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Reigniting Old Flames: The Liberalisation of Trade in Environmental Goods and Services (EGS)

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Abstract

This study traces the evolution of the World Trade Organization (WTO) negotiations on liberalising trade in Environmental Goods and Services (EGS). It explores the challenges and opportunities faced by Commonwealth small states and countries in Sub-Saharan Africa (SSA) in participating in EGS discussions. Small states and SSA countries have been primarily absent from the multilateral discussions on EGS for reasons that include insufficient trade-related interests in environmental goods. Notwithstanding, these countries should partake in these discussions especially amid the changing economic and trading landscape of the 21st century and concomitant changes in the environment. International trade is not as it was in 2001 when these negotiations began and likewise environmental concerns like climate change now pose an existential threat to mankind. The study begins by mapping the progression of the EGS negotiations at the WTO including attempts at establishing a plurilateral environment goods agreement. Thereafter, the paper analyses the trade-related interests of Commonwealth small states and SSA countries in EGS. The challenges and opportunities they face in participating in negotiations on liberalising trade in EGS are then highlighted. The paper concludes by identifying the priorities that these countries might consider should they decide to participate in the WTO EGS discussions.

Contents

Acronyms and Abbreviations

CLEG	Combined List of Environmental Goods
CPC	Central Product Classification System (of the UN)
DDR	Doha Development Round
EGS	environmental goods and services
EPPs	environmentally preferable products
GATS	General Agreement on Trade in Services
GATT	General Agreement on Tariffs and Trade
GHG	Greenhouse gas
HS	Harmonized System
LDC	Least developed country
MEAs	Multilateral environment agreements
MFN	Most-favoured nation
OECD	Organisation for Economic Co-operation and Development
PPMs	Processes and production methods
R&D	Research and development
SDGs	Sustainable Development Goals
SSA	Sub-Saharan Africa/African
UNEP	UN Environment Programme
WTO	World Trade Organization

1. Introduction

The protection and preservation of the environment is a key part of the multilateral trade objectives, as enshrined in the Preamble of the Marrakesh Agreement that laid the foundations of the World Trade Organization (WTO). To demonstrate the importance of protecting and preserving the environment, the Uruguay Round of Multilateral Trade Negotiations adopted two decisions on the environment as part of the WTO agreements: (a) the Decision on Trade and the Environment; and (b) the Decision on Trade in Services and the Environment. In addition, under the WTO, members can adopt trade-related measures that help protect and preserve the environment, subject to certain specific conditions that safeguard against the use of environmental measures as a disguised form of trade restriction (GATT Articles XI and XX).[1] In this regard, the exceptions help to ensure that members adopt regulatory measures that assist them in achieving legitimate policy objectives, such as the protection of human, animal or plant life and health.

Trade in environmental goods and services (EGS) can help countries realise their environmental and climate protection objectives, such as controlling air pollution, managing waste, monitoring the quality of the environment, treating wastewater, producing clean and renewable energy, reducing noise pollution, etc. This demonstrates the direct link between EGS and the achievement of the Sustainable Development Goals (SDGs), as trade in EGS can help countries advance their commitments under the Paris Agreement on Climate Change and other multilateral environment agreements (MEAs).

Recognition of the role that trade in EGS can play in realising environmental and climate objectives has contributed to the mainstreaming of liberalising trade in EGS in WTO negotiations since the launch of the Doha Development Round (DDR) in 2001. Paragraph 31(III) of the Doha Ministerial Declaration called for negotiations on 'the reduction, or as appropriate, elimination of tariff and non-tariff barriers to environmental goods and services' (WTO 2001). The removal of barriers to trade in EGS provides a channel for trade policy to support wider environmental goals. This is partly because liberalising trade in EGS can facilitate greater access to equipment and technologies to mitigate the adverse effects of climate change, help in improving energy efficiency, and further support the transition to more sustainable, green economies.

Despite this shared understanding and a willingness on the part of some WTO members to negotiate on liberalising EGS, reaching consensus multilaterally has proved difficult. EGS remains a complex area of multilateral negotiation, both conceptually and in terms of the issues at stake (Cottier and Baracol Pinhao 2009). WTO members are at odds on what exactly constitutes an environmental good or service and the interests of developed and developing countries digress, making it difficult for both groups of countries to come together at the negotiating table. So far, EGS negotiations have been spearheaded by developed countries, who are both producers and exporters of EGS and are poised to gain significantly from liberalisation. Developing countries remain largely uninterested in these negotiations. Many developing countries, and especially small states and countries in sub-Saharan African (SSA) , are not major exporters of environmental goods. This lack of export interest, though not common to all developing countries, has been cited as one of the more obvious reasons for their lack of interest in these negotiations. However, the issue is not as clear cut. The rationale for developing countries' indifference to the negotiations goes beyond the mere lack of export interests. Rather, it is partly influenced by the limited scope of the current negotiations that cover only tariffs on environmental goods, while not addressing non-tariff barriers and the liberalisation of environmentally related services (Wu 2014). In addition, there have been no detailed studies on how developing countries might benefit from liberalising EGS and the likely implications for them if they decide against doing so.

The growth in goods and services trade globally has, however, created a complex relationship between rising production, consumption and job creation, and concomitant changes in the environment. Such changes include, among others, declining biodiversity, rapid climate change, increasing water scarcity and pollution,

and greater pressure on finite raw materials. This has made it imperative to address the nexus between international trade and environmental sustainability and to explore ways in which negotiations on EGS can contribute to delivering a triple win for trade, the environment and sustainable development. Moreover, ensuring that trade supports the environment is crucial for a green recovery and 'building back better' post-COVID 19. This has contributed to reigniting EGS negotiations as part of the new Trade and Environmental Sustainability Structured Discussions (TESSD), launched in November 2020. While the TESSD complement the ongoing work of the WTO's Committee on Trade and Environment (CTE), it is expected to provide a new lease of life to ESG discussions.

Against this backdrop, this International Trade Working Paper (ITWP) maps the developments on the discussions on liberalising EGS at the WTO and critically assesses the challenges and opportunities for Commonwealth small states and countries in SSA in liberalising trade in EGS. The paper first highlights the evolution of the EGS negotiations at the WTO, before analysing the trade-related interests of Commonwealth small states and SSA countries. Thereafter, it examines the challenges and opportunities they face in participating in negotiations on liberalising trade in EGS. The paper concludes by identifying priorities that these countries can consider if they decide to participate in the WTO EGS discussions.

2. Liberalising trade in environmental goods and services

Multilateral negotiations aimed at removing barriers to trade in EGS began in 2001, following the launch of the DDR. Paragraphs 31–33 of the Doha Declaration explicitly mention environmental issues in the context of multilateral trade negotiations. Ministers agreed to launch negotiations on the link between WTO rules and specific trade obligations set out in MEAs, with the view to: (a) determine how WTO rules apply to members that are parties to environmental agreements; and (b) clarify the relationship between trade measures adopted under MEAs and WTO rules. Ministers also agreed to negotiate procedures for regular information exchange between MEAs and the WTO. In addition, ministers agreed to negotiate on reducing or eliminating tariff and non-tariff barriers to EGS and to develop disciplines on fisheries subsidies (Paragraph 31 (iii)).[2] Environmental issues were also covered in other negotiating areas of the Doha Round, such as agriculture (Doha Declaration Paragraphs 13–14). Furthermore, ministers instructed the CTE to work on several areas related to trade and the environment, such as the effect of environmental measures on market access, particularly for developing countries, measures to ensure that trade liberalisation benefits the environment and development, and the need to take into consideration the importance of technical assistance and capacity building for developing countries in the area of trade and the environment.

In recognition of the urgent need to address climate change and the role that trade in EGS could play, especially in enabling access to cheaper technologies and equipment to mitigate environmental harm, there was a lot at stake in the negotiations on liberalising trade in EGS, and an early conclusion to the talks was anticipated. However, like many other issues on the Doha Agenda, EGS turned out to be a sticking point at the WTO. More than a decade of multilateral talks on this issue failed to deliver an agreement. To date, the negotiations are at a standstill, as members cannot agree on, among other things, what constitutes an environmental good or service, as well as the modality for tariff liberalisation (Wu 2014; Bacchus and Manak 2021). Despite the clear link between environmental goods and environmental services, discussions have focused largely on the former, partly because of the different modes of trading goods and services and the complexity in identifying barriers to environmental services trade (Bucher et al. 2014). Environmental services remain a sensitive issue, despite their relevance in the prevention and mitigation of

environmental damage. In a similar vein, the elimination of non-tariff measures that hinder trade in environmental goods has not received much attention. We discuss below the evolution of the WTO discussions on EGS, highlighting the complexities involved.

2.1 Multilateral discussions on environmental goods

There is no clearly defined environmental goods sector and developing a consensus on identifying and classifying environmental goods proved challenging for WTO negotiators. Instead, environmental goods can be found in a wide array of classifications of industrial goods and are often difficult to single out. In addition, the classification frequently considers stages of the life cycle of a good to determine its environmentally beneficial characteristics, specifically focusing on whether: (a) it is produced in a manner that has less environmental damage/harm; (b) it is used in a way that benefits the environment; and (c) it contributes to mitigating damage to the environment (Bucher et al. 2014). Despite these complexities of defining environmental goods, WTO members have identified at least two general categories of goods as potential candidates for liberalisation:

1. goods used for environmental management (that is, prevention and mitigation of environmental damage, for example, oil spill remediation equipment); and
2. environmentally preferable products (EPPs) (that is, goods whose production, end use or disposal are not harmful to the environment or have positive environmental characteristics relative to similar substitute goods (for example, using biodegradable materials).

However, this WTO categorisation of environmental goods presents several challenges. Some goods that fall into the first category, despite being environmental, could also have multiple end uses/dual uses. For example, a pump used to treat wastewater can also be used for non-environmental purposes. In addition, products with multiple end uses are ill-suited for the current tariff classification system or the Harmonized System (HS) used by customs authorities (see Box 2.1). While this can be partially addressed, significant implementation costs would be incurred, especially by developing countries.

The second category of goods also raises its own set of unique challenges. Some EPPs have other conventional products as substitutes and,

Box 2.1. The Harmonized System (HS) nomenclature and liberalising trade in environmental goods

The HS nomenclature is a six-digit international coding system used by customs authorities to classify goods, identify their origin, and determine their eligibility for exemption from tariffs and other trade taxes. The system was adopted in 1988 and now has 157 contracting parties who have based their domestic customs tariffs on the HS. Non-parties to the HS Convention have also relied on the HS system, resulting in more than 200 countries actively using the HS to date. The near-universal usage of the HS has made it the 'language of international trade', used to inform trade policies, gather trade statistics and undertake general economic research. The six digits of the HS are broken down into three parts. The first two digits (HS-2) identify the chapter the goods are classified in, e.g., 09 = Coffee, Tea, Maté and Spices. The next two digits (HS-4) identify groupings within that chapter, e.g., 09.02 = Tea, whether flavoured or not. The next two digits (HS-6) are even more specific, e.g., 09.02.10 Green tea (not fermented).

The HS nomenclature comprises over 5,000 product categories; however, none of these categories are specific to environmental goods. In fact, the HS system has not adapted to the new sustainability trends that call for greater environmental protection. While the HS is not static and can be updated to respond to the needs of the environment, doing so will result in significant implementation costs. As the International Federation of Customs Brokers Association (IFCBA) reported, 'A single change to the HS can result in thousands of changes to product databases, especially for customs brokers with hundreds of clients importing a wide variety of products' (IFCBA 2018). A change in just one tariff item could result in an average of three to four new tariff items or could be expanded to as many as ten new tariff items. This adjustment cost, which would sometimes require manual updating of domestic tariff systems/product databases, has served as a deterrent to updating the HS codes. However, the 2017 update of the HS nomenclature to include distinctions that are environmentally related – for example, in distinguishing between LED light bulbs and incandescent bulbs – is a positive step and could help further the agenda of the Environmental Goods Agreement (de Melo and Solleder 2019)

Source: UNCTADstat

in certain instances, the substitute products are relatively cleaner and more efficient. This therefore raises the issue of how to address comparison between 'like products'. Designating EPPs as a category of environmental goods also creates scope for discrimination based on processes and production methods (PPMs). While the WTO permits its members to set criteria for the way products are produced, especially if production methods leave a trace in the final product (e.g., cotton grown using pesticides leaves a trace of pesticides in the final product), this could potentially be a gateway for protectionism.[3] Moreover, goods produced in environmentally friendly ways are not a distinct category in the HS nomenclature, making it even more difficult to commit to removing tariffs on such goods.

These concerns have fed into the uncertainty related to the correct approach for tariff liberalisation. Developed countries have championed a 'list approach', whereas developing countries have favoured an integrated/environmental project approach. The list approach, which simply involves compiling a list of products to be exempted from tariffs, is one driven mainly by the export interests/comparative advantages of industrialised countries in environmental goods. It seeks to combine pre-existing lists of environmental products, like the Organisation for Economic Co-operation and Development (OECD) and Asia-Pacific Economic Cooperation (APEC) lists, which have provided a key reference point in these negotiations. The OECD list contains more than 200 environmental products and emerged from the need to establish a deeper understanding of the environmental sector. The APEC list, on the other hand, was specifically crafted with the aim of reducing tariffs on environmental goods and contains only 54 products. The shorter list of products prepared by APEC was created, in part, as a consequence of many of the same issues raised in the paragraph above (dual use, like products etc.). Of foremost importance was ensuring that the goods on the list could be easily distinguished by customs agents and treated differently for tariff purposes (EC, 2016). WTO members have also relied on other environmental goods lists, such as the submission made by the Friends of Environmental Goods. This list informed a proposal made by the European Union and the United States, which included a subset (43 products) of the 153 products on the Friends of Environmental Goods list. These and other submissions have resulted in a combined WTO list of 411 products, which was drafted in 2010 (*ibid.*).

Despite being the preferred approach, the list approach fails to address non-tariff barriers and does not establish a systematic link between the negotiations on environmental goods and negotiations on environmental services, as intended by the Doha paragraph 31(III) mandate. To remedy these issues, developing countries proposed marrying tariff reduction in environmental goods with enhanced market access in environmental services, through what is termed the Environmental Project Approach (EPA) or Integrated Approach.[4] This approach to tariff liberalisation dictates that once an environmental project that meets certain criteria as set by a designated national authority or the WTO's Committee on Trade and Environment in Special Sessions (CTESS) is approved, the goods and services included in the project would qualify for exemption from tariffs for the duration of the project. The proposal further suggested that CTESS identifies categories of environmental projects, such as air pollution control or solid waste management, and include in each category the relevant list of environmental goods (Cottier and Barcol Pinhao 2009). This was necessary to obtain multilateral consensus on environmental projects and would also incorporate the list approach. However, developed country members rejected the proposal on the basis that it was not compatible with WTO rules, and that the projects were only temporary in nature; that is, the proposal limited the reduction in tariffs and non-tariff barriers only for the duration of the projects (Ibid.).

The lack of consensus on this issue partly contributed to the breakdown of the multilateral approach to discussing environmental goods and the subsequent adoption of a plurilateral approach in pursuit of an Environmental Goods Agreement, discussed later.

2.2 Multilateral discussions on environmental services

Removing barriers to trade in environmental services has been largely overshadowed by efforts to liberalise trade in environmental goods, notwithstanding evidence that both are complementary and interrelated.

Environmental services are crucial to the operation and proper functioning of environmental equipment and technologies and are therefore not mutually exclusive. For example, a geothermal plant requires professional expertise and skilled labour to setup and start operations. Services also account for more than 60 per cent of the environmental industry as a whole and should not be left behind in discussions to liberalise trade for the good of the environment (Bucher et.al 2014). Moreover, paragraph 31(III) of the Doha Declaration explicitly calls for the liberalisation of environmental services. The limited response to liberalising trade in environmental services at the WTO stems from, among other reasons, the unavailability of data on services trade more generally and environmental services specifically. This, coupled with the reality that environmental services have traditionally been provided by public entities and municipalities, has made the discussion on environmental services even more sensitive politically.[5] Notwithstanding, some 52 WTO members (counting the EU-27 as one), including both developed and developing countries, have made modest commitments to liberalising trade in services related to the environment. Only eight Commonwealth small states and SSA countries made commitments in at least one environmental subsector under the WTO General Agreement on Trade in Services (GATS) (see Table 2.1). The negotiations on environmental services form part of the wider discussion on services trade and are being undertaken in the Special Sessions of the Council for Trade in Services. Many of the same issues that surfaced in the negotiations on environmental goods have emerged in these negotiations, including the scope of environmental services, which has been a stumbling block to liberalisation.

Despite having the flexibility to adapt their own classification systems for environmental services, WTO members have taken such services to mean the activities covered under division 94 of the UN Central Product Classification System (CPC), as well as the WTO's sectoral classification list (W/120). Division 94 of the CPC (version 2.1) regards environmental services as activities like wastewater treatment, collection and management of hazardous and non-hazardous waste, remediation services, sanitation services, and other environmental protection services. While these are core environmental services, the CPC does not cover the full gamut of environmental and environmentally related services. It remains limited to infrastructure services, while negating non-infrastructure services like air pollution control. On the other hand, the WTO's W/120 list contains an even narrower range of services. The list was drafted in 1991 for the purpose of negotiating GATS and is based on an earlier version of the CPC (i.e., the provisional CPC). As such, 'it reflects the traditional view of environmental services as largely public infrastructure services supplied to the general community and focuses mainly on waste management and pollution control' (OECD 2006).

The environmental services sector has, however, evolved and matured with time, warranting the need to expand the current classification

Table 2.1. Schedules of Commonwealth small states and SSA WTO members with specific commitments on environmental services

Country	Sewage services	Refuse disposal services	Sanitation and similar services	Other	Total
The Gambia	√		√		2
Lesotho	√	√	√	√	4
Rwanda			√		1
Samoa	√	√	√	√	4
Seychelles	√	√		√	3
Sierra Leone	√	√	√	√	4
Tonga	√	√	√	√	4
Vanuatu	√	√	√		3
Total	7	6	7	5	25

Source: Author's calculations from the I-TIP Services databases

Box 2.2. EU's proposal to expand the environmental services classification list

In 2000, the EU proposed the creation of seven 'core' categories of 'pure' environmental services and seven 'clusters'/categories of 'environmentally related' services (i.e., those services with an environmental end use). The EU's seven 'core' categories of 'pure' environmental services are:

1. Water for human use and wastewater management
2. Solid/hazardous waste management
3. Protection of ambient air and climate
4. Remediation and clean-up of soil and water
5. Noise and vibration abatement
6. Protection of biodiversity and landscape
7. Other environmental and ancillary services

These services sectors have been subsequently captured in the EU's Taxonomy Report of 2020 and its supplementary technical annex.

Sources: WTO (2000); European Commission (2020)

and redefine environmental services. A range of integrated services like consulting, engineering and construction are necessary components of environmental projects and could potentially be classified as environmental services/environmentally related services. WTO members have voiced these concerns and have submitted proposals for a revised classification, including the hotly debated EU proposal, S/CSS/W/38 (see Box 2.2). However, no agreement has been reached to date on a way forward.

Addressing restrictions on the supply of environmental services remains a crucial bottleneck to liberalising trade in these services. Currently, trade in environmental services takes place primarily through the establishment of a commercial presence (Mode 3) and the temporary movement of natural persons (Mode 4). However, it need not be limited to these modes of supply, as the provision of environmental services through other modes, including Mode 5,[6] are becoming increasingly possible. The cross-border supply (Mode 1) of some environmental services is now technically feasible due to advances in information and communication technologies, hastened by the COVID-19 pandemic (WTO 2021).

3. A plurilateral approach: the Environmental Goods Agreement

Amid the failed attempt to conclude a multilateral agreement on EGS, a group of 14 WTO members (now extended to 18)[7] embarked on negotiating a plurilateral Environmental Goods Agreement (EGA). Plurilateral agreements involve a subset of WTO members with common interests and have been used as a means of reaching consensus, as with, for example, the agreements on information technology goods and government procurement (WU, 2014). Plurilateral initiatives are proliferating as countries seek to overcome the multilateral impasse, especially on emerging issues. Moreover, as the benefits of plurilateral agreements can be extended on a most-favoured nation (MFN) basis to non-parties, without the need to make concessions, these agreements have become more tolerated (ibid, 2014).[8]

The negotiations on the EGA began in 2014 and were intended to 'ride the wave' of previous success by the APEC group to liberalise environmental goods at the regional level. The group had agreed in 2012 to reduce applied tariffs to 5 per cent or less on all 54 products on the APEC list of environmental goods by 2015. This provided impetus for WTO members, particularly developed countries, to pursue further liberalisation of environmental goods vis-à-vis the list approach. The EGA was, however, far more ambitious, as the intention was to expand the product coverage, as well as eliminating tariffs on all environmental goods, rather than

simply reducing tariffs as APEC countries did. Nonetheless, the scope of the discussion was limited to eliminating tariff barriers on environmental goods and excluded non-tariff barriers and discussions on liberalising trade in environmental services. The 18 parties to the EGA represent 46 WTO members and account for almost 90 per cent of global trade in environmental goods (de Melo and Solleder 2019; Bacchus and Manak 2021). Except for China and Costa Rica, all those involved are developed country members, while only Australia, Canada, Malta (as part of the EU,) New Zealand, Singapore and the UK are Commonwealth member countries. Commonwealth developing countries, including SSA countries and small states, are noticeably absent from the negotiations.

3.1 The breakdown in the EGA

While the plurilateral piecemeal approach to the negotiations was meant to speed up the process, they stalled in 2016. Among the reasons cited for the breakdown in the negotiations was disagreement over what products to include on the expanded list. Some members wanted to include goods that made up a substantial portion of their exports, while excluding goods with high tariffs. China's proposal to include bicycles on the list of environmental products was one such example. Despite the use of bicycles being environmentally preferable, as they emit no greenhouse gases, this proposal was highly controversial. The EU and the US opposed the inclusion of bicycles out of fear that China's overcapacity in bicycle production would lead to an influx of Chinese bicycles to their markets. At the same time, China was seen as only concerned with securing greater market access for its exports. As Bacchus and Manak (2021) argue, China is a leader in the export of environmental technologies, but its demand for the same technologies is relatively low, as it has failed to adequately enforce its domestic environmental policies. In the eyes of other members, China lacked ambition in the EGA negotiations and was accused of 'sitting on the side-lines' (de Melo and Solleder 2019; Bacchus and Manak, 2021).

Another issue that surfaced was how to address free riding. In fact, the issue of free riding has been posited as a major reason why developing countries have not participated in these talks (ibid.). The parties to the agreement had indicated in the initial stages their intent to extend the benefits to non-participating countries on an MFN basis once a critical mass was reached. However, this did not augur well for some countries. The question of fairness has been touted throughout the discussion, with countries like China suggesting that the agreement should not enter into force until countries accounting for 90 per cent of world trade become parties to the agreement.

4. Commonwealth small states and SSA trade in environmental goods and services

For Commonwealth small states and SSA countries to consider participating in the WTO discussions on liberalising trade in EGS, it is necessary for them to have a better understanding of the implications of such liberalisation. As discussed above, these countries have not demonstrated strong interest in participating in the WTO discussions to date. They feel that they do not have a sizable stake in the export of EGS.

4.1 Commonwealth developing countries' trade in environmental goods

Have the trade interests of Commonwealth SSA countries and small states in relation to environmental goods changed since the collapse of multilateral discussions on EGS? Evidence suggests that most of these countries still have no significant export-related interest in the liberalisation of environmental goods. As countries use different categories to collect data on environmental goods (Bucher et al. 2014),[9] and as there is no agreed list of environmental goods, we used the six-digit HS codes forming the Combined List of Environmental Goods (CLEG), developed by Sauvage (2014), to assess Commonwealth SSA countries' and small states' trade in some environmental goods.[10] Table 4.1 is based on the best available data and allows for an approximation of exports by

Table 4.1. Commonwealth countries exports of environmental goods (2019)

2019	Exports (US$ million)		
Countries	Total	Environmental goods	Share of environmental goods in total trade (%)
Developed			
Australia	266,377.23	3,734.74	1.40
Canada	409,826.09	22,625.40	5.52
Cyprus	1,456.47	8.24	0.57
Malta	4,142.92	148.73	3.59
New Zealand	38,185.21	702.80	1.84
United Kingdom	464,065.92	41,278.37	8.89
Developing			
Brunei Darussalam	7,039.08	75.37	1.07
Ghana	16,768.28	27.73	0.17
India	323,250.73	17,726.30	5.48
Kenya	5,836.26	128.95	2.21
Malaysia	238,088.65	18,850.08	7.92
Nigeria	53,617.81	27.73	0.05
Pakistan	23,268.39	83.61	0.36
Singapore	390,331.76	27,752.07	7.11
South Africa	87,142.22	3,904.62	4.48
Sri Lanka	11,763.54	522.90	4.45
LDCs			
The Gambia	7.23	0.15	2.07
Malawi	912.83	6.80	0.75
Mozambique	4,722.31	20.10	0.43
Rwanda	780.81	5.78	0.74
Zambia	6,817.75	34.19	0.50
Small states			
Antigua and Barbuda	2.56	0.12	4.65
Barbados	444.09	18.64	4.20
Belize	205.99	0.00	0.00
Botswana	5,235.47	14.35	0.27
Eswatini	2,001.64	6.78	0.34
Fiji	1,032.91	14.94	1.45
Grenada	31.99	0.35	1.10
Guyana	1,497.58	0.19	0.01
Jamaica	1,536.06	2.68	0.17
Mauritius	1,876.37	12.49	0.67
Namibia	3,677.35	11.16	0.30
Samoa	49.27	0.25	0.50
Seychelles	426.31	2.24	0.53
Saint Lucia	97.26	2.10	2.16
St Vincent and the Grenadines	38.16	0.91	2.39
Commonwealth Total	**2,372,554**	**137,751**	**5.80**

Source: Author's calculations using World Integrated Trade Solution (WITS) data

Note: The data uses CLEG classification of environmental goods. No data were available for Cameroon, Lesotho, Sierra Leone, Uganda, Tanzania, Bangladesh, Maldives, Dominica, St Kitts and Nevis, Trinidad and Tobago, Kiribati, Nauru, Papua New Guinea, Solomon Islands, Tonga, Tuvalu, and Vanuatu.

Commonwealth small states and SSA countries in environmental goods and their export interests in these goods (see also Annex 1). The table shows that Commonwealth small states are relatively insignificant players in the export of environmental goods, with their shares of these exports all below the Commonwealth average. The same is true for Commonwealth SSA countries; only South Africa recorded about a 4.5 per cent share of total exports.

Among small island developing states, only Barbados might have an export interest in environmental goods, given that exports of these goods were worth US$18.6 million in 2019, contributing about 4.5 per cent of the country's total exports. When considering trade flows for individual environmental goods categories, Singapore's exports are dominated by a single category – renewable energy plants/technologies (Annex 1).

Instead, most Commonwealth small states and SSA countries are significant importers of environmental goods. Table 4.2 shows that, except for Botswana and Namibia, all Commonwealth small states and SSA countries have shares of imports of environmental goods exceeding 5 per cent, with shares above the Commonwealth average for Antigua and Bermuda, The Gambia, Ghana, Guyana, Mozambique, Nigeria, Rwanda, Seychelles, and Zambia. Access to these imports is beneficial, as it helps these countries obtain environmental goods and technologies to support their environmental sustainability and decarbonisation endeavours.

4.2 Commonwealth small states and SSA trade in environmental services

It is becoming inconceivable to separate environmental goods and environmental services as two separate components of environmental control. For instance, processes to control pollution continue to rely on specialised services (Steenblik 2005). In addition, a wide range of products and technologies are linked with the provision of services related to environmental change and climate change. Table 4.3 illustrates the range of services involved in environmental sustainability (protection, mitigation and adaptation). As discussed above, services go beyond what the WTO classifies as environmental services in W/120 (WTO 1991) and include services that do not directly relate to the environment, but are connected to protecting and managing the environment, mitigating environmental effects, and adaptation. For example, business services include those related to the environment, such as services that are incidental[11] to agriculture, mining, energy distribution and manufacturing. In fact, the environmental services sector is becoming increasingly more important, and many developing countries are investing more in environmental infrastructure and putting in place stronger regulatory frameworks – a trend expected to continue due to growth in international demand for environmental goods and technologies and the expansion of greener industries in developing countries (Bucher et al. 2014). Thus, removing barriers to trade in environmental goods might not help to achieve the desired results, as the remaining barriers to trade in services have the potential to undermine the effectiveness of liberalising trade in environmental goods and vice versa (Nordås and Steenblik 2021). This is partly because many services are essential to the proper functioning of environmental goods and equipment (Sauvage and Timiliotis 2017). As elaborated below, restrictions imposed by countries on trade in services affect the provision of activities for environmental sustainability. What is then required is to close the gap between the need for environmental regulations, which is a major driver for EGS, and the actual market demand and the potential for profit in EGS, which remains a challenge in developing countries (Bucher et al. 2014).[12]

Most Commonwealth small states and SSA countries rely on the import of environmental services. Much of these imports are in services related to technologically sophisticated equipment for mitigating environmental change and climate change. For example, services related to turbines for power generation and centrifugal blowers for methane capture projects and equipment for delivering core environmental services.[13] Yet most of these countries have several types of restrictions that affect trade in both core environmental services and other environment-related services. Many of these restrictions affect primarily services provided through Modes 3 and 4 and which form important inputs into environmental projects. Examples of horizontal commitments[14] by Commonwealth small states and SSA countries (Annex 2) show that these countries have various limitations on market access and national treatment. The limitations include investment approval requirements, economic needs tests, the entry and temporary stay of natural persons, and capital remittance, among others. In addition, labour market tests

Table 4.2. Commonwealth countries imports of environmental goods (2019)

	Imports (US$ million)		
Countries	Total	Environmental goods	Share of environmental goods in total imports (%)
Developed			
Australia	220,723.42	20,890.01	9.46
Canada	453,308.33	43,239.08	9.54
Cyprus	9,179.16	441.37	4.81
Malta	8,211.01	279.96	3.41
New Zealand	42,148.28	3,263.14	7.74
United Kingdom	686,741.74	49,996.56	7.28
Developing			
Brunei	5,102.67	901.48	17.67
Ghana	10,436.15	948.33	9.09
India	478,883.73	25,750.57	5.38
Kenya	17,210.00	1,285.99	7.47
Malaysia	204,828.23	14,707.36	7.18
Nigeria	47,369.08	5,077.44	10.72
Pakistan	49,930.64	4,263.54	8.54
Singapore	358,974.64	25,779.97	7.18
South Africa	87,647.18	5,650.60	6.45
Sri Lanka	19,474.31	1,359.33	6.98
LDCs			
The Gambia	494.03	66.91	13.54
Malawi	2,940.94	185.90	6.32
Mozambique	7,638.74	646.24	8.46
Rwanda	3,195.16	308.43	9.65
Zambia	7,221.08	597.21	8.27
Small states			
Antigua and Barbuda	568.30	55.49	9.77
Barbados	1,580.84	93.16	5.89
Belize	985.90	59.73	6.06
Botswana	6,558.51	268.51	4.09
Eswatini	1,832.44	100.09	5.46
Fiji	2,734.30	160.02	5.85
Grenada	479.83	31.87	6.64
Guyana	4,025.14	422.83	10.50
Jamaica	6,339.23	458.78	7.24
Mauritius	5,601.18	415.91	7.43
Namibia	7,756.39	364.00	4.69
Samoa	390.68	25.00	6.40
Seychelles	1,437.74	113.33	7.88
Saint Lucia	623.79	36.96	5.92
St Vincent and the Grenadines	335.23	22.19	6.62
Commonwealth Total	**2,762,908**	**208,267**	**7.50**

Source: Author's calculations using WITS data
Note: The data uses CLEG classification of environmental goods.

Table 4.3. Indicative range of services related to environmental sustainability

Sector classification	Indicative range of activities
Environmental services 1. Sewage services 2. Refuse disposable services 3. Sanitation and similar services 4. Other	a. Services for air pollution control – the removal of gaseous and pollutants from air. b. Services for the collection, disposal and treatment of municipal, commercial and industrial waste. c. Services related to identifying, assessing and remedying contaminated sites. d. Services related to reducing noise pollution. e. Services related to environmental research to attain environmental objectives. f. Other activities such as environmental protection. g. Activities such as environmental management and audit work. h. Services involving water treatment, supply and delivery by both the public and private sectors. i. Services provided for producing new products or materials from recovered waste. j. Services provided for generating, collecting or transmitting energy from renewable sources such as biomass, solar, wind and tidal sources. k. Services related to the conservation and maintenance of the natural environment. l. Services related to gas recovery from landfill waste.
Business services	a. Computer-related services. b. Research and development services. c. Services incidental to agriculture. d. Services incidental to forestry. e. Services incidental to mining. f. Services incidental to manufacturing. g. Services incidental to energy distribution. h. Services incidental to energy distribution. i. Professional services, e.g., urban planning and landscape architectural services. j. Professional services.
Communication services	a. Postal services. b. Courier services. c. Some telecommunication services.
Construction and related engineering services	a. Work for building and civil engineering, installation and assembly. b. General construction work. c. Installations and assembly work.
Financial services	a. Banking and other financial services. b. Insurance services.
Research and development services (R&D)	a. R&D in services on natural sciences. b. R&D in services on social sciences and humanities. c. R&D in interdisciplinary R&D services.
Transport services	a. Services related to the production and supply of environmental goods – for example, transport services which play an important role in the delivery of environmental goods that help in the protection of the environment. b. Maritime transport and internal waterways transport, such as passenger transportation and freight transportation. c. Road transport services and retail transport services, such as such passenger transportation and freight transportation. d. Air transport services, such as passenger transportation and freight transportation.
Other services	a. Services related to the production and provision of cleaner technology.

Source: Adapted from WTO Services Sectoral Classification List (WTO, 1991)

are required for longer stays and for employment, which require certificates or licences that can be time consuming to obtain (Nordås and Steenblik 2021). Moreover, most of these countries have not made commitments in core environmental services, with only 8[15] out of the 35 having done so (see Table 2.1).

Given the issues raised above, there is a need for Commonwealth small states and SSA countries to enhance their understanding of the range of services involved in environmental sustainability and their complementary relationship with core environmental services. This could help them review the need for some of the

barriers to trade in services that often impede trade in related technologies (Steenblik and Grosso 2011). Improved understanding can also help them identify potential export opportunities and the barriers to trade faced by environmental services exporters (Bucher et al. 2014).

5. Commonwealth small states and SSA EGS interests in a changing global economic and trading landscape

Despite Commonwealth small states and SSA countries lacking a significant stake in the export of EGS, there have been considerable changes to the global economic and trading landscape since 2001, associated with environmental degradation, biodiversity loss and climate change. These are issues which Commonwealth small states and SSA countries should consider when deciding whether to participate in EGS discussions.

As discussed above, the growth in trade in goods and services globally has created a complex relationship between rising production, consumption and job creation, and associated changes in the environment, particularly due to greater pressure on finite resources. As a result, there have been growing calls to decouple growth and development, so that the former is not achieved at the expense of irreversible climate change and wider environmental degradation. Environmental change is driven by human action and natural processes such as natural disasters, for example, volcanic activity. However, the increase in human action in pursuit of economic development over time has significantly increased the contribution of human activity to environmental change (IPCC 2022).

Increased contribution of human activity to environmental change is taking place in all countries, regardless of level of development. As most developing countries embark on economic transformation initiatives, there is a chance that some of them will contribute to environmental damage and climate change. Economic transformation and growth tend to increase the demand for resources, including natural resources, which impacts on the environment through deforestation, land degradation and water scarcity, among others. Countries can also get locked into high-emission infrastructure and high demand for energy services in the process of economic transformation, which can raise greenhouse gas (GHG) emissions and air pollution. Consequently, economic change is taking place in the context of environmental change and climate change. As economic activities are having a greater impact on the environment, there in an increasingly urgent need to ensure that policies support economic growth and development while also managing environmental change. In other words, trade and environmental objectives and policy measures should be mutually supportive (WTO 2020). For example, there has been growth in renewable energy over the past two decades, contributing to national governments taking measures to ensure that clean energy projects are beneficial to their economies. Consequently, developing countries' interests in liberalising environmental goods, in particular those related to wind and solar energy generation, vary depending on their productive capacity, trade policy settings and export structure (Bridle and Bellmann 2021).

The global economy has also experienced a rapid increase in demand for EGS due to the growing awareness of the importance of environmental sustainability. The EGS market was expected to grow from US$866 billion in 2011 to US$1.9 trillion in 2020 (Bucher et al. 2014). In addition, increases in world population and consumption are expected to raise global solid waste production from 1.3 billion tonnes in 2012 to 2.2 billion tonnes by 2025, while waste management costs are expected to rise from US$205.4 billion per year to about US$375.5 billion per year over the same period (Hoornweg and Bhada-Tata 2012). Moreover, the increased introduction of domestic environmental regulations, partly in fulfilment of countries' commitments in multilateral environmental agreements, has placed greater pressure on producers to comply with these regulations and increased demand for EGS as producers shift to cleaner technologies (Ibid.). The introduction

of new environmental regulations and greater public awareness about protecting the environment tends to push companies, governments and consumers to demand EGS, and means producers of EGS could be more competitive on the international market (OECD 2019). According to de Melo and Solleder (2018), environmental regulations affect trade, as they give rise to demand for EGS. This has contributed to the increased acceptance of the need to switch to a green economy. Liberalising trade in EGS can play an important role in environmental sustainability and facilitating the shift to a green economy (United Nations 2012).[16] It may also lead to greater enforcement of existing environmental regulations, as well as the adoption of newer and more stringent measures (Wu 2014).

The significant transformation of EGS due to technological advances in recent decades, has made it imperative for countries to consider the importance of technology developments in their transition to a greener economy and a green recovery from the COVID-19 pandemic. The delivery of services has also changed due to advances in technology. For example, the monitoring of wind turbines can now be done from a foreign country (Mode 1) rather needing to have an office in the country where the wind turbines are built (Mode 3). In addition, advances in environment-related technologies have been accompanied by growth in services linked to these technologies, such as the maintenance of environmental infrastructure and equipment (Nordås and Steenblik 2021). Such developments provide developing countries with an opportunity to increase trade while, at the same time, transitioning to greener economies (UNEP 2014). Some developing countries, such as Kenya,[17] are already taking advantage of the evolving market for EGS, exploiting niche markets and developing export capacity (Kennett and Steenblik 2005).

Developing countries, particularly small states and SSA countries, are experiencing various impacts stemming from environmental and climate change, which are expected to continue and intensify (Brahmbhatt et al. 2016). The economic consequences of intensifying environmental and climate change impacts are not well understood, yet developing countries are likely to be affected significantly, because of their low adaptive capacity – both within households and in terms of their institutional, technological and financial capacity to take actions to limit damage to the environment. The largest economic impacts for most developing countries, including small states and SSA countries, are expected to be on agriculture yields and output. For example, yield and output losses for SSA countries are expected to range between 20 and 30 per cent, and possibly even higher, by 2050 (ibid.). This will, in turn, impact on trade in agriculture for these countries, as well as employment and economic growth and development. This makes it imperative for small states and SSA countries to consider the impact of economic activities on economic, social and environmental priorities as they design their policies, including trade policy. This should include the impact of exploiting resources such as lithium, cobalt and other minerals used in producing environmental goods.

6. Opportunities and challenges of liberalising trade in EGS

The liberalisation of EGS entails a substantial reduction of trade barriers, as well as an increase in countries' coverage, especially in trade in services. There is no doubt that EGS perform several functions that are critical to tackling environmental challenges, mitigating climate change, revitalising the natural environment and biodiversity, and making production and consumption more sustainable. In considering whether to participate in the discussions on liberalising trade in EGS, developing countries must weigh the opportunities against the disadvantages of doing so.

6.1 Potential opportunities

Lower trade barriers for EGS can trigger positive environmental effects (Wu 2014). There are

several benefits that come with participating in the liberalisation of trade in EGS, especially when the liberalisation works for all countries. Such liberalisation can reduce the cost of importing EGS, which will help to boost competition and lead to increased productivity by encouraging greater entry and expansion of EGS producing firms, as well as hastening the exit of inefficient ones. This is because international trade promotes specialisation, competition, economies of scale and innovation globally (WTO and UN Environment 2018).

Liberalising trade in EGS could provide an opportunity for Commonwealth small states and SSA countries to diversify their economies more generally, by developing productive capacities in manufacturing environmental goods and providing environmental services to take advantage of the market access that comes with liberalisation.[18] This is because international trade can facilitate the speedy diffusion of environmental goods and services to places they are most needed, helping to stimulate local production (ibid.). The liberalisation of trade in EGS allows the spread of new resource-efficient technologies as innovation flows backwards along supply chains (OECD 2019). According to the UN Environment Programme (UNEP), least developed country (LDC) export capacity in environmental goods would stimulate the expansion of their exports, while capacity building and technical assistance can help LDCs to overcome some of the challenges they face in participating in trade in environmental goods (UNEP 2014).

In addition, the diversification and transformation of these economies can occur in ways that focus and maintain attention on environmental and climate change challenges (Brahmbhatt et al. 2016). This will help small states and SSA countries to harness the link between trade and the environment, to accelerate inclusive and sustainable development. According to the Global Commission of the Economy and Climate (2014), all countries, regardless of their level of development, can contribute to building economic growth and development while, at the same time, reducing the risks of climate change and wider environmental degradation.

Eliminating barriers to trade in environmental goods provides market access opportunities, as countries reduce higher tariffs on processed environmental goods. This has the potential to also increase South–South trade as developing countries take advantage of trade liberalisation, leading to greater parity in tariffs on raw materials and manufactured goods, thereby encouraging value-added processing (Tothova 2005). This has the potential to create more jobs, especially in industries in which developing countries have a comparative advantage – such as where value-added processing is labour intensive (UNEP 2014). In addition, there is the opportunity for creating regional or global value chains, as particular environmental sectors outsource parts of the production process to other countries (Bucher et al., 2014). This enables countries to participate in global value chains, providing them with an entry point into green exports – as they can avoid producing technologically demanding finished environmental goods (Baltzer and Jensen 2015).

The lowering of trade barriers on EGS could also give major polluting developing countries access to cheaper and more advanced equipment, technologies and services for preventing or mitigating environmental harm, contributing to lowering the cost of environmental policies (Sauvage and Timiliotis 2017). Mitigating environmental damage and climate change requires a wide range of technologies and services, including those that are imported. For example, trade can help with waste management by allowing waste to be sent to countries that have the best and most-efficient sorting and processing capabilities, contributing to reducing the cost of waste treatment in the country of origin and enhancing environmental protection (OECD 2019). In addition, trade in waste and secondary material can help the country transition towards a more resource-efficient, climate-neutral and circular global economy. Meanwhile, business, telecommunications, and construction and related engineering services (Modes 1, 2,3 and 4) play a role in the deployment of technologies required for the mitigation of GHGs (Steenblik and Grosso 2011).

Additionally, the transfer of technology will provide opportunities for developing countries to shift from lower- to higher-productivity sectors, boosting the overall productivity of their economies and enabling structural transformation. This will help developing countries protect the environment. For example, technology to improve cooking devices to enable fuel to be used

efficiently can also help reduce indoor smoke pollution. The growing demand for energy due to increased consumption – for example, due to shifting from less energy-intensive agriculture to more energy-intensive industry – creates a need for cleaner energy to curb environmental degradation. In addition, improving access to cleaner technologies and services can bring other related economic opportunities, including for micro, small and medium-sized enterprises (MSMEs). The environmental industry has evolved and expanded to become a major contributor to economic growth and employment creation, covering many sectors and activities (Sauvage and Timiliotis 2017).

Reducing trade barriers in EGS brings opportunities for countries, including Commonwealth small states and SSA countries, to collectively pursue common approaches to environmental and climate challenges and take co-ordinated trade- and investment-related action to promote the protection of the environment. The liberalisation of trade in environmental goods can bring opportunities for Commonwealth small states and SSA countries that are seeking to deliver better growth, while at the same time protecting the environment and mitigating climate change. They can do this by reviewing their trade regimes to make them more transparent and predictable, especially in terms of enforcing regulatory measures and standard setting to create markets that benefit the environment and create business opportunities. For example, liberalising trade in EGS can contribute to transforming agriculture and land use through the adoption of approaches such as environment- and climate-smart agriculture and landscape management.

6.2 Challenges

As discussed in section 4, most Commonwealth small states and SSA countries do not have a significant stake in the export of environmental goods, with only a third of their exports destined for countries negotiating the EGA in 2016 (UNEP 2014).[19] As a result, the liberalisation of trade in environmental goods is unlikely to significantly contribute to the expansion of trade for most of these countries, unless the liberalisation covers products and services of export interest to them. Most of these countries are commodity exporters, often engaging heavily in agricultural production, forestry and mining, and most of their services are related to these sectors. However, small states and SSA countries are likely to be affected disproportionately by trade liberalisation in environmental goods, as they might face non-tariff measures considering that most of their exports are extractive in nature and their environmental benefits are derived from production processes (Baltzer and Jensen 2015). This is most likely when importers try to impose national requirements on imported products or try to impose standards or production requirements on exporting countries.

Considering that small states and SSA countries are significant importers of environmental goods and some of them are dependent on tariff revenue, the reduction and elimination of tariffs on these goods is likely to contribute to a decline in revenue broadly proportional to the share of imports of environmental goods, which could have developmental and social implications. In addition, these countries might experience import surges in EGS as a result of trade liberalisation, which they might find challenging to address, especially given their limited capacity for recourse through highly technical safeguard and countervailing measures.

Many of the trade-related policy regulations needed to boost trade in EGS require the capacity to implement and adapt or adjust to the EGS liberalisation measures. In this regard, it is important for small states and SSA countries to explore ways to develop the required capacity, both within households and in terms of their institutional, technological and financial capacity to take action to limit the damage to the environment by trading in environmental goods and services.

It is challenging for small states and SSA countries to exert sufficient influence on discussions regarding which EGS should be included on the list for liberalisation. The goods and services earmarked for liberalisation must help developing countries to realise their environmental and climate protection goals, which include generating clean and renewable energy, improving energy and resource efficiency, controlling air pollution, managing waste, treating wastewater, monitoring the quality of the environment, and combatting noise pollution.

7. Priorities and way forward

The above discussion explored some of the practical issues that Commonwealth small states and SSA countries must consider when deciding to participate in the liberalisation of trade in EGS. The issues identified are also relevant in designing countries' national adaptation plans (NAPs) for achieving nationally determined contribution (NDC) targets for mitigating greenhouse gas emission, as set out under the Paris Agreement.

Given the lack of an agreed list of environmental goods, Commonwealth small states and SSA countries will find the WTO list, which is largely drawn from submissions by developed countries, to be limiting – as it largely comprises products for which they are net importers. To benefit small states and SSA countries, any agreed list should include products of export interest to them. In addition, Commonwealth small states and SSA countries will have to ensure that the definition of environmental goods includes goods with multiple uses[20] (Steenblik 2005), but of interest to them. These countries might also need flexibility in listing products to maintain development policy space. For example, the listing of products with multiple uses has the potential to negatively impact revenue collection for small states and SSA countries, so they might want to protect sensitive products.

Where PPMs are used to determine the listing of environmental goods, Commonwealth small states and SSA countries might be affected disproportionately, considering that most of their exports are commodities, mostly of extractive nature. As mentioned above, this might arise when importers try to impose national requirements on imported products or attempt to impose standards or production requirements on exporting countries. This could create inconsistencies with GATT 1994 Article III, which obligates parties to accord imported 'treatment no less favourable than that accorded to like products of national origin' (WTO 1994).

Commonwealth small states and SSA countries might want to consider making commitments in core environmental and other related services. However, because many services are essential to environmental sustainability, the liberalisation of trade in services might entail revisiting their existing services commitments in the various trade agreements to which they are a party, as the value of commitments made under environmental services is a function of commitments they make in other services (Sauvage and Timiliotis 2017). Considering this, there is a need for members to review their unbound commitments[21] in this area.

Multilateral discussions on liberalising EGS provide an opportunity for developing countries to be insistant in demanding the transfer of important environmental technologies at lower cost. These technologies can, in turn, be used to produce environmental goods and benefit the environment, while supporting the pursuit of green growth objectives and sustainable development.[22]

Liberalisation will provide a set of multilateral trade commitments that help countries harness the forces of trade and environmental change to accelerate inclusive and sustainable development. In other words, trade-driven economic growth and action on the environment and climate change can only be achieved together; and actions taken to tackle climate risks can help generate better trade-driven economic growth, while helping to deliver on the SDGs. However, given the unlevel playing field, developing countries need special and differential treatment to secure policy space and flexibilities to enable them to eventually liberalise trade in EGS and, at the same time, protect the environment.

Environmental concerns can be used for protectionist purposes, especially in the absence of international consensus on the goods that should be considered 'environmental'. It is therefore critical that small states and SSA countries consider participating in the discussions on EGS, to avoid a situation where they might eventually end up being party to the agreement and subjected to rules they did not make. By participating, they can ensure their interests and experiences in conserving the environment and promoting trade are taken on board. This is especially important given that their economic transformation is occurring in the context of

accelerating environmental degradation and climate change. Widespread country participation in these discussions will maximise the possibility of agreeing a mutually beneficial outcome that takes into account diverse regional, national and local experiences and perspectives.

Notes

1 Article XI of the General Agreement on Tariffs and Trade (GATT) of 1994 broadly prohibits trade restrictions, but also provides a broad range of carve-outs that allow members to temporarily impose restrictions. For example, Article XI (2b), allows members to temporarily impose import restrictions, 'necessary to the application of standards, or regulation for classification, grading or marketing of commodities in international trade'. Countries can also justify the imposition of restrictions to international trade using provisions under GATT Article XX on General Exemptions, which provides a broad range of exemptions for trade restrictions, such as the protection of human, animal and plant life or health and the protection of public morals, provided they do not constitute a disguised barrier to trade or discriminate between countries. In addition, Article XXI allow members to impose trade restrictions on grounds of national security. Except for national security reasons, there are checks and balances in other areas of carve-outs and exemptions, where a WTO member must meet a series of conditions to impose trade restrictions.

2 The Doha Declaration does not define EGS, leaving it to negotiation.

3 A product made from cotton with traces of pesticides might be refused market access due to the traces of pesticides.

4 The proposal was first made by India and was supported by other developing countries, who also made suggestions on how to further improve it.

5 Government procurement processes, for example, often favour local suppliers, giving them an undue advantage over foreign suppliers, who are at times are cheaper and more efficient.

6 There have been calls for a new modality of exporting services (mode 5 services) beyond the four modes of supply in the GATS in view of the growing role of inputs in manufacturing exports.

7 Australia, Canada, China, Costa Rica, the European Union, Hong-Kong (China), Iceland, Israel, Japan, Korea, Liechtenstein, New Zealand, Norway, Singapore, Switzerland, Chinese Taipei, Turkey and the United States. The number of countries rises to 46 if the EU member countries are counted individually.

8 Plurilateral trade agreements among WTO members assume two different forms – 'an exclusive and an open variant' (Adlung and Mamdouh 2017). It is the open variants that can only be implemented on a most-favoured nation (MFN) basis and will benefit non-members.

9 For example, the EU identifies environmental goods as those that are: (a) used in the control of pollution and resource management; and (b) 'have a high environmental performance or low environmental impacts' (WTO 2005).

10 Sauvage (2014) uses the APEC and OECD lists of environmental goods to develop a list of environmental goods.

11 Services provided to complement agriculture, mining, energy distribution and manufacturing activities.

12 According to Bucher et al. (2014), this is largely caused by the absence of environmental regulations or the lack of implementation of such regulations.

13 The public sector remains responsible for providing these services, either directly or indirectly. However, many countries without adequate financial capacity are looking to the private sector for assistance in EGS (Kennett and Steenblik 2005).

14 Horizontal commitments apply to all scheduled services sectors unless otherwise specified. There are other limitations/restrictions that apply to specific sectors.

15 Lesotho, Rwanda, Samoa, Seychelles, Sierra Leone, The Gambia, Tonga and Vanuatu.

16 Paragraph 281 of the Resolution adopted by the General Assembly on 27 July 2012 notes: 'We reaffirm that international trade is an engine for development and sustained economic growth, and also reaffirm the critical role that a universal, rules-based, open, non-discriminatory and equitable multilateral trading system, as well as meaningful trade liberalization, can play in stimulating economic growth and development worldwide, thereby benefiting all countries at all stages of development as they advance towards sustainable development. In this context, we remain focused on achieving progress in addressing a set of important issues, such as, inter alia, trade-distorting subsidies and trade in environmental goods and services.'

17 Kenya has manged to develop exports in efficient wood stoves, mineral water and wild game harvested from sustainably run ranches.

18 Much depends on how countries negotiate market access on EGS. Small states and SSA countries could request market access to benefit from niche markets, as in the case of Kenya, and at the same time restrict imports in certain sectors while using safeguard measures to address imports surges. They can also attract investment to take advantage of regional markets.

19 The focus was on products that generate renewable energy, manage waste, clean water and air, control air pollution and contribute to energy efficiency.

20 Most products used for environmental protection or improvement have several uses and are not exclusively environmental. Some of these goods might be

unacceptable to other countries, because their inclusion might be burdensome, especially in term of customs clearance and monitoring and enforcement (Steenblik 2005).

21 All commitments in a schedule are bound unless otherwise specified. In such a case, where a member wishes to remain free in each sector and mode of supply to introduce or maintain measures inconsistent with market access or national treatment, the member has entered in the **appropriate** space the term 'UNBOUND'.

22 Environmental technologies or green technologies help protect the environment and include, among others, technologies that are less polluting, utilise resources in a more sustainable manner, recycle more of their wastes and products, and manage wastes in a more acceptable manner than the technologies they replaced.

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Table A1 Commonwealth countries exports of Environmental Goods

	Export (US$ million)												
	Total	Environmental Goods	Share of environmental goods in total (%)	Types of Environmental Goods									
				MON	APC	CRE	EPP	HEM	NRP	NVA	REP	SWM	SWR	WAT
Developed														
Australia	266,377.23	3,734.74	1.40	1,202.39	130.81	198.08	0.91	113.45	1.41	99.63	846.32	386.10	21.01	734.63
Canada	409,826.09	22,625.40	5.52	2,746.45	1,147.47	3,064.89	45.14	1,484.54	1.51	896.92	6,071.67	3,011.84	92.22	4,062.74
Cyprus	1,456.47	8.24	0.57	0.34	0.06	0.27	0.00	0.26	0.03	0.59	1.34	1.44	0.00	3.91
Malta	4,142.92	148.73	3.59	25.03	0.58	1.35	0.01	5.39	0.06	8.04	48.45	40.21	0.15	19.46
New Zealand	38,185.21	702.80	1.84	92.74	37.84	30.03	0.40	29.98	0.21	5.67	229.17	146.21	4.36	126.18
United Kingdom	464,065.92	41,278.37	8.89	7,733.26	2,942.26	5,786.38	17.60	1,870.32	9.43	1,565.11	9,459.33	3,241.06	265.71	8,387.91
Developing														
Brunei Darussalam	7,039.08	75.37	1.07	21.62	2.17	0.61	0.01	2.54	0.00	2.91	18.15	12.15	0.58	14.63
Ghana	16,768.28	27.73	0.17	4.53	0.47	0.45	2.57	0.48	0.01	0.62	6.75	1.00	0.14	10.72
India	323,250.73	17,726.30	5.48	884.19	1,072.91	1,152.36	417.46	760.08	65.89	1,068.38	6,293.31	1,461.41	91.96	4,458.34
Kenya	5,836.26	128.95	2.21	6.19	2.65	4.68	30.83	5.18	1.31	0.55	30.88	15.32	0.88	30.49
Malaysia	238,088.65	18,850.08	7.92	3,456.28	756.70	715.35	15.35	818.63	19.11	69.26	8,314.55	1,903.14	242.55	2,539.15
Nigeria	53,617.81	27.73	0.05	0.13	0.00	0.00	0.00	0.00	0.00	0.00	1.31	4.59	21.63	0.07
Pakistan	23,268.39	83.61	0.36	1.45	3.49	4.47	11.58	2.87	0.62	0.77	7.77	17.54	0.28	32.77
Singapore	390,331.76	27,752.07	7.11	7,216.71	937.04	1,011.10	5.49	518.51	10.02	793.82	9,715.65	2,588.04	66.93	4,888.77
South Africa	87,142.22	3,904.62	4.48	207.95	1,486.01	189.48	6.76	112.52	3.16	259.51	601.75	266.05	9.66	761.76
Sri Lanka	11,763.54	522.90	4.45	38.46	1.61	48.65	171.39	3.59	4.27	0.41	103.09	36.90	0.71	113.83

	Export (US$ million)												
	Total	Environmental Goods	Share of environmental goods in total (%)	Types of Environmental Goods									
				MON	APC	CRE	EPP	HEM	NRP	NVA	REP	SWM	SWR	WAT
LDCs														
The Gambia	7.23	0.15	2.07	0.00	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Malawi	912.83	6.80	0.75	0.43	0.14	0.06	0.02	0.12	0.01	0.00	4.14	1.39	0.06	0.44
Mozambique	4,722.31	20.10	0.43	0.92	0.54	0.73	3.53	0.15	0.00	1.23	6.15	0.44	0.10	6.29
Rwanda	780.81	5.78	0.74	0.14	0.14	2.98	0.00	0.42	0.03	0.21	1.08	0.30	0.00	0.50
Zambia	6,817.75	34.19	0.50	1.23	0.81	1.78	0.32	2.54	0.02	1.00	5.63	6.92	0.01	13.93
Small states														
Antigua and Barbuda	2.56	0.12	4.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.12
Barbados	444.09	18.64	4.20	2.98	0.02	0.10	0.00	7.98	0.00	0.08	1.49	0.58	0.00	5.40
Belize	205.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Botswana	5,235.47	14.35	0.27	0.84	0.64	0.99	0.07	3.96	0.00	0.63	3.69	1.38	0.00	2.15
Eswatini	2,001.64	6.78	0.34	0.19	0.07	0.21	0.05	0.16	0.00	0.02	0.59	0.95	0.04	4.49
Fiji	1,032.91	14.94	1.45	1.57	0.22	0.30	0.05	2.66	0.69	0.76	3.97	1.43	0.13	3.16
Grenada	31.99	0.35	1.10	0.18	0.03	0.00	0.00	0.01	0.00	0.00	0.05	0.01	0.00	0.07
Guyana	1,497.58	0.19	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.17
Jamaica	1,536.06	2.68	0.17	0.00	0.00	0.00	0.00	0.21	0.00	0.00	0.63	0.03	0.00	1.79
Mauritius	1,876.37	12.49	0.67	1.47	0.61	1.16	0.02	0.64	0.56	0.41	4.52	0.79	0.36	1.95
Namibia	3,677.35	11.16	0.30	0.59	0.65	0.05	0.26	0.29	0.02	0.17	6.60	0.54	0.17	1.82
Samoa	49.27	0.25	0.50	0.01	0.00	0.06	0.00	0.01	0.00	0.06	0.10	0.00	0.00	0.02
Seychelles	426.31	2.24	0.53	0.18	0.03	0.14	0.00	0.00	0.16	0.17	0.15	0.36	0.12	0.93
Saint Lucia	97.26	2.10	2.16	0.17	0.09	0.04	0.00	0.21	0.00	0.17	0.49	0.10	0.02	0.80
St. Vincent and the Grenadines	38.16	0.91	2.39	0.01	0.16	0.01	0.00	0.06	0.00	0.14	0.23	0.18	0.00	0.12
Commonwealth Total	**2,372,554.47**	**137,751.86**	**5.81**	**23,648.63**	**8,526.24**	**12,216.90**	**729.83**	**5,747.78**	**118.52**	**4,777.24**	**41,789.02**	**13,148.39**	**819.78**	**26,229.53**

Table A2 Commonwealth countries imports of Environmental Goods

	Imports (US$ million)												
	Total	Environmental Goods	Share of environmental goods in total (%)	Types of Environmental Goods									
				MON	APC	CRE	EPP	HEM	NRP	NVA	REP	SWM	SWR	WAT
Developed														
Australia	220,723.42	20,890.01	9.46	1,799.24	1,014.40	2,733.86	48.49	1,378.71	14.99	384.90	7,694.69	1,742.01	126.72	3,952.00
Canada	453,308.33	43,239.08	9.54	3,559.13	2,895.58	6,701.82	50.27	3,239.27	19.89	2,231.62	11,634.14	3,469.90	221.77	9,215.67
Cyprus	9,179.16	441.37	4.81	22.80	11.82	48.22	2.92	56.79	1.49	56.61	109.17	28.24	3.02	100.29
Malta	8,211.01	279.96	3.41	27.84	10.55	29.66	0.64	22.90	1.44	10.34	86.88	26.57	1.64	61.51
New Zealand	42,148.28	3,263.14	7.74	303.15	141.95	484.86	13.40	340.36	5.78	58.57	822.58	352.82	32.05	707.62
United Kingdom	686,741.74	49,996.56	7.28	5,071.94	2,758.68	8,007.30	182.74	3,326.50	16.78	3,980.52	13,823.67	3,216.25	287.97	9,324.22
Developing														
Brunei	5,102.67	901.48	17.67	62.15	84.26	6.82	0.59	68.28	0.58	6.47	320.44	66.52	7.72	277.63
Ghana	10,436.15	948.33	9.09	55.60	61.49	59.79	26.96	64.84	11.10	14.35	331.68	99.30	6.09	217.14
India	478,883.73	25,750.57	5.38	3,914.77	2,086.09	1,287.80	122.97	906.78	16.65	1,055.52	8,630.22	2,821.92	71.75	4,836.10
Kenya	17,210.00	1,285.99	7.47	65.38	39.37	190.16	3.32	74.86	2.49	16.76	497.22	185.84	5.63	204.97
Malaysia	204,828.23	14,707.36	7.18	2,337.57	904.77	729.07	8.41	598.58	39.36	338.91	4,833.35	2,000.69	60.14	2,856.51
Nigeria	47,369.08	5,077.44	10.72	409.82	333.92	299.30	92.67	371.99	7.25	18.81	1,614.01	511.02	19.67	1,398.98
Pakistan	49,930.64	4,263.54	8.54	195.87	336.63	211.61	26.56	181.15	3.64	137.29	2,063.22	262.56	17.22	827.81
Singapore	358,974.64	25,779.97	7.18	5,036.78	1,179.64	1,654.01	7.62	1,047.30	12.50	820.49	8,748.60	2,281.08	149.40	4,842.54
South Africa	87,647.18	5,650.60	6.45	615.36	370.94	266.64	17.26	339.12	3.55	188.37	2,014.92	587.31	31.88	1,215.24
Sri Lanka	19,474.31	1,359.33	6.98	78.00	43.44	308.05	3.84	79.97	2.64	21.46	344.08	101.34	8.90	367.62
LDCs														
The Gambia	494.03	66.91	13.54	0.49	0.23	6.86	0.26	1.38	0.43	0.24	54.05	0.86	0.02	2.07
Malawi	2,940.94	185.90	6.32	11.51	5.08	29.12	1.30	7.02	0.32	1.25	71.21	32.11	0.43	26.54

	Imports (US$ million)													
	Total	Environmental Goods	Share of environmental goods in total (%)	Types of Environmental Goods										
				MON	APC	CRE	EPP	HEM	NRP	NVA	REP	SWM	SWR	WAT
Mozambique	7,638.74	646.24	8.46	32.20	31.62	76.66	3.37	42.80	3.63	12.65	202.81	54.64	4.19	181.68
Rwanda	3,195.16	308.43	9.65	17.75	4.64	16.85	1.06	18.59	0.52	2.45	109.74	78.53	0.30	58.00
Zambia	7,221.08	597.21	8.27	28.07	31.63	43.81	2.15	21.17	0.89	8.00	209.96	78.10	1.82	171.61
Small States														
Antigua and Barbuda	568.30	55.49	9.77	1.28	0.80	4.38	0.06	5.53	0.05	1.77	16.10	1.73	0.98	22.82
Barbados	1,580.84	93.16	5.89	6.91	3.35	8.78	0.21	10.02	0.21	1.98	34.59	5.56	0.29	21.27
Belize	985.90	59.73	6.06	2.88	3.16	5.48	0.08	3.33	0.15	2.47	18.22	3.59	1.11	19.26
Botswana	6,558.51	268.51	4.09	17.92	11.38	15.71	1.26	15.70	0.37	2.95	103.52	23.94	1.76	74.00
Eswatini	1,832.44	100.09	5.46	4.85	5.34	7.83	0.24	8.57	0.16	2.39	34.71	6.68	0.53	28.78
Fiji	2,734.30	160.02	5.85	7.48	5.31	26.61	0.28	12.18	1.20	4.27	42.51	18.71	0.89	40.59
Grenada	479.83	31.87	6.64	1.67	1.30	1.91	0.05	3.94	0.12	1.49	10.15	2.68	0.21	8.35
Guyana	4,025.14	422.83	10.50	40.54	8.76	9.93	0.17	7.67	0.96	14.67	104.25	57.31	29.47	149.10
Jamaica	6,339.23	458.78	7.24	28.86	16.01	34.51	0.67	46.02	0.34	9.03	180.51	33.85	3.07	105.91
Mauritius	5,601.18	415.91	7.43	19.95	11.22	135.90	1.03	33.84	1.22	8.56	98.89	29.43	1.79	74.07
Namibia	7,756.39	364.00	4.69	23.64	15.86	49.90	2.45	18.87	2.37	20.45	90.57	32.02	2.15	105.74
Samoa	390.68	25.00	6.40	0.58	2.61	6.10	0.08	3.42	0.06	0.18	5.54	1.02	0.06	5.34

	Imports (US$ million)													
	Total	Environmental Goods	Share of environmental goods in total (%)	Types of Environmental Goods										
				MON	APC	CRE	EPP	HEM	NRP	NVA	REP	SWM	SWR	WAT
Seychelles	1,437.74	113.33	7.88	5.66	3.71	11.10	0.34	5.12	5.06	4.24	30.93	6.86	15.46	24.85
Saint Lucia	623.79	36.96	5.92	1.63	3.62	2.65	0.01	4.71	0.05	1.25	7.52	1.95	0.24	13.32
St. Vincent and the Grenadines	335.23	22.19	6.62	1.07	0.64	2.65	0.23	2.07	0.04	1.72	6.54	1.06	0.03	6.14
Commonwealth Total	**2,762,908.05**	**208,267.33**	**7.54**	**23,810.34**	**12,439.80**	**23,515.71**	**623.95**	**12,369.34**	**178.29**	**9,442.99**	**65,001.18**	**18,224.02**	**1,116.40**	**41,545.31**

APC: Air pollution control
CRE: Cleaner or more resource efficient technologies and products
EPP: Environmentally preferable products based on end use or disposal characteristics
HEM: Heat and energy management
MON: Environmental monitoring, analysis and assessment equipment
NRP: Natural resources protection
NVA: Noise and vibration abatement
REP: Renewable energy plant
SWM: Management of solid and hazardous waste and recycling systems
SWR: Clean up or remediation of soil and water
WAT: Waste water management and potable water treatment

Table A3 Commonwealth small states and SSA countries horizontal commitments under the GATS

Examples of small states and SSA horizontal commitments under GATS (all sectors included in the schedules)*

Country	Limitations on market access	Limitations on national treatment
Antigua and Barbuda	- Joint ventures are encouraged; approval must first be obtained, but up to 100% foreign ownership of an enterprise is permitted. - Non-national must have a valid work permit before taking up employment in the country. Normally, a work permit is issued for a specific period to fill a particular post and only when qualified nationals are unavailable. A prospective employer is required to submit the application for a work permit to the minister of labour for approval.	
Barbados	- All foreigners working in Barbados are controlled by the Immigration Act and regulations control. A work permit must be obtained. Labour market tests are also conducted.	- Foreign investors interested in the purchase or sale of land or shares/stocks are subject to a specific tax on the value of settlement in accordance with the Property Transfer Tax Act.
Belize	- Unbound, except for senior managerial personnel and technical experts not available in the local labour market.	- None, with respect to categories of persons indicated in market access. Unbound for all other categories of persons.
Botswana	- All juridical persons are required to register with the registrar of companies and must be licenced by the relevant authorities. - Foreigners seeking to work and reside in Botswana are subject to immigration laws, regulations, guidelines and procedures, as well as subject to labour laws, regulations and procedures. They also require a residence and work permit and shall be employed by companies that provide services within Botswana only as managers, executives, special technicians and highly qualified professionals. - Investors are required to conform to the requirements of the localisation policy and to train citizens in order to enable them, to assume senior management positions over time. - Professionals are required to register with the appropriate professional body	- Capital remittances and transfer of funds and fees payable to a non-resident service supplier require approval by the Bank of Botswana (Central Bank). - Foreign investors are encouraged to enter into joint ventures with local investors with a fixed ratio of equity between foreign and local companies. - Juridical persons who specialise in providing services should be registered in their countries of origin. - All sale of business interests, mergers and take-overs should be notified to the Ministry of Commerce and Industry. When foreign investors sell their interests in resident companies, locals should be given priority to purchase such interests. - Professional foreign natural persons should be recognised as such, and they should have rights to practise in their countries of origin. Professional natural persons should be recognised and be registered by the appropriate committee or council.

Country	Limitations on market access	Limitations on national treatment
Cameroon	- Enterprises require a Certificate of Approval and must comply with the specifications set out in the certificate: e.g., the use of goods and services produced in Cameroon must constitute at least 25 per cent of the value of inputs; at least 35 per cent of the equity of an enterprise must be held by Cameroonian natural persons or a legal entity established under Cameroonian law. - Enterprises must meet the requirements concerning the creation of jobs for Cameroonians (at least one job to be created for every 5 million CFAF or fraction thereof to be invested in the enterprise concerned). Additional requirements also include training and jobs may be issued by regulation. - Also measures affecting the entry and temporary stay of natural persons – who are employees of a company and transferred to a company incorporated in Cameroon belonging to, controlled by or a subsidiary of the former – in the following categories: managers; senior executives; specialists who possess knowledge that is essential to the provision of the service.	
Dominica	- Foreign investment must be approved by the Directorate of Foreign Investment and get registered in the Central Bank register of foreign investment and technology transfer contracts. - Remittance abroad is up to an amount equivalent to 25 per cent of the registered capital. - Foreign investment is totally prohibited in public services, such as drinking water, sewage and postal services, and any other area the directorate declares closed to foreign investment. - Foreign investment is limited to a percentage not exceeding 29 per cent of the equity in: production of material and equipment directly related to the national defence and security; advertising, broadcasting, newspapers, magazines, publishing and mass communication media; internal land transport, except where directly related to import and export, internal air transport, maritime transport, cabotage and international maritime transport; forestry. - Foreign investment is limited to a percentage not exceeding 49 per cent of the equity in: crop, livestock and poultry farming; fishery; insurance. - Land cannot be acquired in locations within 60 metres of the high-water mark along the coastline and the purchase of land by foreigners is limited to 5,000m2. Authorisation in the form of a presidential decree is required above this limit. - Foreign companies must recruit a minimum of 80 per cent of Dominican employees. The authorisation to employ more foreigners given in special circumstances – when it is impossible to replace them by locals, with the obligation for the company to train local staff. - Senior and specialised staff associated with commercial presence must contribute to the training of local personnel in the areas of specialisation concerned. - Foreigners require a work permit and a work visa and professionals service providers are subject to the fulfilment of the requirements laid down in the laws governing the exercise of such professions.	- Income received by foreigners in the form of payment of dividends, royalties and interest is subject to payment of the taxes provided for by law. - Labour laws apply to locals and foreigners without distinction, except as otherwise provided for in international agreements.

Country	Limitations on market access	Limitations on national treatment
Gambia, The	- Individuals/companies must meet specific conditions and requirements to be certified and registered, as stipulated by the professional associations or Registrar General's Office. The conditions and requirements include: (a) a business registration fee; (b) a tax deposit; and (c) a professional qualification of the individual. - The employment of management and experts' jobs for the implementation of foreign investment must be agreed upon by the contracting parties and approved by the Office of the President. Foreign investment must also provide training for local nationals, to enable them to assume specialised roles. The conditions or requirements for an approval for expatriate quota/staff include: (a) the payment of payroll tax; (b) a minimum Investment of a specified amount; and (c) the unavailability of qualified local nationals for the position.	
Ghana	- Foreign-owned enterprises including joint venture enterprises with locals must satisfy minimum capital outlay and foreign equity requirements, which include: (a) a wholly foreign-owned company requires a minimum equity capital outlay of US$200,000; and (b) a joint-venture company should have a minimum foreign equity capital of at least US$10,000 in.cash or kind. - Automatic entry and a work permit is granted to up to 4 expatriate senior executives and specialised skilled personnel in accordance with relevant provisions in the Investment Promotion Law; approval is required for any additional expatriate workers beyond the automatic level. - Foreign investment must also provide for training in higher skills for local nationals to enable them to assume specialised roles.	
Grenada	- Foreign investment requires that foreign services providers establish the business locally in accordance with the relevant provisions of the laws of the country and other stipulated operating conditions provided in relevant Acts and regulations, such as regulations on property acquisition, lease and rental, the Exchange Control Act, tax laws, registration requirements, the Aliens Landholding Act, and the Insurance Act. - The country reserves several small business service opportunities in some services sectors and foreign participation in these sectors is subject to an economic-needs test.	
Guyana	- Unbound, except with respect to measures relating to senior managerial personnel and technical experts not available in the local labour market.	- None, with respect to categories of persons indicated in market access. Unbound, with respect to any other categories of persons.
Jamaica	- Foreign investment is required to be registered with the registrar of companies before companies start operating. - Foreigners require work permits and visas and, in some cases, licensing may be a prerequisite for practising in certain specified professional categories. Work permits are also subject to skills not being available locally. I addition, foreigners who are managers and executives are exempted from work permits for a period of 30 days and experts and specialists for 14 days.	- While foreigners are allowed to purchase land, the purchase of large acreages should be for specific Investment projects. - Measures concerning the categories of natural persons are referred to in the market access column.

Country	Limitations on market access	Limitations on national treatment
Kenya	- Commercial presence requires that foreign service providers incorporate or establish the business locally. - The employment of foreigners for the implementation of foreign investment shall be agreed upon by the contracting parties and approved by government.	
Lesotho	- Foreign investment, including joint ventures with local nationals, must satisfy minimum capital outlay and foreign equity requirements as follows: (a) a wholly foreign-owned company requires a minimum equity capital outlay of US$200,000; (b) a joint-venture company should have a minimum foreign-equity capital outlay of US$50,000 in.cash or in kind. - Automatic entry and work permit is granted for up to four expatriate senior executives and specialised skilled personnel in accordance with relevant provisions in the laws of the country; and an approval is required for additional foreign workers beyond the automatic level. - Foreign investors must provide for training in higher skills for locals to enable them to assume specialised roles.	
Malawi	- The employment of foreigners for the implementation of foreign investment shall be agreed upon by the contracting parties and approved by government.	- The Reserve Bank of Malawi can permit foreign-controlled companies to obtain loans or overdrafts of up to one-third of the value of its paid-up capital. - The employment of foreigners for the implementation of foreign investment shall be agreed upon by the contracting parties and approved by government.
Maldives	N/A	N/A
Mauritius	- Foreign investment is governed by the provisions of the: Companies Act (1984); Non-Citizens Property Restrictions Act (1975); Non-Citizens Employment Restriction Act (1970); Income Tax Act (1974); Act No. 41 of Banking Act (1988); Exchange Control Act. - The entry and temporary stay of highly qualified foreigners is governed inter alia by the: Passport Act, 1969; Immigration Act, 1973.	- Foreign investment is governed by the provisions of the: Companies Act (1984); Non-Citizens Property Restrictions Act (1975); Non-Citizens Employment Restriction Act (1970); Income Tax Act (1974); Act No. 41 of Banking Act (1988); Exchange Control Act. - The entry and temporary stay of highly qualified foreigners is governed inter alia by the: Passport Act, 1969; Immigration Act, 1973.
Mozambique	N/A	N/A

Country	Limitations on market access	Limitations on national treatment
Namibia	- Commercial presence requires that foreign service providers incorporate or establish the business locally in accordance with the provision of the countries' laws (Companies Act 61 of 1973). - Foreign investment has the same rights and responsibilities as domestic enterprises. - The entry and residence of foreign workers (service providers) is subject to the Immigrations Control Act of 1993 and labour laws. - The employment of foreigners for the implementation of the foreign investment shall be agreed upon by the contracting parties and be subject to approval by the government, and such personnel shall be employed in management and expert jobs only.	
Nauru	N/A	N/A
Nigeria	- Commercial presence requires that foreign service providers incorporate or establish the business locally in accordance with the relevant provisions of the country's laws and, where applicable, regulations, particularly with respect to land and building acquisition, lease rental, etc., which are applied on a non-discriminatory basis. - Foreign investors have the same rights and responsibilities as domestic enterprises and can transfer abroad their profits in accordance with existing regulations. - The entry and temporary stay of foreigners in senior management and expert jobs for the implementation of foreign investment shall be agreed upon by the service providers and approved by the Industrial Development Coordinating Committee (IDCC).	- The entry and temporary stay of foreigners in senior management and expert jobs for the implementation of foreign investment shall be agreed upon by the service providers and approved by the Industrial Development Coordinating Committee (IDCC).
Papua New Guinea	- Government approval and registration are required for all foreign investors and must meet the following criteria: (i) provision of new services; (ii) improvement of productive structure of the economy; (iii) viability of the new project, especially with respect to foreign exchange earnings or savings; (iv) implications for employment in Papua New Guinea. - Foreign investment must register the name of the company with the Investment Promotion Authority in the country. - Foreign nationals and foreign-owned companies may not purchase land, but may lease from government or land-holding groups through the Department of Lands.	- Foreign employees are required to provide on-the-job training to local employees.
Rwanda	N/A	N/A
Samoa	- The entry and temporary stay of foreigners in the following categories can take place for 60 days: (a) services salespersons; (b) intra-corporate transferees; (c) personnel engaged in establishment; and (d) independent service suppliers. - The admission of more than two intra-corporate transferees at any given time will be granted only after consideration of national locals or permanent residents with the requisite skills and experience available for such employment, while the entry and stay of persons named in this category is for a maximum of three years (renewable).	- Foreigners may lease land for up to 30 years, renewable, but cannot own land. - Foreign service suppliers may be required to provide training to local employees. - Measures affecting the entry and temporary stay of natural persons are referred to in the market access column.

Country	Limitations on market access	Limitations on national treatment
Seychelles	- The entry and temporary stay of foreigners in the following categories can take place for 90 days: (a) business visitors; (b) intra-corporate transferees; (c) contractual services suppliers; (d) independent consultants; (e) installers and maintainers.	- Foreigners may lease/rent non-movable property for up to two years, without requiring approval from government. Two -yearly extensions beyond that also do not require government approval. - Foreigners may also lease/rent non-movable property for longer terms, up to 99 years, subject to approval from the government, under certain conditions – such as the applicant not being involved in money laundering or the financing of terrorism, and not having been convicted of a serious crime, or having links to organised crime or terrorist organisations; or the use of land is not in line with the Land Use Plan of the particular area. - Foreigners may also acquire freehold land held in private ownership in inner islands, subject to government approval. - Measures concerning the categories of natural persons are referred to in the market access column.
Sierra Leone	- Foreign investment is required to establish business locally in accordance with the relevant provisions of the country's laws and, where applicable, regulations, particularly with respect to land and building acquisition, lease, rental, etc. - Foreign investors in the country can transfer their profits abroad in accordance with existing regulations. - Foreign workers, who must be senior management personnel and technical experts not available in the local labour market, must obtain a work permit.	- Foreign workers, who must be senior management personnel and technical experts not available in the local labour market, must obtain a work permit.
Solomon Islands	- Government approval and registration are required for all foreign investment. - Such approval is based on an economic-needs test based on a set criterion. - Foreigners cannot purchase land, but may lease from government or land holding groups. - Foreign investors must have a debt-to-equity ratio of 2:1. - Temporary entry and stay of foreign managers and specialists who possess knowledge that is necessary for the provision of the service is permitted where employees are unavailable locally. Such entry and stay is limited to two years initially, with any extension subject to immigration and labour requirements	- Foreign employees are required to provide on-the-job training to local employees.

Country	Limitations on market access	Limitations on national treatment
South Africa	- The temporary entry and stay of services salespersons, intra-corporate transferees, managers, specialists and professionals is subject to an economic-needs test and stay would be for a period of up to three years, unless otherwise specified	- Local borrowing by South African-registered companies with a non-resident shareholding of 25 per cent or more is limited.
Sri Lanka	- Foreigners can invest in any sector of the economy other than the sectors and activities that are reserved for citizens of Sri Lanka. - Foreigners who buy land are liable to pay a tax at 100 per cent of the purchase price. - The movement of natural persons is subject to immigration laws, consumer laws, and other relevant laws and regulations. Foreign workers are also required to obtain work permits.	
St Kitts and Navis	- Foreign investment requires that foreign service providers incorporate or establish the business locally in accordance with the regulatory requirements of the country's Commercial Code. - Foreign companies and individuals wishing to hold property in the country must obtain a licence to do so, within which conditions of purchase are detailed in accordance with the Alien Landholding Act. - The country reserves several small business service opportunities for nationals and a room limitation on hotel and resort development is within the context of this policy. - Foreign workers are subject to work permit regulations and the issuing of such permits is normally confined to people with managerial and technical skills that are in short supply or not available in the country.	
Saint Lucia	- Foreign investment is in accordance with the requirements of Saint Lucia's Commercial Code, and where so required, and relevant Acts related to property acquisition, lease and rental and any operating condition that maybe the subject of existing laws and regulations. - Foreigners wishing to hold property must first obtain a licence within which conditions of purchase are detailed. - Several small business service opportunities are reserved for nationals. - The entry and stay of foreigners are regulated by immigration laws. - The employment of foreigners is subject to work permit regulations. The issue of work permits is normally confined to persons with specialised managerial and technical skills and the administration of the regime is normally guided by a labour market test. - Professionals in certain disciplines may be required to register with the appropriate professional or governmental body.	
St Vincent and the Grenadines	N/A	N/A

Country	Limitations on market access	Limitations on national treatment
Tonga	- The entry and stay of specialists, executives and intra-corporate transferee managers is limited to a two-year period, which may be renewed.	
Trinidad and Tobago	- A licence is required for the acquisition of land, the area of which exceeds five acres for trade or business or one acre for residential purposes. - A licence is required for the acquisition of shares in a local public company, where the holding of such shares either directly or indirectly results in 30 per cent or more of the total cumulative shareholding of the company being held by foreign investors. - Foreign investment must be registered with the registrar of companies. - The entry and residence of foreigners is subject to immigration laws. - The employment of foreigners in excess of 30 days is subject to obtaining a work permit, which is granted on a case-by-case basis. - Foreigners can only be employed as managers, executives, specialists and experts.	
Vanuatu	- Government approval is required for all foreign investment. - The entry and temporary stay of foreigners with managerial and technical skills is subject to obtaining a work permit.	
Zambia	- The entry and temporary stay of foreigners employed in management and expert jobs for the implementation of foreign investment shall be agreed upon by the contracting parties and approved by the government. - Foreign investment must also provide for training in higher skills for local nationals, to enable them to assume specialised roles.	

*Some countries' schedules do not have horizontal commitments. No country made additional horizontal commitments in their schedules.
Source: Commonwealth Secretariat, compiled from small states and SSA countries' GATS schedules of commitments