UNWTO (2018) notes the explicit reference to tourism on the SDGs highlighted in Table 2.2. However, the UNWTO indicates that sustainable tourism should play a pivotal role in delivering solutions across all the 17 SDGs. In the Americas, where 207 million international tourist arrivals were reported in 2017,

### Table 2.2 SDGs making explicit reference to tourism

| Goal | Goal targets | Indicators |
|------|--------------|------------|
| Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all | 8.9 By 2030, devise and implement policies to promote sustainable tourism that creates jobs and promotes local culture and products | 8.9.1 Tourism direct GDP as a proportion of total GDP and in growth rate 8.9.2 Proportion of jobs in sustainable tourism industries out of total tourism jobs |
| Goal 12. Ensure sustainable consumption and production patterns | 12.b Develop and implement tools to monitor sustainable development impacts for sustainable tourism that creates jobs and promotes local culture and products | 12.b.1 Number of sustainable tourism strategies or policies and implemented action plans with agreed monitoring and evaluation tools |
| Goal 14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development | 14.7 By 2030, increase the economic benefits to small island developing states and least developed countries from the sustainable use of marine resources, including through sustainable management of fisheries, aquaculture and tourism | 14.7.1 Sustainable fisheries as a proportion of GDP in small island developing states, least developed countries and all countries |

Source: authors, based on IAEG-SDGs (2019: 19–32)
the tourism sector was identified “as a priority to promote economic development and diversification, fight poverty and create sustainable livelihoods” (Ibid.: 8). The focus on poverty points to SDG 1. The UNWTO goes further to identify how tourism could lead to the protection of biodiversity (SDG 15) and act as a catalyst to provide a platform for building peace (SDG 16). Given the foregone, it becomes necessary to elaborate on how tourism contributes (or lack thereof) to the attainment of all the 17 SDGs (Table 2.3).

| Goala | Selected key tourism sector contributions |
|-------|------------------------------------------|
| SDG 1: No poverty | Provides income through job creation at local and community levels, with low skills requirement and local recruitment able to empower less favoured groups, particularly youth and women |
| SDG 2: Zero hunger | Spurs sustainable agricultural growth by promoting the production and supplying to hotels and sales of local products to tourists. Agro-tourism can generate additional income while enhancing the value of the tourism experience |
| SDG 3: Good health and wellbeing | Tax income generated from tourism can be reinvested in healthcare and services, including improving maternal health, reducing child mortality and preventing diseases |
| SDG 4: Quality education | Potential to promote inclusiveness and provides opportunities for direct and indirect jobs for youth, women and those with special needs, who should benefit through educational programmes |
| SDG 5: Gender equality | Empowers women through direct jobs and income generation from SMMEs in tourism and hospitality-related enterprises |
| SDG 6: Clean water and sanitation | Investment requirement for providing tourism-related utilities play a critical role in achieving water access and security, as well as good hygiene and sanitation for all |
| SDG 7: Affordable and clean energy | Can accelerate renewable energy shares in the global energy mix, thereby contributing to carbon reductions (SDG 13) and access of energy for all |
| SDG 8: Decent work and economic growth | One of the top four export earners globally, which provided one in ten jobs worldwide as of 2018 with a strong bias towards youth and women |
| SDG 9: Industry, innovation and infrastructure | Sector can influence and excite public policy for infrastructure upgrade and retrofit, making them more sustainable, innovative and resource-efficient and moving towards low carbon growth. The Gautrain high-speed train investment in South Africa for the 2010 FIFA Football World Cup remains testimony to that |
| SDG 10: Reduce inequality | Remains a potentially powerful tool for reducing inequalities if it engages local populations and all key stakeholders in its development. Sector is also an effective pathway for economic integration and diversification |
| SDG 11: Sustainable cities and communities | Promotes regeneration and preserves cultural and natural heritage assets on which tourism depends. Investment in green infrastructure (more efficient transport, reduced air pollution) should result in smarter and greener cities for all users |
| SDG 12: Responsible consumption and production | Sector needs to adopt sustainable consumption and production modes, accelerating the shift towards sustainability |

(continued)
To demonstrate the contributions the tourism sector may make across the SDGs, the UNWTO (2018) documents some case studies from the Americas. For example, in Chile, there was an initiative to strengthen municipal tourism management, thereby addressing SDG 11 directly. In Colombia, the El Carlos Ecotourism and Archaeological Centre were profiled. The centre was established by ex-guerrilla and ex-paramilitary forces and people with disabilities to address SDG 16 through tourism ventures. Ecotourism projects were also observed and profiled for Panama. In Ecuador, the Karanki Magdalena Community Project is an indigenous establishment that creates deployment (SDG 8) and developed infrastructure (SDG 9) while preserving community culture and traditional livelihoods (SDG 11). In Guyana, the Rewa Eco-lodge provides employment for the Rewa people and has resulted in the village protecting its natural resources (SDG 15). Lodges and natural attractions were discussed earlier in this chapter under the tourism value chain. In Jamaica, the Community Tourism Toolkit has provided community-based tourism businesses with a set of tools on how to establish their enterprises. This answered calls to have locals get involved in SMMEs in the tourism value chain. To harness the blue/ocean economy (SDG 14), the Mayakoba Tourism Development in Mexico focuses on high-level coastal tourism development. Lastly, the Sustainable Destinations Alliance for the Americas brings together 11 destinations in the Caribbean and Central America. These partnered to address the challenges of climate vulnerability and environmental degradation in a bid to attract more arrivals (Ibid.). The next section brings the three thematic areas together.

Table 2.3 (continued)

| Goala | Selected key tourism sector contributions |
|-------|------------------------------------------|
| SDG 13: Climate action | Contributes to and is affected by climate change. As such, stakeholders should play a leading role in the global response to climate change by reducing the carbon footprint, particularly in the transport and accommodation sectors |
| SDG 14: Life below water | Tourism development must be a part of integrated coastal zone management in order to help conserve and preserve fragile marine ecosystems and serve as a vehicle to promote a blue economy, contributing to the sustainable use of marine resources. The sector will also present opportunities for fast-tracking investments in the underdeveloped blue/ocean economy |
| SDG 15: Life on land | Can play a major role in promoting sustainable management of fragile zones, not only in conserving and preserving biodiversity but also in generating revenue as an alternative livelihood to local communities |
| SDG 16: Peace, justice and strong institutions | The sector can foster multicultural and interfaith tolerance and understanding, laying the foundation for peaceful societies. It can also consolidate peace in post-conflict societies, particularly at a community level |
| SDG 17: Partnerships for goals | Has the ability to strengthen private/public partnerships and engage multiple stakeholders from international, national, regional and local scales to mobilise the resources (policy and innovative financing) needed to achieve the 2030 Agenda |

Source: authors, based on UNWTO (2018: 20–21)

aFull expression of the SDGs can be found from the United Nations (2015: 14)
2.5 The Nexus Between COVID-19, Tourism and the SDGs

This section raises potential red flags and critiques (to revisit and redress as appropriate moving forward). If the tourism sector is to recover quickly and be better in the context of the 2030 AfSD, then there is a need to proactively consider the complex linkages joining the people, planet, prosperity and partnerships (the 4Ps) (United Nations 2015).

Many potential tourists died during the pandemic, and many more were traumatised by caring for the dying and losing their loved ones. There were also issues of economic recession, resulting in job losses, general anxiety and anger and fear with regard to the future (Potash et al. 2020). With economic activities grounded for some major sectors, including tourism and key support industries, projections were clear that both economic and psychosocial recovery would take longer than past pandemics such as SARS and MERS, resulting in even bigger post-traumatic stress. The oil and gas industry was among those hard hit, and it haemorrhaged jobs (Nicola et al. 2020). On Monday 20 April 2020, the oil price crashed to a historical low with West Texas crude crashing to below $0, with contracts getting as low as −$37.63 per barrel, and Brent crude went down further, trading around $25.42 (Omarjee 2020).

Hundreds of thousands were still being infected, with tens of thousands dying, at the time this book was being written. This brings to the fore the need for psychosocial support services for the entire world (Potash et al. 2020) as the COVID-19 effects persisted among affected individuals (Onyeaka et al. 2020). To this end, art therapy remained one of the pathways that could be enrolled in the recovery and post-recovery phases of COVID-19 to benefit the tourism sector (Potash et al. 2020). The tool has the potential to reach out to traumatised communities, secure family connections as well as develop coping and resilience mechanisms, thereby enhancing hope for the future. Art therapy proved to be a very useful tool during past pandemics like SARS and Ebola, especially for those on the frontlines such as medical personnel and security clusters and those in other essential services.

Emerging evidence is pointing to the fact that COVID-19 deaths were mainly associated with the elderly, particularly in Europe. Whereas tourists come from all over the world, Europe remains one of the main suppliers of outbound tourists globally (Macola and Unger 2018). Of the European travellers, senior citizens made up 50% of the total, with 52% out of the total coming from Germany, Switzerland and Austria (Macola and Unger 2018). In Myanmar, for example, Macola and Unger (2018) established that in 2016, about 18.7% of international tourist arrivals were from western Europe, particularly the UK, France, Germany, Italy, Netherlands, Switzerland and Spain. Most of these were badly impacted by COVID-19, with Italy being the European epicentre, both in the numbers of those infected and deaths. Spain was (then) also the second-worst impacted on the continent. Furthermore, an estimated 67.94% of international arrivals came from Asia, especially China and Thailand, with North America coming in as the third highest contributor at 7.2%. China was the original epicentre of COVID-19, and the USA became the global epicentre, taking over from both China and Italy – all important sources of tourists.
On tourism and its role towards the attainment of the SDGs, there are descending voices emerging. Kamp and Mangalassery (2017) raise a red flag concerning the fact that the concept of tourism for poverty alleviation (SDG 1) and its “trickle-down effect” of having benefits going down to the poor of communities have proved challenging to achieve. Instead, tourism could have increased poverty in many communities due to its inherent inequalities (SDG 10). Deregulation within the tourism value chain and the erosion of workers’ rights both lead to loss of employment (Ibid.). There are instances where restaurant workers may largely work for tips, with minimum basic wages, especially if they are migrant labourers. To make matters worse, within this group of the exploited are women and the youth.

With reference to tourism and SDG 2, Zerrudo (2017) is of the view that it remains important to think local, including not only serving the interests of the tourists but also those of the local communities. In the authors’ view, local farmers should be empowered to embark on an integrated, holistic food-based approach to tourism. This enables the local farmers to grow nutritional food from sustainable practices, thereby permitting them to earn an income through selling good produce to tourists and thus better sustain their families too. Although there still remain some tourists that demand locally grown and traditional foods, the massive emergence of fast-food chains, including food courts across the world, leads to commercialised food production dominating the supply chain. This has also led to the sourcing of food where it is cheapest across the world. While this practice is sensible in conventional commercial analysis, considerations of sustainability, i.e. the carbon emissions from transporting food, alters many considerations leading to a preference of locally produced and supplied foods albeit at a competitive price.

Regarding the contribution of tourism to health (SDG 3), Jaeger (2017) calls for a comprehensive, cross-sectoral and people-centred approach. Both the local people and tourists’ health and safety issues must be considered. The health and safety of tourists and crew members were severely compromised in the cruise ship industry during the COVID-19 pandemic, resulting in infections, deaths and ongoing litigation (Mole 2020). Labour laws are regularly violated in the tourism industry, including lack of or under insurance for medical bills. This suggests a need to ensure that some of the generated revenue from the industry should be invested in healthcare systems for all to be afforded good healthcare (Jaeger 2017).

There are also outstanding matters of education and gender equality in the tourism industry. Novelli and Jones (2017) maintain that tourism development master plans usually overlook education (SDG 4), focusing more on property developments rather than enhancing skills and human capital development needed by the sector. The issue of human capital development was highlighted earlier in the generic value chain as a support activity for the companies. Concerning gender matters, Alarcón (2017) brings to the fore the fact that although many women are involved in the tourism sector, the main issue remains exploitation through low and differentiated salaries. The matter of low and differentiated salaries flies in the face of SDGs 8 and SDG 10 that anticipate decent work and wage equity (Cañada 2017). If tourism’s success is to be measured in line with the 2030 AfSD, then it should be evaluated against the manner in which it contributes towards reducing inequalities as enshrined in SDG 10 (Monshausen 2017).
There are also voices opposing the proposition by the UNWTO (2018) that tourism can contribute towards achieving sustainable water and sanitation supplies (SDG 6). Contrary to this view, Jennings (2017) sees tourism leading to water scarcity and further inequalities. In spite of increasing climate-related droughts, destinations overexploit both surface and underground water resources to meet the tourism industry needs as well as local domestic and other industrial uses. In other instances, waste generated in hosting tourists end up in river channels and the sea, mainly plastic waste. This and other issues form a group of matters that require redressing if the tourism sector is going to contribute towards the attainment of SDG 12 on sustainable consumption and production (United Nations 2015; Plüss and Sahdeva 2017) as well as SDG 14.

Many controversial issues emerge when one focuses on tourism, energy consumption (SDG 7) and carbon emission (SDG 13). Many destinations still use dirty, hydrocarbon-based sources of energy including petrol, diesel and jet fuel, leading to huge carbon emissions, especially from the transport sub-chain of the tourism value chain (Eijgelaar and Peeters 2017). In other instances, wood fuel is utilised, resulting in massive deforestation, soil erosion and the silting up of rivers. The negative impacts resulting from carbon emission and general environmental decay have disproportionately affected communities in developing countries. To this end, stakeholders in the tourism value chain are encouraged to localise SDGs as appropriate, leading to the lowering of carbon emissions and footprints (Dube and Nhamo 2020b). Before the onset of the coronavirus infection, this transformation was already in full swing as witnessed by developments in fuel-efficient technologies in the aircraft manufacturing sector and lodging. Many hotels and B&Bs were investing in energy-efficient technologies as well as renewable energy, especially solar (Dube and Nhamo 2020a). Innovation and technological advancements as harnessed in SDG 9 remain at the centre of the tourism sector’s contribution to the SDGs too (Kösterke 2017).

With the advent of the revitalised ocean (blue) economy presented in SDG 14, many across the world tour the coastal areas, including floating resorts mainly in the form of the cruise ship subsector. Oceans cover up to 71% of the earth’s surface area, supporting millions of people’s livelihoods (de Man 2017). Oceans further support biodiversity and life on land as enshrined in SDG 15 (Karschat and Kühhas 2017), including flora and fauna as well as some of the world heritage sites. In the 183 countries with coastlines and 37% of the world’s population living in coastal communities, there remains a high risk of tourism development leading to human influxes that could ecologically damage these resorts (de Man 2017). Furthermore, the hotel subsector has encroached on beach fronts and other natural attractions such as nature reserves and parks, breaking building and conservation barriers (Karschat and Kühhas 2017). This once more promotes mass tourism that degrades the biodiversity. These are all red flags to address in 2030. In addition, the shareholders in the tourism value chain need to pay additional attention to small island developing states (SIDS) whose economies are heavily dependent on tourism.

As for good governance (SDG 16) and partnerships (SDG 17), the United Nations (2015) highlighted that there were issues to address leading up to 2030. Although the UNWTO (2018) praised the tourism sector for bringing peace to the Americas through several partnerships, Rutherford (2017) observed that govern-
ments and the corporate sector dominate with minimal integration of the local economies in the respective value chains. This tends to result in neglected fundamental human rights. To this end and moving forward, local communities should be empowered to participate in decision-making concerning existing and proposed new tourism developments. There should be effective and transparent monitoring mechanisms at various spatial scales including at local, national and global levels. The corporate sector usually prefers voluntary regulations, and this comes with inherent loopholes (Nhamo and Swart 2012) that require additional verification lenses from non-governmental organisations and governments. The business sector will always try to maximise its profit margins and will always prefer self-regulation. In most instances, self-regulation results in the bare minimum of standards being put in place. Overall, there remains a challenge concerning the choice of SDGs to address by certain entities in the tourism sector as taking on board all 17 SDGs could be problematic (Jones et al. 2017). Entities would need to engage their stakeholders to get assistance and determine which SDGs could be of importance in the tourism value chain. This will eventually enable the stakeholders in the value chain to determine which SDGs are of material value to them. Many big tourism corporates already had sustainability policies and strategies in place. Hence the SDGs and COVID-19 may require the reorientation of such, including building new and relevant human resources capacity.

What is emerging from the foregoing discussion is that, while tourism remains an acknowledged significant economic sector, several red flags demand careful managing to make the sector truly sustainable. For example, debates tend not to factor in the fact that there is strong competition in attracting visitors between and among countries and continents. Furthermore, the sector will remain in the spotlight with government and other bailouts in the mix (Kang and Rhee 2020; Loayza and Pennings 2020).

### 2.6 Conclusion

The tourism global value chain provided a good framework and setting for the book. The tourism industry and players in the value chain will be seeking ways to bounce back after a disaster and to do so quicker and better after the COVID-19 pandemic subsides. To this end, while the existing working partnerships need to be maintained, new and innovative ways of resuscitating the sector need to emerge. Every segment in the tourism value chain must rise simultaneously because a piecemeal approach may delay recovery. With several key stakeholders involved in industries within the value chain, linkages can be traced between the air travel that is supported by the travel agents and lodging segments, while the lodging segment needs restaurants, retail and the food and beverage sector. It is a complex web. The chapters that follow will draw insights from this chapter and focus specifically on industries within the value chain segments including air travel, cruise ships, airport networks, hotels, restaurants, sports tourism, pilgrimage and religious tourism as well as tourism economic stimulus packages.
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