Global Value Chains and Sustainable Development Goals:
What Role for Trade and Industrial Policies?

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<tr>
<td>AGOA</td>
<td>African Growth and Opportunity Act</td>
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<td>BPO</td>
<td>business process outsourcing</td>
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<td>BSCI</td>
<td>Business Social Compliance Initiative</td>
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<tr>
<td>CMT</td>
<td>cut, make, and trim</td>
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<td>CRGE</td>
<td>Climate-Resilient Green Economy</td>
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<td>CTC</td>
<td>crush, tear, curl</td>
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<td>EBA</td>
<td>Everything but Arms</td>
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<td>EU</td>
<td>European Union</td>
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<td>FDI</td>
<td>foreign direct investment</td>
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<td>FOB</td>
<td>free on board</td>
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<tr>
<td>GDP</td>
<td>gross domestic product</td>
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<td>GVC</td>
<td>global value chain</td>
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<tr>
<td>ICT</td>
<td>information and communication technology</td>
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<tr>
<td>ILO</td>
<td>International Labour Organization</td>
</tr>
<tr>
<td>IT</td>
<td>information technology</td>
</tr>
<tr>
<td>ITO</td>
<td>information technology outsourcing</td>
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<tr>
<td>KPO</td>
<td>knowledge process outsourcing</td>
</tr>
<tr>
<td>KTDA</td>
<td>Kenya Tea Development Agency</td>
</tr>
<tr>
<td>MFA</td>
<td>Multi-Fibre Arrangement</td>
</tr>
<tr>
<td>OEM</td>
<td>original equipment manufacturing</td>
</tr>
<tr>
<td>SDG</td>
<td>Sustainable Development Goal</td>
</tr>
<tr>
<td>SMEs</td>
<td>small and medium-sized enterprises</td>
</tr>
<tr>
<td>SPFF</td>
<td>[Cambodian] Strategic Planning Framework for Fisheries</td>
</tr>
<tr>
<td>TVET</td>
<td>technical and vocational education and training</td>
</tr>
<tr>
<td>US</td>
<td>United States</td>
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<tr>
<td>VAT</td>
<td>value-added tax</td>
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FOREWORD

Global value chains are an increasingly pervasive feature of the world economy. Through global value chains, low-income and least developed countries can integrate into the global trading system, which offers significant opportunities for economic growth, job creation, and learning by exporting. However, participation in global value chains does not automatically result in upgrading and social and environmental sustainability: forward-looking industrial development policies that deepen domestic firms’ capabilities, promote knowledge and technology spillovers, and mainstream sustainability issues are critical.

This report summarises the key findings of ICTSD’s Inclusive Economic Transformation research programme on global value chains, which is aimed at empowering low-income countries to effectively use value chains to achieve sustainable development objectives. In a series of case studies, the research programme examined tea value chains in Kenya, Nepal, and Sri Lanka; apparel and textile value chains in Ethiopia, Lesotho, and Myanmar; the fisheries value chain in Cambodia; and the business process outsourcing sector in Kenya.

Analysis of these value chains revealed cross-cutting trends that formed the foundation of policy recommendations to ensure value chain production is aligned with the Sustainable Development Goals. Key factors for consideration include the importance of knowledge and technology spillovers, addressing barriers to upgrading, strategic adoption of standards, and the impact on women and small and medium-sized enterprises.

Despite common trends, upgrading trajectories vary by sector and country. Thus, policy implementation must consider value chain complexities. Additionally, measures must be adopted to ensure economic upgrading drives sustainable development and inclusive growth.

We hope this synthesis report informs the decisions of policymakers, businesses, and relevant stakeholders in different value chains as they work together to further the Sustainable Development Goals.

Ricardo Meléndez-Ortiz
Chief Executive, ICTSD
EXECUTIVE SUMMARY

The Inclusive Economic Transformation research programme at ICTSD explores global value chain (GVC) upgrading opportunities for low-income countries and examines the development implications through the lens of the Sustainable Development Goals (SDGs).

This research, based on country and sectoral case studies, commissioned by ICTSD, finds that:

- Economic upgrading is a necessary but not sufficient condition for broader social and environmental sustainability.
- Industrial policy is critical in this respect to build domestic capabilities, value addition and technological upgrading, and to maximise the impact of trade and investment policies on economic transformation.
- However, more targeted, innovative public and private policy measures are also required to enhance the contribution of GVC participation in the SDGs.

ICTSD case study analysis of the apparel, tea, fisheries, and business process outsourcing sectors reveals the impact that lead firms’ governance, supplier capabilities, and government policy have on value chain trajectories. For example, in the apparel GVC, preferential market access to the US and EU, lead firms’ supplier diversification strategies, and low labour costs have been driving foreign direct investment (FDI) to Ethiopia, Lesotho, and Myanmar. However, only when paired with proactive government policies have these resulted in deeper technological capabilities and economic upgrading. While there is no single path to economic upgrading, industrial policies that recognise the global complexity of production and trade dynamics, and invest in firm-level capabilities and infrastructure, are crucial for facilitating industrialisation in developing countries.

The most prevalent upgrading trajectories in the case study value chains were process upgrading and product upgrading, while supply chain upgrading and functional upgrading proved difficult. Challenges to upgrading include a lack of scale, capital, and technology, with lead firm and end market characteristics also being important factors. Apparel manufacturing in Lesotho illustrates this dynamic. Manufacturers supplying South Africa have distinct upgrading trajectories from those supplying US end markets due to South African demand for high-quality and variety items, which has facilitated skills development and product upgrades for manufacturers supplying that market.

The case studies further reveal that GVCs can be the vehicle through which selected SDGs can be attained, particularly in terms of income and employment. GVC participation is linked to economic sustainability when upgrading and knowledge and technical spillovers are facilitated, neither of which are automatic but can be encouraged by proactive government policies. GVC participation correlates with job creation and income opportunities, especially for youth, women, and unskilled labour. The contribution to SDG 5 on gender equality is complex: the case studies show pervasive, though not ubiquitous, problems of gender wage gap, job segmentation, and poor contractual conditions. While gendered division of labour exists in the tea and fisheries value chain, women control activities, such as fish processing and tea plucking, that are essential to upgrading. Therefore, any upgrading strategies in these sectors must prioritise the building of women’s technical and financial capacity.

Beyond economic opportunity, GVCs can create a pathway for environmentally and socially sustainable growth. The widespread adoption of sustainability standards by lead firms supports
SDGs related to fair labour, sustainable production, climate change, and more. However, standards compliance can be prohibitively costly, especially for small and medium-sized enterprises (SMEs) and small producers, and so private-public partnerships aligning business interests with SDGs are crucial. Labour conditions in GVCs are especially problematic; key concerns include occupational health and safety, overtime, no minimum wage, low social rights, weak enforcement of standards, and no collective agreements.

The long-term social and environmental sustainability of the case study industries depends not on competing at the lower end of the value chain but on upgrading into more profitable and sophisticated tasks and products in GVCs. Despite having different national strategies and value chain trajectories, government participation in standard promotion and compliance has led to economic upgrading in the Kenyan and Sri Lankan tea industries. Kenya has established a solid national quality infrastructure and worked with lead firms to promote large-scale supplier certification to a global sustainability standard scheme, while Sri Lanka targeted function upgrading into high-quality value-added products by enforcing quality and international health standards.

The multifaceted nature of the SDGs can create trade-offs between economic, social, and environmental priorities. For example, the growth of community fisheries in Cambodia has increased poor people’s use of fisheries resources but, from a conservation perspective, open access has caused overfishing. Forward-looking, multistakeholder policy platforms are critical to navigate conflicting agendas.

Economic upgrading in GVCs is thus critical to reach sustainable development objectives, but upgrading does not automatically result in sustainable and inclusive development. Concerted industrial development policy that builds domestic firm capabilities is necessary to ensure technology and knowledge spillover from FDI. Additionally, SMEs, smallholders, and women must receive targeted training and resources to ensure sustainable and long-term competitiveness. Environmental sustainability should be mainstreamed in policymaking to build competitiveness in any GVC.

The summary table below denotes key trade considerations and resulting policy recommendations emerging from the case study research, along with expected policy impacts. Due to the complexity of GVCs, the applicability of these policies will vary by country and sector and should be considered as part of a comprehensive development strategy.
### Summary of key policy recommendations for economic upgrading and sustainable development

<table>
<thead>
<tr>
<th>Consideration</th>
<th>Policy Recommendation</th>
<th>Sustainable Development</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade negotiations and preferences</td>
<td>Maintain preferential trade schemes and relating rules of origin.</td>
<td></td>
</tr>
<tr>
<td>Strategic industrial and FDI policies</td>
<td>Build domestic capabilities and partner with lead firms to enhance linkages and spillovers.</td>
<td></td>
</tr>
<tr>
<td>Export promotion for target markets</td>
<td>Build relationships with global buyers and diversity end markets, including niche markets.</td>
<td></td>
</tr>
<tr>
<td>Services and upgrading</td>
<td>Mainstream service in industrial and export strategy.</td>
<td></td>
</tr>
<tr>
<td>Support firm competitiveness</td>
<td>Targeted skill development for production workers, supervisors, and firm management.</td>
<td></td>
</tr>
<tr>
<td>Meet standard requirements</td>
<td>Support smallholders and SME compliance with standards, including sustainability standards.</td>
<td></td>
</tr>
<tr>
<td>Outreach to small-scale producers</td>
<td>Upgrade smallholder practices in GVCs to meet quality demand and improve productivity.</td>
<td></td>
</tr>
<tr>
<td>Trade facilitation and infrastructure</td>
<td>Invest in development corridors leveraging Aid for Trade, reduce trade costs, and target hard and soft infrastructure.</td>
<td></td>
</tr>
<tr>
<td>Institutional capacity-building</td>
<td>Policy implementation requires adequate resources, political support, monitoring mechanisms, and private sector buy-in.</td>
<td></td>
</tr>
<tr>
<td>Promote inclusiveness</td>
<td>Establish domestic labour and environmental regulations and target SMEs, youth, and women for upgrading and export opportunities.</td>
<td></td>
</tr>
</tbody>
</table>

**SDG 1:** No poverty  
**SDG 4:** Good-quality education  
**SDG 5:** Gender equality  
**SDG 8:** Decent work and economic growth  
**SDG 9:** Industry, innovation, and infrastructure  
**SDG 10:** Reduce inequalities  
**SDG 12:** Sustainable consumption and production
1. INTRODUCTION

The role played by trade and investment policies in advancing sustainable development is explicitly recognised in the 2030 Agenda for Sustainable Development and the 17 Sustainable Development Goals (SDGs). The SDGs provide an opportunity to mainstream inclusivity and sustainability strategies in the economic transformation agenda of developing countries. This agenda is now firmly framed within the opportunities and challenges of global value chains (GVCs). GVCs encompass the full range of activities required to bring a product or service from conception, through the different phases of production (involving a combination of physical transformation and the input of various producer services), delivery to final consumers, and final disposal after use (Kaplinsky and Morris 2001). GVCs have enabled late industrialisers to participate in global production and trade by specialising in tasks rather than entire production processes. As a result, international trade has changed in multiple ways: the share of trade from developing country global manufacturers grew from 10 percent in 1980 to 45 percent in 2014, and more than half of global trade is now dominated by intermediated goods (UNCTAD 2016).

The role of GVCs in shaping international trade and investment and the international community’s commitment to the SDGs have important implications for the development strategies of developing countries. For this reason, ICTSD has undertaken a research programme on inclusive economic transformation to improve our understanding of the linkages between GVCs, sustainable development, and trade and investment policies. The research programme explored the following issues:

- How are GVCs structured and governed, and what are the implications for developing countries’ participation and upgrading?
- What are the sustainability implications of participation in GVCs in terms of economic, social, and environmental SDGs?
- What are the trade, investment, and upgrading (social and economic) policy implications?

The ICTSD programme included thematic framework papers to analyse GVC-SDG foundational issues, a GVC-SDG methodological framework, and country case studies applying the framework papers and methodology to analyse GVC-SDG sector sustainability dynamics (Table 1).

Table 1: Country case studies and cross-cutting issues

<table>
<thead>
<tr>
<th>Case study</th>
<th>Framework thematic issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apparel and textile GVC</td>
<td>• GVC-SDGs nexus&lt;br&gt;• Gender dimensions of GVCs&lt;br&gt;• Trade policy and sustainable development in the context of GVCs&lt;br&gt;• Trade facilitation and GVCs&lt;br&gt;• Leveraging the services sector for inclusive value chains&lt;br&gt;• How regulation and standards can support social and environmental dynamics in GVCs&lt;br&gt;• Role of aid for trade in building capacity of developing country firms to meet sustainability standards&lt;br&gt;• Mapping GVCs in west Africa</td>
</tr>
<tr>
<td>• Lesotho</td>
<td></td>
</tr>
<tr>
<td>• Ethiopia</td>
<td></td>
</tr>
<tr>
<td>• Myanmar</td>
<td></td>
</tr>
<tr>
<td>Tea GVC</td>
<td></td>
</tr>
<tr>
<td>• Kenya</td>
<td></td>
</tr>
<tr>
<td>• Nepal</td>
<td></td>
</tr>
<tr>
<td>• Sri Lanka</td>
<td></td>
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<tr>
<td>Fisheries GVC</td>
<td></td>
</tr>
<tr>
<td>• Cambodia</td>
<td></td>
</tr>
<tr>
<td>Business process outsourcing/information technology outsourcing GVC</td>
<td></td>
</tr>
<tr>
<td>• Kenya</td>
<td></td>
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</tbody>
</table>
This synthesis paper of the Inclusive Economic Transformation research programme presents an analytical summary of the programme thus far and brings forward the key findings emerging from the case study research. The reader should refer to the individual framework and case study papers for specific data, references, and detailed issues. While each case study provides country and sector value chain-specific findings and policies, this synthesis report provides cross-cutting findings on value chain dynamics and policy considerations and insights for policymakers, businesses, and relevant stakeholders.

The paper is organised as follows: Section 2 discusses key GVC analytical concepts—governance and upgrading, the changing operational environment for GVCs, and the analytical approach informing ICTSD research. Section 3 presents key GVC findings from the case studies. Section 4 discusses the sustainability outcomes in terms of economic, social, and environmental SDGs. Section 5 addresses the trade and investment policy implications. Section 6 concludes.
2. MOVING UP? OPPORTUNITIES AND CHALLENGES IN GLOBAL VALUE CHAINS

2.1 Governance and Upgrading

The growing power of “lead firms,” usually multinational corporations, in shaping how GVCs are structured and organised is analysed through the concept of value chain governance. Lead firms decide what will be outsourced, which production activities take place where, which firms participate in value chains, and whether they upgrade (Kaplinsky and Morris 2001). Lead firms determine market parameters (price, quality, volumes, and lead times), contractual terms, and private and voluntary sustainability standards. Moreover, lead firms may decide to engage in various forms of supplier development if suppliers struggle to meet their parameters.

The structure of GVCs impinges on the unequal distribution of rents. As a general rule, lead firms outsource production of the less profitable tasks, usually labour-intensive manufacturing activities, while focusing on their core business, often intangible activities, such as product design, research and development, marketing, and retailing (Kaplinsky 2005). The value-added content of these tasks is depicted in Figure 1. Often developing country firms concentrate on low-value-added tasks characterised by low entry barriers, decreasing economic returns, and vulnerability to stiff competition, hence running the risk of falling into a commodification trap or immiserising growth path (i.e. a race to the bottom as they try to outcompete each other) (Kaplinsky 2005). Notwithstanding the term, this risk is not confined to commodities but concerns value-added agricultural products (Ponte and Ewert 2009), low-tech manufactures such as apparel (Kaplinsky 2005), and higher-tech products such as electronic components (Sturgeon and Kawakami 2010). Instead of upgrading strategies aimed at increasing productivity and moving into higher-value-added tasks, firms try to remain cost-competitive by

Figure 1: Value-adding curve and activities in the apparel global value chain


1 “Rent describes an environment of scarcity in the context of demand. The holder of rent benefits from an absence (relative or absolute) of competition, protected by one or more barriers to entry. The more desired the scarce attribute, and the higher the barriers to entry, the higher are the resultant incomes.” (Davis, Kaplinsky, and Morris 2017, 3).
undercutting labour (e.g. wages, casualisation, safety) and the environment (Barrientos et al. 2016). Countering these tendencies and facilitating social and economic upgrading is particularly important given the significance attached to inclusive growth and the need to achieve SDGs within developing country growth paths (Kaplinsky 2016; Kaplinsky and Morris 2017).

Value chain governance determines the extent of market access for developing country producers, their economic returns, and their opportunity to upgrade through their relationships with buyers (Humphrey and Schmitz 2002). Most definitions of “upgrading” encompass a mix of the following types of capabilities: (i) improvements in the production process or adopting new technologies (process upgrading); (ii) moving into more sophisticated product lines (product upgrading); (iii) establishing backward linkages to input sectors (supply chain upgrading); (iv) diversifying to new buyers (end-market upgrading); (v) moving into new value-added links (functional upgrading); and (vi) shifting to new value chains in other sectors (chain upgrading) (Humphrey and Schmitz 2002; Kaplinsky and Morris 2001; Staritz, Plank, and Morris 2016).

This paper looks at economic upgrading as an essential basis for achievement of the SDGs through economic growth, job creation, sustainable industrialisation, technology and skills upgrading, environmental upgrading, and social upgrading (e.g. wages, working hours, social protection, contractual terms, non-discrimination, gender opportunities).

2.2 The Changing Environment of Global Value Chains

GVCs operate in a global environment that is changing in multiple ways. China is now the world’s dominant supplier of apparel, footwear, and electronics (Gereffi 2013). China and other emerging economies are reshaping opportunities for developing countries, in both positive and negative ways. Regional value chains are becoming more important. Increasing production costs and longer lead times in China and the Triple Bottom Line2 have led EU and US lead firms to favour regional sourcing (Bair 2006; Ivarsson and Alvstam 2010; Pickles et al. 2006). Finally, the role of services and digital technologies both as inputs into GVCs and as part of the final products sold to customers is rising exponentially, with significant implications for sustainable economic development (Fessehaie 2017; Low 2013).

2.3 Analytical Framework of the ICTSD Case Study Research Programme

The analytical thrust of the ICTSD case study research programme is structured around three components (Figure 2). First, it draws on solid empirical case study research to define the key dynamics characterising selected GVCs: value chain governance, end markets, supplier and producer capabilities in the case study countries, domestic policies, and international trade policy frameworks.

Next, the case study research examines the sustainability implications of participation in GVCs: are firms building long-term and sustainable competitiveness through economic upgrading? Which forms of upgrading, if any, are taking place, and are they sufficient? What are the outcomes in terms of social upgrading, in particular gender equity? Are there implications for environmental sustainability? Responses to these questions draw from the case studies and from conceptual work on the linkages between GVCs and SDGs, the gender dimension of GVCs, and the role of regulations and sustainability standards in promoting the SDGs.

Finally, the research draws on the policy implications of this work, especially with regard to trade and investment policies. Policy papers on the role of trade policies, trade in services, and trade facilitation contribute to this component.

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2 The Triple Bottom Line is an accounting framework based on social, environmental, and financial considerations. Lead firms assess their performance according to the Triple Bottom Line to create greater business value.
Figure 2: Analytical framework of the ICTSD research programme

Global value chains (GVCs) and upgrading opportunities for firms in developing countries

- Dynamics and governance of specific GVCs
- Role of lead firms (multinational corporations)
- Role of international and domestic policies
- Not only whether countries participate but how
- Importance of sustainability and inclusive growth

Sustainability implications

- SDG 1 End poverty
- SDG 5 Gender equality
- SDG 8 Decent work and economic growth
- SDG 9 Industry, innovation, and infrastructure
- SDG 10 Reduced inequalities
- SDG 12 Responsible consumption and production
- SDG 13 Climate action

Policy implications

- International trade and investment policies and agreements
- Domestic policies and national industrial policies
3. LEAD FIRMS, PRODUCERS, AND SUPPLIERS IN GLOBAL VALUE CHAINS

This section has a dual objective: to present a brief overview of the case studies, and to point out similarities and differences in terms of key value chain dynamics.

3.1 The Apparel and Textiles Global Value Chains

The apparel and textiles sector played an important role for late industrialisers that have traditionally specialised in specific segments of the value chain (see Figure 3). Developing country firms have been able to participate because of low barriers to entry, low fixed costs, simple technology, the labour-intensive nature of manufacturing, and high tradability. Lead firm buyers in Europe and the US include retail chains (soft-goods retailers selling private labels and focused on buying, including both mass merchants and specialty apparel), branded marketers (or “manufacturers without factories” focused on product design and brand management), and branded manufacturers (apparel manufacturers that have increasingly outsourced the most labour-intensive value-added links) (Gereffi 1999). Lead firms retain the most value-added links, such as design, brand management, and retail, where entry barriers for developing countries tend to be high.

Since the 1970s, lead firms have outsourced manufacturing activities to low-cost producers—first in Chinese Taipei, the Republic of Korea, and Hong Kong, China, followed by China, South-East Asia, South Asia, Latin America, and sub-Saharan Africa (Gereffi 1999; Morris, Barnes, and Kao 2016). Producers supply lead firms according to a variety of models. In cut, make, and trim (CMT) arrangements, the lowest-value-added link, buyers pay contracting fees to a garment factory to carry out the labour-intensive tasks of cutting the textile fabric in line with the pattern supplied, sewing garments together according to design specifications, and then packing the garment for export to international markets. Under a free-on-board (FOB) arrangement, manufacturers are responsible for producing the entire garment and arranging for shipment, and hence are responsible for higher-value-added tasks such as inputs sourcing, pattern-making, and logistics. Under original design manufacturing arrangements, manufacturers are also involved in design and product development.

Figure 3: Textile and clothing value chain


This arrangement is also known as original equipment manufacturing (OEM). The term FOB is used in this context differently from its well-known meaning in relation to contracts between sellers and buyers of goods.
Transnational apparel producers in East Asia concentrated on securing global buyers, product design, inputs sourcing, merchandising, and logistics, while outsourcing CMT or FOB tasks to lower-labour-cost countries. These transnationals coordinated supply networks through their own foreign direct investment (FDI), joint ventures, or contract manufacturers in low-labour-cost countries (Gereffi, Fernandez-Stark, and Psilos 2011). All of our country case studies fall into the latter category: Ethiopia (Staritz, Plank, and Morris 2016), Lesotho (Morris, Barnes, and Kao 2016), and Myanmar (El-Shahat and di Canossa 2018). In these three countries, there has been a surge in investment in the apparel and textile sectors driven by a combination of factors: preferential market access to the US and Europe, the strategy of lead firms to diversify supply networks, low labour costs, and industrial policy.

3.1.1 Lesotho

Lesotho’s apparel industry took off in 2000 when Chinese Taipei transnational firms invested to take advantage of US preferential market access through the African Growth and Opportunity Act (AGOA). Chinese Taipei firms could also access fabric from other countries under the Third Country Fabric derogation to the rules of origin, which enabled single transformation in apparel manufacturing. Moreover, they were eligible for Lesotho’s quota allocation under the Multi-Fibre Arrangement (MFA). They adopted a CMT model producing basic garments in large volumes, and exported to the US, resulting in a four-fold increase in apparel exports by 2004 (Table 2). Lesotho’s apparel sector policy mainly consisted of a comprehensive FDI incentives scheme: subsidised factory rentals, serviced industrial sites, low corporate tax, free profit repatriation, capital imports tax exemption, rebates on imported inputs for exports, and export incentives.

When the MFA quota restrictions ended, Lesotho’s exports to the US dropped significantly as 6 Chinese Taipei firms exited, leaving only 21 Asian-owned plants in 2012. The crisis was partially offset by the entry of South African firms, relocating to take advantage of lower labour costs, freedom from South Africa’s restrictive labour market conditions, and duty-free exports to South African retail chains under the Southern African Customs Union. Proximity to South African lead firms also brought some upgrading into somewhat more complex garments. With 15 South African firms relocating, regional exports increased three-fold between 2010 and 2014 (Table 2).

<table>
<thead>
<tr>
<th>Year</th>
<th>Lesotho to world (US$ million)</th>
<th>Lesotho to US (US$ million)</th>
<th>Share to US (%)</th>
<th>Lesotho to South Africa (US$ million)</th>
<th>Share to South Africa (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>153</td>
<td>146</td>
<td>99</td>
<td>0</td>
<td>-</td>
</tr>
<tr>
<td>2002</td>
<td>348</td>
<td>342</td>
<td>98</td>
<td>0</td>
<td>-</td>
</tr>
<tr>
<td>2004</td>
<td>494</td>
<td>482</td>
<td>96</td>
<td>2</td>
<td>0.5</td>
</tr>
<tr>
<td>2005</td>
<td>424</td>
<td>408</td>
<td>97</td>
<td>2</td>
<td>0.5</td>
</tr>
<tr>
<td>2006</td>
<td>420</td>
<td>407</td>
<td>94</td>
<td>2</td>
<td>0.5</td>
</tr>
<tr>
<td>2008</td>
<td>383</td>
<td>359</td>
<td>94</td>
<td>13</td>
<td>3</td>
</tr>
<tr>
<td>2010</td>
<td>351</td>
<td>281</td>
<td>80</td>
<td>46</td>
<td>13</td>
</tr>
<tr>
<td>2012</td>
<td>392</td>
<td>301</td>
<td>77</td>
<td>74</td>
<td>19</td>
</tr>
<tr>
<td>2014</td>
<td>396</td>
<td>290</td>
<td>73</td>
<td>93</td>
<td>24</td>
</tr>
</tbody>
</table>


3.1.2 Ethiopia

Ethiopia’s apparel and textile industry growth is a recent development as a direct result of the Ethiopian Government pursuing an aggressive industrial policy seeking out lead retail firms and large producers from key emerging economies. A key motivation for FDI has been preferential access with single transformation rule of origin through AGOA to the US and Everything but Arms (EBA) to the EU markets. US and EU global buyers have been proactive in screening potential Ethiopian suppliers or pushing their lead firms to invest. Unlike in other African countries, the Ethiopian policy has stressed the importance of GVC dynamics,
and consequently has also sought out large foreign textile and apparel firms to create an integrated local value chain of producers.

Ethiopia’s apparel and textile value chain is populated by locally owned firms (66 percent of firms, 51 percent of employment), foreign-owned firms (32 percent of firms, 49 percent of employment), and three state- or party-owned enterprises. FDI originates from China, the Republic of Korea, India, Pakistan, and Turkey. Unlike in other apparel-exporting countries, many foreign firms in Ethiopia are owner-managed. Also unlike in other African countries, many apparel or textile firms in Ethiopia, responding to strong government persuasion, are becoming increasingly vertically integrated (Table 3). The challenge for Ethiopia is two-fold: EU buyers seek FOB suppliers, but these capabilities do not exist yet in Ethiopia; and US buyers are more cost-driven and are interested in CMT suppliers, but Ethiopian firms struggle to compete on production costs alone with established global suppliers.

<table>
<thead>
<tr>
<th>Table 3: Ethiopia’s apparel and textiles exports to the world</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td><strong>Apparel</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total value (US$ millions)</td>
<td>1</td>
<td>5</td>
<td>13</td>
<td>9</td>
<td>12</td>
<td>44</td>
<td>52</td>
<td>66</td>
<td>68</td>
</tr>
<tr>
<td>Annual growth rate (%)</td>
<td>-</td>
<td>115</td>
<td>116</td>
<td>-27</td>
<td>30</td>
<td>264</td>
<td>18</td>
<td>26</td>
<td>4</td>
</tr>
<tr>
<td><strong>Textiles</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total value (US$ millions)</td>
<td>2</td>
<td>9</td>
<td>10</td>
<td>16</td>
<td>24</td>
<td>39</td>
<td>29</td>
<td>46</td>
<td>49</td>
</tr>
<tr>
<td>Annual growth rate (%)</td>
<td>-</td>
<td>-10</td>
<td>-28</td>
<td>66</td>
<td>48</td>
<td>-26</td>
<td>60</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td><strong>Cotton (raw and waste)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total value (US$ millions)</td>
<td>3</td>
<td>11</td>
<td>11</td>
<td>6</td>
<td>8</td>
<td>1</td>
<td>5</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Apparel and textiles: total value (US$ millions)</td>
<td>3</td>
<td>14</td>
<td>23</td>
<td>25</td>
<td>36</td>
<td>83</td>
<td>81</td>
<td>112</td>
<td>117</td>
</tr>
</tbody>
</table>


The distinguishing feature of Ethiopia’s textile and apparel sector has been an active government policy to support industrialisation. Unlike in other countries, the Ethiopian Government has not only attracted FDI but also supported learning, upgrading, green production facilitating energy-efficient technologies, and domestic linkages. Structural bottlenecks are being addressed through large investment in infrastructure, industrial parks, and support by state-owned logistics and transport companies. Ethiopia’s export-oriented industrial strategy is composed of the following components:

- **Strategic FDI promotion at the highest political level**: the objective is to attract capital, technology, and skills from large firms in China, India, Turkey, and other Asian countries, and interest in sourcing from EU and US buyers. In order to maximise the impact of FDI, firms are offered conditional incentives. Foreign investors are required to export 80 percent of output in order to access incentives and political support. The Ethiopian Government promotes domestic linkages development in two ways: textile firms are encouraged to invest directly in apparel manufacturing and to domestic apparel manufacturers; and apparel manufacturers are encouraged to invest in vertically integrated textile mills.

- **Export promotion**: this includes foreign exchange retention schemes, duty drawback schemes for inputs, and bonded warehouses. Firms can access credit guarantee schemes, tax exemptions, industrial parks, and support institutes. All firms are strongly encouraged to export, and access to these incentives is subject to meeting export targets.
• Industrial parks: these are playing a major role in driving export-based industrialisation, providing access to land (since private ownership is restricted), electricity, water, and information and communication technology (ICT) services. The parks are part of a strategy to leapfrog global competition by using their green identity to provide a competitive advantage over Asian competitors.

• Specialised capacity-building institutes: the Textile Industry Development Institute provides investment promotion, consultancy, training, research, and marketing services. It is developing backward linkages to cotton. The Ethiopian Government has expanded technical and vocational education and training (TVET) and established the Ethiopian Institute of Textile and Fashion Technology. Knowledge-sharing and skills spillovers are encouraged by supporting domestic firms’ recruitment of foreign personnel for managerial, supervisory, and technical positions, providing industry training and promoting experience sharing.

3.1.3 Myanmar

The trajectory of Myanmar’s apparel sector was strongly affected by the sanctions period. In 2000 the textile industry included 300-400 firms, mostly domestic, employing 300,000 people and exporting to the US and the EU. Growth halted when trade and investment sanctions were imposed on the military government by the US and the EU and a 10 percent export tax was introduced in 2003. Japan was the only large economy that did not place any trade sanctions on Myanmar.

In 2011, with the democratisation process, there were key developments for the sector: the abolishment of the export tax in 2012, which resulted in a surge in garment exports to Japan; and the lifting of sanctions by the EU in 2013 and US in 2016. These led to a surge in FDI in Myanmar. The total value of Myanmar’s garment exports increased from US$ 340 million in 2010 to around US$ 1.6 billion in 2016. According to the Myanmar Garment Manufacturers Association, garment exports accounted for 10 percent of the country’s export revenues in 2015. The EU is currently the largest export market (Table 4).

According to 2017 data, there are 420 firms in Myanmar, of which 60 percent are foreign-owned (mostly Chinese) and 38 percent are fully locally owned. The relatively high percentage of locally owned exporting companies, together with joint ventures, points to a relatively high level of local embeddedness, with a reasonable number of companies having roots in the social and economic fabric of the country and entangled in local economic and social networks. Local linkages are also evident in some forms of subcontracting.

Myanmar’s sector policy has mostly comprised FDI promotion. In 2005 the country introduced an industrial zones scheme, and by 2012 there were over 20 designated zones. However, foreign-owned firms are hesitant due to high land costs, notwithstanding good access to labour, electricity, and the main ports.

Table 4: Myanmar’s main garment export destinations (US$ millions)

<table>
<thead>
<tr>
<th>Year</th>
<th>EU</th>
<th>Germany</th>
<th>France</th>
<th>Spain</th>
<th>Netherlands</th>
<th>UK</th>
<th>Japan</th>
<th>Republic of Korea</th>
<th>US</th>
<th>China*</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>278</td>
<td>66</td>
<td>58</td>
<td>17</td>
<td>30</td>
<td>75</td>
<td>5</td>
<td>1</td>
<td>435</td>
<td>2</td>
</tr>
<tr>
<td>2005</td>
<td>241</td>
<td>97</td>
<td>26</td>
<td>20</td>
<td>7</td>
<td>58</td>
<td>53</td>
<td>7</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2010</td>
<td>178</td>
<td>74</td>
<td>2</td>
<td>47</td>
<td>6</td>
<td>29</td>
<td>181</td>
<td>124</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>2016</td>
<td>764</td>
<td>238</td>
<td>50</td>
<td>87</td>
<td>119</td>
<td>97</td>
<td>647</td>
<td>344</td>
<td>76</td>
<td>51</td>
</tr>
</tbody>
</table>

* China includes the Hong Kong Special Administrative Region.

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Subsequently, the Government of Myanmar also set up Special Economic Zones, which have special rules and incentives in terms of land and labour laws, governance, and dispute settlement. Lack of transparency over labour and land disputes, however, have discouraged some key investors.

While FDI promotion received substantial attention from policymakers, other policy interventions have been lagging behind. For example, TVET or graduate-level training is weak and failed to fill severe skills gaps for managerial and technical skills. There are tax exemptions for CMT operations but not for FOB operations, which has discouraged upgrading. However, apparel is earmarked by the 2015 five-year National Export Strategy as a high-priority sector, with the aim of upgrading to FOB production and establishing a national quality infrastructure.

3.2 The Fisheries Global Value Chain in Cambodia

Global demand for fisheries products follows a divergent pattern: markets in the north are growing slowly and are increasingly standard-intensive; demand from the south is fast-growing and less stringent in terms of standards for food safety or sustainability. Labour costs are critical to being competitive in the low-value segment of the fisheries value chain because these products are exported as frozen fillets. Infrastructure and cold chain are also important factors. In standard-intensive markets, different actors in the value chain must also comply with food safety and hygiene standards, environmental and social sustainability standards, and rules regarding resource governance, namely illegal, unreported, and unregulated fishing.

Although low in regional terms, Cambodia’s fishery production has grown significantly—6 percent annual growth from 2000 to 2014, to a total of 750,000 tonnes in 2014 (Peacock 2011). Capture fishery dominates, at 84 percent of production, but there is consensus that there is limited room for expansion. Most fisheries are artisanal or small scale. Producers in rural and urban areas (60 percent and 35 percent of total production, respectively) alternate rice-growing, vegetable, livestock, and fishery production, depending on the season, flooding, and land availability. Future growth can come only from aquaculture production, focusing on the most valuable species, which has grown by 12 percent annually since 2000 but represents only 16 percent of total fishery output.

Domestic sales of fresh whole fish and processed fish products are controlled by a network of traders (Figure 4). Overall, traders accrue the largest profits in the domestic value chain. Trading is segmented among multiple players: fish collector, landing site wholesaler, and end-market wholesaler, with mark-ups at each stage estimated at 10 percent. Traders sell onwards to small, mostly female retailers in urban markets. The value chain for processed fish is hampered by lack of a cold infrastructure (e.g. limited industrial freezing capacity or cold supply chains and no widespread availability of domestic freezers). Hence, processing is limited to traditional methods for products, such as salted fish paste (fermentation), fish sauce, and dried, salted, and smoked fish.
Regional trade is substantial but largely informal, and hence official trade statistics underestimate the extent of Cambodia’s exports. Fresh fish is exported chilled to the Lao People’s Democratic Republic, Thailand, and Viet Nam via trucks and boats. Bilateral trade with Viet Nam is particularly significant. “Trash fish” exports to Viet Nam’s aquaculture sector is large, and there are indications of large imports from Viet Nam of farmed fish. Trash fish are small, low-value species. Their use as feed for exports is a concern because they are removed from human food channels and threaten the natural stock’s resilience. Finally, there is a niche of small-volume, high-value fish (e.g. grouper, marbled gobies, mantis shrimp) airfreighted live to premium markets in China, Malaysia, and Singapore.

Cambodia’s Strategic Planning Framework for Fisheries (SPFF) 2015–2024 comprises four pillars: (1) sustainable management of capture fisheries management, (2) promotion of aquaculture, (3) upgrading the fisheries value chain, and (4) improving the regulatory and support services regime. Some of the targets include increasing exports to 100,000 tonnes, and creating 30 competent, sanitary and phytosanitary-compliant, mid- to large-scale processing operations. Lack of data on the actual trade flows to the region, however, make the export target difficult to monitor. The SPFF prioritises aquaculture and sets an ambitious target of 740,000 tonnes by 2024, focusing on higher-value species, which are input-intensive. Yet, the supply chain to the aquaculture industry is remarkably weak. Moreover, there is an absence of players able to rise to the challenge of accommodating increasingly stringent western market demands on biosecurity, quality, price-competitiveness, hygiene, and ethical certification. Cambodia’s major challenge is whether it can break out of its low-value domestic-oriented value chain and, like its more successful neighbours Thailand and Viet Nam, enter into higher-value-added, standards-intensive GVCs supplying higher-income markets.

**3.3 The Tea Global Value Chain**

Over the past three decades, a significant segment of global tea production has shifted from plantations to smallholders, in part driven by labour rigidities on the plantations. This has had positive outcomes in terms of inclusive development, but it has also created the challenge of coordinating quality across thousands of small firms. The quality challenge is two-fold: first, tea needs to be processed immediately after farming, which opens opportunities for upgrading but also requires processing capabilities to be
in place. The main value-added links in the tea value chains need to be undertaken in succession and within tight timeframes to avoid product deterioration. Second, international markets require increasingly high standards, and producing countries are often stuck in bulk tea exports, with most value added captured overseas. Yet, there is significant scope for product and end-market diversification: black tea, green tea, technical processing into fine, easily soluble tea for teabags (crush, tear, curl—CTC), orthodox processing to whole-leaf loose tea, a variety of sustainability standards (e.g. Rainforest Alliance, organic certification), and specialty teas.

Producers in developing countries sell either via auction, when tea is destined to bulk sales in emerging and developing countries, or via direct sale to lead firms (multinational corporations) that buy, blend, and market the tea and ensure compliance to a range of standards. Lead firms, including Unilever, Tata, and Twinings, dominate the tea trade, accounting for some 85 percent of global tea sales. While bulk low-quality tea can fetch approximately US$ 2/kg (usually black CTC tea), high-quality, standard-compliant bulk sales can fetch US$ 5/kg. Finally, direct sales can target niche markets for specialty teas, in which loose-leaf green, oolong, or black orthodox teas of outstanding quality can fetch US$ 20-100/kg. Few producers have upgraded into value-added tea exports of branded, packaged, or flavoured teas.

The three countries selected for this research show very different upgrading trajectories in the tea GVC (Table 5) (Mohan 2018). Kenya, the world’s largest exporter by volume, has focused its competitiveness profile on high-quality bulk black CTC tea for inclusion in lead firms’ teabags, and much of its production is certified to private sustainability standards. Sri Lanka, the world’s

| Table 5: Selected characteristics of tea value chains in Kenya, Sri Lanka, and Nepal |
|---------------------------------|-----------------|-----------------|-----------------|
| Hectares (in 2015-2016)         | 209,426         | 205,000         | 27,688          |
| Production quantity (kg, in 2016) | 473,010,000     | 292,362,000     | 24,263,744      |
| Average yield (made kg/ha, in 2014) | 2193           | 1523            | 1110            |
| Ranking world production        | 3               | 4               | 21              |
| % black tea                     | >96             | 93              | 88              |
| % crush, tear, curl tea         | >92             | 6               | 76              |
| % certified (in 2015)           | >88             | 20              | 5               |
| % consumed domestically         | 5               | 10              | 45              |
| Export quantity (kg)            | 480,330,230     | 288,771,000     | 13,289,000      |
| Rank world exports (quantity)   | 1               | 2               | 22              |
| Value exports (US$, in 2016)    | 1,088,468,000   | 1,251,730,000   | 12,282,000      |
| Rank world exports (value)      | 2               | 1               | 34              |
| Average export price (US$/kg, in 2016, government data (International Trade Centre data)) | 2.36 (3.21) | 2.99 (4.81) | 1.77 (2.22) |
| % exports value added           | 14              | 60              | <15             |
| % output from smallholders      | 60              | 75              | 41              |
| Number of factories             | 106             | 250             | 41              |
| Number of smallholder farms     | 600,000         | 400,000         | 15,040          |
| % smallholder household income derived from tea | 50 (east), 8 (west) | 48* | 34 |
| Median smallholder tea land (ha) | 0.5 (east), 0.2 (west) | 0.35 | 0.46 |

*48 percent of households say tea is their main source of income.

largest exporter by value, upgraded into good-quality and value-added own-branded exports. Finally, Nepal, similarly to other smaller tea producers, is competing on low-quality bulk black tea but is trying to upgrade into supplying sustainable standards-intensive markets.

3.3.1 Kenya

Smallholders are the cornerstone of Kenya’s tea sector and are managed by the Kenya Tea Development Agency (KTDA). Through KTDA they are well-organised, supply lead firms’ value chains, and participate in numerous development initiatives. There are also 35 plantations, both domestic and foreign-owned, with in-house processing facilities. More than 95 percent of Kenya’s production consists of black CTC tea and is exported overseas, mainly through auctions, to Afghanistan, Egypt, Pakistan, Sudan, and the United Kingdom. Given how dependent the sector is on bulk exports, it is relatively vulnerable to fluctuations in international prices, exchange rates, and climatic conditions. The national quality infrastructure is well established, and the Kenya Bureau of Standards tests and certifies compliance with international standards and a domestic code of practice. More than 80 percent of Kenyan tea production complies with private sustainability standards.

Kenya’s policy for the tea sector involved investment in infrastructure, marketing channels (auction), and standards compliance. A more ambitious upgrading strategy is constrained by the lack of a comprehensive vision for the sector with buy-in from all stakeholders. This has delayed the adoption of national agricultural policy and prevented the development of a tea policy. A patchwork set of national ad valorem levies on warehousing, county taxes, and delayed value-added tax (VAT) refunds is in need of harmonisation. A subsidy for new tea bushes is, however, potentially important to increase long-term productivity.

3.3.2 Sri Lanka

Sri Lanka’s upgrading strategy was spurred by increased competition in bulk black tea markets. From the 1970s, competition from low-cost Asian and African producers eroded its market share and reduced world prices. With relatively low productivity compared with other leading exporters, Sri Lanka, unable to compete on volumes, repositioned itself as the largest exporter of high-quality orthodox black tea, fetching a premium on world markets. Rather than feeding into lead firms’ supply chains, Sri Lanka has upgraded into high-quality value-added and own-branded tea—namely teabags and packets under the Lion Logo brand.

Functional upgrading in Sri Lanka resulted from a strategy in the 1980s to promote value adding by producing teabags and retail packets for overseas markets with a view to increasing financial returns, creating new employment opportunities, and developing associated industrial and service sectors. Apart from preventing poor-quality exports, setting up a domestic auction centre, and privatising formerly state-owned plantations (which was crucial to increase productivity and build the country’s high-quality reputation), the Sri Lankan Government established a system of incentives for domestic value addition in the 1980s and 1990s. These included the following:

- The Export Development Board of Sri Lanka introduced the Custom Duty Rebate Scheme, in which it repaid the tea export tax to exporters moving into higher-value-added tea products, and an Export Expansion Grant Scheme, under which grants were provided to undertake export expansion programmes.
- A tea import policy allowed imports of CTC and filler-grade teas for re-export in order to address the limited availability or absence of different types of tea required for blending.
• The Tea Board of Sri Lanka granted tax-free incentives based on exporters’ previous year’s incremental increase in its export value of teabags and tea packets and part of the interest on loans for capital investment in tea-bagging machines.

• The Tea Promotion Bureau promoted Sri Lankan tea in export markets, provided matching grants up to 50 percent of expenses for the promotion of Sri Lankan brands (with priority being given to high-value specialty teas, teabags, and retail packets), and developed the Lion Logo to facilitate marketing of Sri Lankan value-added teas overseas.

As a result, Sri Lankan firms have built their competitiveness in value-added and high-quality tea exports, with over 50 percent of exports in value-added form. While the early subsidies and incentives are no longer in operation, the Sri Lankan Government continues to facilitate tea research, promote Sri Lankan tea overseas, and promote upgrading among smallholders.

Smallholders account for three-quarters of national tea output. While they are fairly well organised in societies that provide extension services, their remote location and diversity of occupations makes it difficult to change farm practice in a timely way (e.g. in reaction to changes in permitted pesticides). To improve productivity among smallholders, in 2016 the Sri Lankan Government approved a fertiliser subsidy for tea farmers with cultivated land of less than two hectares, and it offers a modest subsidy for the replacement of old tea bushes with new ones. Productivity increases are particularly important to prevent forecasted labour constraints to impact on production volumes.

3.3.3 Nepal

Notwithstanding their geographical proximity to India’s Darjeeling tea gardens, the Nepalese tea estates remain modest in number and reputation. Compared with those in Sri Lanka and Kenya, smallholders in Nepal account for a smaller share of national output (41 percent), while the plantation-based CTC sector accounts for the main share of production. There are two distinct production segments: CTC black tea and orthodox tea. The latter has expanded over the years: in 2015-2016 there were 16 CTC factories and 25 orthodox factories.

CTC black tea, mostly grown in plantations, accounts for three-quarters of Nepalese tea production and is either exported as low-value bulk tea to India (where it is often mixed with Darjeeling tea and sold at a premium) or sold in the domestic market. Nepal has struggled to upgrade the quality and reputation of its tea exports, in particular to repair its reputation after a shipment to Germany was rejected in the 1990s owing to higher-than-permitted pesticide residues. Although some exporting processors coordinate the overseas selling process themselves, many use the marketing services of the national Himalayan Orthodox Tea Producers Cooperative.

Orthodox tea, grown by smallholders in the foothills of the Himalaya, is sold at a premium to global markets. In the orthodox tea sector, a domestic code of conduct and, more recently, adoption of organic standards have brought production in line with international food safety standards. Both government and development agencies have recognised the orthodox tea value chain as having significant development potential and have initiated programmes to improve smallholder farming practices and diversify exports, but infrastructure, quality, and marketing remain a challenge.

Lack of a comprehensive vision supported by stakeholders has hampered the development of an effective sectoral strategy. The 2000 National Tea Policy has not been implemented. Government, industry, cooperatives, and labour organisations in the tea sector follow separate and uncoordinated strategies. Nepalese exporters face a time-consuming and costly process of getting their products to market—shipments incur fees and delays at the Indian border on their way to port, and food safety testing in India or overseas is costly. In 2017 a National Export Sector Strategy in Tea was developed with the assistance of the International Trade Centre.
3.4 The Business Process and Information Technology Outsourcing Value Chain

The offshore services sector can be segmented into subcomponents (Gereffi and Fernandez-Stark 2010): information technology outsourcing (ITO), business process outsourcing (BPO), and knowledge process outsourcing (KPO). Five principal upgrading trajectories for the offshore services industry can be identified: entry into the value chain through BPO; upgrading within the BPO segment; offering full package services; the expansion of information technology (IT) firms into KPO services; and the specialisation of firms in vertical industries. The most common way to enter the offshore services market, particularly for low-income countries, has been through establishment of call centre operations. The main factors for companies looking to set up shop in a particular country are costs: labour costs, infrastructure costs (most importantly, unit costs for telecommunications networks), internet access and power, and especially corporate taxes (including tax breaks, subsidies, and regulations). Other incentives for investment are also important.

Over the past five years, services have been a major engine of growth in Kenya. ICT, computer, and communications service exports accounted for 25 percent of total service exports in 2014 and employ 100,000 people, 10,000 of whom work in IT and IT-enabled services. Kenya is also a leading supplier of business and professional services to the eastern Africa region, such as IT, insurance, accounting, financial, engineering, and architectural services. In 2017 there were 550 licensed IT companies operating in Kenya across the BPO and ITO segments, including five ICT multinationals (IBM, Google, Cisco, Oracle, Microsoft) and a number of homegrown firms (e.g. Technoserve, Craft Silicon, Verviant). Kenya has sought to position itself as a top digital offshoring destination in Africa since 2007, targeting the BPO industry. Early on, a few large BPO providers entered the market, but they soon struggled to attract the large, international BPO contracts that the government and industry had banked on, partly due to lack of scale for many firms, poor reputation, and high internet costs compared with global competitors. While some firms went bankrupt soon after, many firms succeeded by refocusing on low-end ITO work, namely application and network management, for domestic (government procurement) and regional markets. For both local and regional markets, unique knowledge and understanding of the market, geographic proximity, and social connections provide Kenyan firms with an advantage over international competitors. With growing demand for digitisation of business and state services, these rapidly growing domestic and regional markets appear to constitute the most significant growth opportunities for east African BPO and ITO firms. Indeed, Kenya’s 2017 ICT Master Plan prioritises the ITO sector, promoting smaller Nairobi-based companies engaged in higher-value IT services work such as social media, software and app development, web design, and IT consulting. These already have a strong brand globally, based on success stories such as Mpesa and with the entry of impact investors. Already within the sector there is evidence of economic upgrading, with firms starting out in basic web design or network integration transitioning into higher-value-added activities, such as app and software design.

3.5 Summarising Global Value Chain Constraints Across the Various Case Studies

Table 6 summarises the important constraints to GVC participation and upgrading in the various country case studies.
<table>
<thead>
<tr>
<th>Country</th>
<th>Constraints</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lesotho: apparel</td>
<td>- Infrastructure, border, and customs delay, particularly affecting lead times and cost-competitiveness because inputs (including textiles) are imported from Asia</td>
</tr>
<tr>
<td></td>
<td>- Inadequate water and energy supply; lack of water waste treatment facilities</td>
</tr>
<tr>
<td></td>
<td>- Low productivity and low skills are of a particular concern to South African firms that would be more interested in investing in local upgrading</td>
</tr>
<tr>
<td>Ethiopia: apparel and textiles</td>
<td>- Access to raw materials; poor quality and inadequate supply of cotton; high cost and low quality of local fabrics; long lead times to import inputs</td>
</tr>
<tr>
<td></td>
<td>- Difficult access to skills and working capital to move to free-on-board production</td>
</tr>
<tr>
<td></td>
<td>- Challenge of local firms developing long-term relationships with global buyers</td>
</tr>
<tr>
<td></td>
<td>- High cost and inefficiencies of local transport, logistics, and customs clearance</td>
</tr>
<tr>
<td>Myanmar: apparel</td>
<td>- Poor infrastructures contributing to long logistic times; speed for European lead firms is increasingly critical; time-sensitive buyers source only when they can avoid shipping</td>
</tr>
<tr>
<td></td>
<td>- Poor productivity; high labour turnover; low level of worker efficiency; shortage of skilled middle and top management; lack of technical know-how; lack of numeracy and literacy</td>
</tr>
<tr>
<td></td>
<td>- Poor financial infrastructure; limited investment capacity</td>
</tr>
<tr>
<td>Cambodia: fisheries</td>
<td>- Poor infrastructure</td>
</tr>
<tr>
<td></td>
<td>- High utility costs</td>
</tr>
<tr>
<td></td>
<td>- Logistics and customs clearance</td>
</tr>
<tr>
<td></td>
<td>- Sanitary and phytosanitary issues</td>
</tr>
<tr>
<td></td>
<td>- Lack of key inputs such as feed and seeds</td>
</tr>
<tr>
<td></td>
<td>- Overfishing; Mekong dams</td>
</tr>
<tr>
<td></td>
<td>- Aquaculture—competition for land from agriculture; seasonality problem</td>
</tr>
<tr>
<td></td>
<td>- Absence of firms able to meet export requirements</td>
</tr>
<tr>
<td></td>
<td>- Crippling trading costs for small and medium-sized enterprises (SMEs)</td>
</tr>
</tbody>
</table>
Table 6: Continued

<table>
<thead>
<tr>
<th>Country</th>
<th>Constraints</th>
</tr>
</thead>
</table>
| Kenya: business processing outsourcing | • Lack of shared visions; fragmented actors; poor coordination within government  
• Poor infrastructure; logistics; customs; incapacitating costs for SMEs  
• Poor roads prevent transport to factories  
• Poor supply of electricity damages quality of tea  
• Labour scarcity; training; lack of numeracy and literacy  
• Processing plants using old machineries  
• Training/outreach programmes difficult to reach scattered and remote smallholders |
| Sri Lanka: tea | • Training/outreach programmes difficult to reach scattered and remote smallholders |
| Nepal: tea | • Lack of shared vision; fragmented actors; poor coordination within government  
• Training/outreach programmes difficult to reach scattered and remote smallholders  
• Lack of numeracy and literacy  
• Poor infrastructure; logistics; customs; incapacitating costs for SMEs  
• Poor-quality reputation; poor marketing capabilities |
| Kenya: tea | • Cost and reliability of electricity  
• High-cost office rental  
• Poor transport |

The following critical GVC dynamics cut across the various case studies:

- Preferential market access matters: coupled with flexible rules of origin, this has been critical in developing apparel manufacturing in Ethiopia, Lesotho, and Myanmar. Lead firms are diversifying their supply base, thereby opening opportunities for low-cost countries qualifying for preferential market access to the US and EU.

- GVCs configurations vary: the apparel GVC is dominated by triangular manufacturing networks, where global buyers and large firms play different roles. The tea GVC has a two-fold configuration, with producers supplying via auction to developing countries or via direct sales to lead firms. The fisheries GVCs have distinctive domestic, regional, and global configurations, although Cambodia with insignificant global exports operates only with the first two dimensions via a complex web of formal and informal traders. Each configuration has implications for upgrading and sustainability paths.

- Upgrading is possible: while lead firms control key, high-value-added links such as branding and retail, the case studies show that a number of upgrading paths are possible in terms of product, process, and functional upgrading.

- FDI is crucial: FDI has played a critical role in building productive and export capabilities across all countries but Cambodia. In Cambodia, the lack of foreign investors is one of the critical constraints in launching an export industry. However, domestic
investors play an important role to be leveraged in the upgrading strategies of most countries covered in this paper.

- Government institutions and policy are important: government policies in all the case studies have firmly targeted export and foreign investment. However, Ethiopia and Sri Lanka go beyond this in promoting learning and functional upgrading. In Sri Lanka the composition of tea exports proves that the policy has been effective. Other countries have adopted less ambitious policies—targeting only productivity and certification in Kenya. Bottlenecks in policy design or implementation characterise Cambodia, Myanmar, and Nepal, notwithstanding their high potential in fisheries, apparel, and tea, respectively. In Kenya, the initial policy focus on the BPO segment was not aligned to the actual competitive advantage of the industry, which lies in the ITO segment.

- Focusing on GVCs is critical: industrial policy that recognises the global complexity of production and trade dynamics driving GVCs, and directly engages with the drivers, is crucial for facilitating industrialisation in low-income countries. Ethiopian policy explicitly targets attracting lead firm buyers and transnational producers to drive industrial development, while Sri Lanka has adopted an holistic value chain approach to facilitate upgrading and drive exports. These GVC-driven industrial policies are in marked contrast to the more limited success of those of Cambodia, Kenya, Lesotho, and Nepal.
4. WHAT DRIVES SUSTAINABILITY OUTCOMES IN GLOBAL VALUE CHAINS?

The case studies show the importance of accessing GVCs, meeting standards, and creating the conditions for harnessing greater rents through economic upgrading. However, inclusive growth requires understanding sustainability in all its dimensions—economic, social, and environmental—hence the importance of unpacking in greater detail the SDGs and the complexity of upgrading.

Globalisation has impacted unequally across and within countries. While some countries, such as China, have seized GVC opportunities to reduce poverty, others have lagged. Even within countries, firms, workers, and citizens have benefited unequally. The SDGs help us frame the discussion about GVCs in terms of economic, social, and environmental sustainability. Each case study shows that whether and how countries and producers participate in GVCs has direct and indirect effects on attaining sustainability through the SDGs. Moreover, they raise an important issue: participation and upgrading in GVCs could impact even more profoundly on the SDGs if government, private sector, and donors were to shape this trajectory towards more inclusive and sustainable paths.

4.1 Economic Sustainability

SDG 1 End poverty in all its forms everywhere

SDG 9 Resilient infrastructure, inclusive industrialisation, fostering innovation

SDG 10 Reduce inequality within and among countries

In our case studies, GVC participation has contributed to the SDGs in terms of income and employment generation, upgrading into better products or processes, and rarely more sophisticated functions. Two countries, however, struggle to integrate meaningfully in GVCs: Nepal in tea, and Cambodia in fisheries. Low supplier capabilities to meet standards set by global buyers (quality, price, sustainability), weak-quality physical and services infrastructure, poorly articulated and implemented policies, and scarce FDI are the key underlying policies. Cambodia is currently "red carded" by the EU for non-compliance on illegal, unreported, and unregulated measures, manifesting in a broad ban on seafood exports to EU markets.

4.1.1 Job creation and income opportunities

In the context of poverty and high unemployment, participation in the apparel GVC directly impacts on employment creation, especially for three vulnerable segments: unskilled people, youth, and women. In Lesotho, half the population lives below the poverty line. The apparel sector accounts for approximately a third of Lesotho’s gross domestic product (GDP) and 60 percent of exports. It is the country’s largest employer, accounting for nearly 50 percent of the formerly employed workforce—35,000 workers in 2015, down from a peak of 53,000 in 2004, but still significantly up from 16,000 in 2000 at the start of AGOA. In Ethiopia, apparel and textile exports rose from US$ 3 million in 2000 to US$ 117 million in 2014, accounting for a quarter of total manufactured exports. The entire industry, including ginning, accessory, and packaging, employed 57,400 workers in 2014 (15 percent of manufacturing sector employment). It is an increasingly important source of employment for unskilled young female workers, from rural areas. Myanmar’s garment exports increased from US$ 340 million in 2010 to US$ 1.6 billion in 2016. Employment in the garment sector totalled approximately 750,000 workers (16 percent of manufacturing sector employment).

In Kenya, Sri Lanka, and Nepal, the tea GVC supports large numbers of smallholder farmers—accounting for 60 percent, 75 percent, and 41 percent of national output, respectively. In terms of labour participation, these amount to 600,000, 400,000, and 15,000 smallholders, respectively. In addition to using their family members, Kenyan smallholders hire migrant labour. Tea smallholders seem to perform much better than
plantations on poverty-related SDGs—they tend to invest significantly in their children’s education, own their own homes, and access health care. Moreover, in Kenya and to a lesser extent Nepal, sustainability standards have facilitated access to premium markets, improving returns to labour, thereby reducing poverty, improving nutrition, and providing decent work.

Kenya’s BPO/ITO sector creates 7000 relatively well-paid job opportunities for youth. The project-based nature of BPO work means that companies will retain a small permanent workforce and hire additional temporary staff when they win a larger contract. Temporary workers do not have the same entitlements and social security as permanent workers in terms of health insurance, pension contributions, annual leave, sick leave, and maternity leave. The irregular nature of such contracts can make it difficult for workers to earn a regular living wage.

4.1.2 End markets and upgrading (including innovation)

End markets play an important role in shaping the upgrading trajectories of developing countries’ suppliers. In Lesotho, global and regional end markets require different supplier capabilities and open different upgrading opportunities. Lesotho-based Chinese Taipei firms supplying the US market are locked into internal triangular manufacturing networks—US buyers only deal with transnational firms based in Chinese Taipei that undertake higher-value-added tasks related to pre- and post-production services at headquarters. They have limited interest in promoting functional, product, or process upgrading of their plants in Lesotho, which produce low-fashion basic products, with modest investment in continuous operational efficiency. Lesotho-based South African firms supplying South African retailers are smaller than the Chinese Taipei firms but operate on short production runs of higher quality and variety items, which requires higher skills and capacity to operate just in time. They are more involved in operational decisions together with headquarters in South Africa, and there is more interest from the parent companies in shifting additional functions to their Lesotho affiliates.

In Myanmar, foreign firms are also locked in triangular manufacturing networks. However, there are selective upgrading processes taking place, shaped by global buyers. Firms supplying the quality-driven end markets of Japan and the Republic of Korea have undertaken significant product upgrading. Historical ties to Japan had a profound impact on quality control and skills upgrading. Japanese investors and managers taught local workers the importance of product quality and piece inspection. They drove changes in the production layout, increasing efficiency and effectiveness, and involved employees in standardised decision-making. European buyers are more interested in process upgrading—operating shorter runs and quicker lead times, better processing to increase productivity, and moving to knit garment production. Poor infrastructure and logistics, however, impact lead times. EU buyers expect suppliers to contribute to design and product development, a push towards FOB. US buyers nominate specific fabric and input suppliers and are generally disinterested in supplier designs, generating fewer upgrading opportunities.

4.1.3 Knowledge and technology spillovers are not automatic

Domestic investors play an important role, but in the apparel case studies FDI has played a catalytic role in building productive and exporting capabilities. Domestic firms face constraints related to infrastructure, finance, and skills and struggle to develop linkages to global buyers. The exception has been Sri Lanka due to implementing comprehensive upgrading strategies for decades.

The case studies underline how knowledge spillover and technology transfer are not automatic. Suppliers inserted at the bottom end of triangular manufacturing networks are less likely to be supported in upgrading skills, processes, and functions. Subcontracting relationships have been scarce. The surge in south-south FDI flows has contributed to a
rapid expansion of production capabilities, but not necessarily in deepening of production capabilities. In Lesotho, Chinese Taipei firms import technical, managerial, and supervisory skills from China, Chinese Taipei, and Sri Lanka. There has been little transfer of technology or technical know-how. Local employees undergo limited on-the-job training and no multiskilling. More sophisticated skills, such as machine maintenance and pattern-making, are not taught. In Myanmar, knowledge spillover, technology transfer, and training are limited. Technical positions tend to be filled by Chinese staff. Language and cultural barriers between expatriates and local staff curtail skills transfer. The only area where there has been some supplier development has been in social sustainability to meet lead buyers’ requirements. In Kenya’s BPO/ITO value chain, smaller Kenyan firms vie for lower-value piecemeal work subcontracted from larger BPO firms that control the flow of information within the value chain, often redacting the name of the clients for whom the work is being undertaken. This means that Kenyan firms struggle to build up a list of reputable references of their work, limiting their ability to challenge incumbents within the network and source international work and larger contracts directly. Personal contacts are important for the diffusion of technical knowledge within the value chain, with large firms such as Technobrain able to draw on international expertise of US, Philippine, and Indian consultants to help structure operations and train workforces.

This requires governments adopting more proactive policies to build local absorptive capabilities, investing in skills, technological know-how, and organisational capabilities of domestic firms and workers. Ethiopia targets these capabilities, although it is too early to evaluate the impact.

### 4.1.4 Challenges of supply chain upgrading

In most case studies, supply chain upgrading has been insignificant because the inputs required are capital-intensive; the countries lack the scale, capital, and technologies to be competitive; and industrial policy is not focused on the entire value chain. Unlike in Lesotho and Myanmar, in Ethiopia there is an important dynamic of foreign-owned firms investing in integrated apparel and textile mills. Turkish firms relocated their entire plants to Ethiopia, leaving only offices in Turkey. Indian and other foreign firms invested in apparel have plans to invest in textiles. Table 7 shows the number of factories and workers involved in different value-added links. It is highly unusual for an apparel producer to find these backward linkages. Of 127 firms, there are 24 integrated mills (textiles and apparel), 23 textile mills (spinning, weaving, knitting), 72 apparel plants, 8 handloom factories, and a few cotton ginning, packaging, and accessories firms.

#### Table 7: Ethiopia’s textile and apparel firms (January 2016)

<table>
<thead>
<tr>
<th>Value chain linkages</th>
<th>Factories</th>
<th>Workers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ginning</td>
<td>21</td>
<td>1541</td>
</tr>
<tr>
<td>Spinning, weaving, and knitting</td>
<td>23</td>
<td>7229</td>
</tr>
<tr>
<td>Integrated textiles</td>
<td>24</td>
<td>28,255</td>
</tr>
<tr>
<td>Apparel</td>
<td>72</td>
<td>17,431</td>
</tr>
<tr>
<td>Handloom</td>
<td>8</td>
<td>2161</td>
</tr>
<tr>
<td>Trims and accessories</td>
<td>2</td>
<td>150</td>
</tr>
<tr>
<td>Packaging, printing, dyeing, and finishing</td>
<td>5</td>
<td>665</td>
</tr>
<tr>
<td>Total</td>
<td>155</td>
<td>57,432</td>
</tr>
<tr>
<td>Textiles and apparel total</td>
<td>127</td>
<td>55,076</td>
</tr>
</tbody>
</table>

In Cambodia, lack of inputs is a critical constraint. The majority of fingerlings are imported because domestic producers cannot supply the required quantity or quality. Formulated fish feed is also imported as there are no local manufacturers and the essential protein ingredients are scarce. Use of trash fish as an alternative feed has caused problems in itself—denying a raw material source for processors, decreasing food supplies for poor people, and threatening supply of juveniles to the fishery.

4.1.5 The most difficult type of upgrading: functional upgrading

Upgrading in the tea GVC can take different dimensions. Most developing countries target process upgrading. In Kenya and Sri Lanka, publicly funded research into new tea bush varieties, and policies that provide subsidies for the replacement of old tea bushes with the new ones, are improving productivity. In Sri Lanka, policies that made the smallholder sector more attractive have encouraged a shift from plantation to smallholder farming, further contributing to productivity gains. In Nepal, process upgrading has been weaker, although the Nepalese Government grants a subsidy for new processing machines.

Some countries have also embarked on product upgrading, moving away from CTC black teas towards green tea or white tea, sustainability certifications, or speciality fine teas. Kenya has focused compliance towards importers’ standards and certification to voluntary sustainability standards, as more than 80 percent of its exports are certified. Sri Lanka has focused on meeting importers’ public standards and international food safety standards, including ISO 3720, HACCP, GAP, Codex regulations, and methyl bromide reduction. It also certifies value-added exports of retail-ready tea that are comprised of 100 percent Sri Lankan tea and meet stringent quality criteria for the country’s official Lion Logo, which has international brand recognition.

Functional upgrading has been remarkably rare, which makes Sri Lanka’s case stand out. All processing firms in Sri Lanka are domestically owned. Those that have branched out into packaging, marketing, and exporting have been at the vanguard of value-added tea exports. These exporters have used the value created by relationships of trust with direct buyers overseas to break away from the commodity trap and build more value into the product within Sri Lanka. Teabags and retail packets exported from Sri Lanka include brands owned by Sri Lankan firms, brands jointly owned, and private labels or brands solely owned by foreign firms. Brands that are fully or partly Sri Lankan owned account for about 20 percent of bag and packet exports, and private labels account for the rest, suggesting that some Sri Lankan firms have upgraded into the packaging nodes of the chain, though not the marketing side.

4.2 Gender Equality

SDG 4 Gender

The apparel and textile GVC has historically played an important role in creating job opportunities for women, and created sources of income and financial independence that are not otherwise available in rural areas. In Lesotho, Ethiopia, and Myanmar, female workers account for 80 percent, 75 percent, and 91 percent of total employment of the textile and apparel sector, respectively.

Women suffer a pay gap when performing the same jobs as men. Overall, female employment is concentrated in low-paid jobs, while males dominate technical and low managerial positions. However, a few South African-owned firms employ women all the way up the managerial chain. Myanmar is a general exception—female presence is found all the way up to management positions throughout the industry, and female employees are more concerned about the absolute level of compensation and a decent working environment rather than a pay gap.

In the tea and fisheries value chains, women occupy distinctively different roles from men. In Cambodia’s fisheries chain, men dominate upstream jobs (catching, farming), while women dominate downstream segments (processing, trading; 85 percent of traders are female).
However, 20 percent of fishers and more than 50 percent of fish farmers are women, which is higher than global norms. Women are concentrated in small-scale artisanal fishery, while men dominate the commercial segment.

In the tea value chain, men are responsible for planting and pruning the tea bushes, fertiliser and pesticide application, and liaising with the relevant organisations. Land in Kenya and Nepal is often in men’s names, reducing women’s control over farming decisions and finances. The share of male-headed smallholders is 54 percent in Kenya, 60 percent in Sri Lanka, and 70 percent in Nepal. It is, however, women who play the lead role in the actual management and cultivation of tea gardens. Women are responsible for plucking the tea and timeously bringing it to the processing factory. Up to 80 percent of the quality of the made tea is derived from plucking and transportation. As demonstrated in Table 8, women play a key role in these activities. The gendered division of labour extends downstream to the factory—women maintain the leaf supply among the processing machines and do the sorting, while men are in charge of machine repair and packing.

### Table 8: Gender roles on small-scale tea farms in Kenya, Sri Lanka, and Nepal

<table>
<thead>
<tr>
<th>Activity</th>
<th>Kenya</th>
<th>Sri Lanka</th>
<th>Nepal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land preparation and planting</td>
<td>Mostly male</td>
<td>n/a</td>
<td>Mostly male</td>
</tr>
<tr>
<td>Pruning</td>
<td>Male</td>
<td>Male</td>
<td>Male</td>
</tr>
<tr>
<td>Fertiliser and pesticide application</td>
<td>Mostly male</td>
<td>n/a</td>
<td>Mostly male</td>
</tr>
<tr>
<td>Plucking</td>
<td>Female</td>
<td>Female</td>
<td>Female</td>
</tr>
<tr>
<td>Tea transportation</td>
<td>Mostly female</td>
<td>n/a</td>
<td>Mostly female</td>
</tr>
<tr>
<td>Factory/cooperative liaison</td>
<td>Mostly male</td>
<td>n/a</td>
<td>Mostly male</td>
</tr>
</tbody>
</table>


A major implication is that upgrading in fisheries and tea GVCs encompasses activities controlled by women, namely fish processing and retailing, and tea plucking and transportation. In the apparel GVC, women represent the bulk of the workforce. Hence, upgrading strategies at the firm and government level must make particular effort to extend technical and financial support opportunities to women.

In Kenya’s BPO/ITO value chain, women make up only 15 percent of the workforce, much lower than other large BPO services exporters. There is also significant vertical labour segregation along gender lines, especially in BPO. Women dominate the ranks of telephone operators and data-entry and data-processing personnel—work that is highly routinised and low-paid. In the ITO sector particularly, women are a minority and tend to be employed in sales and human resources rather than technical roles. There is, however, also evidence of things changing, with women increasingly progressing into leadership roles within the ICT sector or starting their own companies. Finally, globally there is also evidence of work opportunities in the sector stimulating demand for education for girls (SDG 5).

### 4.3 Social and Environmental Sustainability

**SDG 8** Inclusive and sustainable economic growth, full and productive employment, and decent work

**SDG 10** Reduce inequality within and among countries

**SDG 7** Reliable, sustainable, and modern energy

**SDG 9** Resilient infrastructure

**SDG 12** Sustainable consumption and production

**SDG 13** Climate change

**SDG 14** Oceans and marine
4.3.1 Sustainability standards support the Sustainable Development Goals

Sustainability standards support improved social and environmental processes underpinning production across all the GVCs. They tend to be market-specific. For example, in the Myanmar apparel GVC, it is only EU and US brands (H&M, C&A, Adidas, Gap Inc., Marks & Spencer, Primark) that require higher working condition standards and a higher level of social and environmental compliance, unlike Asian buyers. EU buyers require compliance with the Business Social Compliance Initiative (BSCI), a European social monitoring system for ethical sourcing, based on International Labour Organization (ILO) labour standards. BSCI supports the continuous improvement of, among other things, working hours, compensation, and health and safety. The US Responsible Investment Reporting Requirement is another example. In Lesotho, civil society and consumer demand in the US has led to the application of the ILO Better Working Conditions to almost 60 percent of the industry. This has resulted in improvements in occupational health and safety conditions, provision of health services, and improved maternity leave. In Kenya's BPO/ITO sector, impact sourcing is pursued by firms such as Samasource, DDD, Adept, and Daporim. Impact sourcing involves employing people from poor and vulnerable communities (base-of-the-pyramid workers, youth, disabled people) as principle employees in BPO centres to provide high-quality information-based services and other microwork to domestic and international clients. In Kenya, Samasource splits jobs into microwork for almost 1500 workers (50 percent of them women), on average more than doubling their previous income while providing fair wages and social protection and opportunities for skills upgrading.

These sustainability standards have spurred important product and process upgrading at the firm level, and have granted producers access to large and profitable markets. In some cases, voluntary sustainable standards are de facto mandatory (e.g. Rainforest Alliance certification for tea supplied to lead firms for northern markets). However, these standards can exclude small producers because they require high certification costs, an established quality infrastructure system, and good reputation. Multiple standards increase certification costs for SMEs and small producers—one Nepalese tea exporter had five different certifications for five different export markets.

Private and public partnerships are critical in this regard. Nepal focused on food safety standards and adopted its own code of conduct for quality and sustainability of tea but, owing to lack of interest from global buyers, Nepal had to shift to organic certification to demonstrate its low chemical residues and high quality to overseas importers. In Kenya, the Kenya Tea Development Agency partnered with Unilever and Rainforest Alliance to improve smallholder tea quality, certify smallholders, and improve supply to Unilever. This enabled certification to Rainforest Alliance, which is costly and is generally only undergone at a large scale. Ethiopia subscribed to a new Swedish and H&M-funded programme implemented by ILO in collaboration with government, trade unions, and employers. This aims to support the development of a socially sustainable apparel industry, targeting improved wages and working conditions, labour conditions, and productivity.

4.3.2 Labour conditions and upgrading

Both in terms of enabling rights and measurable indicators (wages), labour conditions are problematic. Levels of unionisation are rising, but from a low basis, especially in apparel. Key concerns include occupational health and safety, overtime, no minimum wage, low social rights, and no collective agreements. Inspectorate enforcement is also weak and there is limited experience in collective bargaining.

Ethiopia apparel wages are lower than any in other comparable sub-Saharan African country. In Lesotho there is a minimum wage set by a multistakeholder Wages Advisory Board composed of labour, industry, and government.
The minimum wage is applied across the industry, and some firms pay more. There are five unions, but unionisation at firm level is low. In Myanmar’s apparel sector, working conditions have tended to be poor. These include vulnerable labour arrangements, child labour, lack of training, excessive overtime, poor working conditions, poor health and safety, and flouting of the country’s new minimum wage. There is also extensive use of “daily labour,” abuse of the apprenticeship period, and limits to the freedom of association. Non-compliance of the minimum wage tends to be high across ownership and end market.

In some cases, EU or US lead firms tend to push for better working conditions. To access their brands, certifications such as BSCI are often necessary. BSCI is a European social monitoring system for ethical sourcing, based on ILO labour standards, supporting continuous improvement of the social performance of suppliers, and covering 13 performance areas. BSCI requires a strict and independent third-party checking system. Recently, labour protests have declined due to improved working conditions, legal and policy frameworks, and an increase in buyers entering the market with a focus on ethical sourcing.

While wage levels in the apparel sector are generally low, upgrading and productivity gains are associated with skills development and higher wages. Expanding apparel production per se may lead to lower unit values and lower wages, but upgrading linked to improved processes, more sophisticated products, and new functions can bring about higher and more sustainable income.

In tea GVC case study countries, labourers are often unionised—unlike their peers who work on smallholder farms—and benefit from regular renegotiation of pay and conditions. Fair Trade certification on Kenyan plantations has provided price premiums and higher returns to labour, thereby reducing poverty and providing decent work. In Sri Lanka’s tea plantations, there are reports of poor living and working conditions. This has provoked a move towards smallholder farming. Smallholders seem to perform much better than plantation labour on all measures of housing, education, and health care. Indeed, smallholder tea farmers tend to own their own homes, invest significantly in their children’s education, and access health care. Kenyan and Sri Lankan smallholders are well above the international poverty line.

4.3.3 A proactive approach to secure environmental sustainability

Ethiopia champions a model industrialisation path that is environmentally sound. It adopted the Climate-Resilient Green Economy (CRGE) strategy to mainstream a green industrialisation agenda into the country’s industrial development strategy and policies. Ethiopia has pledged to become a zero net emissions economy by 2025. Energy is sourced from hydroelectric plants, and the CRGE focuses on renewable energy in three key industrial sectors: leather, cement, and textiles and apparel. At the firm level, in the apparel and textiles sector, the Ethiopian Government checks environmental and technical compliance regarding water, mineral, and toxic dispatch. Many factories have effluent treatment plants. The Awassa industrial zone will be a green industrial park by adopting zero discharge technology, natural ventilation and lighting, water recycling, electricity saving with LED lighting systems, green tree-planted areas, and use of 100 percent renewable or clean energy.

4.3.4 Complex linkages between economic, social, and environmental Sustainable Development Goals

The case studies provide examples where economic, social, and environmental goals have been in conflict. In Cambodia, policies to increase poor people’s access to fisheries resources and increase production have conflicted with environmental sustainability. Cambodia moved from a system of commercial fishing licences for individual lots assigned through a bidding system, to community fisheries allocated as open access areas to local communities. By early 2012 the lot system had
been dismantled and their transformation to community fisheries led to the establishment of 516 community fisheries involving 156,600 families (comprising 332,000 individuals, a third of whom were women). However, management—especially from a conservation perspective—has been problematic. Anecdotal evidence points to increasing effort (more people are becoming fishers), stalled production growth, falling catch per unit effort (productivity), and reducing average fish size—all classic signs of a resource being fished beyond its sustainable maximum.

Simultaneously, Cambodia’s fisheries are impacted by upstream hydrological developments along the Mekong. Dam building will have a significantly negative impact on wild fisheries. Given the fish stock’s complex migratory interaction with the river systems, these dams will impede the spawning migrations of key food species. With 60 percent of Cambodia’s freshwater fish being migratory, the impact on the great floods that spur productivity bonanzas are likely to be serious (e.g. the Tonlé Sap flood/drain cycle and lower Mekong flood plain). Moreover, it will reduce the nutrients within the dam reservoirs that would otherwise have fertilised Cambodia’s lacustrine systems downstream (Tonlé Sap and the flood plain again). Consequently, an eventual decline of as much as 30-50 percent in wild fish production in Tonlé Sap is anticipated.

In the tea sector, expanding output and increasing productivity have direct environmental implications. Land clearing is associated with deforestation, biodiversity loss, soil erosion, and changed water flows. The tea factories in all three countries use tree fuelwood for processing green leaf into black tea. In Kenya, each factory uses up to 30,000 trees per year, higher with older machines. Deforestation has devastating impacts on biodiversity and ecosystem functions in the hilly areas, encouraging landslides and affecting weather. The burning of wood fuel, diesel, and coal also affects the carbon footprint of tea. Several initiatives are currently under way in Kenya to reduce fuelwood use, including replacing it with other biomass sources and investments in small hydropower stations. Nepalese factory owners have been investigating win-win technological opportunities that would replace old equipment with new energy-efficient machines, lowering energy costs and reducing the tea’s greenhouse gas footprint. There is little available information on the carbon footprint of Sri Lankan tea or mitigation initiatives under way. In all three countries, mounting evidence of climatic changes and their impact on current and future tea production has sparked research and planning into adaptation strategies.

Ongoing production of tea also affects the environment through agrochemical and energy use. Policies to reduce excess agrochemical use by smallholders can reduce water pollution and emissions from agrochemical production, while reducing farmer costs. The adoption of organic and biodynamic practices promotes biodiversity by encouraging insects that enhance the taste of the tea and also reduce land degradation by enriching soil biodiversity.

Kenya’s BPO/ITO value chain shows that upgrading in IT capabilities can have spillover effects on economic competitiveness, and hence economic growth, and other SDGs. IT solutions in Kenya have contributed to trade facilitation (single window system for customs clearance), food supply chain management, maternal health monitoring, education, child protection, and farmer extension services. e-Government portals have promoted accountability of government and civic engagement.
5. TRADE AND INVESTMENT POLICIES FOR GROWTH AND SUSTAINABILITY

Policies shape GVC dynamics in multiple ways. What matters is not only the design of policies but also their implementation and monitoring. By controlling their access to inputs and markets, domestic policies determine the level of competitiveness of firms and producers. Investment policies determine the level of productive capabilities in the domestic economy, linkages to original equipment manufacturers and buyers, agglomeration economies (cluster development), backward linkages to inputs and raw material suppliers, and knowledge and technology transfer. Trade policies determine preferential market access to export markets, which in turn will determine end markets and value chain governance influencing the upgrading opportunities of firms and producers.

The major challenges and opportunities for each of the case study countries have been reviewed in this paper in terms of both individual country issues and cross-cutting general implications. Using this information as the foundation, this section focuses primarily but not exclusively on trade and investment policies. The section simultaneously considers domestic policies that should be viewed as a priority by policymakers and stakeholders in order to address these constraints. In GVC analysis and policy development there is no one-size-fits-all approach or “magic policy bullet.” There is an unavoidable tension between necessarily considering the specifics of each country’s dynamics and the need to draw general insights that can help in framing policy recommendations going forward. The latter are set out below.

5.1 Trade Negotiations and Trade Preferences

Trade preferences are important in selected GVCs. Beneficiaries of EBA and AGOA need to ensure the continuation of preferential treatment and favourable rules of origin because these are critical in attracting and maintaining foreign investors. This would include lobbying US government and supporting the African Clothing and Textile Industries Federation. Trade negotiations should also aim to reduce tariff escalation for higher-value-added products. For example, Sri Lanka needs to engage third countries to reduce high tariff rates on processed tea products in export markets, including the Russian Federation and the United Arab Emirates.

5.2 Strategic Industrial and Foreign Direct Investment Policies

FDI promotion should be complemented by a strategic approach of identifying end markets, lead firms, and upgrading priorities, and designing complementary policies from an early stage to promote knowledge spillovers, technology transfer, and upgrading. A GVC industrial policy should incorporate mechanisms to ensure direct interaction with critical global lead firms and key transnationals. Maximising collaboration to create strong linkages, technology transfer, and spillovers within a strong strategic vision for value chain integration and upgrading is crucial.

Emphasis on FDI should not detract from leveraging domestic investors. A coherent support package is needed, including linkages to buyers, to ensure they can participate in GVCs. The Sri Lanka case study is illustrative of such policies and shows how policy packages should change with time and capability levels.

5.3 Export Promotion for Targeted Markets

Governments can play a critical role in expanding relationships with new global buyers and end markets. This includes government support for industry participation in international fairs and national branding efforts. Market diversification also involves targeting niche markets or sustainability standards intensive markets. Niche markets for high-quality products require high-quality institutions and the establishment of multistakeholder platforms.
5.4 Services and Upgrading

Services are more than just another sector. They are integral to, and play multifaceted roles within, GVCs. Services are essential inputs and highly profitable value-added tasks, and they can support the attainment of SDGs. Two aspects of services stand out: the tasks where developing countries’ firms have struggled to upgrade are service-related (e.g. product development, marketing); and participation and upgrading in GVCs requiring access to services inputs that are usually outsourced. Some inputs are acquired using existing networks (telecommunications), and others are outsourced to third parties. Competitive access to these inputs is essential to promote participation and upgrading in GVCs.

Upgrading strategies should be based on a detailed understanding of services sectors in which liberalisation and regulations are instrumental to value chain competitiveness, and in which increased services exports and imports support goods exports.

5.5 Policies to Support Firm Competitiveness

Governments need to intensify skills development through TVET for production workers, supervisors, and machine operators. Management training and knowledge sharing on basic and world-class operational activities are also required. Customised, specific training programmes should be offered on the basis of tax or matching grant schemes, in-house or through third parties. Supporting access to external consultants can help connect firms with world-class management programmes. Governments should also consider cluster development initiatives and supplier development programmes. Moreover, countries can target increases in domestic value added by attracting foreign firms and supporting local enterprises in key supply links.

5.6 Policy Support to Help Firms Meet Standard Requirements

Policy support is crucial to ensure that standards compliance leads to inclusion and not exclusion of smaller producers and workers. There are four sets of support measures that can be of assistance here:

- Promoting inclusion through addressing information failure, subsidising certifications costs, and targeting vulnerable segments that can be excluded by strict standards adherence.
- Building dynamic capabilities through providing specialist business services required to help producers meet and implement standards compliance.
- More effective monitoring of standards throughout the chain in order to uncover instances where conformance is achieved by actively excluding some workers and producers from formal incorporation in the chain.
- Promoting access to alternative markets with lower barriers to entry in order to allow smaller producers to build up their capabilities in less demanding markets.

5.7 Outreach Programmes for Small-Scale Producers

The quality of tea exports is the single most important ingredient in the competitiveness of developing country tea exports. While the move from plantation to smallholder organisation is a positive one, particularly in terms of cost and social development, it poses a unique challenge for changing field-level practices. Field practice often needs upgrading to meet new food safety rules, to improve productivity and the quality of tea plucked, and to achieve sustainability goals. The government can complement and coordinate with factory, development agency, cooperative, and other stakeholder programmes in this regard.

5.8 Addressing Trade Facilitation and Infrastructure Constraints

Improving the trade facilitation and the logistics environment is a major way in which developing countries can expand their engagement with GVCs. A priority is developing economic corri-
dors in the context of Aid for Trade. TradeMark East Africa and the East African Community provide an illustrative example of how trade facilitation can address key bottlenecks. This programme includes infrastructure upgrading and legal and regulatory work (hard and soft infrastructure) and, beyond customs procedures and transit, extends to other sources of trade costs, such as non-tariff measures. Global institutions working to reduce trade costs need to work collaboratively with regional economic communities and development banks and private-sector actors to support this kind of approach.

5.9 Institutional Capacity-Building

Government policy is fundamental to support GVC upgrading. Policies should be accompanied by adequate resources, political support, and implementation and monitoring mechanisms. It is important that industry (e.g. domestic and lead firms, associations) is involved from design to implementation, to ensure the policy has buy-in and can be implemented effectively. In some sectors, the establishment of capable, well-resourced, sector-specific agencies responsible for policy design and implementation and coordination of upgrading initiatives has been very effective. This will also ease addressing incoherent policies and regulations.

5.10 Policies Promoting Inclusiveness

To ensure that GVC activity is consistent with sustainable development, policymakers should establish appropriate domestic regulatory structures in areas such as core labour standards, environmental regulations, and anti-discrimination laws (Figure 5). Inclusive development also requires targeted support interventions, which include expanding upgrading and export opportunities for SMEs, skills development for youth, gender-oriented upgrading and skills strategies for women, and access to finance, skills, and infrastructure. Mainstreaming gender policies is essential in order to highlight its importance for inclusiveness, rather than treating women's equality as a separate set of possible goals. Gender inclusiveness in trade, industry, export promotion, training, and GVC intervention policies needs to explicitly take into account such aspects in order to make these policies more effective drivers of sustainable development based on gender equity.

Targeting voluntary sustainable standards can also support inclusive development, if the appropriate measures are put in place to ensure small producers and women are in a position to comply. Governments can harness donors, international organisations, lead firms, domestic industry and foreign investors, and civil society in this respect. Moreover, the research highlights the need for capacity-building in negotiations and mediation skills for government and trade unions to support improved working conditions. Finally, governments should support adoption of clean energy sources and environmentally friendly waste disposal systems, and prepare response strategies to face climate change-induced challenges.
Table 9: Summary of key policy recommendations for economic upgrading and sustainable development

<table>
<thead>
<tr>
<th>Consideration</th>
<th>Policy Recommendation</th>
<th>Sustainable Development</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade negotiations and preferences</td>
<td>Maintain preferential trade schemes and relating rules of origin.</td>
<td>1 10</td>
</tr>
<tr>
<td>Strategic industrial and FDI policies</td>
<td>Build domestic capabilities and partner with lead firms to enhance linkages and spillovers.</td>
<td>1 6 9 10</td>
</tr>
<tr>
<td>Export promotion for target markets</td>
<td>Build relationships with global buyers and diversify end markets, including niche markets.</td>
<td>8 9</td>
</tr>
<tr>
<td>Services and upgrading</td>
<td>Mainstream service in industrial and export strategy.</td>
<td>8 9</td>
</tr>
<tr>
<td>Support firm competitiveness</td>
<td>Targeted skill development for production workers, supervisors, and firm management.</td>
<td>1 4 8 9 10</td>
</tr>
<tr>
<td>Meet standard requirements</td>
<td>Support smallholders and SME compliance with standards, including sustainability standards.</td>
<td>1 8 10 12</td>
</tr>
<tr>
<td>Outreach to small-scale producers</td>
<td>Upgrade smallholder practices in GVCs to meet quality demand and improve productivity.</td>
<td>1 5 8 10</td>
</tr>
<tr>
<td>Trade facilitation and infrastructure</td>
<td>Invest in development corridors leveraging Aid for Trade, reduce trade costs, and target hard and soft infrastructure.</td>
<td>8 10</td>
</tr>
<tr>
<td>Institutional capacity-building</td>
<td>Policy implementation requires adequate resources, political support, monitoring mechanisms, and private sector buy-in.</td>
<td>8 9 10 12</td>
</tr>
<tr>
<td>Promote inclusiveness</td>
<td>Establish domestic labour and environmental regulations and target SMEs, youth, and women for upgrading and export opportunities.</td>
<td>1 5 8 10 12</td>
</tr>
</tbody>
</table>

SDG 1: No poverty  
SDG 4: Good-quality education  
SDG 5: Gender equality  
SDG 8: Decent work and economic growth  
SDG 9: Industry, innovation, and infrastructure  
SDG 10: Reduce inequalities  
SDG 12: Sustainable consumption and production
6. CONCLUSION

GVCs can contribute directly to income opportunities and employment generation. However, a critical look must be given to the processes set in motion by GVC participation to ensure that the latter results in long-term economic transformation, technological upgrading, and broad-based development; and inclusive development for workers, women, and small producers and environmental sustainability.

Leveraging GVCs for economic transformation and upgrading into more sophisticated products, processes, and tasks requires government strategies that are well-designed, resourced, and implemented. While there is no one-size-fits-all strategy for upgrading and sustainability, past successes and failures provide some reliable lessons. Upgrading strategies need strong political leadership, intragovernmental coordination, and effective engagement with the private sector.

The survey paper shows that FDI is important to accessing capital, know-how, and linkages to global buyers, but technological spillovers and upgrading are not automatic. Governments need to invest in local technological capabilities, incentivise spillovers, and improve infrastructure, among other things. This is particularly important where they can leverage a significant domestic capital base. A deep understanding of the dynamics of GVCs is critical: which end markets, global buyers, FDI sources, and sustainability standards schemes offer the highest opportunities for local upgrading paths? This knowledge should inform trade, industrial, and investment strategies. While GVCs open opportunities for countries to specialise in tasks, policymakers and firms should aim to move into higher-value-added tasks, and should assess the opportunities, which will vary on a country basis, to develop local supply chains. If a country wants to move up the value chain, then understanding how value chains are governed and operate is vital to challenge competitors and break into new markets.

While economic upgrading is necessary for the attainment of the SDGs, it is not sufficient. Creating inclusive opportunities for workers, women, small producers, and unskilled youth and improving environmental sustainability all require purposive policies from governments, private firms, and other non-state actors. There may also be trade-offs between different aspects of sustainability that need to be factored into policymaking. GVCs can deliver on the SDGs if policymakers have a strategic and effective vision of how to leverage the lessons from successful countries and adapt them innovatively to their own specific contexts.
REFERENCES

ICTSD Inclusive Economic Transformation Research Programme Case Studies and Papers


Other References


Other recent publications from ICTSD’s Programme on Inclusive Economic Transformation include:

- Service Negotiations in Southeast Asia: Implications for Low-Income Countries in the Region
  Batshur Gootiz, 2018
- Promoting Capability Enhancing Development
  ICTSD, 2018
- Value Chain Upgrading for Competitiveness and Sustainability: A Comparative Study of Tea
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