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Moving up the value chain with South-South cooperation for trade and technology? An analysis of India's trade with East Africa

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Abstract

Purpose – The purpose of this paper is to provide an early assessment of India's South-South cooperation for trade and technology (SSTT) with East Africa, focusing on Ethiopia, Rwanda, Kenya, Uganda and Tanzania. It aims to analyse the role of SSTT in providing support to targeted sectors.

Design/methodology/approach – The paper examines SSTT, focusing on India and East Africa over a specific period (2000–2016) of its emergence, and extends the public sponsorship literature in international business (IB) to better understand the relationship between SSTT and value addition – applying to a particular case study of SSTT interventions in spices.

Findings – The paper highlights SSTT as a pathway to support value addition in global value chains (GVCs). Trade between India and East African countries has grown, with three developments over the period of analysis in particular: shifting trade patterns, growing share of intermediate goods trade and differences in GVC insertion. However, East African exports are largely of lower value. Capacity building to support processing capability and thriving markets can encourage greater value addition. Preliminary findings suggest early gains at the margins, as SSTT interventions have been focusing on capacity boosting with buffering and bridging mechanisms for increased volume of trade. Moving up the value chain however requires that specific value-enhancing activities continue to be targeted, building on regional capacities. Our high-level case study for spices suggests that activities are starting to have a positive effect; however, more focus is needed to specifically target value creation before export and in particular higher levels of processing.

Practical implications – While findings are preliminary, policy implications emerge to guide SSTT interventions. There is capacity for building higher value-added supply chains as is evident among East African countries that trade with each other – future SSTT programmes could tap into this and help build

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capacity in these higher-value value chains. Future SSTT programmes can take a comprehensive approach by aiming at interventions at key points of the value chain, and especially at points that facilitate higher value addition than initial processing. An example is that Ethiopia and Rwanda are likely to benefit from an expanded spice industry, but the next phase should be towards building processing for value-addition components of the value chain, such as through trade policies, incentivising exporters to add value to items before export. From a development perspective, more analysis needs to be done on the value chain itself – for instance, trade facilitation measures to help processers engage in value chains and to access investments for increasing value add activities. (iv), Future research should examine more closely the development impacts of SSTT, namely, the connection between increased trade, local job creation and sustained innovation, as it is these tangible benefits that will help countries in the Global South realise the benefits of increased trade.

Originality/value – The paper underlines how the SSTT approach can contribute to the critical IB and GVCs literature using a theoretical grounded approach from public sponsorship theory, and with a unique lens of development cooperation between countries in the global south and its emerging impact on development outcomes in these countries.

Keywords South-South, Trade, Technology, Development, Value chain, Value addition

Paper type General review

1. Introduction

With rapid economic growth witnessed by economies in the global south, their participation in global value chains (GVCs) has received increasing attention in recent decades. The early consensus was that GVCs benefit all participating countries (Baldwin and Robert-Nicoud, 2014), with those engaging in GVCs growing on average 2% faster than those not engaging (ICTSD, 2016), especially facilitating economic development in the global South (Bernhardt, 2016). More recent international business (IB) literature has argued that Southern economies in GVCs may face the risk of getting stuck in lower value-added production and primary goods exports where they have been historically positioned (Franssen, 2019). Unless firms in these countries can be engaged in a continuous process of change, innovation and ultimately value addition (henceforth "*moving up the value chain*"), economic gains remain limited (Giuliani *et al.*, 2005; Kaplinsky, 2010; Fernandez-Stark and Gereffi, 2019) [1].

Facing the challenge of value addition and adapting to the realities of GVCs to truly realise economic benefits (Taglioni *et al.*, 2016) is no easy task. In particular, South-North trade requires greater preparedness to comply with stringent standards. It has been argued that Southern economies and particularly small firms in these countries find it easier to participate and engage in Southern value chains, especially as the first step towards GVC integration (Kaplinsky and Farooki, 2011; Mohanty *et al.*, 2019, p. 14). Studies have also shown that standards in the South exist, but are still evolving relative to those in the Global North (Nadvi, 2014). Hence, building capacity for processing and manufacturing that is internationally competitive, whether for North-South or South-South trade, requires targeted support to encourage trade, facilitate investments and provide technical expertise (Mohanty *et al.*, 2019; Saha *et al.*, 2019, 2020).

South-South cooperation has become increasingly important in its role of providing such support towards increasing value addition and participation in GVCs through mutually beneficial partnerships (UNCTAD, 2018; Horner and Nadvi, 2018), targeting trade and technology in particular (henceforth *South-South cooperation for trade and technology* or SSTT) [2]. SSTT focuses on using existing trade strengths towards boosting trade in selected value chains through exchange of technology and knowledge flows, contributing to increase in value of business transactions, firm's productive capacities and enhanced incomes for partner countries (ITC, 2019, p. 2). India-East Africa trade has generated much interest (Cheru, 2016; Horner, 2016; Franssen, 2019; Gakhar and Subir, 2015), growing eight-fold from US$7.2bn in 2001 to US$59.9bn in 2017 (EXIM India, Afreximbank, 2018, p. 6),

allowing both Indian and African partners to explore opportunities for diversifying in terms of trade destinations (EXIM India, Afreximbank, 2018, p. 6). India has been building further on this trade potential with the East African region to boost its own and partner country exports, including by investing in developing capacity and value chains in East Africa (Mohanty *et al.*, 2019; Banga and Saha, 2016).

An SSTT programme is the Supporting Indian Trade and Investment for Africa (SITA) that ran from 2015–2020, with the overall objective of encouraging value addition in East Africa [3], providing a unique opportunity to draw concrete lessons towards furthering SSTT as an economic cooperation model. SITA focused on facilitating partnerships between Indian and East African firms to encourage investments by providing opportunities for knowledge transfer and exchange through trainings, business-to-business meetings, exposure missions and institutional strengthening. Small- and medium-sized enterprises (SMEs) were supported to transition from early-stage processing to expanding their activities towards including more downstream stages in their value chains. However, assessing the impact of such South-South initiatives has been challenging (Li, 2018; Saha *et al.*, 2020).

The IB literature has argued that South-South trade partnerships present certain benefits over traditional North-South trade, and especially as a stepping-stone to greater value-addition (Lee and Gereffi, 2015). This perspective builds on Southern partners operating in similar environments, and so being more aware of common issues such as infrastructure and investment challenges and knowledge gaps, and therefore sharing lessons learnt across borders to improve trade and economic systems. Despite the overarching interest in South-South partnerships for trade, a systematic conceptual framing of the relationship between SSTT specifically and its impact on organisational growth and value addition is needed, particularly with applications, even if early or limited in coverage, to recent initiatives to draw lessons for the future of South-South cooperation for trade.

This presents the question:

Q1. How do SSTT interventions support organisational outcomes for firms in the Global South that ultimately encourages value addition?

To contribute towards a framework on SSTT, this article draws from theory of public sponsorship (Mahoney *et al.*, 2009; Schwartz, 2009; Amezcua *et al.*, 2013; Autio and Rannikko, 2016) to better conceptualise the relationship between SSTT and value addition based on Southern firms upgrading in GVCs. The GVC perspective on upgrading focuses on moving towards higher value-added activities (Ponte and Ewert, 2009), from basic functions to more advanced ones, with different types of upgrading (Fernandez-Stark and Gereffi, 2019; Humphrey and Schmitz, 2002): process and product, towards new or more sophisticated products or methods of production; functional, toward higher value-added activities within the value chain; and inter-chain, towards more technologically advanced chains or industries. The literature emphasising synergies between IB and GVC studies (Sinkovics and Sinkovics, 2019; Sinkovics *et al.*, 2018), and the focus of the GVC literature on different global linkages that can spur the development of capabilities and resources (De Marchi *et al.*, 2020), presents the opportunity for investigating how South-South linkages might be influencing upgrading dynamics.

This article examines SSTT, focusing on India and East Africa over a specific period (2000–2016) of its emergence, and extends the public sponsorship literature in IB to frame the relationship between SSTT and value addition – applying to a particular case study of SSTT (**Appendix 1** provides a brief note on methods). Firstly, we examine SSTT for India-East Africa and focus on implications of three developments over the above period in

particular: shifting trade patterns, growing share of intermediate goods trade and differences in GVC insertion. Secondly, we extend the public sponsorship literature in IB (Mahoney *et al.*, 2009; Schwartz, 2009; Amezcua *et al.*, 2013; Autio and Rannikko, 2016) to show how SSTT interventions support new organisational outcomes for firms in Southern economies, contributing to greater value addition in GVCs; looking in detail into SSTT interventions in spices. We conclude with a discussion on how public sponsorship functions can add a critical basis for examining SSTT and value addition, drawing lessons that could inform the future direction of research on South-South trade in the critical IB literature.

2. South-South cooperation for trade and technology, global value chains and India-East Africa

2.1 The case for South-South cooperation for trade and technology

Participation in GVCs is a priority for many nations in the Global South, achieved through specialising in specific tasks, attracting investors and sourcing foreign inputs for export production (Mohanty *et al.*, 2019, p. 12). The share of intermediate products in trade has increased greatly and now represents the majority of countries' trade (Miroudot *et al.*, 2013). Around 60% of global trade is in intermediate goods and services that are needed at various stages in a production process (Taglioni *et al.*, 2016, p. 122). It is however the process of value addition that provides the greatest economic return [4], with the idea that developing countries should gradually move away from the export of raw commodities and include more downstream processing activities [5].

The move towards processing and manufacturing activity is deemed as key to economic development owing to some salient features of these activities. Firstly, a vast literature has found manufacturing growth to be associated to economic growth (Szirmai and Verspagen, 2015) and unconditional convergence (Rodrik, 2013), with access to foreign demand, enabling economies of scale, providing opportunities for capital accumulation and with strong linkages favouring productivity spill-overs in other sectors (Hirschman, 1958; Kaldor, 1968; Szirmai, 2012). Yet, several Southern economies face challenges in GVC integration and value addition and that stem from scale and productivity.

Secondly, beyond the specific advantages of a growing industrial sector for the domestic economy, the so-called Prebisch–Singer hypothesis posits that commodity prices will be degrading with respect to manufactured goods (Prebisch, 1959), with strong empirical support (Harvey *et al.*, 2010); moreover, commodities often have low income elasticity, which means that as foreign trade partners' incomes grow, their demand will shift towards other products, such as manufacturing goods with higher income elasticity (Cimoli *et al.*, 2010).

Furthermore, more recently, the literature on GVCs explored the potential of domestic linkages emanating from natural resource industries, based on the extent that these provide opportunities for export diversification in backward linked sectors, allowing countries to include processing activities (Morris *et al.*, 2012), as well as upstream services and equipment (Bontadini *et al.*, 2019). Africa, for instance, with rich natural resource endowments but relatively weak industrial production, imports a very low share of intermediate goods and services, albeit the share is higher in exports. This is further exacerbated by fundamental problems related to infrastructure and institutions that should be a key priority for development programmes.

In this context, the potential for SSTT has generated much interest in the literature (Hanlin and Kaplinsky, 2016; Cheru, 2016; Horner, 2016; Franssen, 2019; Gakhar and Subir, 2015), presenting certain benefits as a stepping-stone to greater value addition, over traditional North-South partnerships. A recent ITC report found that southern value chains also allow southern firms to capture on average 25% of a chains total value, higher than that for North-South chains due to fewer specialisation opportunities (Mohanty *et al.*, 2019, p. ix).

Partners are realising that while northern partners provide access to markets and technology spill-overs, it is far from being an automatic process (Blalock and Veloso, 2007; Pack and Saggi, 2001), southern partners provide greater opportunities for firms to move up the value chain (Mohanty *et al.*, 2019, p. ix). Hence, while North-South value chains continue to offer opportunities, Southern countries are learning to explore advantage of the complementary offerings across North-South and SSTT.

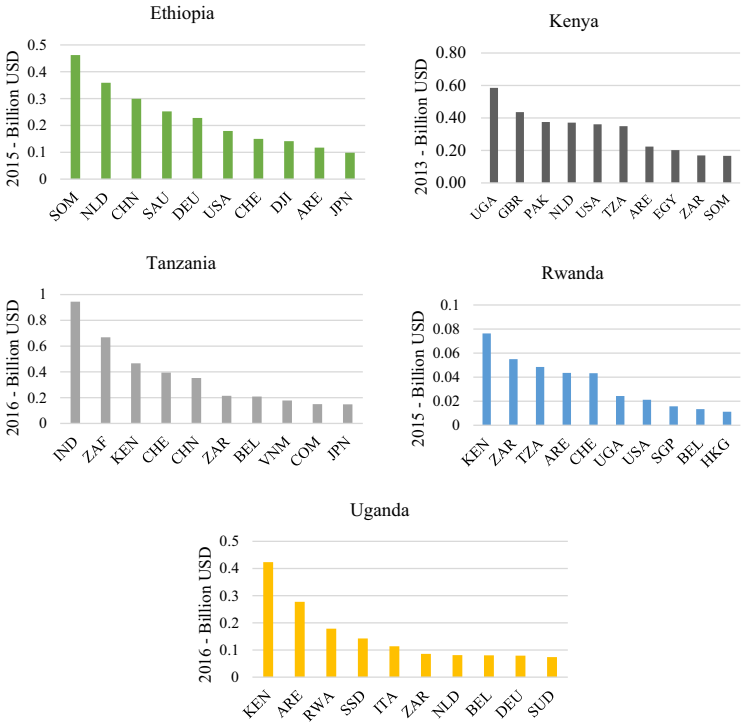
2.2 South-South trade: India and East Africa

2.2.1 Shifting patterns. India's top export destinations mirror the gravity model, with bilateral trade proportional to GDP, and inversely proportional to the geographic distance between them (Anderson and Van Wincoop, 2003). Firstly, overall, it is no surprise that East African countries were not among India's top export destinations recently (2012–2016), given its much larger economic size, and that it is not geographically close. India's top ten export destinations (ranked based on 2016 levels) included a combination of high-income and middle-income economies. While the USA was the largest with US$42.7bn in 2016, United Arab Emirates was second with US$29.5bn, followed by Hong Kong. China (CHN) unsurprisingly, ranked fourth in the top export destinations, arguably due to its large size and its pivotal role in GVCs (Baldwin and Lopez-Gonzalez, 2015), followed by Singapore, the UK, Germany and Saudi Arabia ranked tenth with US$5.7bn in 2016. However, towards the end of the same period (2014–2016), we find some developing economies increased in prominence as India's export destinations – Vietnam (VNM) from 2014–2016 and Bangladesh (BGD) from 2015–2016. These trends are quite interesting and reflect the integration of these two countries in GVCs in the region, and arguably due to the fact that China had started shedding lower value-added activities that were taken on by other developing economies in the region (Giroud, 2007).

Secondly, India became prominent as an export destination for many East African countries in the past decade, given its large economic size, attracting exports, despite constraints that may stem from distance. However, patterns differed across countries in the early period of analysis (Figure 1). For Ethiopia – high-income economies were among the top destinations, especially Germany (DEU) and Japan (JPN), and geography played a role, with closely located countries such as Somalia (SOM) ranking very high (Djibouti ranked high in early 2000s), but none of the other East African countries was top ten destinations in the same period.

Kenya, in contrast, showed striking differences, with its key export destination being Uganda (UGA), consistently throughout the observed period; Tanzania (TZA) also ranked in the top five exports destinations, and the ranks included other developing countries from East Africa. Kenya also featured as a key export destination for all of our countries of interest, except Ethiopia. This suggests that Kenya was already significantly more integrated with the African economy than Ethiopia, indicating that Kenya was at the centre, or at least an integral part of regional value chains.

Tanzania's exports exhibit a fairly similar pattern to Kenya, with quite a few African countries among the top destinations, especially South Africa (ZAF); though similar to Ethiopia, high- and middle-income countries dominate export destinations, especially Switzerland (CHE), France (FRA) and China (CHN), we also note Kenya as an increasingly prominent export destination for along with India by 2010–2013. Rwanda was also highly integrated with other countries in the region, specifically with Tanzania and Kenya – as a small economy, it trades intensively with neighbouring countries, and, a large country such as India, separated by greater distance, did not represent an important export destination. Lastly, Uganda also featured as a high-ranking export destination, with exports to Kenya, playing a significant role throughout the period of analysis, and, Rwanda also rose as an export destination, from 2007–2016, after Kenya and the United Arab Emirates.



Source: Author's own using WITS data. Country codes attached in Appendix 2

Figure 1.
Top export destinations across East African (SITA) countries (US$bn)

Overall, these results confirm the importance of size and geographic proximity, which the literature has identified as key determinants of trade in East Africa (Oparanya *et al.*, 2019). Interestingly however, two different patterns, albeit consistent with gravity theory, emerge from this descriptive evidence. Firstly, Ethiopia was trading with countries that were geographically distant, but with a large economic size that provided significant demand, hinting to the possibility that developing countries can indeed insert themselves in GVCs and gain access to the global economy (Baldwin, 2012). Secondly, however, a more common pattern among other countries indicates that trade flows follow geographic proximity, and not only economic size, that from a GVC perspective is consistent with the fact that most GVC are regional (Los *et al.*, 2015), presenting alternative economic upgrading pathways where Southern lead firms have opportunities for functional upgrading (Bazan and Navas-Alemán, 2004; Morris *et al.*, 2011). This prima facie evidence of the existence of regional GVCs in East Africa (Foster-McGregor *et al.*, 2015) mitigates recent concerns about the performance of GVCs in this region (De Melo and Twum, 2020), defying the idea of "flat-world" (Friedman, 2005) in which geographical proximity is irrelevant (Meliciani and Savona, 2015; Amador *et al.*, 2018).

2.2.2 Growing share of intermediate goods trade. Comparing East African exports (2000–2015) to India relative to exports to the world using the Broad Economic Categories (BEC) classification (Figure 2) [6], we find that intermediate goods were the majority of most

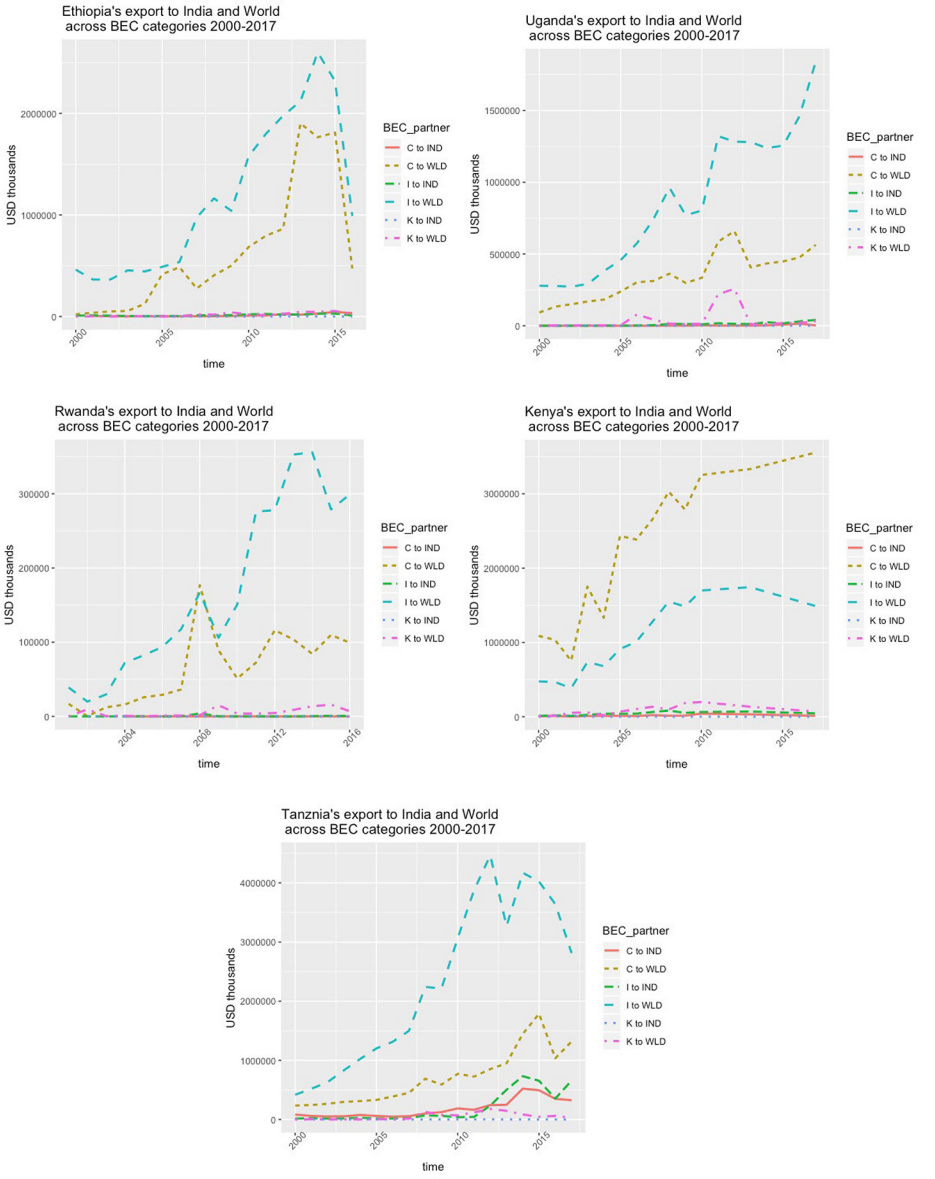


Figure 2.
East African (SITA) countries' exports to India and world (USD '000 s)

Notes: Based on raw data from WITS, compiled using R. "C", "I" and" K" stand for consumption, intermediate and capital goods respectively. Country codes attached in Appendix 2

East African country exports to India, with consumption goods often being a large share of the mix for some countries. By contrast, and despite the significant growth in trade we have discussed so far, East African countries were not yet specialising in export of capital goods. This is important to note for capital goods as a driver of economic development, signalling shifts in countries' production structure through larger capital endowments and higher total factor productivity (Mutreja *et al.*, 2014; Stiglitz *et al.*, 2013).

Exports of consumption goods roughly exhibit the same pattern across all countries, with sharp fluctuations from 2015–2016. By contrast, we see that the export of intermediate goods is increasing, despite some volatility, especially in Tanzania. Kenya represents an exception to this since exports towards India have been declining since 2010. Ethiopia also sets itself apart, as it is the only country that exports more consumption goods than intermediate ones, and for a sustained period of time, i.e. from 2012 onwards. In terms of volume, Kenya is the largest exporter to India among the five East African countries here, followed by Tanzania, also reflecting the overall size of each economy. Looking at the detail behind the category of intermediate goods, the increase in exports of these goods does suggest that majority of the country's exports are located upstream.

When we compare East African country export flows between India and those to the World, East African countries exhibit a high degree of volatility. We observe, for example, a sharp decline in Ethiopia's exports in 2015, Rwanda's in 2008 and Tanzania's in 2014. Uganda appears to experience a surge in exports between 2010 and 2013 across all goods categories, including capital goods; however, in 2013, export of capital goods is back at earlier levels. This volatility also suggests that exports may be competitive on cost rather than quality – often termed as "Schumpeterian rent" (Kaplinsky, 1998). Interestingly, all countries, except Kenya, export more intermediates than consumption goods, which again hints to some differences in the extent of their integration in the global market.

To understand the position for East African countries within GVCs, and in relation to India, we also look at countries imports, both from India and the world (Figure 3). Overall, it can be noted that India provides primarily consumption goods to most of the countries, and while these countries tend to import large shares of intermediate goods, suggesting linkages with GVCs, these are not necessarily with India. Ethiopia, Kenya and Rwanda exhibit similar patterns in importing goods for intermediate and consumption goods. While import flows have increased steadily over the period of analysis, we observe a slowdown at the end, with Ethiopia witnessing a decrease across all three BEC categories. Ethiopia however sets itself apart as an import destination: in 2010, all three goods categories have similar levels around US$100m. While India's export towards the other East African countries were characterised by an increase in the export of consumption goods, we observe in the case of Ethiopia, a large increase in the export of intermediates, which then decreases again in 2013. Consumption goods also follow a similar pattern, but they remain constantly at lower levels than intermediate goods. Capital goods represent a smaller share of India's exports, with an increase in 2009 and then plateauing until the end of our observed period.

Kenya and Rwanda show a prevalence of imports of consumption goods, rather than intermediate goods from India. Imports between these two countries and India differs significantly from what they import from the rest of the world. This could be related to how Kenya and Rwanda are inserted into global markets: India represents for them mainly a source of consumption goods that are likely to be consumed domestically, though we cannot exclude that they will be re-exported again. By contrast, the fact that Kenya and Rwanda import a large share of intermediate goods signals that they are part of GVCs, where the goods they import are going to be used in a production process that will lead to finished (or more elaborated intermediate goods) for either the domestic or global market.

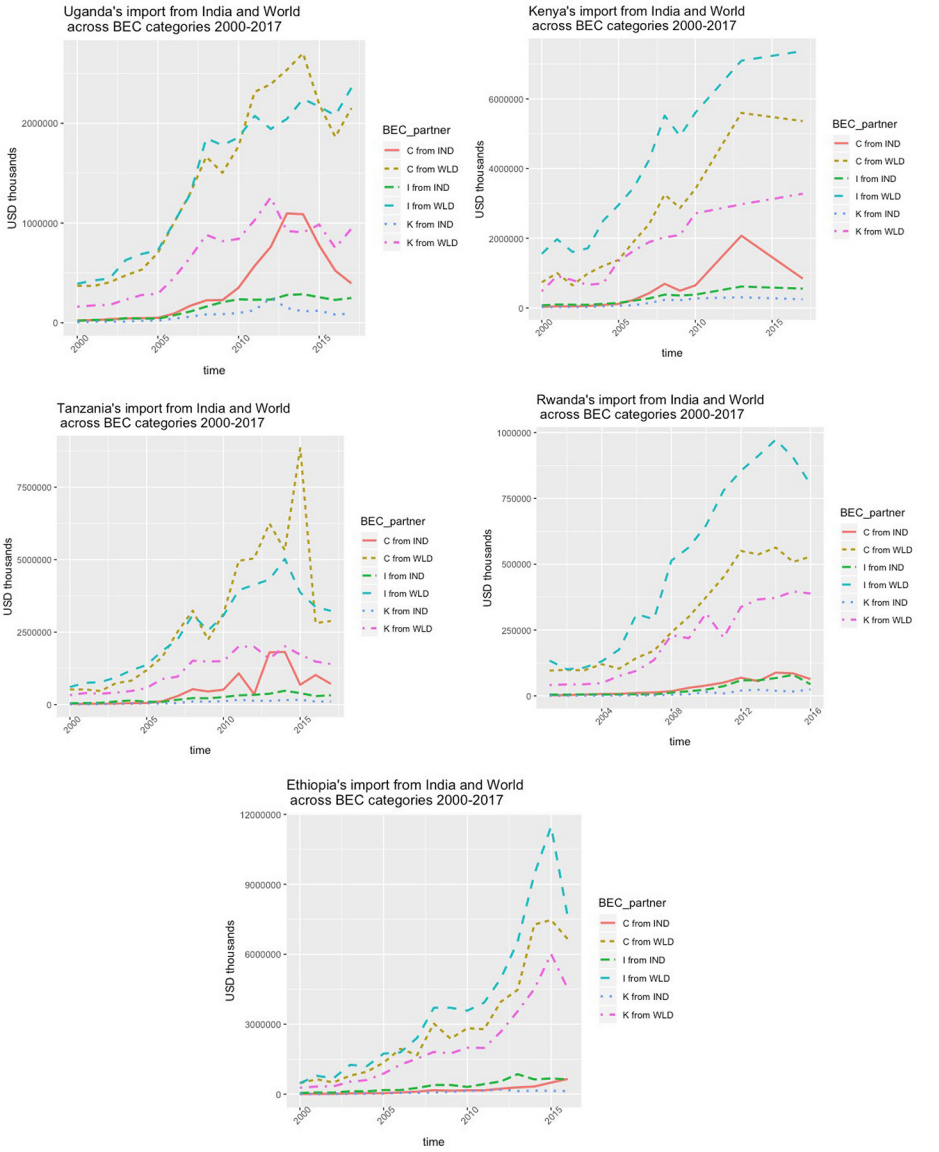


Figure 3.
East African (SITA) partner imports from India and world (USD '000 s)

Notes: Based on raw data from WITS, compiled using R. "C", "I" and" K" stand for consumption, intermediate and capital goods repsectively. Country codes attached in Appendix 2

Tanzania and Uganda also have roughly similar patterns, though with some significant differences. Both countries show consumption and intermediate goods, making up the two top shares of import from the world, with the former exhibiting some significant volatility, declining sharply at the end of the period of analysis, especially Tanzania. We also observe that import of consumption goods from India represents a very large share of the import in this category of both Tanzania and Uganda, reaching higher levels than the import of capital goods from the whole world. So, in contrast to the other three SITA countries, Uganda and Tanzania show the same pattern of import for both India and the world, with India being a very important origin of imports for these two countries, especially in consumption goods.

2.2.3 Differences in global value chain insertion – India and East African countries. The larger proportion of intermediate products for East African countries exports and imports reflects their emerging participation in GVCs since 2000s, albeit in rather upstream sections of GVCs (Foster-McGregor *et al.*, 2015; De Melo and Twum, 2020). To assess the extent of value addition in these products, and countries' exact positioning in GVCs, we look at East African countries top export products at the HS six-digit level (Figure 4), in terms of top exports (focusing on changes/trends), we find that these are primarily raw materials or lower value-added commodities.

Ethiopia's top ten exports were mainly concentrated in commodities that are low complexity and lower value added, and main export products (at HS six-digit) include coffee and other agricultural items, with a significant rise in export of cut flowers by 2014–2015. Kenya's exports are also concentrated in agriculture commodities, especially tea and coffee, and much like Ethiopia, cut flowers represent a large share of Kenya's exports, with a significant difference being that Kenya's export basket includes a few manufactured, or partly manufactured products such as products of iron, carbonates and peroxocarbonates, and women's or girls' suits.

Tanzania's exports are similarly concentrated around commodities and natural resources, especially extractive ones, and gold was consistently ranked as the first export product, and precious metal ores and concentrates as well as manganese ores and concentrates; and, by 2016, there were no manufactured products in its export basket with the exception of apparatus for television. The other commodities that were being exported seem to undergo little to no value addition – tobacco is exported "unmanufactured", and cotton is neither carded nor combed. Hence, generally, Tanzania was facing capacity challenges in trading in goods beyond low value-added and unprocessed commodities.

Rwanda's export products exhibit a fairly similar pattern as Tanzania, with low export specialisation in manufactured products, though with arguably slightly greater specialisation in the mining industry – "Niobium, tantalum, vanadium or zinc" is a key export, along with "tin, tungsten, and gold ores". Apart from these, agricultural produce such as tea and coffee also represent important exports.

Uganda's export basket was dominated by commodities, either from mining or agriculture. It is interesting to note that from 2004–2010, Uganda integrated some manufactured goods such as "Portland cement, aluminous cement", "transmission apparatus for radio-television", "flat-rolled products of iron" and "other tubes, pips and hollow profilates" in its export basket. However, by 2016, Uganda was still exporting mainly agricultural commodities, fishery products and cement was the only manufactured product.

Oil stands as the largest product in terms of imports for the above countries, with very similar patterns, despite the differences in terms of export destinations and imports origins. Other products accounting for large shares of imports are more complex value-added items such as "motor vehicles", "aircrafts", "electrical apparatus" and "medicaments". This shows

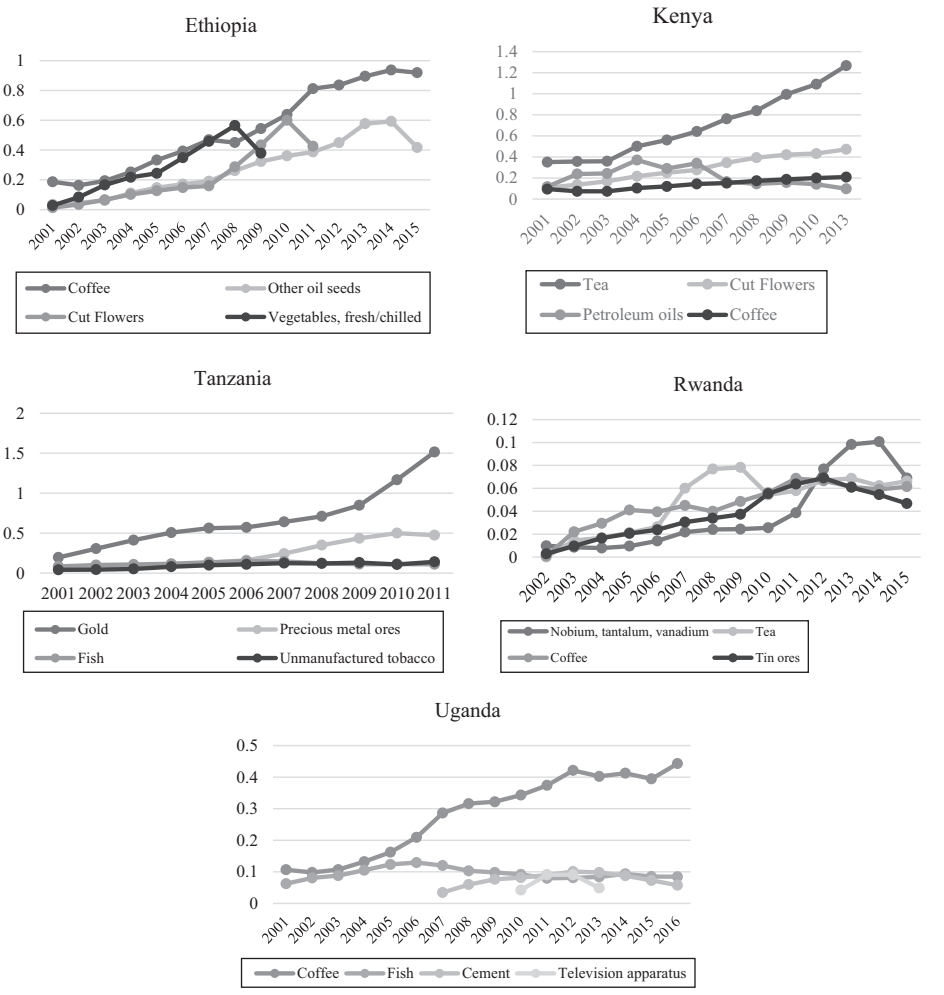


Figure 4.
East African (SITA) countries' main export products (US $bn)

Notes: Based on raw data from WITS in Billions US$, analysed using R, with products in each year as three-year rolling averages. Top products with reference to most recent years presented here

that while exporting low value-added products and commodities, largely from the agricultural and mining sector, these East African countries tended to import much more sophisticated inputs such as capital goods or high value-added consumption goods. Additionally, Kenya has been discussed as a "hub", importing from countries outside the region – among which India – and exporting to neighbouring countries such as Tanzania and Uganda, the country's pattern in terms of traded products shows an asymmetry between high-tech and capital goods imported and exports heavily concentrated in commodities.

On the other hand, looking to India's export products – these consist of diamonds, oil, medicaments, articles of jewellery, iron ores and rice as top products (Figure 5). In the early 2000s, the textile sector represented a large share of India's export – products such as "cotton yarn", "women's or girls' suits", etc. By 2016, however, we observe a surge in the export of more complex products such as "motor car parts" and "medicaments". On the other hand, India's import mix comprises both intermediate and capital goods. Together with the fact that India imports mainly from large and/or high-income countries, this further evidence suggests that the country is increasingly integrating in GVCs with lead firms (Banga and Saha, 2016; Das and Gupta, 2019). It is particularly noteworthy that there has been a shift from intermediate low value-added products towards more technology-intensive capital goods.

Furthermore, India's participation in GVCs is radically different compared to the East African counterparts, and the above patterns show India is now specialising in manufacturing activities, with increasing sophistication in certain products. The concentration of export in commodities has been recognised in the literature to expose countries to price fluctuations and is associated with poor economic performance (Havranek *et al.*, 2016; Harding and Venables, 2016; Torvik, 2001).

2.3 Supporting Indian trade and investment for Africa interventions in spices

The SITA programme was created following emerging opportunities discussed above, suggesting that interventions furthering SSTT have been based on identifying existing capacity, albeit where there is a need for support towards value addition and moving up the value chain. SITA targeted specific products for capacity development and growth. The spices sector presented existing capacity in East Africa, and possibilities towards building processing for value addition. The scope of spices (classified as four-digit HS code 0910) consisted ginger, turmeric, chili and rosemary (ITC, 2019) – with the aim of boosting capacity and advancing value addition in these products in East Africa.

SITA targeted interventions for spices owing to a variety of reasons. Firstly, for East Africa, and for Ethiopia and Rwanda in particular, there were potential benefits from an expanded spice industry, but this required building processing capacity for value addition such as through trade policies. Secondly, owing to its importance in the context of India – being one of

Notes: Based on raw data from WITS in US$, analysed using R, with products in each year as three-year rolling averages. Top products with reference to most recent years presented here

Figure 5. India top export products (US$bn)

the largest consumers of spices and importing vast amounts to satisfy home demand, and, India had been struggling with its own spice industry, suffering from reduced yields due to degraded soils from overuse (Schramm, 2019) and expanding capacity of its East African trading partners was also clearly in India's interest, while complimenting development objectives in both Rwanda and Ethiopia (Schramm, 2019, p. 5) – suggesting mutual benefits. Third, there is also an acute shortage in the global supply of spices with growing demand, which has resulted in higher prices on global markets (Herms, 2015, p. 6).

Rwanda's climate and soil conditions are favourable for spice cultivation (Schramm, 2019, p. 6), and Ethiopia has vast amounts of uncultivated land that has been vouched for expanding production of its already thriving spice industry (Mekuria, 2016). However, while Rwanda at the time had a very small spice industry, Ethiopia had a strong existing spice trade, including with India, exporting US$7.8m in 2016, compared to Rwanda's US$0.01m. Both, Rwanda and Ethiopia, however, had high potential for growth in these products, with large amounts of arable land and a strong agriculture sector. Ethiopia, for example, had an approximate 122,700 ha of land for spice cultivation from an estimated 3.7 million ha of available land that the government identified for foreign and local investment into agriculture, including spices (Mekuria, 2016, p. 19).

3. A public sponsorship framework of South-South cooperation for trade and technology

It has been shown that southern value chains allow southern firms to capture greater value and move up the value chain (Mohanty *et al.*, 2019, p. ix). This argument has been specifically focused where there have been emerging opportunities that were identified and are being furthered, as in the case of India and East Africa.

But with firm-level capacity gaps, interventions are needed to support new organisational outcomes in the Global South. SSTT has been targeted to this role towards improving organisational outcomes through partnerships between firms and institutions, and firm-to-firm. These aim to support partner countries to move from raw material exports to raw material processing and even manufacturing, with the ultimate aim of encouraging value addition. Achieving this transition has the potential to overcome constraints for a country's balance of payments (Thirlwall, 2012) [7]; create jobs with increased demand for manufacturing (Szirmai and Verspagen, 2015; Rodrik, 2012); and strengthen spill-over effects of foreign direct investments (Amendolagine *et al.*, 2017; Farole and Winkler, 2014).

Public sponsorship theory (Mahoney *et al.*, 2009) advances two mechanisms for supporting existing firms: "*buffering*" – resources to shelter fledgling firms against adverse effects of internal resource scarcity and external resource dependencies through subsidies and resource provision; "*bridging*" – facilitating the connectivity of new firms with important external stakeholders through networking activities, field building, referrals, etc. SSTT provides buffering and bridging, through resources and creating networks for firms, and facilitating links between firms and institutions across Southern partners and also with third-country partners.

However, it has been argued that such SSTT support must be tailored (Franssen, 2019; Mohanty *et al.*, 2019) – in fact, unless specific areas of value chains are targeted, there will be limited development in organisational capacity to produce and export higher value-added goods. An example of this is support for agricultural processing where several countries in East Africa have a competitive advantage. Extending public sponsorship theory to SSTT, and similar to the arguments advanced by Autio and Rannikko (2016), we add the need for "*capacity boosting*" that is active, hands-on policy such as training and capacity building for

organisational growth beyond resource provision, with demonstrated real impact on new firm growth (Amezcua *et al.*, 2013; Autio and Rannikko, 2016).

There are possibilities for building higher value-added supply chains, as is evident among East African countries that trade with each other based on regional capacities, and as shown in Section 2 of this paper – SSTT programmes tap into these opportunities through a combination of buffering, bridging and capacity boosting. We argue that by taking such a comprehensive approach, SSTT programmes can aim for interventions at key points of the value chain, and especially at points that facilitate higher value addition than initial processing. Especially, as for impact (Saha *et al.*, 2020), the aforementioned functions should be targeted to specific products and sectors. In the next section, we examine the argument of emerging opportunities that led to SSTT interventions for India and East Africa, applying the lens of the extended public sponsorship framework to the case of spices.

4. South-South cooperation for trade and technology and moving up the value chain

4.1 India and East Africa

By 2000s, East African countries were participating in GVCs, though primarily in lower value-added products. India exhibited a different and more dynamic pattern, exporting increasingly more sophisticated finished or intermediate goods. East African countries were importing intermediate and capital goods, and to a certain extent from India, but India emerged as an increasingly important export destination. India's trade with these partners showed signs of growth but was still in its infancy by 2016, with the exception being Tanzania, as India and Tanzania had linkages in textiles and apparel.

While there were increases in overall trade volumes, despite large fluctuations, there had been only a marginal change in the "type" and "proportion" of trade, as categorised by. In fact, the literature on synergies between IB and GVC studies (Sinkovics and Sinkovics, 2019; Sinkovics *et al.*, 2018) has highlighted the importance of upgrading dynamics. But, while East African countries were participating in GVCs, there was no evidence of high levels of intermediate exports or exports of finished or capital goods. This could be for several reasons. Firstly, the final stages of production require greater skills and technology, usually gained through foreign investment, skills transfer and global partnerships (Taglioni *et al.*, 2016). Secondly, there were competitiveness issues, especially with constraints on the ability to produce finished goods at a competitive price globally. Thirdly, geography played a likely role, with little incentive for highly competitive Asian value chains to include East African countries due to the existing competitive countries within the vicinity.

Despite evidence of increase in intermediate goods in East African countries export mix, unprocessed goods still made up a large proportion of overall exports. When we look at products, we find scant evidence of engaging in higher value addition within value chains or moving up the value chain in general. Most prominent exports were of low value, with little change over the period of analysis, and imports consisted of relatively higher-value goods. When we looked at top products exported to India, we find largely unprocessed primary goods. There are however signs of these exports feeding into India's processing needs, but exports seem to be intermediate inputs into higher value chains such as natural gums, vegetable extracts and leather. This suggests building on South-South trade partnerships as a stepping-stone to greater value addition (Lee and Gereffi, 2015).

It is interesting to note that East African exports were feeding into India's value chains, and connections were visible between India's import needs and partner's supply. Discounting India's huge demand for petroleum oils, natural minerals and other high-value items, there were similarities between India's lower value-added product needs and partner

country exports in East Africa. Products such as dried leguminous vegetables are India's top imports, and both Kenya and Ethiopia's second largest export to India in 2010. Other connections included metal scraps and ores, gold and seeds and cereals.

Furthermore, looking at exports between East African countries, we find a very different picture. There were strong trade links among these partners, except Ethiopia, suggesting engagement in regional value chains. In 2017, Kenya's exports to Tanzania were mainly processed goods – including processed foods, electronic items and processed intermediate goods for manufacturing inputs. Likewise, Tanzania's exports to Kenya in the same year had slightly less advanced processed items such as cardboard, wheat flour and packaging, but still with elements of value addition and processing.

It is also important to note the relative importance of the different trading relationships between and within regions. While East African partners were exporting predominantly unprocessed goods to the world, and to India, they were already trading a large proportion of higher-value goods with each other – suggesting existing potential to further build on these. India as an emerging economy stands to benefit by supporting these capacities, especially in meeting rapidly increasing demands in its own market, as well as boosting partner country and own trade. There was hence a robust case for investing in SSTT partnerships between India and East African countries, with specific support for capacity boosting towards meeting gaps in East Africa, especially towards expanding capacity and trade in sectors such as spices (De Marchi *et al.*, 2020).

4.2 The case of spices

While it would be naïve to attribute any positive change directly to early SSTT interventions, we examined the qualitative contribution for the case of spices under SITA to organisational outcomes (Ton *et al.*, 2019; Autio and Rannikko, 2016). The average spice value chain is complex owing to the many processes needed to alter the spices from its raw form. In the case of value addition, there are clearly many steps that need to be developed to arrive to a processed end product. Therefore, SITA activities would have needed to focus on these areas within the value chain to develop value-adding activities further. We assessed the contribution from SSTT by understanding its level of support, as well as understanding the nature of support itself, and its anticipated effects. We identify where the value addition activities were located, and, if hypothetically, the chosen activities would have a positive impact on value added areas in the value chain and what support would be needed.

4.2.1 Ethiopia. Demand for spices in Ethiopia is very high – the country consumes 90% of its produced spices (Herms, 2015, p. 8), so existing agricultural capacity for production is high. India is a prominent destination for its spice exports, with consistent growth across years. In 2016, Ethiopia was the top country for exports by value (US$2.95 m); however, Ethiopian spices accounted for only 0.05% of India's total spice imports. At the same time, the EU and the USA, other large global importers of spices, do not register among Ethiopia's current export destinations. What is however clear is that India, EU and the USA are investing in strengthened capacity in Ethiopia, suggesting that if this is achieved, there is a large global market that can be tapped in to, likely achieving economies of scale and increasing productivity and wages.

Ethiopia witnessed rising foreign direct investment net inflows, from US$288m in 2010, to just over US$4bn by 2017 [8]. In the spices sector, the largest global importers of spices had been investing in Ethiopia, with particular interest from The Netherlands, which made up 39% of the EU's total spice imports in 2015 (US$136m of US$345m, respectively). The Netherlands even developed its own trade development programme, the *Ethiopian Netherlands Trade for Agricultural Growth* (ENTAG) programme, that promotes trade

between the two countries and works to boost productivity in Ethiopia's spice sector (ENTAG, 2018, p. 6). In fact, the ENTAG programme had been running alongside SITA, with the aim of supporting Ethiopian spice exports in meeting EU regulations (ENTAG, 2018, p. 5) [9]. ENTAG had some success that coupled with its investment promotion (Herms *et al.*, 2015) suggests that uptake of Ethiopian spices in EU imports is likely. Other notable countries investing in Ethiopia's spices sector include the USA, China and Saudi Arabia (ENTAG, 2015).

Under SITA, interventions were targeted to increasing quality of turmeric in Ethiopia. Ethiopian turmeric was found to have high quality potential, but post-harvest handling practices faced several issues, damaging the colour and overall value of the turmeric exported. In this case, SITA began by providing buffering and bridging mechanisms, working with early-stage Ethiopian processors to improve the post-harvest handling process, aimed to increasing the quality of the final product. In doing so, interventions first provided resources to improve processing capacity. This was followed by bridging through new connections for Ethiopian firms with firms in India – for example, an Indian spice processing company starting to source Ethiopian turmeric to process into dietary supplementary tablets to be sold in the USA and EU (Saha *et al.*, 2020). SITA interventions then focused on capacity boosting by providing training to Ethiopian processors.

In this case, the area of the value chain targeted were the first stage processors – post-harvest handlers. The intervention worked to improve the quality of exported products, increasing the overall price on international markets and demand for Ethiopian turmeric. However, the key value-added activities during the programme appeared to be carried out primarily by the Indian processing firm once exported to India. So, while the public sponsorship mechanisms were implemented in this case in a phased manner, to move to higher value added with a consistent pattern would likely require time and continued support interventions.

4.2.2 Rwanda. During the period of analysis, the capacity for spices exports in Rwanda appeared small. Rwanda's spice exports of 2014 and 2015 followed a similar pattern to Rwanda's wider exports, by focusing on nearby East African countries. Rwanda however received strong investment from India to the sum of US$23m, with up to US$80m anticipated in 2020 (Venuprasad *et al.*, 2018).

Rwanda has a more government-led approach to agricultural development, with 70% of the population engaged in the sector, accounting for 33% of the national GDP (FAO, 2020). While the country's 2013–2018 agriculture investment strategy was to support the commercialisation of the sector, the main challenge was accessing land, with the majority of land being used for small-scale low-productivity subsistence farming (MINAGRI, 2013). The government increased investment in its 2018–2023 strategy with the EU's EIB support of US$30m to boost private engagement with agriculture (EIB, 2019), and AfDB invested through its Comprehensive Africa Agricultural Development Programme (CAADP), aiming to develop investment plans alongside land management. SNV, a Dutch development agency was developing horticulture capacity with US$16.2m EU funding, alongside US$5m of private sector co-funding.

In Rwanda, chilli buyback arrangements were introduced as a combination of buffering and bridging mechanisms under SITA. Rwandan farmers face many agricultural challenges, resulting in lack of ability to increase production and yields. An Indian firm, Akay Flavours and Aromatics, developed a buyback scheme where they guaranteed to buy dried chillies at a prevailing market price. Capacity boosting was done in parallel, as training was also provided on drying for export. US$14,000 of dried chillies were shipped from Rwanda to iIndia n, 2018, with the aim of boosting exports to US$200,000 in 2019

(Venuprasad *et al.*, 2018). In this case, the area of the value chain targeted were the growers and post-harvest handlers. This intervention encouraged spices production and post-harvest processing. The training provided processing skills to Rwandan producers and firms, and the Indian firm committed to further investment if a viable industry was to develop in Rwanda, including investing in primary processing facilities in Rwanda that can boost value addition (Venuprasad *et al.*, 2018, p. 12).

Capacity boosting received additional focus in Rwanda, with support for introduction of new chilli varieties. The same firm above worked with Rwandan farmers to pilot a new chilli variety, as existing birds eye chilli appeared to have limited economic feasibility. The aim was to trial a higher value and yield variety and expand cultivation to 1,000 ha in Rwanda (Jyothi, 2016). The area of value chain targeted was the same as above, growers and post-harvest handlers.

We see that the public sponsorship mechanisms were implemented in parallel with additional focus on capacity boosting. It contributed to Rwanda's capacity for producing chilli, but the partner firm in this case was a spice processor and extractor, with a greater interest in exports of primary products in raw or dried form (Jyothi, 2016). What can be inferred in this case is that while the support mechanisms contribute to building potential for value addition, the type of partner for the bridging mechanism would be of importance for move to longer-term value-added activities.

4.2.3 Key messages. Overall, although, we examined a limited subset of interventions within the spice industry, some early conclusions can be drawn. Firstly, support was aimed at boosting agricultural processing by firms, either through improved crops or incentives to cultivate more crops. This approach aligned well with Rwanda's need to create and develop its spices industry, starting from very low capacity. Ethiopia, however, already had a strong spice industry (with a high revealed comparative advantage) [10], and so additional interventions to improve quality of outputs aligned with its needs. The choice was also driven by India's demand in spices that created the opportunity for SSTT in this case (Lee and Gereffi, 2015).

Secondly, while interventions in Ethiopia appeared in a phased manner, those in Rwanda were implemented in parallel. Capacity boosting was combined with buffering and bridging mechanisms in both cases, but in Rwanda additional efforts were introduced for developing capacity. In both cases, however, the support appeared to have been implemented at a fairly early stage of building value addition. Spices was also not an obvious product where East African partners were trading more in higher value products, which may imply requiring a longer period towards higher value added and moving up the value chain.

Thirdly, and relatedly, the most striking observation is that support for capacity building was in early-stage post-harvest handling. Indian partner firms were spices processors, and this played a role. Increasing quality of unprocessed exports was beneficial in early stages, and the main value-adding activities within the value chain were initially being carried out by the Indian partners. While boosting capacity is a beneficial intervention, there is still more that can be done around encouraging the processing of spices as the next step. This would be true especially for Ethiopia that already exports mostly unprocessed and semi-processed spices for example (Mekuria, 2016, p. 19).

The SITA programme invested in supporting the spices sector in Ethiopia and Rwanda, with what can be argued as being in early stages, although there were also investment in the sector from other partners and India's efforts contributed to the progress made. In terms of value addition, the findings are mixed. The programme focused on post-harvest initial processing such as drying and cleaning, but these export products in this early stage were being exported to India and third-country partners for further processing and value

addition, though value-added products emerged like chilli oil that showed promise. Overall, in terms of relative level of value addition across the value chain, both Ethiopian and Rwandan exports were still limited in their overall value addition during the SITA programme, and there is a clear underlined need for continued support in developing these processing capacities further.

5. Conclusions

This paper examined trends from 2000s to demonstrate the potential for SSTT between India and East African partner countries, which were built on through programmes at the end of the decade – highlighting the importance for public policy interventions to fostering value addition. There is a clear case for investing in promotion of SSTT that bring resources to East African firms to address internal resource scarcity and external resource dependencies, facilitating the connectivity of new firms with important external stakeholders.

We applied public sponsorship theory to frame our discussion regarding the effectiveness of SSTT for value addition. Complementing the buffering, bridging and capacity boosting – the above analysis suggests that these functions could be targeted to products where regional partners are trading more in higher value goods with each other to then further build on these. Therefore, active, hands-on policy initiatives should be tailored to regional capacity. While this observation will not be new to policy practitioners, it has not been advocated fully in SSTT or discussed in the public sponsorship theory. We believe that by emphasising an active exploratory role for SSTT, we have discerned early gains, and further identified distinguishing characteristics of these policy initiatives that can be the focus for future directions in this area.

SSTT to support value addition in GVCs is still a relatively new approach, but one that holds promise. Capacity boosting to support processing capability and thriving markets can encourage greater value addition. Moving up the value chain however requires that specific value-enhancing activities are targeted, avoiding the risk that simply more capacity for higher volumes of raw material exports is developed and the focus is on sufficient value addition in countries of origin. This can be done by targeting SSTT initiatives to building on regional capacities.

Trade between India and East African countries is growing, with increase in trade volumes, and promising signs in intermediate goods trade. However, East African countries exports are largely of lower value. SSTT programme's objective of increasing trade and diversifying exports is therefore much needed. Our high-level case study of interventions centred on spices suggests early gains at the margins, as interventions have been focusing on volume of trade. However, more efforts are needed to specifically target value creation before export and in particular higher levels of processing. From a development perspective, more analysis needs to be done on specific value chains – for instance, trade facilitation measures to help processers engage in value chains and to access investments for increasing value-added activities. Future research should examine more closely the continuing development impacts of SSTT, namely, the connection between increased trade, local job creation and sustained innovation, as it is these tangible benefits that will help countries in the Global South realise the benefits of increased trade.

Notes

1. Fernandez-Stark and Gereffi (2019) explain GVCs in terms of four dimensions: input–output structure; governance structure; upgrading, when value addition enables suppliers to "move up the value chain"; and the institutional context. While these four dimensions together provide a holistic picture on GVCs, we focus on upgrading and hence a more bottom-up view of industries.
2. We use this term henceforth.

3. The initiative, funded by the UK Government's Department for International Development (DFID) and implemented by International Trade Centre (ITC) in partnership with India, set ambitious targets to enable partner countries to move up the value chain, while building stronger value chains for India's own exports.
4. The UNCTAD-Eora global value chain database's assessment of benefits to adding value at every stage of production provides a good example (Taglioni *et al.*, 2016, p. 123). The gains felt along various stages of the value chain are significant – in the UNCTAD example, adding processing capability onto raw material extraction increases value by a factor of 10, but manufacturing processed goods, the next stage along the value chain increases the value by a further factor of 2. The result is manufactured goods having increased value by a factor of over 30 (Taglioni *et al.*, 2016, p. 123).
5. Specialisation in commodities and natural resources have been found often associated with stagnating economic growth. The literature has not agreed on why this is the case – in fact, the debate around the existence of the so-called natural resource curse is still ongoing (Harding and Venables, 2016; Lederman and Maloney, 2006) – with the possibility that large commodity sectors with little linkages to the domestic economy (Phelps, Atienza and Arias, 2015) would drain resources away from other sectors, driving up countries' currency exchange rates and penalise export of other manufactured tradable products, such that a high concentration of countries' exports in commodities will expose them to price volatility (Lederman and Maloney, 2006).
6. BEC helps examine trade flows using three end-use categories: capital, intermediate and consumption goods, and is often used for purposes such as setting tariff rates, research on trade specialisation, national account and, most importantly, on GVCs (Sturgeon and Memedovic, 2010).
7. Growth will be constrained by the country's BoP, which in turns depends on income elasticity of what it imports and exports, implying that moving towards exporting products with higher-income elasticity will increase economic growth at higher rates than remaining stuck in export of commodities with low-income elasticity.
8. Data accessed from COMTRADE.
9. Ethiopian market was closed off in 2015 due to presence of toxins in spice exports.
10. Author calculated from WITS and UNCTAD data.
11. Revealed comparative advantage (RCA) is based on Ricardian trade theory, which posits that patterns of trade among countries are governed by their relative differences in productivity. Although such productivity differences are difficult to observe, an RCA metric can be readily calculated using trade data to "reveal" such differences. While the metric can be used to provide a general indication and first approximation of a country's competitive export strengths, it should be noted that applied national measures, which affect competitiveness such as tariffs, non-tariff measures, subsidies and others, are not considered in the RCA metric.

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Appendix 1. Methods note

Quantitative analysis

Firstly, using quantitative data from World Integrated Trade Solutions (WITS), ITC trade indicators and UN Comtrade; we looked at overall trends in the type and proportion of trade for SITA countries in East Africa and India using panel data from 2001–2016. To examine the overall trends in trade, we looked at trade indicators as follows:

- We examine *trade by volume* to study trends in trade between India and SITA partner countries.
- We categorise trade flows by *Broad Economic Categories* (BEC) to analyse changes in the overall mix of trade for SITA countries and India.
- Lastly, we examine trade flows at the *product level* (at HS six-digit) to understand changes in top ten imports and exports, by value and over the period of analysis.

We focused on trends from various angles. Firstly, understanding SITA countries' key partners in trade and India's relative prominence in trade volumes, to assess whether India has been a more prominent trading partner in the period; we also provide an indicator of SITA country engagement in GVCs. Secondly, we look at SITA country imports and exports by the BEC, to examine the level of intermediate and finished products that SITA countries are trading in. The aim is to see any changing capacity for value-added products and indicators for engaging in wider GVCs during the period. Lastly, the analysis adds a level of detail looking at specific products that are traded to determine the level of value addition present in top exports.

We briefly outline the three simple measures that we used in our analysis below:

(1) *Top destinations*: We sort export destination countries by export volume between 2001 and 2016, and then examine top ten countries for trends and changing patterns. Naturally, trade flows experience some significant volatility across years and pick up fluctuations that do not reflect persisting trends in trade; to avoid this, we take the three-year rolling averages and then rank each country (either export destination or source of export) in each year.

(2) *Export broad category*: We examine trade types for trends and patterns between 2001 and 2016 to understand the growth and changes in trade between SITA countries, India and the world. Exports and imports are first evaluated between India and SITA countries categorised by the UN Broad Economic Categories (BEC Rev 5) as outlined in Table A1. BEC helps examine trade flows using three end-use categories: capital, intermediate and consumption goods and is often used for purposes such as setting tariff rates, research on trade specialisation, national account and, most importantly, on GVCs (Sturgeon and Memedovic, 2010). We analyse trade trends by BEC to examine changes at a broader level – the change from primary goods to intermediate and consumption goods.

(3) *Trends*: We examine exports and imports by country and product, over time; this provides insights into changing patterns in products by SITA country, whether higher-value products gained prominence in the trade mix and whether this indicated early signs of value addition and value chain development. This analysis looks at products at the six-digit HS level, identifying top ten products exported by country. We focus on SITA countries exports between 2001 and 2015. The analysis covers multiple indicators – including trade flows, product competitiveness and revealed comparative advantage analysis [11].

BEC classification	Sum of categories
Capital goods	41* Capital goods (except transport equipment) 521* Transport equipment, industrial
Intermediate goods	111* Food and beverages, primary, mainly for industry 121* Food and beverages, processed, mainly for industry 21* Industrial supplies not elsewhere specified, primary 22* Industrial supplies not elsewhere specified, processed 31* Fuels and lubricants, primary 322* Fuels and lubricants, processed (other than motor spirit) 42* Parts and accessories of capital goods (except transport equipment); 53* Parts and accessories of transport equipment
Consumption goods	112* Food and beverages, primary, mainly for household consumption; 122* Food and beverages, processed, mainly for household consumption; 321* Fuels and lubricants, processed (motor spirit) 522* Transport equipment, non-industrial 61* Consumer goods not elsewhere specified, durable 62* Consumer goods not elsewhere specified, semi-durable 63* Consumer goods not elsewhere specified, non-durable

Source: UN Statistics, 2018

Table A1.
Trade type – BEC classification

Qualitative analysis

We undertook a qualitative case study to bring in micro insights from a recent SSTT programme, focusing on spices in Rwanda and Ethiopia. The aim was to explore impact of SSTT at a micro level, trying to capture early qualitative contribution to outcomes to draw higher-level policy conclusions. Our qualitative analysis provides an initial analysis of SSTT by analysing implemented activities to compliment insights from quantitative analysis, recognising that conclusions certainly cannot be drawn from early results of SITA implementation. The analysis firstly explores capacity building programmes from the Global North that are directly investing in spices in Ethiopia and Rwanda and comparing them to the SITA initiative, using a combination of insights from UN Comtrade data and review of existing literature exploring similar case study topics and value chains. We secondly explore insights gathered from SITA-supported project documentation and case studies, conducing a qualitative analysis on the effectiveness of selected SITA preprogramme activities to support value addition along the value chain.

Appendix 2. Country acronyms

- AFG – Afghanistan
- ARE – United Arab Emirates
- AUS – Australia
- BDI – Burundi
- BEL – Belgium
- BGD – Bangladesh
- CHE – Switzerland
- CHN – China
- COG – Congo
- COM – Comoros
- DEU – Germany

- DJI – Djibouti
- EGY – Egypt
- ESP – Spain
- FRA – France
- GBR – United Kingdom
- HKG – Hong Kong
- IND – India
- IRL – Ireland
- IRN – Iran
- IRQ – Iraq
- ISR – Israel
- ITA – Italy
- JPN – Japan
- KEN – Kenya
- KOR – Korea
- KWT – Kuwait
- NGA – Nigeria
- NLD – The Netherlands
- PAK – Pakistan
- QAT – Qatar
- RWA – Rwanda
- SAU – Saudi Arabia
- SDN – Sudan
- SGP – Singapore
- SOM – Somalia
- SSD – South Sudan
- SUD – Sudan
- SWZ – Swaziland
- TZA – Tanzania
- UGA – Uganda
- UNS – Unspecified
- USA – United States of America
- VNM – Vietnam
- ZAF – South Africa

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