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Industries without smokestacks

Implications for Ethiopia's industrialization

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Abstract: Although the manufacturing sector is known to have a unique role in structural transformation, the industries without smokestacks that include tradable services (e.g., IT, tourism, transport), horticulture, and agro-industry can provide new opportunities for export development in low-income countries and in turn drive economic growth. With vast natural and man-made tourist attractions and diversified agroecological advantage, Ethiopia is particularly well positioned to exploit the opportunities in industries without smokestacks. This study takes the case of Ethiopia and examines the current state and contribution of the industries without smokestacks to the economy and exports with the aim of improving our understanding of the major bottlenecks and solutions to unlocking the potential of these industries. It gives special attention to the horticulture and tourism industries, given the huge unexploited potential of these sectors in Ethiopia.

Keywords: Ethiopia, exports, tourism, horticulture

JEL classification: F10, L52, L84, N50

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1 Introduction

Exports can promote economic growth through multiple channels: increased earnings of foreign exchange (thus relaxing balance-of-payments constraints); economies of scale; and access to new technologies and knowledge. They also provide opportunities to initiate structural transformation by enhancing specialization in products that have comparative advantage, and stimulate learning by providing access to new technologies and knowledge, in addition to the more conventional benefits obtained from economies of scale and competition (Grossman and Helpman 1991; Helpman and Krugman 1985).

In recognition of this, many countries have made attempts to diversify export product bases. Likewise, the Ethiopian government adopted an (export promotion strategy) EPS in 1998 that was later (in 2003) developed into a full-fledged industrial development strategy (IDS). The government has made notable efforts to promote export in selected priority industries, and particularly light manufacturing (textile, leather, and other agro-industries) through setting targets and providing multifaceted support to meet these targets.

Despite these efforts, Ethiopia's export sector remained a very small contribution to the envisaged structural transformation. According to Gebreyesus and Kebede (2015), Ethiopia's merchandise export receipts can finance only about one-quarter of the import bill. The trade deficit is increasingly high and unsustainable, reaching about US\$7.9 billion in 2013. Even more worrying is that the export basket has remained less diversified despite efforts for diversification in the last two decades. For example, in 2013 the value of manufacturing exports was only US\$368 million, accounting for about 13 per cent of merchandise exports. More than three-quarters of the merchandise export revenue in Ethiopia still comes from agriculture. The surge in imports and sluggish export growth has led to a shortage and, thus, rationing of foreign currency that is crucial for importing capital goods and other intermediate inputs that are required to sustain growth in manufacturing and other sectors.

Although the manufacturing sector is known to have a unique role in structural transformation, the potential of other sectors, such as natural resource-based activities and tradable services, to provide exports and drive growth must not be underestimated. The industries without smokestacks that include tradable services (for example, IT, tourism, transport), horticulture, and agro-industry can provide new opportunities for export development in low-income countries, including Ethiopia, which in turn can drive economic growth. The development of these sectors can also provide significant opportunities to build new areas of comparative advantage, including in the manufacturing sector through resolving the shortage of foreign exchange, lack of inputs, and poor logistic and infrastructure services. The growth in productivity of services and agricultural inputs is found to be closely linked with the productivity growth of the manufacturing sector and exports of manufacturing (for example, Lee and McKibbin 2013).

With vast natural and man-made tourist attractions and diversified agroecological opportunities, Ethiopia is particularly well positioned to exploit the opportunities in sectors without smokestacks, especially horticulture, tourism, and transport. The extent of knowledge regarding these sectors is, however, very limited. Moreover, to date the importance of the development of these sectors to the transformation of the economy has received little attention—at least in practice. The main objective of this case study is, thus, to show the current state and contribution of these sectors to the economy and exports, as well as to improve our understanding about the major bottlenecks and required solutions to unlock the potential of these sectors. A special focus is given to the horticulture and tourism industries, given the huge unexploited potential of these sectors in

Ethiopia. It is our belief that this study can also serve as an input for policy makers when reviewing the existing strategies on these industries and their implementation.

The methodology we have applied here is mainly descriptive. Towards this and in addition to the standard review of the literature and policy documents, we use data from several sources, including the database from Ethiopian Central Statistics (CSA), the National Bank of Ethiopia (NBE), the Ethiopia Revenue and Customs Authority (ERCA), Ethiopian tourism organizations, the World Bank, United Nations tourism organizations, and other sources.

The rest of this paper is organized as follows. Section 2 describes some conceptual issues regarding exports diversification and structural transformation. Section 3 briefly reviews the evolution of Ethiopian export promotion policies. Section 4 presents the recent performance and structure of the Ethiopian economy, especially exports. Sections 5 and 6 examine the opportunities, performance, and bottlenecks in the two selected sector cases: the travel and tourism and horticulture industries. Section 7 concludes with some remarks.

2 Export diversification and structural transformation: conceptual issues

Manufacturing has long been hailed as the main engine of structural transformation. The literature consists of various arguments in favour of this position, including that manufacturing is the main source of dynamic comparative advantage, offers higher-productivity activities, provides special opportunities for economies of scale and learning, generates and disseminates new technology, and stimulates cross-sector linkages. Diversification into manufacturing has, thus, been advocated as the primary goal of national development strategies of low-income countries. A substantial part of the empirical literature provides evidence in support of the manufacturing sector as an engine of growth. For recent review on this, see Szirmai (2012) and Szirmai and Verspagen (2015).

The flipside of this argument is that diversification into primary commodities and natural resources can have detrimental effects on countries' growth prospects—commonly referred to as the 'resource curse'.¹ Although the unique role of manufacturing towards structural transformation cannot be denied, the 'resource curse' view is not consistent with the historical evidence demonstrated in several natural resource-rich OECD countries (e.g., Australia, Canada, Scandinavia, the United States) and non-OECD countries (e.g., Brazil, Chile, Uruguay). The experience in these countries shows that resource-based activities can lead growth over long periods and can be a source of knowledge and technological advancement (Lederman and Maloney 2002).

The economic structural transformation in Asia in the last half-century has been mainly driven by the growth of the manufacturing sector. Replication of this growth path in other developing countries, including those in sub-Saharan Africa, however, has remained challenging. This is because, first, even with the low-wage advantage many African countries' transition to manufacturing might be limited due to internal factors such as initial conditions (poor infrastructure, human capital, and institutions), geography (many small and/or landlocked countries), and richness in natural resources. Second, the windows of opportunity used by Asian

¹ There are various arguments supporting this view. Among others, these include: low world income elasticity of primary products and declining terms of trade; lower skill and technological content of primary commodity production and as a result lower growth spillover; Dutch disease, limiting the effectiveness of government capacity building efforts; and rent-seeking.

countries are no longer available to newcomers. The global setting and industrial environment have significantly changed and this has altered the way enterprises and countries compete (Lall 2005).

According to Perez et al. (2014), the information and communication technology (ICT) revolution and its paradigm in the organization of global corporations, the process of globalization of production and hyper-segmentation of markets, the rise of Asia (notably China and India), as well as the threat of global warming and other environmental concerns have profoundly modified the conditions (innovation and trade) in all sectors. These transformations have radically changed the capacity to innovate in natural resource-based activities and driven them towards 'decommoditization'. In contrast, the mature manufactures, which depend on highly codified technologies and low-cost labour, are suffering from a process of 'commoditization' and have been shown to be as vulnerable to downturns as the lower echelons of primary producers, and as being just as likely to suffer decreasing margins (Kaplinsky 1993).

Another pessimistic view against the smokestack industries is that they generally have banks of chimney stacks emitting smoke into the atmosphere, which has a negative impact on natural and environmental resources, as well as on the local people. Decades of manufacturing-oriented industrial growth in Western economies have had an impact on the environment. As a result, civil societies and other concerned parties have made their voices heard among governments to push for reduced polluting emissions from such industries. Hence, sustainable development has been the overarching goal of the international community since the United Nations Conference on Environment and Development in 1992.

Our intention here is not to give a gloomy picture of the potential of the manufacturing sector in Africa, but provide a rationale to look beyond conventional smokestack manufacturing as a means to achieve industrial transformation. If managed properly, the industries without smokestacks can provide new opportunities for export development in Africa and help to build new areas of comparative advantage, including the manufacturing sector. It is in this context that some scholars (for example, Pack and Saggi 2006; Rodrik 2007) have provided a broader definition of industrial policy as government selective intervention or policies that stimulate specific economic activities and promote structural change. This thus includes not only industry per se, but also non-traditional agriculture or services.

3 Overview of Ethiopia's export promotion policies

In the 1990s, the government led by the Ethiopian People's Revolutionary Democratic Front undertook extensive reforms towards the market economy by adopting a structural adjustment programme under the auspices of international financial institutions. The reform package was formulated with regard to the complementarity between trade liberalization and macroeconomic management in shaping the reform outcome. This was expected to change the overall incentive structure in favour of exports, private investment, and diversification of exports and output structure in favour of manufactured goods.

In the mid-1990s, the government formulated its development vision known as the Agricultural Development Led Industrialization (ADLI). Agricultural development was envisaged to play a leading role in the industrialization process by preparing various conditions for full-fledged industrialization through supplying inputs to the industrial sector, generating foreign exchange for importing industrial inputs, and creating market for industrial output. ADLI also embraces an export-led development strategy as an engine of growth.

However, despite the revival of private sector participation in the economy and exports, the 1990s did not see a significant increase in the volume or diversification of exports. As a result, the government adopted the Export Promotion Strategy (EPS) in 1998 to alleviate the problems of trade balance. The EPS was conceived based on resource endowment and comparative advantage, with a focus on the following four major elements (International Trade Centre (ITC) 2001):

- 1 The gain from surplus venting through productivity improvements and cultivation of unused land will be maximized;
- 2 The advantage of natural resources for exports of high-value agricultural products will be utilized.
- 3 There will be a new basis for exports of manufactured goods, grounded on the country's comparative advantage of labour.
- 4 Discovery and exploitation of exportable minerals.

Accordingly, coffee, oilseed, horticulture, meat, cotton, clothing, leather, and minerals were chosen as primary products for export promotion and associated incentives. Incentives include: a duty drawback scheme on items imported to produce exports; a voucher scheme or bonded manufacturing warehouse; pre- and post-shipment credit guarantee schemes; and permission for retention of a certain percentage of foreign exchange. Different types of export trade support services were also created.

The EPS was relatively narrow in scope but resulted, among other things, in the formation of new institutions such as the Ethiopian Export Promotion Agency, the Ethiopian Livestock Marketing Authority, and the Ethiopian Leather and Leather Products Technology Institute, with the aim of helping the export sector.

A comprehensive IDS was formulated in 2002–03 under which export orientation has been made one of the key principles (FDRE 2002). Accordingly, the export-oriented sectors were designated to lead industrial development and be given preferential treatment. The strategy declares certain industries to be largely export oriented, such as textiles and garments, leather and leather products, meat, sugar, and other food products. The selection of these industries is also justified on the ground that they are labour intensive and provide strong linkages with the agricultural sector in addition to their comparative advantage in competing in export markets. The government provided extensive support programmes that include economic incentives, capacity building, cluster development, and direct public investment in order to meet these targets. The specific policies and instruments with regard to manufacturing exports can be found in Gebreeyesus (2013).

In terms of sectors, the focus of the IDS strategy has obviously been on manufacturing; non-manufacturing exports are not covered under this strategy. Although not with equal emphasis, the government has also tried to promote the tourism industry (see Section 5.2) and high-value agricultural exports, particularly horticulture (see Section 6.2).

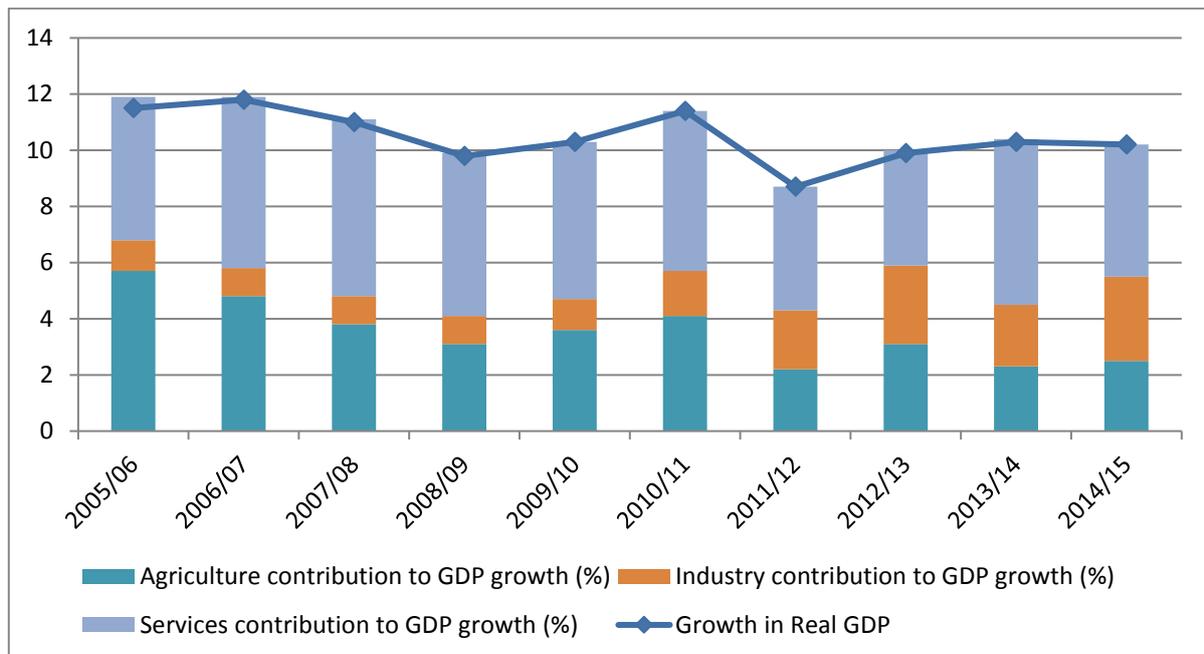
4 Ethiopia's recent economic performance in the context of structural transformation

4.1 Overall economic performance

Ethiopia has achieved a remarkable and sustained economic growth over the past decade. Figure 1 shows the pattern of gross domestic product (GDP) growth and the contribution of the major

sectors towards this growth. Between 2005–06 and 2014–15, Ethiopian GDP grew by an annual average of 10.5 per cent. The major sectors, including agriculture, industry, and services, have also shown unprecedented growth over the same period. The main drivers of this impressive economic growth have been the service sector and agriculture, in that order. The annual average of the service and agriculture sectors’ contribution to GDP growth over the period 2005–06 to 2014–15 was respectively about 51.5 and 32.5 per cent. In contrast, the industrial sector contribution to GDP growth remained small at only 16.3 per cent.

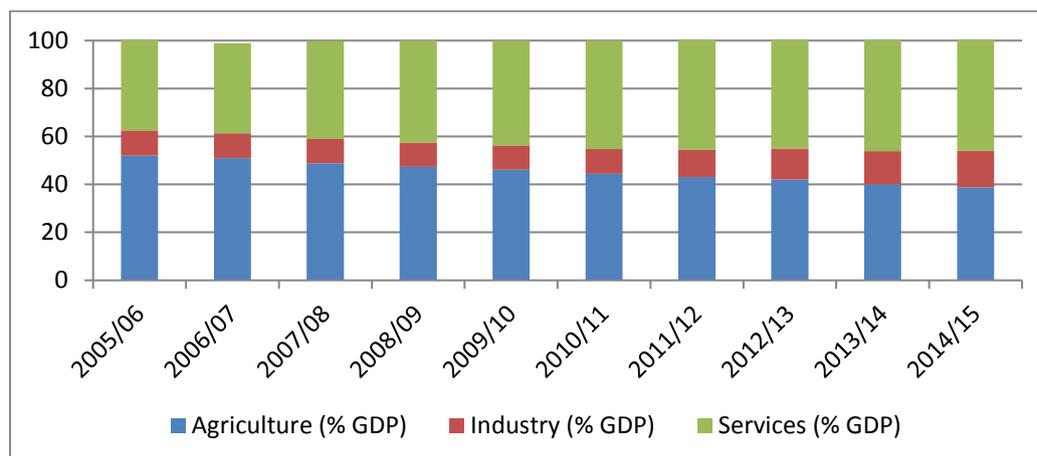
Figure 1: Contribution of the different sectors to Ethiopia’s real GDP growth



Source: based on NBE annual reports.

Despite such rapid economic growth, the pace of structural transformation has been slow. Ethiopia’s structure of output has shown a shift from agriculture to services. In 2014–15, the respective shares of the services and agriculture sectors to GDP was 46.6 per cent and 38.8 per cent (see Figure 2). However, Ethiopia’s industrial sector—which includes construction, manufacturing, mining, and utilities subsectors—remained underdeveloped and contributed only about 15 per cent of GDP. The contribution of the manufacturing subsector to GDP was only 5 per cent, which is very low even in comparison to the sub-Saharan Africa average.

Figure 2: Sector shares in Ethiopia's GDP



Source: based on NBE annual reports.

The employment structure demonstrates an even slower pace of structural transformation. Despite marginal declines, agriculture remained the dominant employer in Ethiopia, accounting for more than three-quarters of the workforce. According to the World Bank (2015), between 2005 and 2013 the agriculture sector employment share declined only three percentage points (from 80.2 to 77.3 per cent). On the other hand, the service sector employment share in 2013 was only 15 per cent, although its contribution to GDP was about 46 per cent. The employment share of the manufacturing sector also remained insignificant. In fact, it exhibited a marginal decline from 4.9 in 2005 to 4.7 per cent in 2013.

4.2 Export structure and performance

Table 1 shows the pattern of Ethiopia's export of goods and services over the period 2005–13. Ethiopia's exports grew threefold, from about US\$2 billion to nearly US\$6 billion. However, the recent growth pattern is not encouraging and started to flatten in 2011.

Table 1: Ethiopia's merchandise and service exports 2005–13

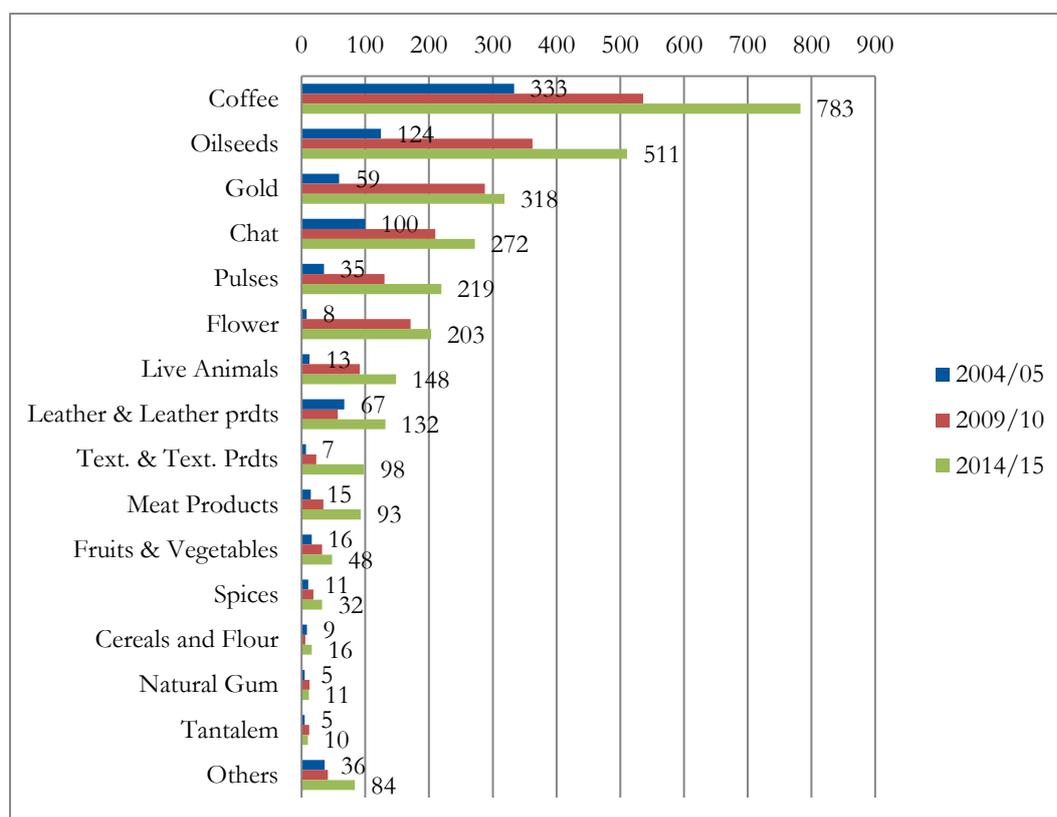
Year	Total exports of goods and services (US\$ million)	Merchandise export share (percentage)				Service export share (percentage)			
		Agriculture	Fishing and mining	Manufacturing	Total merchandise	Transport	Travel	Other services	Total services
2005	1,931.0	36.9	2.7	8.0	47.6	24.2	8.7	19.5	52.4
2006	2,200.0	37.4	2.7	7.9	48.0	26.6	7.4	18.0	52.0
2007	2,649.9	40.1	2.5	8.4	51.0	27.7	6.7	14.7	49.0
2008	3,500.0	40.0	2.7	6.5	49.2	30.0	10.8	10.0	50.8
2009	3,429.8	41.6	3.3	4.5	49.4	28.9	9.6	12.1	50.6
2010	4,640.0	43.6	4.9	4.9	53.3	25.4	11.3	10.0	46.7
2011	5,809.7	42.3	3.2	6.6	52.1	27.2	13.0	7.7	47.9
2012	5,990.0	44.9	3.9	5.5	54.3	28.9	10.1	6.7	45.7
2013	5,900.0	37.6	3.0	6.2	46.9	35.2	10.6	7.4	53.1

Source: author's calculations based on data from the ERCA (2016) for merchandise exports and World Development Indicators (WDIs) for service exports.

Table 1 also classifies exports into major subsectors. The broad classification between the merchandise and service exports shows that, despite some fluctuations, each accounts for about half of the goods and services exports. With over 37 per cent of total goods and services exports, agricultural products continue to dominate Ethiopia's exports. This amounts to 80 per cent of merchandise exports. Transport services is the second important sector, accounting for about one-third of total goods and services exports. Again, this amounts to two-third of services export earnings, which are mainly generated by the national carrier, Ethiopian Airlines. In contrast, the mining and manufacturing sector share of total exports is among the lowest, below 5 per cent and 9 per cent of total export earnings respectively.

Figure 3 shows further disaggregation of merchandise exports. With about US\$783 million in 2014–15, coffee continues to be the greatest generator of foreign exchange for the country. Oilseed, gold, chat, pulses, and flowers are, in that order, the next largest sources of foreign exchange, all of which—except gold—are agricultural products. In contrast, exports from fruits and vegetables remained marginal. Manufacturing products including textiles, leather, and meat are also not performing very well despite special attention from the government and efforts to turn them into major sources of exports.

Figure 3: Major Ethiopian export products (US\$ millions)



Source: based on NBE annual reports.

5 The travel and tourism industry

The World Tourism Organization (UNWTO) defines tourism as the activities of persons travelling to and staying in places outside their usual environment for not more than one consecutive year for leisure, business, and other purposes. The travel and tourism sector includes subsectors such

as tour operators, accommodation, travel agents, attractions, transport, and ancillary services. Recent UNWTO (2016a, 2016b) reports show that, especially after entering the new millennium, tourism has become prominent, with a significant rise in the number of international arrivals and receipts. For example, in 2015 international tourist arrivals reached about 1.2 billion, generating receipts of about US\$1.232 trillion.

Europe has been the leading continent for international tourist arrivals, while Asia and the Pacific showed the most rapid growth in international arrivals as well as receipts. Despite great potential for tourism, with its diverse cultural and natural resources, Africa's share of worldwide tourism remains below 5 per cent in arrivals and 3 per cent in worldwide tourism receipts. Kenya, Tanzania, and Ethiopia are the preferred destinations of international tourism in East Africa (WTTC 2015).

5.1 The contribution of the travel and tourism industry in Ethiopia

This subsection presents the state and contribution of Ethiopia's tourism industry and compares it with neighbouring Kenya, a country known to be the most important destination for tourists in East Africa. Table 2 compares Kenya and Ethiopia in terms of tourist arrivals and the contribution of tourism and travel to export receipts for employment and GDP. Ethiopia's number of international tourist arrivals has been growing rapidly. For example, between 2005 and 2013, the number of tourist arrivals tripled, increasing from 227,000 to 681,000. International tourist and travel receipts have similarly tripled in the same period.

In contrast, Kenya's number of arrivals and receipts have not shown any progress in this period. And yet Ethiopia's tourist arrivals are only about half of Kenya's. Surprisingly, despite the difference in arrivals the two countries are almost equal in terms of revenue generated from tourist arrivals (i.e. receipts). If these figures are correct, the receipts generated per traveller in Ethiopia are much higher than those in Kenya. This might be caused by the large share of Ethiopian Airlines in the tourist and travel receipts of Ethiopia. In this regard, more information is needed to account for the contribution of Ethiopian Airlines.

Table 2: Contribution of tourism and travel to exports, GDP, and employment: Ethiopia vs Kenya

Year	Arrivals ('000)		Receipts (US\$ billion)		Contribution of travel and tourism to GDP (percentage)		Contribution of travel and tourism to employment (percentage)	
	Ethiopia	Kenya	Ethiopia	Kenya	Ethiopia	Kenya	Ethiopia	Kenya
2005	227	1,399	0.53	0.97	8.1	14.7	7	12.7
2008	383	1,141	1.12	1.39	10.3	12.8	9	11.1
2009	427	1,392	1.12	1.12	9.2	11.5	7.9	10
2010	468	1,470	1.4	1.6	11.1	12.7	9.6	11.1
2011	523	1,750	1.99	1.8	12.5	13.2	10.8	11.5
2012	597	1,619	1.98	2	12.2	12.5	10.6	10.8
2013	681	1,434	N/A	1.83	N/A	N/A	N/A	N/A
2015					11.3	12	9.8	10.4

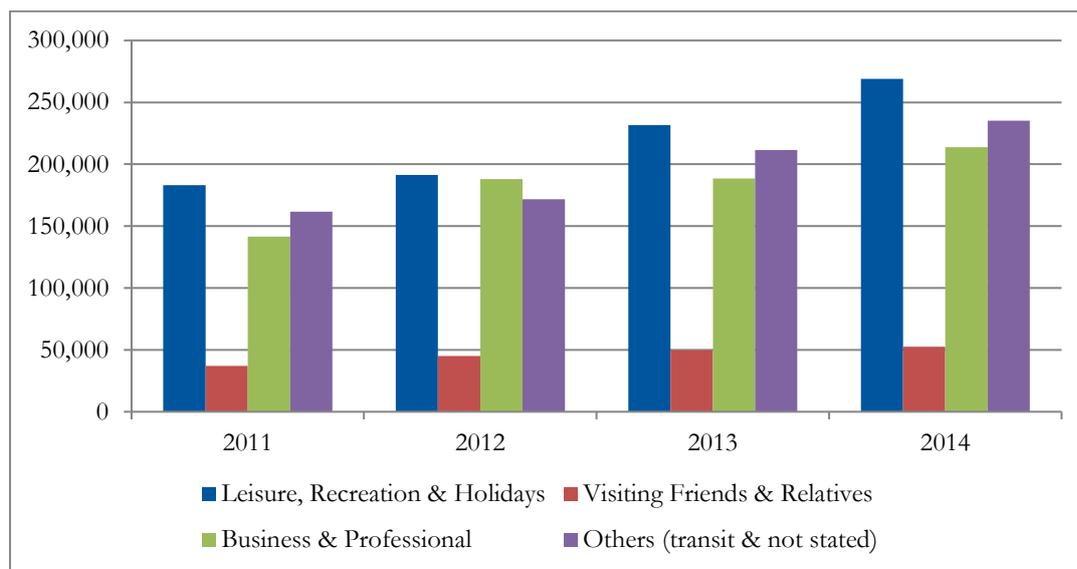
Source: author's calculations based on data from WDIs.

In 2005, the contribution of the travel and tourism sector to GDP and employment in Ethiopia was almost half of that of Kenya. But Ethiopia has reduced this gap following the expansion of this sector in the last decade. For example, in 2015 the travel and tourism sector contributed about

11.3 per cent and 12 per cent of GDP, respectively, in Ethiopia and Kenya. For employment, these figures were 9.8 per cent and 10.4 per cent, respectively.

Air travel is the major means of transportation for international tourists to Ethiopia. According to the MOCT (2016), out of the 770,428 tourists who visited Ethiopia in 2014, about 97 per cent arrived by air. This suggests that Ethiopian Airlines is playing a critical role in stimulating the Ethiopian tourism industry. With regard to the purpose of their visit, recreation and holidays, and business and professional visits are the two main reasons for the tourist flow to Ethiopia (see Figure 4).

Figure 4: The purposes of tourists' travel to Ethiopia, 2011–14



Source: author's calculation based on data from the MOCT (2016).

Table 3 gives the regional patterns of tourism in Ethiopia. Most foreign tourists visit four main regions of Ethiopia: Oromia, Amhara, the Southern Nations, Nationalities, and Peoples' Region (SNNPR), and Tigray. Most tourists travelled to Oromia, followed by Amhara and the SNNPR, whereas Tigray collected the most revenue.

Table 3: Regional pattern of foreign tourists in Ethiopia, 2015–16

Region	No. of tourists	Revenue
1 Tigray	60,924	39,602,017
2 Amhara	253,235	30,039,353
3 Afar	4,718	–
4 Gambela	5,469	116,298
5 Harar	20,088	3,069,644
6 DireDawa	33,268	4,604,689
7 SNNPR	239,810	–
8 Oromiya	1,846,686	8,303,083

Source: based on data from the MOCT (2016).

5.2 The tourism industry policies and implementation

In Ethiopia, modern tourism promotion started in 1961 following the establishment of the Ethiopian Tourism Organization. At the beginning, the income generated from tourist flows was

not as great as anticipated, but later it started to increase steadily. However, the drought in 1974 and restriction on entry and free movement instituted by the military junta negatively affected the sector. After the fall of the military government in 1991, a conducive environment for infrastructure development coupled with the removal of travel restrictions witnessed a substantial revival of the tourism sector. The inflow of tourists has since been on the rise, except in 1998 and 1999, which was the period of war between Ethiopia and Eritrea (Walle 2010).

In 2005, the Ministry of Culture and Tourism (MOCT), as per proclamation No. 471/98, was re-established with the aim of making Ethiopia one of the top tourist destinations in Africa. The sector is perceived to increase the foreign exchange capacity, create employment opportunities, and play a role in sustainable development. However, at that time there was no clear policy to guide the sector.

In 2009, the government of Ethiopia launched a tourism development policy to increase tourist arrivals and optimize returns from the sector (MOCT 2009). The guiding principles are:

- guiding the sector in a broad-based development framework;
- developing existing and new tourism attractions and products;
- expanding the infrastructure and tourist services that are vital for the growth of the sector;
- ensuring that the country benefits from the sector by being sufficiently competitive in international tourism markets; and
- solving the serious limitations in capacity that are apparent in the industry.

Due to too little attention and lack of finance, most of the issues included in the policy document are still in the process of implementation. Against the backdrop of this we try here to provide an overview of the implementation and progress so far. The tourism sector is given attention in the second phase of the Growth and Transformation Plan (2015–20). The number of arrivals by 2020 is expected to be above 2.5 million. A sustainable master plan with the help of the United Nations Economic Commission for Africa (UNECA) is also in the process of formulation. In addition, the MOCT has identified five major goals to be achieved in the next five years. These are natural and cultural heritage conservation and development, culture and tourism product marketing, service excellence, improved culture and tourism research and information systems, and enhanced cooperation and collaboration with development partners (Ministry of Foreign Affairs (MoFA) n.d.).

Ethiopia's tourism sector is benefiting from the expansion of infrastructure being undertaken in the country, including the construction of roads, airports, hotels, and communication networks. International tourist arrivals have been increasing. The tourism sector is not the only beneficiary, but is also driving allied activities. Consequently, tourism-related subsectors and infrastructure have started to expand. For example, the number of hotels has increased from 19,025 in 2011 to 22,285 in 2014. Furthermore, Ethiopia was ranked eighth, following Kenya, in the ranking of the number of hotels planned to be built (MOCT 2016). To alleviate problems related to quality and international standards in the tourism sector, the Ministry, in collaboration with the UNWTO, recently assessed nearly 400 hotels and awarded stars from 1 to 5.

One of the most crucial issues underlined in the policy document is building a positive image with a brand that will represent the country and maximize the benefits gained. With the aim of leading the tourism sector in a new way, in March 2016 the MOCT launched a new brand name, 'Ethiopia, Land of Origins', with its own logo, slogan, and icon. In addition to the new brand name, the Ministry has in parallel been trying to develop different websites, build a new communication campaign, and develop new mobile apps to promote the country as a popular tourist destination.

To strengthen the collaborative relations among actors participating in the tourism sector, in August 2013 the government established the Ethiopian Tourism Transformation and the Ethiopian Tourism Organization Council. This council is chaired by the prime minister and is composed of council members including all the ministers, regional leaders, and tourism bureaux of each region state, Ethiopian Airlines, the Ethiopian Chamber of Commerce and Sectoral Associations, hotel and restaurants, and other sector representatives. The Tourism Council is expected to enhance benefits from tourism based on the potential of the country and to provide leadership to tourism sector actors and stakeholders (MoFA n.d.).

The country's image has continued to improve over time. A vivid example of this is that recently a representative of the 28 countries on the General Assembly of the European Council on Tourism and Trade named Ethiopia as the 'Best Tourism Destination' of 2015.

To summarize, most of the issues that were listed under the policy can be said to be mostly in the first phase and still require full commitment from the government and other stakeholders.

5.3 Opportunities and challenges: the tourism industry in Ethiopia

Opportunities

Ethiopia is endowed with rich cultural and abundant natural resources. It is a land of remarkable features, such as the Ras Dashen and Danakil Depression, two of the highest and lowest places on earth, respectively (MOCT 2016). In terms of history, Ethiopia is a very old country, with over 3,000 years of history. The Axumite Kingdom was a powerful realm during the early Christian era, and a great civilization. Great religious civilizations in Lalibela that expressed great faith and architectural skills also flourished during the ancient period. Moreover, the Walled city of Harar made the country one of the four ancient Islamic cities in the world. Ethiopia is home of nine United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage Sites and 12 world literary and manuscript heritages (MOCT 2016).

Moreover, Ethiopia has numerous national parks with a range of wildlife and biodiversity preserved in their natural habitats. It is also a country of different ethnic groups with their own unique languages, cultures, and traditions (MOCT 2016).

For tourism to be successful, some crucial enablers like political stability, air transport facilities for easy access, and high-standard accommodation are needed. Ethiopian Airlines, a Star Alliance member, can be seen as one opportunity to advertise Ethiopian culture and to attract tourism. The airline's new strategy to build the major new airport hub for African transport in Addis Ababa is expected to enhance the development of the tourism sector. Moreover, the country is improving existing and establishing new accommodation for tourism.

The other valuable resource of the country is its people. The country has a large pool of labour that can be trained and employed in the sector. The country also has the potential for conference tourism. The presence of UNECA, the African Union, and other regional and international organizations has made Addis Ababa a diplomatic hub (Azage 2013), and could create a strong market for conference and domestic tourism. Thus tourism could offer a substantial contribution to the overall economy by creating opportunities for local communities to sell goods and services directly or indirectly. The other opportunity is in infrastructure built to improve tourist flows, such as transport and communications, as these can also benefit other sectors of the economy. Incentives in the sector have also been introduced by the government, such as tax holidays and 100 per cent duty exemptions being made available for all investment capital goods imports (Assefa et al. 2013).

Major challenges and suggested solutions

As shown above, tourism has a considerable and unexploited potential in the development of the Ethiopian economy. But the sector has major bottlenecks that prevent it from growing as expected; some of these are listed below:

- *Weak coordination among tourism stakeholders.* One cause for the poor implementation of the policy is lack of coordination and attention among the various stakeholders in playing their roles (Kasahun 2010). Strong coordination and commitment from the government, public, and private sectors, as well as the local community, is thus necessary for full implementation of the strategy.
- *Weak attention to domestic tourism.* Efforts made to promote domestic tourism by the government and private sector are quite insignificant. There is no clear strategy promoting domestic tourism. The weak travelling culture of the society and the low income of the majority of the population are hindering factors. Too little promotion and unaffordable prices for domestic travellers are an obstacle to the growth of domestic tourism. As domestic tourism is less sensitive to crises, a clear strategy to promote it should be created (World Bank 2015).
- *Lack of awareness and incentives among the local people.* The lack of awareness among the local people about preserving the potential for tourism development have made it difficult to generate good incomes (Asmelash 2015). Most of the local community consider tourism as a luxurious industry and believe that tourism wrongly leads to inappropriate service delivery, like overcharging. Moreover, since the community has low or no awareness of tourism's contribution, they are not committed to protecting the tourism resources or making businesses out of it. The solution to this is, thus, not only to improve awareness but also to support the local community to benefit from tourist activities—for example, creating enterprises producing goods and services for tourists.
- *Shortage of trained labour.* There is a critical shortage of skilled labour in hospitality and logistics in Ethiopia. Hence, the government need to promote tourism-related education and expertise.
- *Lack of infrastructure.* Though the country is making significant progress, there is still poor road infrastructure, banking services, water, power supply, and communications, especially in rural areas (Shitemaw 2015). Improving ICT and banking services is particularly crucial in attracting more tourists and benefiting from their stay.
- *Lack of quality service provision.* In Ethiopia there is a limited supply of multiple-star and tourist-quality hotel rooms, especially outside of Addis Ababa. In addition, many of the existing hotels in the tourist sites lack some basic services like sanitation and clean, good-quality water, and lack variety in food (Gebru 2011).
- *Inadequate promotion work.* Different promotion strategies play a critical role in the expansion of the tourism sector. Unlike many other tourist destination countries, Ethiopia does not advertise its tourist potential using international media with a global reach. Thus, most of the country's tourism resources are almost unknown internationally (Gebru 2011). Using the new brand name, and as outlined in the Growth and Transformation Plan (GTP), the MOCT should actively promote the country using different media and other outlets. More resources are, of course, needed to implement this.

6 The Ethiopian horticulture sector

6.1 The features of the horticulture sector

Endowed with a wide range of agroclimatic conditions, adequate water, and soil types, Ethiopia is suitable for producing diverse varieties of horticulture products, including temperate, tropical, and subtropical crops. In terms of exports, the country is also geographically well positioned for major international horticulture markets: the Middle East and Europe. The fruits and vegetables subsector has significant importance for improving food security (and nutrition) as well as the development of agroprocessing industries.

According to the CSA 2014–15 survey report, *fruits* (such as pineapples, passion fruits, bananas, avocados, citrus fruits, mangoes, mandarin, papayas, guava, grapes, and asparagus) and *vegetables* (such as tomato, melon, pepper, chilies, onion, carrot, green beans, green peas, cabbages, okra, cauliflower, and cucumbers) are produced in Ethiopia. However, the production of fruits and vegetables in Ethiopia are not developed to their full potential, nor is production of other grain crops.

Table 4 gives the country-level cultivated land and production of major crops. The total area under fruits and vegetables cultivation (by both smallholder and commercial farm) in 2014–15 was respectively 146,776 and 98,275 hectares. The respective yield for these crops of this year's *Meher* season² was estimated at about 6.84 million quintals and 8.10 million quintals (see Table 4). The fruits and vegetables account for only 1.87 per cent of the total land area under cultivation and 3.4 per cent of the total grain crops production in the same year.

Table 4: Ethiopia's country-level cultivated crop land and production by major crops

Major crop category	Country-level harvested land (million hectares)	Share of the major crops (percentage)	Share cultivated by small holder farmers (percentage)	Country-level gross crop production in million quintals	Share of major crops (percentage)	Share produced by smallholder farmers (percentage)
Grain crops	13.18	88.78	95.3	282.55	63.95	95.7
Vegetables	0.15	0.99	95.1	6.84	1.55	87.0
Root crops	0.22	1.47	99.2	54.92	12.43	99.5
Fruit crops	0.10	0.66	91.7	8.10	1.83	87.2
Cash crops	1.21	8.12	72.1	89.41	20.24	25.7
All crops production	14.85	100.00	93.4	441.83	100.00	81.7

Source: based on CSA 2014–15 survey report.

The production distribution of fruits and vegetables is highly skewed towards a few crops. According to the CSA survey report for 2014–15, of the total estimated area for vegetables cultivation, red peppers and Ethiopian cabbage take the lion's share, accounting for about 66 and 22.5 per cent, respectively. In terms of harvest, the Ethiopian cabbage accounts for 55 per cent, while fruits are about 29 per cent. Banana is the dominant crop, accounting for about 60 per cent and 68 per cent of total fruits by cultivated area and harvest, respectively.

² *Meher* season is the main Ethiopian crop season (June–August), accounting for about 95 per cent of total annual crop production in Ethiopia.

Table 4 also gives the relative share in cultivated area and production of smallholder private farms and medium and large commercial farms.³ Above 93.4 per cent of the cultivated land and 81.7 per cent of all crops production is by smallholder farmers. In other words, the large- and medium-scale commercial farms account for only 6.6 per cent and 18.3 per cent of crops and cultivated land production, respectively. Similarly, fruits and vegetables in Ethiopia are mainly produced by smallholder farmers for subsistence purpose or sales at local markets. More than 90 per cent of total cultivated land and 87 per cent of production of fruits and vegetables is held/produced by smallholder farmers. In contrast, the medium- and large-scale commercial farms account for only 10 per cent and 13 per cent of cultivated land and production of fruits and vegetables, respectively.

The smallholder farmers often apply traditional method with little or no inputs in the form of scientific know-how and improved technology. As a result, the productivity and quality of horticultural crops is far below the level attained in other parts of the world. According to the CSA's (2015) recent estimates, Ethiopia's peasant farm-level average yield (quintal/per hectare) of, for example, tomato is 334, potato 207, sweet potato 575, and banana 93.8. This is much lower than the internationally attained productivity levels, respectively, of 600–1000, 600–700, >700, and up to 1,000 (Ethiopian Investment Agency 2012).

6.2 Horticulture export promotion and performance

In recognition of Ethiopia's significant comparative advantage in horticulture production (suitable weather, abundant land, and cheap labour) and marketing (proximity to Europe, the largest world horticulture market), the government in 1998 identified the sector as an option for export diversification through high-value crops. Similar to the manufacturing sector, investors in horticulture exports have been granted various incentives including exemption customs duties and import tariffs on all capital equipment and up to 15 per cent on spare parts; and income tax holidays of 1–5 years. Furthermore, investments in exports are exempt from income taxes if at least 50 per cent of the output is directly exported or if at least 75 per cent of the output is indirectly exported for a period of no less than five years (Ethiopian Investment Agency 2012).

Commercialization of the agriculture sector both through private sector large-scale farms and smallholder out-grower schemes were anticipated to accelerate production of exportable vegetables, fruits, flowers, spices, and herbs. The objective of the government to promote horticulture exports was carried forward through the subsequent development plan (2005–06 to 2009–10), the Plan of Action for Sustainable Development and Eradication of Poverty, and the GTP I (2010–11 to 2014–15). For example, targets were set to generate US\$356 million from exports of flowers and US\$371.6 million from exports of fruits and vegetables by the end of GTP I (2014–15) (FDRE NPC 2016).

To provide institutional support for the development of the horticulture sector, in 2008 the government established a separate agency, the Ethiopian Horticulture Development Agency (EHDA), which is responsible for promoting, facilitating, coordinating, and supporting investment in flowers and fruits and vegetables. The EHDA has separate technical support case teams for flowers and fruits and vegetables. Investment promotion and marketing departments also have

³ The CSA defines the smallholder private holding as a sub-sector that includes rural/urban small and fragmented privately owned agricultural holdings on which all types of agricultural activities such as crop production and livestock rearing are performed by the operator/holders to obtain agricultural produce for self/family consumption and sometimes for sale. The commercial farms sub-sector, on the other hand, refers to the farms that include state and private commercial farms mainly established for the purpose of profit making by selling agricultural products at local markets and/or abroad (Haile 2016).

teams that work for both sectors. Structurally, the EHDA is accountable to the Ministry of Agriculture and works closely with the Ethiopian Investment Commission. In addition, the EHDA has an active relationship with regional offices and, particularly, Oromia and Amhara (EHDA 2012).

Table 5 gives the value of Ethiopia’s horticulture exports from 2007–08 to 2015–16. Ethiopia exports fruit and vegetables mainly to Europe, the Middle East, and East Africa. Exports of fruits and vegetables have shown some increases over the last decade—for example, from US\$13.4 million in 2007–08 to US\$43.5 million by 2014–15. But this is still small in contrast not only to the country’s potential, but also to neighbouring Kenya’s exports. For example, in 2014 Kenya earned about US\$266 million from exports of fruits and vegetables, which is about sixfold the amount of Ethiopia’s foreign exchange earnings from fruits and vegetables for the same year. Ethiopia’s actual fruits and vegetables exports are also much lower in comparison to the targets set under the five-year development plans. For example, only US\$43.55 million was collected by the end of the GTP I plan period, which is only 11.7 per cent of the target set.

Table 5: Pattern of Ethiopia’s exports of flowers, fruits, and vegetables (in US\$ million)

Year	Flowers	Fruits and vegetables		
		Fruits	Vegetables	Total fruits and vegetables
2007–08	111.26	3.26	10.39	13.66
2008–09	130.64	3.01	16.84	19.85
2009–10	158.15	4.23	27.63	31.86
2010–11	175.28	4.02	29.04	33.06
2011–12	196.97	4.40	40.54	44.94
2012–13	188.00	4.09	61.89	65.98
2013–14	195.03	5.72	41.24	46.96
2014–15	201.24	5.41	38.14	43.55
2015–16	225.32	5.79	43.50	49.30

Source: based on data from the EHDA.

The picture is very different when it comes to flower exports. Unlike in fruits and vegetables, Ethiopia has achieved extraordinary success in flower exports, making the country a global player in the sector. The flower sector has started to show a significant contribution to the Ethiopian export sector, beginning in the mid-2000s. Between 2002 and 2008 the number of flower farms grew about 16-fold and reached 81, covering about 1,200 hectares. The value of flower exports has also soared in this period, growing about 20-fold. Ethiopia’s current (2015–16) exports have reached about US\$225 million, making the country the second largest cut-flower exporter in Africa.

To give more context to the different performance between the flower subsector and the fruits and vegetables subsector, we can compare the export earnings per hectare cultivated. The flower sector generates about US\$225 million foreign exchange from a cultivated land area of no more than 1,200 hectares, whereas the fruits and vegetables subsector generates no more than US\$50 million from cultivation of as much as 250,000 hectares. The flower industry has attracted a large amount of foreign investment; about two-thirds of the existing 80+ flower farms are foreign-owned. In contrast, the fruits and vegetables subsector is not only dominated by smallholder farmers, but also most investors (85 per cent) in the large commercial farms are domestic ones, mainly targeting domestic markets instead of exporting. Foreign investors are not very interested in the fruit and vegetable industries yet. For example, in 2012 there were about 23 commercial

vegetable farms (among which 13 received foreign direct investment) and six fruit companies (among which two received foreign direct investment).

6.3 Understanding the factors behind the differential success between the flower and the fruits and vegetables subsectors

Why has the success of the flower industry not been replicated in the fruit and vegetable sector yet? Before directly answering this question, we would like to start by highlighting how the flower industry came to emerge with a focus on public–private interaction. Flowers are a new export venture for Ethiopia. An export-oriented and private sector-based floriculture industry began to appear in the mid-1990s after two domestic private entrepreneurs experimented in the aftermath of the extensive reform programmes to transform the command economy to a market oriented one.⁴ These early entrants faced a number of difficulties, particularly related to logistics, land, and finance. In 2002, they formed an association and started to seek government support.

The government was made aware of the export potential of this sector through the experiments of the private entrepreneurs and their efforts to acquire government support. The government responded quickly and positively following the lobbying from the private sector through their association. In 2002, it worked out a five-year plan of action for the sector, outlining the sector's constraints and possible solutions. With the government decision to engage, promotion of the flower sector started in 2004. And, as shown above, with about US\$225 million, the sector has become one of the major foreign exchange earning products for the country.

Gebreeyesus (2014) contrasted the performance of the flower industry and the metal and engineering sector in Ethiopia in an effort to understand the factors behind the success of the former and failure (less success) of the latter, despite similar policy environments. He argues that the first reason for the differential success between the two sectors is related to the presence or absence of comparative advantage. Ethiopia has a clear comparative advantage in high-value cut-flower production over other competitors, which was revealed by the private entrepreneurs' costly experiments. In contrast, Ethiopia has no comparative advantage in the basic metal and engineering industries (BMEI), which is a capital- and technology-intensive sector. The choice of the BMEI as a priority sector was not based on careful analysis of comparative advantage but on the need to substitute the ever-increasing imports of metal and engineering products (an import-substitution strategy).

The second explanation is related to how narrow is the sector or activity that was chosen for promotion. Floriculture is a specific activity, while the BMEI consists of highly diversified industries, making it difficult to come up with an effective industry action plan. The third explanation is the choice of instruments and nature of engagement with the private sector. The successful discovery of the flower industry in Ethiopia was the result of private entrepreneurs' experiments. The warm relation created between the government and private sector through its association not only enabled the government to pick floriculture as a priority sector, but also facilitated the design of appropriate policy instruments addressing emerging bottlenecks. In contrast, in the BMEI sector the association was formed by government recommendations. It consists of diversified sectors that have few specific needs in common, and thus less motivation to act collectively. Moreover, there is a lack of distinct instruments addressing sector-specific binding constraints. The authorities apply a similar set of incentives and support programmes designed for export sectors.

⁴ See Gebreeyesus and Iizuka (2012) for extensive discussion of this.

The present case, i.e. why the flower but not fruits and vegetable sectors succeeded, is even more paradoxical given the close similarities between the two sectors. The country is believed to have a comparative advantage in both subsectors, at least in terms of agroclimatic endowments. The government has promoted the two subsectors equally. The government is providing the same package of investment incentives related to land acquisition, duty-free import of machinery, tax exemption, credit, and others, for both flower and fruit and vegetable sectors. Lastly, the industry association that was formed in 2002 was representing not only the flower sector but also the fruits and vegetables producers and exporters.

So the question is why has the success in the flower subsector thus far not replicated in the fruits and vegetables subsector despite such similarities? To provide plausible explanations for this we look further into the analysis of comparative advantage among the two sectors. Below are some of the issues that came to our consideration through discussion with the relevant actors in the sector, such as the EHDA.

- *Agronomic differences and required size of land.* The two sectors have some difference in agronomic and required land size. Flower production requires shorter time periods compared to most types of fruit. Hence, investment in the flower subsector has a shorter payback period (cost recovery) than most fruits with long gestation periods, although the former require higher initial investment. Moreover, the production of fruits and vegetables requires a relatively larger land area. Land rotation is required after some years of fruit and vegetable production, but flowers can be produced in smaller land areas and for a longer period of time without undertaking land rotation.
- *Market conditions.* The flower industry has secured an international market. Investors can enter international *auction markets* for flowers if they satisfy the minimum requirements (which are relatively easy) and sell their products. However, the story is different for fruits and vegetables. The market for fruits and vegetables requires direct sales (no auction market), which requires searching for and dealing with buyers.
- *International stringent standards requirement for food items.* The standards to enter developed country markets is more stringent in the food (fruits and vegetables) than in the flower sector. Unlike flowers, which are required for aesthetic purposes, fruits and vegetables are food items. Hence, any export of fruits and vegetables should fulfil international standards, which are mandatory as compared to the voluntary standards for the non-food items, including flowers. Fulfilling these standards requires establishing ‘closed systems’ for the production of fruits and vegetables, which in turn require costly technology and know-how. But most production in Ethiopia uses open field systems, which makes quality control difficult.
- *Cost of transportation.* Flower exports are not heavy (small volume) and hence using air transportation is viable. But in the case of fruits and vegetables, the fresh weight is high because water is the major component of the products. It makes them bulky and they have a low value per unit despite being expensive to transport in their fresh form. Therefore, using air transportation is costly (not feasible economically). Moreover, as Ethiopia is landlocked the cost of using marine transportation to export fruits and vegetables is high (given the perishability and long time required to transport the exports via Djibouti ports).

The above suggests that Ethiopia has better comparative advantage in flowers than fruits and vegetables exports. This is due to the long gestation period for most fruits, more stringent standards for food in the destination markets, and more importantly the high logistics cost because of the bulky nature of fruits and vegetables. Ethiopian Airlines was instrumental in reducing the transport-related uncertainties in the flower industry. Unfortunately, this is not the case for fruits and vegetables exports due to the bulkiness of the product. The ideal transport means for Ethiopia

to export fruits and vegetables is a combination of road and sea transport. As a landlocked country, Ethiopia has a comparative disadvantage in this regard. As a result, foreign investors are not very interested in the fruit and vegetable industries. The majority of investors (more than 85 per cent) are domestic, and they mainly target domestic markets instead of exporting their products.

This should not, however, be taken to imply that Ethiopia should abandon promotion of fruit and vegetable exports. Rather, it suggests the design of appropriate policy instruments and support programmes different to those applied in the flower sector and specifically addressing the major bottlenecks in fruits and vegetables, particularly related to market access, improving logistics, and farm productivity. Another implication is that the promotion should identify champion products within fruits and vegetables instead of using a sector-wide approach.

7 Concluding remarks

Ethiopia has embarked on a massive industrialization programme as a part of a vision to become a middle-income country by 2025. Moreover, the country has long recognized the role of exports for economic development. In the 1990s the country adopted an EPS that was in 2002 transformed into a comprehensive IDS. These visions have been put into action through the consecutive development plans over the last decade and a half, which always include export targets and associated support programmes.

The Ethiopian economy has registered impressive growth over this period. However, the exports are not able to catch-up with surging import demand, which in turn is fuelled by unprecedented economic growth. As a result, the economy is facing a critical foreign exchange shortage, which it is feared will slow the growth momentum.

The focus on export promotion has largely been on the light manufacturing sector. As shown above, manufacturing exports and the sector at large have not taken-off yet and it may require more effort and time. The current driving forces behind the growth of Ethiopian exports and the economy at large are the agriculture and service sectors. These sectors are not only major sources of exports, but also the growth drivers of the economy generally. The implication is that the government needs to give more attention to these sectors as part of not only export promotion but also industrialization. They can ease the foreign exchange strains that manufacturing firms face when importing machinery and industrial inputs. Advancement of the service sector can also improve the efficiency of manufacturing activities. Moreover, promotion of the horticulture sector can also directly enhance the manufacturing sector by improving the supply of industrial inputs.

Within the span of less than a decade, Ethiopia has emerged as a global player in the cut-flowers business. It has become the second largest flower exporter in Africa, after Kenya. However, the success of flower exports has not thus far been replicated in the fruits and vegetables sector, despite huge potential. This study identified some critical bottlenecks—among others market access, logistics problems, and low farm-level productivity—that inhibit the expansion of fruits and vegetables exports.

This paper has also specifically examined the opportunities and bottlenecks of the Ethiopian travel and tourism sector. Ethiopia has vast natural and man-made tourist attractions but these are largely unexploited, although a tourism development policy was launched in 2009 and the Tourism Transformation Council chaired by the prime minister was established in 2013. However, implementation of the policies and strategies remained poor and coordination among different relevant institutions is weak. Lack of trained labour in the sector and poor infrastructure facilities

are also among the major bottlenecks for the growth of the sector. Equipped with the existing policies, policy makers need to redirect their efforts into practical implementation and institution building that will facilitate the growth of the travel and tourism sector.

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