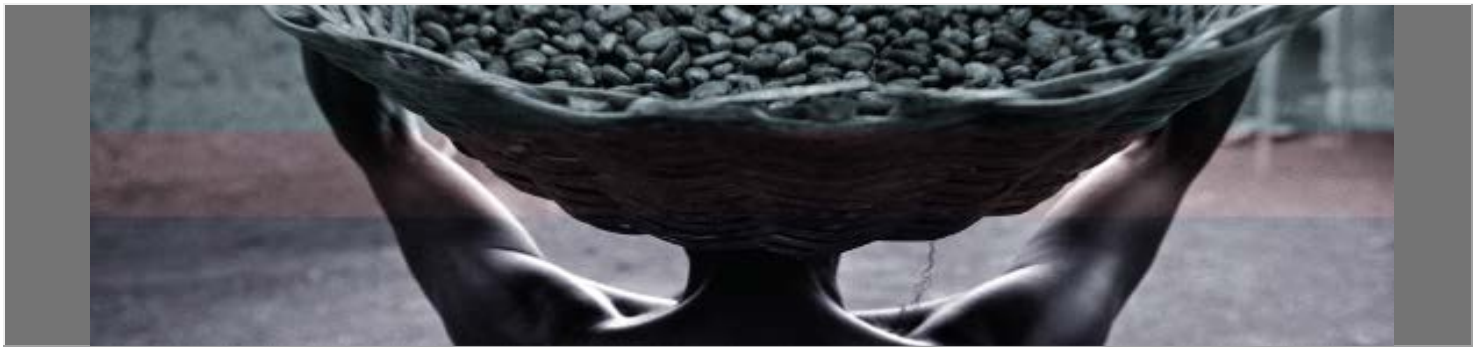

CAPTURING THE GAINS

economic and social upgrading in global production networks

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Social and economic upgrading in floriculture global value chains: flowers and cuttings GVCs in Uganda

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Abstract

Low-income countries are increasingly integrated into the global economy through their participation in global value chains (GVCs). This paper explores the extent to which workers and producers in Uganda have been able to improve their positions in floriculture GVCs over the past decade and the extent to which economic and social upgrading are linked. African flowers and cuttings, though closely related, are two distinct GVCs with different value chain dynamics and different prospects for social and economic upgrading for workers and producers. Both GVCs are closely tied into depressed European markets characterized by more competitive pressures across the GVCs. However, as a result of the different forms of GVC governance, the outcomes for Ugandan flowers and cuttings producers have differed. The dynamics of buyer-driven flowers GVCs have exerted downgrading pressures on producers. By contrast, the lead companies in the captive and hierarchical cuttings GVCs have enabled upgrading among their suppliers in Uganda. Workers in both cuttings and flowers GVCs have experienced significant social upgrading. Clear linkages exist between economic and social upgrading in cuttings. However, the principle drivers of social upgrading and its strong gender equality elements have been collective bargaining and advocacy by Ugandan trade unions and non-governmental organizations (NGOs) (backed by European NGOs). In conclusion, we point to areas for further research and possible steps to strengthen economic and social upgrading and their linkages.

Keywords: cuttings, economic upgrading, floriculture, flowers, GVC, gender, governance, social upgrading Uganda

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Abbreviations

CBA	Collective Bargaining Agreement
CBI	Centre for the Development of Exports from developing countries
CIF	Cost Insurance Freight
CPRC	Chronic Poverty Research Centre
DFID	Department for International Development
ESRC	Economic and Social Research Council
EU	European Union
FFP	Fair Flowers and Plants
FGD	Focus Group Discussion
FLP	Flower Label Programme
FOB	Free On Board
GAP	Good Agricultural Practice
GVC	Global Value Chain
IDEA	Investment in Developing Export Agriculture
ISO	International Standards Organization
ITC	International Trade Centre
MNC	Multi-National Corporation
MOMU	Mountains of the Moon University
MPS	Milieu Project Sierteelt
nes	Not Elsewhere Specified
NGO	Non-Governmental Organization
NUPAWU	National Union of Plantation and Agricultural Workers – Uganda
SCI	Sustainable Consumption Institute
SCOPE	Strengthening the Competitiveness of Private Enterprise
SSA	Sub-Saharan Africa
UFEA	Uganda Flowers Exporters Association
UHAWU	Uganda Horticultural and Allied Workers' Union
UK	United Kingdom
UN	United Nations
UNEP	UN Environment Programme
UNIDO	UN Industrial Development Organization
US	United States
USAID	US Agency for International Development
UWEA	Uganda Workers Education Association

1. Introduction

Low-income countries in the global South are increasingly integrated into the global economy through their participation in global value chains (GVCs). For agriculture-based economies in Sub-Saharan Africa, horticulture has been considered an important driver of economic growth, exports and employment. Uganda is a good example of a low-income agriculture-based economy that has achieved a degree of success in export horticulture, particularly floriculture. In common with many African countries, economic reforms to support export-led growth began in Uganda in the 1980s. By the late 1990s, Ugandan floriculture exports (primarily flowers) began to take off. In 2011, floriculture exports were generating employment and supporting the livelihoods of some 30,000 people, many women and most from poor rural backgrounds. Wages and benefits of floriculture workers had improved substantially, with the position of women workers' greatly improved. These successes were driven by the economic upgrading of producers who diversified away from buyer-driven flowers GVCs to cuttings – a GVC driven by vertically integrated operations of multi-national corporations (MNCs). This transition was accompanied by strong social governance, with national trade unions, national and international non-governmental organizations (NGOs), driving significant gains for workers, particularly women workers.

This paper explores these changes in Ugandan floriculture GVCs over the past decade. While the analysis of the international trade data (ITC 2013) and recent research on Ugandan horticulture supply chains (e.g. Carse and Webber 2010; Gabre-Madhin and de Vette 2004) and women floriculture workers (UWEA 2011) tells part of the story, they lack a global focus. Our GVC-focused analysis sheds light on the manner in which Ugandan producers and workers are integrated into the global economy and to what extent they have been able to benefit from this. Furthermore, we consider what, if any, linkages exist between economic and social upgrading in floriculture GVCs in Uganda and policy measures that might promote such linkages.

A distinctive feature of our approach is to distinguish flowers and cuttings GVCs, which have different upgrading trajectories. Ugandan floriculture tends to be treated as synonymous with flowers (UWEA 2011; Langan 2011), which is a buyer-driven GVC in which independent African flower producers' access to global markets is contingent on long-standing relationships with European buyers (flowers wholesalers and increasingly retailers) and consistently meeting their stringent standards. With a few exceptions (Gabre-Madhin and de Vette 2004; Martsynovska 2010; Dutch Ministry of Economic Affairs, Agriculture & Innovation 2012), cuttings has had little attention in the analysis of Ugandan floriculture, and few if any distinguish flowers and cuttings GVCs. Cuttings production in Uganda is not part of a buyer-led value chain. Rather, Uganda is an outsourcing platform for European propagation MNCs in which control is exercised through MNC ownership of production facilities. Cuttings represents a mixture of captive and hierarchical value chains (Gereffi et al. 2005) in which Ugandan-based producers are engaged either as wholly owned, MNC-controlled in hierarchical relationships with subsidiaries (hierarchical) or as captive value chains in which independent companies engage in separate joint venture cuttings production projects with the cuttings MNCs.

An important reference point for the Uganda case study is a broader multi-country, four-sector macro-level analysis of economic and social upgrading in GVCs by Bernhardt and Milberg (2011). Among their country-specific findings was that Ugandan horticulture had experienced strong economic and social upgrading, drawing solely on secondary trade and employment data (1999-2009) for horticulture as a whole. Their study is helpful in its overall approach to upgrading, and their findings, which suggest positive performance for Uganda in terms of economic upgrading (dramatic increases in global market share and in export unit values) and in social upgrading

(increases in employment and real wages). They broadly conclude that economic upgrading may, but does not necessarily, lead to social upgrading. We return to this in our conclusions.

This paper presents a complementary story to Bernhard and Milberg's (2011) macro and parsimonious analysis. We adopt a more detailed, qualitative case study approach, analysing firm-level qualitative analysis (micro) in the context of the flowers and cuttings GVCs (meso). We also draw on secondary trade data, but at a more disaggregated level (cut flowers and cuttings) to provide context for the more detailed value chain analysis. This draws on interviews with key value chain stakeholders in Uganda: producers (managers and senior decision-makers, industry representatives) and workers (individual workers, union representatives).

The paper is organized as follows. Section 1 provides an introduction to the case study. Section 2 discusses the international trade data for flowers and cuttings as contextual background for the GVC analysis. Section 3 presents the key concepts and framework of GVC analysis and outlines the broad elements of African cut flowers and cuttings GVCs. Section 4 presents background on Ugandan flowers and cuttings exports and floriculture employment, based on the secondary data for Uganda. Section 5 introduces the Ugandan GVCs, drawing on a mixture of secondary data and our field. Section 6 presents the main findings on social and economic upgrading of producers and in Uganda. Section 7 presents conclusions and provides illustrative policy recommendations.

2. International trade in floriculture: context for analysis of global value chains in flowers and cuttings[1]

2.1 Introduction

This section presents a summary of international trade in floriculture, distinguishing cut flowers from cuttings.[2] Cut flowers consist primarily of roses – 75 percent of traded flowers are roses and virtually all African flowers exports are roses (ITC 2013; author's interviews). As much as 50 to 80 percent of flowers trade (value) goes through GVCs.[3] They are exported as final products, grown, harvested and then processed (clipped, bundled into bouquets, boxed) at the farm ready for shipment, primarily to Europe. Cuttings are partially grown stems of flowers (chrysanthemums) or pot plants (e.g. otsteos, dahlias, impatiens, geraniums and others). They are intermediate products that are more light-weight and delicate and lower in bulk and hence have higher unit prices than flowers. Virtually all global trade in cuttings is channelled through GVCs in which trade is largely controlled by a few large propagation companies (based in The Netherlands, Germany and Switzerland).

Trade data provide the broad context for the analysis of cuttings and flowers. They give a good indication of the magnitude of the GVCs supplied by African producers and suggest trends in major importing regions. It is helpful to keep in mind that what lies behind much of these trade data are the company–company value chain relationships. These are discussed later in the paper.

[1] It is beyond the scope of this paper to present the floriculture global production networks that stretches across Africa, Asia, East and Central Europe and South America. Further research is needed to map out the global and regional production networks for intermediate and final floriculture products.

[2] The source of all trade data is ITC (2013) and all references to trade data are in export and import values in current US dollars.

[3] This is based on industry estimates of current (e.g. 2010/11) annual consumption of commercially grown flowers at €30-50 billion (roughly $22.5-37.5 billion) (Dutch Ministry of Economic Affairs, Agriculture & Innovation 2012).

2.2 Overview of trends in floriculture trade

The value of floriculture trade is fairly evenly divided between flowers and cuttings. Cuttings' share rose slightly from 47 percent in 2001 to 49 percent in 2012. Table 1 presents ITC estimates of total floriculture exports in current US dollars (cuttings and flowers) for the period 2001-2012. They more than doubled from $7.2 to $17.9 billion; average annual growth was 9 percent.[4] Although growth was robust for much of the early 2000s, exports declined in 2009 and 2010 following the financial crisis and the subsequent onset of economic crises in Europe. The decline in trade was exacerbated by the Icelandic volcano shock, which disrupted air travel between Africa and Europe for several weeks in 2010. Although there was a sharp recovery in 2011, this was reversed in 2012 when exports again declined, flowers by 2 percent and cuttings by 4 percent. This recent slowdown in exports reflects a depressed European market by 2012 compared with 2001, and industry experts expect growth to remain depressed, in the region of 2 percent for the foreseeable future (Dutch Ministry of Economic Affairs, Agriculture & Innovation 2012; author's interviews).

Table 1: Overview of global trade – exports of flowers and cuttings, 2001-2112

	Cuttings (US$ '000s)	Annual change %	Cut flowers (US$ '000s)	Annual change %	Total (US$ '000s)	Annual change %
2001	3,395,032		3,783,528		7,178,560	
2011	9,031,496	21%	9,246,647	22%	18,278,143	22%
2012	8,672,343	-4%	9,200,616	0%	17,872,959	-2%
2001-2102	Average annual growth	9%	Average annual growth	9%		9%

Source: ITC (2013).

2.3 Flowers: exports and imports

2.3.1 Flowers exports: shifting from North to South

The sources of global cut flowers exports are gradually shifting from North to South. The Netherlands is the only high-income country among the top five flower exporters, although it continues to account for about half (49.5 percent in 2012; down from 52 percent in 2001 and 55 percent in 2005) (ITC 2013). Latin America has maintained a constant share of global trade at about 22 percent. Sub-Saharan Africa (SSA) increased its share of global flower exports from 5 percent to 13-17 percent between 2001 and 2012 (to $1.2 billion) (ibid.).[5] However, Kenya's relative importance within SSA is on the decline – from 75 percent of SSA flower exports in 2001 to 48 percent in 2012. This is explained by the rapid rise of Ethiopia as a flower exporter. From virtually nothing in 2001, Ethiopia exported 43.2 percent of SSA flowers in 2012. Uganda's position as a SSA flower exporter tells a very different story; it declined over this period, both in absolute and in relative terms. Uganda's share of the SSA flower exports fell from 6 percent in 2001 ($11 million), to a fraction of 1 percent in 2012 ($0.2 million).[6]

[4] ITC estimates of floriculture imports and exports do not match. There are several possible reasons for this. One major explanation is likely to be is related to the nature of trade in floriculture, here re-exports, and trade in intermediate products (cuttings). More than 30 reasons have been identified for the discrepancies between reported imports and parallel exports. Countries treat re-exports or transit differently. Discrepancies arise if exports are registered in one year and the corresponding imports in the following year. Transportation and insurance costs are included in the reported import value (CIF: Cost Insurance Freight–port of destination) but are excluded from the reported export value (FOB: Free On Board–port of shipment). Not all countries follow international standards in which exports are valued FOB and imports are valued CIF. (http://www.trademap.org/stFAQ.aspx#li_Answer2_3).

[5] ITC estimates of SSA's global market reported by exporting countries are lower than those reported by importing countries.

[6] It is important to note, however, that, according to Ugandan sources, flower exports have declined less drastically and the ITC estimates may vastly overstate the decline.

Table 2: Global flower exports – focus on SSA (current US$)

		2001	2005	2011	2012
SSA % of world exports	4.7%	6.1%	8.5%	9.7%	13.3%
Of which % SSA:					
Kenya	75.0%	71.1%	61.1%	67.4%	48.4%
Ethiopia	0.1%	3.6%	22.2%	18.8%	43.2%
Uganda	6.0%	0.6%	0.0%	0.0%	0.0%

Source: ITC (2013).

2.3.2 Imports of flowers: stagnation in Europe and slow rise of new markets

Most of the world's cut flowers, especially those from Africa, are imported to the European Union (EU) but the EU's share has declined from 66.9 percent to 54.6 percent (2001-2012). Historically, Dutch auction houses have been the major channel for the European flower trade, although this is changing with the rise of direct buying from flower farms by retailers (especially supermarkets). Another development changing the orientation of GVCs is the emergence of new markets, including the Russian Federation and Eastern Europe, which are among the fastest-growing importers of cut flowers. In 2012, the Russian Federation accounted for 9.6 percent of world flower imports (from 1.2 percent in 2001) (ITC 2013). These changing patterns are important for Ugandan flower exporters, which are trying – as yet unsuccessfully – to reduce their dependence on European buyers (author's interviews; Dutch Ministry of Economic Affairs, Agriculture & Innovation 2012).

2.4 Cuttings exports[7]

Most cuttings (60 percent) are exported from high-income European countries where the global propagation companies are located. The Netherlands is the largest with 48 percent of the value of world's cuttings exports in 2012, up from 38 percent in 2001. The two largest propagation MNCs are based in The Netherlands (see Table 4). Germany follows with about 8 percent of world exports (from 6 percent in 2001), also home to two of the world's top five propagation MNCs.

As a result of outsourcing strategies of the large propagation companies, there has been rapid growth in exports from developing and emerging economies but from a very low base. SSA's share of global cuttings exports rose from 1.6 percent to 2.4 percent (in value) between 2001 and 2012. Three countries account for 85 percent of these exports: Ethiopia, Uganda and Kenya, in that order. Ethiopia started with virtually nothing in 2001, to become the 15th largest cuttings exporter in the world in 2012. Such exports rose from 1 percent of SSA's cuttings exports in 2005 to 36.9 percent in 2012. Uganda's rose nearly ten-fold from $5.5 million in 2001 to $52.4 million in 2012, making Uganda the 16th largest cuttings exporter in the world compared with 32nd in 2001. By contrast, Kenya's share of SSA cuttings declined from 31 percent in 2001 to 23 percent in 2012.

[7] The trade data for cuttings should be interpreted with particular care, since cuttings include a wider range of products than cut flowers. ITC Product Code 0602, cuttings, includes plants, live, not elsewhere specified (nes) (including roots), cuttings and slips and mushroom spawn. Hence the percentages of world trade referred to in this discussion are percentages of a much larger basket of goods than just cuttings of flowers and pot plants.

Table 3: SSA cuttings exports (SSA as % of world, countries as % SSA)

Exporting country	2001	2005	2010	2011	2012
World (US$ '000s)	3,395,032	5,690,811	7,439,762	9,031,496	8,672,343
SSA (US$ '000s)	53,948	102,858	157,527	180,109	211,710
SSA % world	1.6%	1.8%	2.1%	2.0%	2.4%
Of which (% SSA)					
Ethiopia	0.0%	0.9%	13.5%	12.4%	36.9%
Uganda	10.2%	31.9%	29.6%	29.1%	24.7%
Kenya	31.1%	36.4%	36.2%	42.7%	23.3%

Source: ITC (2013).

Over the past decade, Europe accounted for about two-thirds of the value of global cuttings imports. Germany is the largest European cuttings importer (fairly stable at around 20 percent), followed by The Netherlands, whose share nearly doubled from 5.5 percent in 2001 to 9.5 percent in 2102, and France, accounting for a stable 10 percent of imports. In value terms, the rate of growth of imports by other EU countries (and the US and Canada) has declined while Russian imports have grown rapidly, but from a low base of 0.6 percent to 2.1 percent of world imports in 2012 (ITC 2013).

2.5 Summary of global trade in cut flowers and cuttings

The share of flowers exported from Africa, Latin America and Asia has increased over the period, continuing a trend that began in the 1990s. The pace of import growth has slowed and new exporters have emerged within regions, with Ethiopia the major newcomer in SSA. Cuttings represent a similar but different value chain as flowers, driven by five European propagation companies. SSA is slowly gaining importance as a production site for these companies. This is what lies behind the rise in Ugandan cuttings, which we discuss in the case study in Sections 4-6. First, we discuss the key GVC concepts and their relevance to African floriculture.

3. GVCs: key concepts and their application to African floriculture GVCs

3.1 Introduction

GVC analysis provides a methodology and conceptual framework for understanding how companies and workers are integrated into globalized trade, production and employment. Value chain relationships differ from traditional arms-length trade in the nature and degree of coordination along the whole of the value chain, ranging from buyer-driven GVCs such as flowers, in which coordination is achieved without ownership, to ownership-based relations evident in cuttings. This section sets out the GVC framework, introduces key concepts and presents an overview of the two value chains (flowers and cuttings) we identified in our analysis of Ugandan floriculture.

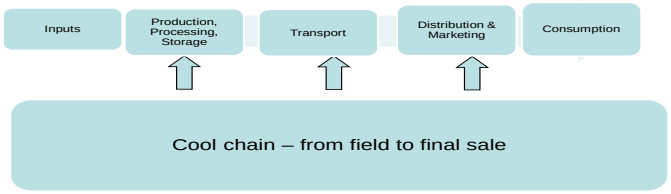
3.2 A simplified value chain framework

The GVC considers the lifecycle of a product, from its inception starting with inputs, to various stages of production, through to marketing and final consumption, in which different activities cross national boundaries. Figure 1 presents a simple outline of the basic activities that make up the value chain.

Logistics and the cool chain are central to the commercial floriculture GVC presented above. Export floriculture (both cuttings and flowers) could not have developed in Africa without affordable, accessible air transport and substantial (private) investment in cool chain facilities from field to final destination. This owes to the combination of high perishability of flowers and cuttings, and the geographic distance between production and consumption. Transport costs, timeliness of delivery

and maintenance of constant cool temperatures from farm to destination are crucial. Below, we present an overview of the structure and coordination of the flowers and cuttings value chains from the perspective of African producers. This is followed by a discussion of governance, focusing on private governance, which drives these commercial value chains; then there is a summary of social and public governance.

Figure 1: Simplified floriculture GVC framework



3.3 Overview: floriculture and flowers GVCs in Africa

Below, we present an overview of flowers and cuttings GVCs to illustrate the global context in which Ugandan floriculture producers and workers are integrated.

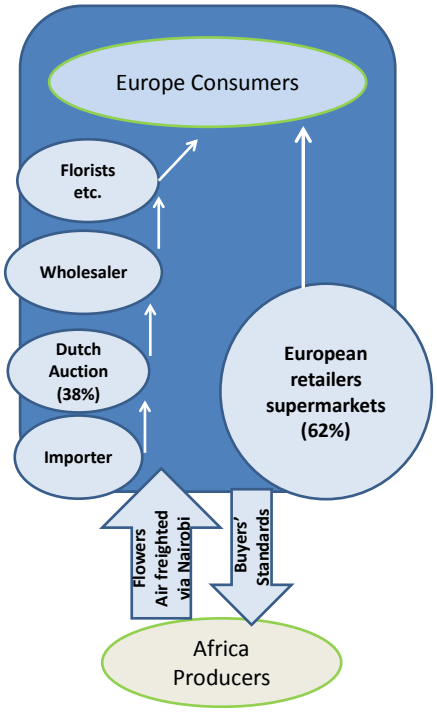
3.3.1 Flowers: buyer-driven GVC

Governance in the flowers GVC is exercised by lead buyers through their sourcing requirements and stringent standards and without direct ownership (Gereffi 1994). Buyers are able to acquire economic rents through the 'capture' of value at the consumer end of the chain (Gereffi 1994; Gereffi et al. 2001; Kaplinsky and Morris 2002). Producers can seek to capture more value through upgrading (process, product, functional, chain). In theory, they are also free to switch buyers. As modular GVCs (Gereffi et al. 2005), both producers and buyers are not closely tied to each other. Production site are independently owned by producers; although they are geared towards meeting buyers' specifications, these requirements do not tie them to specific buyers. The cost for buyers to switch to new suppliers may be relatively low compared with the costs to suppliers of finding new buyers (Gereffi et al. 2005). However, as we note later, this does not appear to have been the case for Ugandan flower exporters supplying European GVCs. Alternative suppliers are easily available in Kenya and Ethiopia, as the trade data suggest.

Figure 2 below depicts a simplified Africa–European flowers GVC. This shows South–North linkages between producers and buyers. Trade in cut flowers is largely organized by region and trade lines run from the South to the North, rather than from the East to the West. African and European producers are the principal suppliers to Europe. All African flowers are shipped by air, primarily to Europe, some to the Middle East and East Asia, and normally transported by land to final end markets. Nairobi is a major transport hub for flowers exported out of Africa. Indeed, in 2011, Kenya became the largest cargo hub of Africa, bigger than Johannesburg or Cairo (Dutch Ministry of Economic Affairs, Agriculture & Innovation 2012).

Historically, Dutch flower auctions[8] have been the central marketing hub for flowers, involving wholesalers supply florists and other traditional retailers. Increasingly, the Dutch auction houses are being by-passed by large retailers, particularly supermarkets (e.g. Asda, Marks & Spencer, Tesco, Sainsbury), which have established their own supply chain networks with producers in Africa.

Figure 2: Simplified buyer-driven global value chain – African flowers



It is estimated that, in Europe, the share sold by florists and traditional sellers declined from 57 percent in 2000 to 38 percent in 2010 (Martsynovska 2010). This has implications for the governance of the flowers value chain, since supermarkets usually set their own process and product standards, which can be more stringent than wider industry standards. Furthermore, supermarkets tend towards single-sourcing based less on price (as in the Dutch auction system) and more on quality, delivery reliability and traceability (Dutch Ministry of Economic Affairs, Agriculture & Innovation 2012).

Current trends in flowers GVCs suggest buyers (retailers, auction houses) are putting increasing pressure on suppliers to increase quality, develop new varieties and cut costs. Growth in European demand for flowers has slowed, yet at the same time consumer demand for production quality and social and environmental standards is increasing. As a result, margins across the flowers GVC are under pressure and direct trade channels (bypassing the auction system) are growing. Technology and knowledge are developing rapidly, in cultivation and in how flowers are traded; transactions are increasingly computerized (Dutch Ministry of Economic Affairs Agriculture & Innovation 2012).

3.3.2 Cuttings GVC: led by vertically integrated multinational propagation companies

Cuttings is a more closed value chain than that of cut flowers. It has been more difficult for local African investors to establish independent farms to supply cuttings to a small number of European-based MNCs (see Table 4). These MNCs specialize in research and development of new varieties

[8] The merger of the two largest Dutch cooperative flower auctions (FloraHolland and Bloemenveiling Aalsmeer) has given rise to the world's largest flower market place, called FloraHolland, with total flower sales of €2.35 billion in 2011 (Dutch Ministry of Economic Affairs, Agriculture & Innovation 2012).

of pot plants and flowers. They exercise control of cuttings production through ownership. The final stage of production is controlled through strict licensing, when cuttings are sold on to nurseries for cultivation into pot plants and flowers (Dutch Ministry of Economic Affairs, Agriculture & Innovation 2012; author's interviews). For the first stage of production, these companies have global sourcing platforms in Uganda, Kenya and other countries, including Spain, Brazil and Vietnam. Although we could not confirm it, it is very likely that these companies are also using sourcing from Ethiopia.

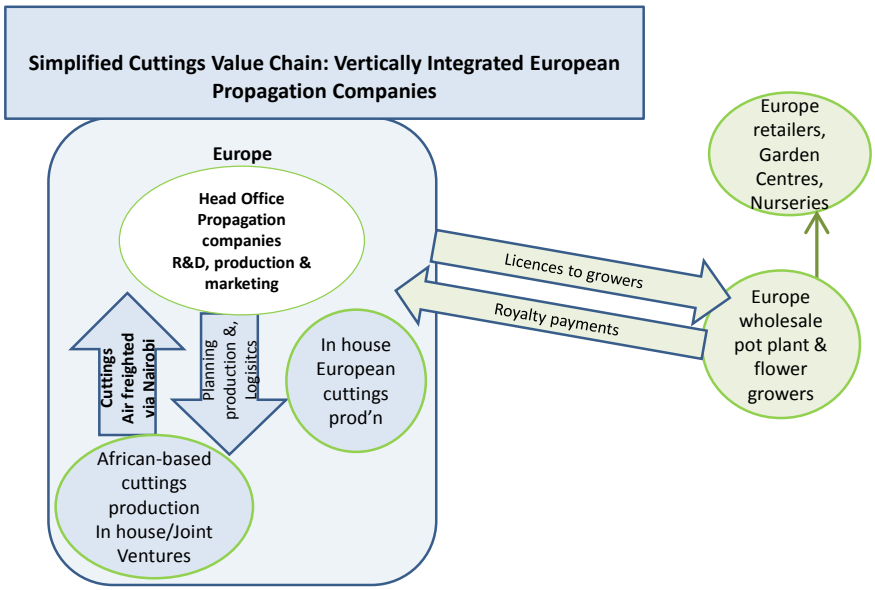
Table 4: Top five cuttings producers

Global ranking, company	Estimated production, number of cuttings (2009)	Headquarters	No. of countries with operations
1. Fides B.V.	800-850 million	Netherlands	5
2. Beekenkamp	635 million	Netherlands	6
3. Syngenta Flowers	550-600 million	Switzerland	7
4. Selecta Klemm	230-250 million	Germany	3
5. Dümmen	200-220 million	Germany	3

Source: www.GreenhouseGrower.com (2009), cited in Dutch Ministry of Economic Affairs, Agriculture & Innovation (2012).

Figure 3 presents an overview of the cuttings GVC, where cuttings are an intermediate product – an input into an extended value chain in pot plants and flowers.[9] Cuttings are primarily grown in European in-house propagation centres. However, this intermediate stage of production is gradually shifting to low-income, low-cost countries, but under the strict control of the propagation companies.

Figure 3: Simplified global cuttings value chain – focus on African global sourcing



For African producers, the cuttings value chain follows a similar trade channel to that of flowers, from South to North, but with no option for diversification to other end markets, since this is done by the MNC, not the cuttings suppliers. African production and logistics are planned and coordinated by the head office of the European propagator and managed through computerization. Once cuttings are harvested and boxed, transport is the same as for flowers – via air – to Europe. Whereas flowers are transported by land to auction houses or to retailers, cuttings are transported

[9] To complement the trade data we refer to this as the cuttings GVC, although it is an input into the pot plants and chrysanthemum GVC.

to the next production sites.[10] Cuttings are sold to wholesalers (greenhouses and other propagators) for replanting in the final production phase, where they are grown, harvested and processed into bouquets of chrysanthemum flowers or pot plants and sold on to final retailers (garden centres, nurseries), which sell on to final consumers.

In this MNC-driven value chain, propagation companies capture value through vertical ownership of the whole of the value chain – research and development (and hence knowledge and patents on new plant varieties) and production facilities (in Europe and lower-cost sites in Africa and Asia); and by coordination of the marketing segment of the chain.

3.4 Governance: private, social and public governance

3.4.1 Private governance of flowers: buyer-driven GVC

Private governance of the flowers GVC is driven by buyers' demand for particular specifications, or standards. This can promote economic upgrading of producers when global buyers place orders for significant volumes and provide 'upgrading' support – in terms of guidance on product quality and processes. The main standards governing floriculture GVCs are Milieu Project Sierteelt (MPS), a widely accepted private certification/labelling protocol for floriculture that aims to reduce the environmental impact of floriculture through reduced use of pesticides, fertilizers and energy and improve working conditions. Approximately 85 percent of flowers sold through Dutch auctions are MPS-certified (Labaste 2005). Auctions, therefore, fall under the influence of GVCs through the acceptance of standards as a requirement. MPS has been benchmarked to the Euro-Retailer Produce Working Group for Good Agricultural Practices (GAPs) (UNEP 2009). MPS' environmental and social certification/labelling programme comprises four certificates: MPS-A (for environmental registration that certifies the use of crop protection agents, fertilizers, energy and waste); MPS-GAP (safe, good quality, traceable products that have been cultivated in a sustainable manner); MPS Quality (a quality assurance system that includes sector-specific requirements for floriculture); and MPS-SQ (certificate for products cultivated under good working conditions).[11]

Two International Standards Organization (ISO) guidelines are i) ISO 9001:2008, a global benchmark for quality management to help companies meet internationally recognized quality management principles set out by the ISO[12] and ii) ISO 26000:2010, launched in 2010, which provides guidance to help businesses and organizations translate social responsibility principles into practice. It is an example of a form of social governance representing the efforts by multiple stakeholders (from governments, NGOs, industry, consumer groups and labour organizations) to improve social standards of suppliers.[13]

Private governance may strengthen corporate social responsibility. Examples are the Fair Flowers and Plants (FFP) Certification, which recognizes flowers that have been cultivated and traded in an environmentally and socially responsible manner. There is cross-referencing so a company certified as MSP-A is eligible for a FFP logo and the Flower Label Programme (FLP), which provides guidance to promote socially and environmentally responsible flower, fern, plant and foliage cultivation by setting universal standards to improve Labour, Social, Health and Safety

[10] The cost of transporting potted plants means the cuttings are planted on to larger pots in traditional production centres like The Netherlands and Germany and some new production hubs like Poland and Italy (Martsynovska 2010).
[11] http://www.my-mps.com/en/certificates-trader/mps-florimark-trade-trader
[12] http://www.iso.org/iso/home/standards/management-standards/iso_9000.htm
[13] http://www.iso.org/iso/home/standards/iso26000.htm

Standards and reduce the use of pesticides and chemicals. Another example is the Fairtrade standard for flowers, which establishes standards on health and safety and employment conditions and for which producers receive a Fairtrade premium.

3.4.2 Private governance of the cuttings: vertically integrated MNC

Cuttings represents a form of MNC value chain governance exercised through ownership of outsourcing production sites either as joint ventures (captive) or wholly owned subsidiaries (hierarchical). Cuttings is a closed value chain; producers entering this value chain require supplier competence greater than that required for flowers. There is extensive intervention from the lead firm (Gereffi et al. 2005). The lead firm 'locks in' suppliers for particular products through provision of product-specific technical and management support (ibid.). For both joint venture and vertically integrated companies, the lead firm effectively manages a complex web of inputs and outputs and controls resources, especially intellectual property (ibid.). The difference between joint venture and vertically integrated companies is that switching buyers/suppliers is possible but unattractive for producers.

3.4.3 Social governance

Social governance has been important in Uganda flowers and cuttings GVCs. It refers to the influence on GVCs by workers organizations, trade unions, NGOs and other civil society organizations at national, regional and international levels. It refers to both formal and informal rules that influence the behaviour of companies (Mayer and Posthuma 2012) as well as workers (including gender norms). Trade unions and workers organizations use advocacy campaigns to achieve decent pay and employment conditions, address discrimination and promote gender equality in the workplace, for example. Civil society networks and international trade unions have been able to organize global campaigns to influence the behaviour of companies to support social outcomes (Barrientos and Evers 2013). Such networks organize at different sections of the value chain as a means to strengthen the bargaining power and voice of workers in global production (ibid.). NGOs and international trade unions have been able to influence corporate policy on labour and environmental standards.

3.4.4 Public governance

Public governance refers to the policies of national governments, international agencies and bilateral donors that have a bearing on the value chain Public governance can strengthen economic upgrading through support to the GVC by improving linkages between public governance actors, private sector companies and end markets, through support to the cool chain, for example. Public governance can facilitate the implementation of phyto-sanitary requirements, Global GAP and improved labour standards and the establishment of complementary institutional structures needed to enable more favourable integration of national producers and workers into global and regional value chains.

3.5 Summary

Having outlined the broad GVC framework and key concepts of governance, in the next section we introduce the overall Ugandan context.

4. Uganda background

4.1 Introduction

This section provides a summary of recent trends in Ugandan exports, employment and wages in cuttings and flowers, drawing on secondary data. Drawing directly on Bernhardt and Milberg's (2011) macro-level analysis of economic and social upgrading, we provide an overview of economic and social upgrading/downgrading suggested by the secondary data.

4.2. Floriculture in Uganda: background and recent trends in exports and employment

Uganda began exporting flowers (and a small percentage of cuttings) in the mid-1990s. By 1998, there were 22 medium-sized commercial farms covering 85 hectares directly employing about 3,300 people. The number of farms has remained fairly constant, but the size of farms has increased – with 20 exporters (mainly flowers producers) in 2001 and cuttings exports dominating in 2012.[14] Over the period, the area under cultivation more than doubled from 100 to 230 hectares (Table 5), and the share of flowers has steadily declined as cuttings production has increased. Over this period, total employment (in both flowers and cuttings) rose from 4,000 workers in 2001 to 7,000 in 2011 (author's interviews; Gabre-Madhin and Vette 2004). Women are concentrated in greenhouses (cultivation and harvesting) and pack houses (processing, packaging). The majority (80 percent) of workers on farms are production workers (harvesters, packers, graders) and most of these are women (85 percent). Women have always made up the majority of workers, but their representation has remained fairly constant at around 75 percent of the workforce since 2001 (UWEA 2011; author's interviews).

Table 5: Uganda, selected data on floriculture exporters, 2001, 2012

Global ranking, company	2001*	2012
Number of farms	20	20
Area (ha)	100	230
Employment	4,000	7,000
Percentage of women	75%	63-75%

Source: http://ufea.co.ug/; UWEA (2011); author's interviews.

Uganda's total floriculture exports increased substantially between 2001 and 2012. Cuttings exports rose from $5.5 million (2001) to $52.4 million (2012), making Uganda the 16th largest cuttings exporter in the world up from 32nd place (of some 140 exporters) in 2001 (ITC 2013). According to the International Trade Centre (ITC), export revenues from flowers fell dramatically – from $10.8 million to an estimated £204,000 in 2012.[15] According to the ITC, Uganda's flower exports fell from just under 70 percent of total floriculture exports in 2001 to less than 1 percent in 2012. By contrast, the share of cuttings in total floriculture exports rose from 33.6 percent 30 percent in 2001 to about over 99 percent in 2012 (ITC 2013). The data for flowers should be interpreted with care since key informants suggest the decline has not been as dramatic as Table 6 suggests. Nonetheless, there is no doubt flowers exports have declined quite substantially.

The EU, and particularly the Netherlands, has been the primary importing region for Ugandan flowers and cuttings over the past decade. In 2012, 84 percent of cuttings were exports to the Netherlands, this compared with 91 percent in 2001. The share of flowers exported to the Netherlands increased, from 69 percent in 2001 to 90 percent in 2012 (ITC 2013). While this

[14] The number of farms varied between 17 and 20 in the late 1990s till the early 2000s, with marginal farms closing and new ventures being established.

[15] The data in Table 6 are based on reporting by exporting countries. However, import data reported by EU countries suggest that, in 2012, Uganda flowers exports were closer to $3 mn (ITC 2013).

suggests Uganda is still tied into the Dutch auction houses, key informants report the share going to Auction has declined. Indeed, flowers destined for retailers are flown to the Netherlands and transported to elsewhere in Europe.

Table 6: Uganda exports to world

	Cuttings (US$ '000 current)	%	Cut flowers (US$ '000 current)	%	Total floriculture (US$ '000 current)
2001	5,484	**33.6%**	10,847	**66.4%**	16,331
2005	32,785	**94.1%**	2,050	**5.9%**	34,835
2012	52,364	**99.6%**	204	**0.4%**	52,568

Source: ITC (2013).

Table 7 shows that unit prices of cuttings (in current US$ per kilogram) have been increasing since 2001, from £3.90/kg to $8.38/kg in 2011. Flower prices rose modestly between 2001 and 2005, but are not available for 2011. However, field studies suggest they have been stable or declining since 2010. We return to the question of prices in Section 5 where we draw on field studies.

Figure 4 below replicates Bernhardt and Milberg's (2011) original quadrant, excluding the other countries, and with the positions of flowers and cuttings inserted. Drawing on Tables 5, 6 and 7, we have replaced horticulture with cuttings in the top right hand quadrant, suggesting there has been both social and economic upgrading.[16] However, the story for flowers is clearly different, since we know from the trade data that flowers exporters experienced substantial downgrading (in terms of loss of market share), and real unit prices have been stable at best. However, since neither the wages nor the employment data disaggregate flowers and cuttings, it is not possible to distinguish social upgrading in flowers from that of cuttings. We attempt to do this in Section 6, where we draw on field interviews with stakeholders from both cuttings and flowers GVCs.

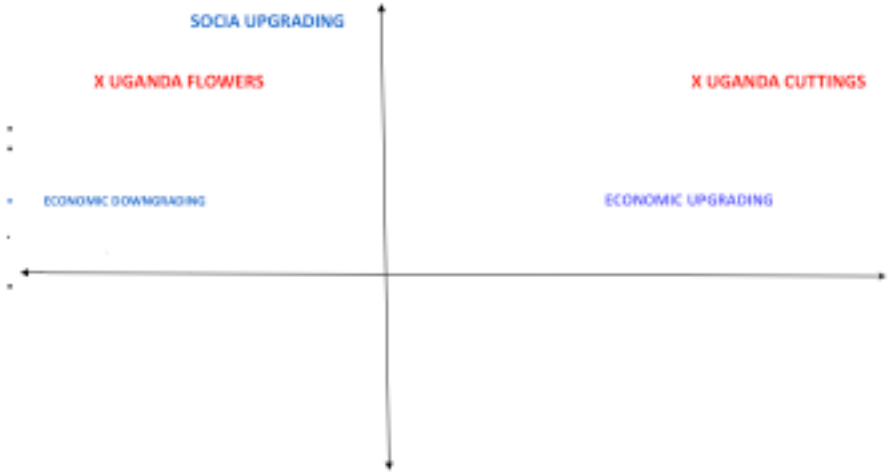
Table 7: Uganda, key export indicators for flowers and cuttings

	2001	2007	2011
Cuttings export (US$ '000s)	5,483	35,781	52,290
% of global cuttings	3%	9%	13%
Global ranking	32	17	16
Unit prices/kg cuttings	$3.90	$5.60	$8.38
Flowers exports (US$ '000s)	10,847	50	191
Global ranking	25	9	72
Unit prices/kg roses	$4.04	$4.55	N/A

Source: ITC (2013).

[16] Their macro-level approach measures upgrading and downgrading as changes in export unit values and export shares (economic upgrading/downgrading) and changes in real wages and total employment (social upgrading/downgrading).

Figure 4: Social and economic upgrading/downgrading in floriculture



Source: Adapted from Bernhardt and Milberg (2011).

4.3 Summary

This section gave a brief analysis of Ugandan floriculture (flowers and cuttings) drawing solely on the secondary data, drawing comparisons with Bernhardt and Milberg (2011). This suggests there has been economic downgrading and social upgrading for producers and workers in Ugandan flowers but economic and social upgrading among those in cuttings. In the next section, the GVCs for cuttings and flowers in Uganda are presented, drawing on the secondary data as well as insights from the field studies.

5. Flowers and cuttings GVCs: key findings from Ugandan field studies

5.1 Introduction

This section presents a more detailed picture of the flowers and cuttings GVCs. This applies the general GVC framework and concepts to the experience of Ugandan producers and workers and maps out the GVC for Uganda, drawing on secondary data as well as our field studies.

5.2 Research methodology

Research was carried out in two phases – in July 2011 and at the end of February to early March 2012.[17] The first phase involved a review of secondary data and information on flowers and cuttings presented above. This provided the first stage mapping of the Ugandan flowers and cuttings value chains. We also draw on research in the second phase, which involved key informant interviews within Uganda. This helped fill in the details of the GVC mapping and inform the analysis of analysis of social and economic upgrading (presented in Section 6).

We identified key flower and cutting farms, from which nine farms were selected for more in-depth study. All were members of Uganda Flowers Exporters Association (UFEA), which acts in the interests of both flowers and cuttings exporters and has a secretariat based in Entebbe. UFEA has been supported by international donors – primarily to support process upgrading – through investments in airport handling to cut losses and research to improve production technologies. Key informants say there has been less success in working with government to support the floriculture industry.

[17] On these visits, interviews were held with stakeholders in fresh fruit and vegetables value chains discussed in Evers et al. (2013).

The four flowers exporters and five cuttings producers interviewed accounted for substantial proportions of both cuttings and flowers exports and employment. Semi-structured interviews were held with 20 managers (4 managing directors, 16 human resources, logistics and production managers) and 6 interviews and 9 focus group discussions (FGDs) were held with 52 workers (30 women; 22 men). Other key informants interviewed were UFEA's freight handling company (Fresh Handling); leaders of the two national trade unions representing flower workers in Uganda, the National Union of Plantation and Agricultural Workers – Uganda (NUPAWU) and Uganda Horticultural and Allied Workers' Union (UHAWU); a women worker's leader; a regional representative of the International Union of Foodworkers; and two civil society organizations (the Private Sector Foundation and the Uganda Workers Education Association (UWEA)).[18]

Managers and workers were usually interviewed separately. Most workers were interviewed anonymously outside of working hours, in a location away from the farm. Gaining independent access to floriculture workers is difficult and sensitive, since workers run the risk of being dismissed for participating in non-company-sponsored interviews. Therefore, we relied on contacts with a local workers' rights NGO (UWEA) and, through it, made contact with the trade unions, which assisted in organizing workers for interview. Interviews with the workers' representative and workers on two of the farms were not organized through the trade union, and were conducted on the farm but without the presence of farm management.

5.3 Simplified GVC for cut flowers

All cut flowers produced and exported from Uganda are small-headed roses of 10-20 varieties. At the time of our research, 10 floriculture farms were producing and exporting roses, which represented less than 1 percent of total floriculture production, by value, according to the ITC in 2012. However, key informants suggest flowers accounted for more than 5 percent of total floriculture revenues. It is difficult to estimate, since cuttings prices are determined internally, not through market transactions, and the data on volumes of production are inconsistent and not easily comparable between flowers and cuttings, so these are approximations.

Figure 5 presents a simple GVC for cut flowers in Uganda based on secondary data and key informant interviews. Ugandan producers are engaged in securing inputs, producing, processing and storing roses, managing logistics and transport to UFEA's handling company (Fresh Handling) based at Entebbe Airport. The main inputs consist of imported breeding stock from companies in Kenya and Europe (for which flower producers pay royalties of an estimated 15 percent of the value of sales), agro-chemicals and greenhouses, which are also imported and for which government approval is required. The main local inputs are cardboard boxes, sourced from two Ugandan suppliers.

Production takes place under greenhouses, on the ground where flowers are planted, tended and harvested. The greenhouses under flowers are not required to be climate-controlled, although there are fans that protect workers and flowers from extreme heat. The cool chain is essential once the roses have been cut until they reach their final destination. Ideally, temperatures in the range of 10-14 degrees centigrade must be maintained during processing, storage and transport. Flowers are cut and transported to pack houses, where they are processed, bundled into bouquets (often applying store labels and price) and then boxed ready for storage and transport in refrigerated trucks to the airport handling station. All flowers are shipped from Entebbe Airport and handled through the UFEA-managed Fresh Handling, which is located just outside the airport perimeter.

[18] Four South African and Kenyan supermarket retailers were also interviewed. Since very few local flowers are sold to Ugandan retailers, we do not refer to these interviews here.

Passenger airlines (e.g. KLM, Emirates and Belgian airlines) and commercial freight (e.g. IceMark) are used for shipping. In 2008/09, about 30-50 percent of Ugandan flowers were sold to Dutch auction houses (Webber and Labaste 2010). In 2011, according to key informants, about one-third of Ugandan roses were sold through Dutch auction houses; the rest was contracted for sale to buyers in the UK/Europe (primarily European/UK supermarkets). Although the secondary data presented earlier show the vast majority of Ugandan flowers are destined for Europe, exporters report sales to East Asia, including Japan, as well as the Middle East.

In terms of marketing in the GVC, long-term contracts with buyers are critical for securing access to high-value markets. The distance of producers from final markets (and the lack of marketing expertise among Ugandan exporters) shifts power in the flowers GVC strongly towards buyers. Section 3 outlines the standards exporters must meet (MPS, ISO). All companies interviewed were MPS-A or (B or C) certified. One flower farm has Fairtrade certification. Buyers make specific requirements (often with lead times of less than three months) for particular rose varieties, stem length packaging and delivery schedules.

5.4 Simplified cuttings GVC for Uganda

Cuttings account for approximately 90 percent (by value) of floriculture in Ugandan GVCs. All are produced on behalf of European cuttings propagators. Cuttings are partially grown stems of flowers or pot plants. One cuttings company had a small project breeding new varieties of roses, which were sold to Kenyan farms.[19]

Cuttings is a more closed value chain than that of flowers; propagation MNCs own and coordinate all of the cuttings activities of Ugandan suppliers. Among the producers operating in Uganda at the time of the research, more than half were wholly owned outsourcing operations of European-based propagation companies, not independent suppliers. The remainder comprised independent companies with other (lower-value) horticulture operations, and had additional projects that were joint ventures with propagation companies in clearly specified cuttings operations. Figure 6 portrays a simplified version of the cuttings GVC in which Ugandan producers and workers participate. The main activities are securing production inputs, producing, processing and storing cuttings and managing logistics, as described below. Industry stakeholders agreed cuttings were increasingly competitive, especially within Uganda, but also elsewhere in East Africa, including Kenya, Tanzania and Vietnam (author's interviews).

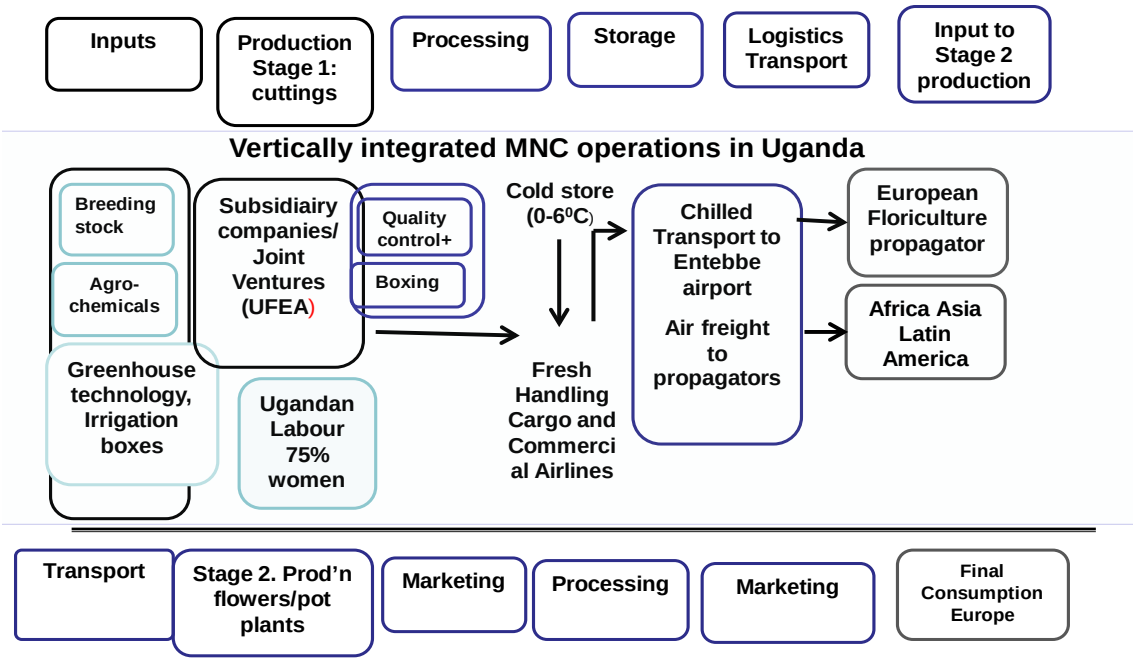
Research and development is a critical area of value capture, controlled by the GVC. Uganda is a site for growing new varieties developed in European growing operations by the MNCs. The head company sells licences to other companies and producers. For example, one of the five companies listed in Table 5, recently sold a company in Brazil the licence to make their brand cuttings, for which they pay the company 9 percent royalties. Ugandan producers do not pay or receive royalties, although royalty payments are imputed as a share of sales.

Production technology and skills more advanced than roses. Ugandan operations are production sites. Inputs consist of breeding stock supplied (and owned) by head companies. The technical specifications of the greenhouses are more advanced than for flowers, workers are slightly better trained and cuttings farms increasingly prefer workers with a secondary education, which is not

[19] This was the only example of the link between the two GVCs. In this case, a cuttings company, a wholly owned subsidiary of the MNC, had expanded into the input segment of the flowers GVC, which linked into the Kenya flowers GVC, rather than the Ugandan one.

required in flowers farms. Chemical and other inputs are more specialized in cuttings than in rose production. This is because cuttings have zero pest tolerance, so cuttings require filtered water from water purification plants. Several producers suggested government investment in power and irrigation infrastructure would help reduce costs and uncertainty. Furthermore, cuttings producers report long government delays in approving more environmentally friendly bio-chemicals (which are currently used in Kenya): 'This could cut our costs and reduce environmental damage […] many of these chemicals are allowed in Kenya, but not yet here in Uganda.' Cardboard boxes are supplied from the same two companies that sell to flower farms, although these are not considered of a high enough standard by some of the cuttings growers. Satellite computerized systems connect the farm to head office. Thus, production and logistical management systems are closely tied into the lead company and are far more transaction-specific than for flowers.

Figure 6. Uganda: Simplified Cuttings Global Value Chain



Production, processing, storage and ground transport to Entebbe airport all take place in Uganda. The cool chain and hygiene are more critical to cuttings than to roses because cuttings are more sensitive to greenhouse and storage environment. The greenhouses are technologically more advanced, with automatic environmental controls. Cuttings are grown on tables, not on the ground like roses, because they are easier to disinfect. It also means greenhouse workers have less arduous bending than with roses or horticulture products. Production management is fine tuned to particular cuttings varieties. However, some cuttings have a longer shelf-life than roses,[20] which was an advantage in 2010 when the Icelandic volcano seriously interrupted air transport to Europe. Cuttings, however, require cooler temperatures than roses, at most 6 degrees centigrade. Transport and export processing of cuttings for chrysanthemums are similar to those for roses.

In cuttings GVCs, production and logistics are managed by the MNC head office through a computerized global sourcing system. The Uganda-based production managers follow the planting orders received from head office; similarly, export managers follow shipping instructions received from head office – all via computer links. 'Everything is produced and planned for in Holland and

[20] The on-farm shelf life of chrysanthemum cuttings is reported to be two weeks. Plants for potting – e.g. poinsettias and geraniums, rooted and unrooted – have to be shipped immediately (author's interviews).

Germany, Uganda is a production and propagation site, marketing is done from Holland and Germany. They make the decisions' (Export Manager, Farm 1). Most cuttings are shipped to Europe, though some go direct to Japan, South Africa and Colombia on behalf of head office.

Although the head office organizes logistics strategies, it is up to the Ugandan producers to negotiate freight costs from farm to departure airport. The Ugandan end of logistics and transport has been especially problematic for both cuttings and flowers exporters, with high costs and inefficient freight, failures in the cool chain and 'offloads' by handling agents – both cuttings and flowers produce being offloaded to make room for fish exports. However, UFEA has used its resources to improve handling and bargain with airlines for lower freight charges.

5.5 Governance of the cuttings GVC

Uganda's cuttings operations provide low-cost production sites, and enable the lead companies to capture more value in an increasingly competitive GVC. In the cuttings GVCs, control is exercised through ownership, where MNCs aim to control and capture the gains of specialized knowledge through direct ownership of these GVCs. Standards are enforced by end buyers – a pressure cuttings producers do not face – thus the lead companies have a direct interest in enabling producers to meet standards (all cuttings producers meet MPS or Global GAP standards).

The propagation companies provide financial, management and production support to enable the farms to meet industry standards as well as those of the head company. Independent companies are more likely than wholly owned subsidiaries to raise concerns about the costs of meeting social standards. One joint venture cuttings company with MPS-GAP, MPS-SQ and FFFP certification maintained European consumers had no understanding of the situation in Uganda. The standards were set too high – an incremental ranking of standard setting and implementation would be more appropriate.

Company-specific standards are even more stringent than industry standards, and are more important as a basis of competition among the MNCs. Company-specific standards are aimed at ensuring the best quality and the best varieties. Key factors that drive and differentiate cuttings MNCs are achieving production guidelines and hygiene standards to produce better quality (appearance, response time of cutting, growth in short day conditions) and developing an increasing number and type of varieties. For example, one wholly vertically integrated company competes on the basis of producing the best (most valued by consumers) varieties in Uganda, so is less pressured on quality standards.

For MNCs, internal outsourcing of cuttings is driven by cost saving, and creates opportunities for transfer pricing by the MNC. Although Ugandan-based managers and producers are responsible for the implementation of standards, the multinational sets the strategies. Standards are even more stringent in the cuttings supply chain. However, meeting these is in the interest of both producers and the MNC. It is not a source of conflict but reflects cooperation, in which the MNC provides the required resources and expertise to meet both industry-wide and buyer-specific requirements.

5.6 Social governance and public governance – flowers and cuttings

Social governance. Trade unions and national and international NGOs have run successful campaigns in Uganda and in Europe that have been effective in driving social upgrading among both flowers and cuttings workers. Trade unions treat all floriculture farms as if they were in the same value chain; the Collective Bargaining Agreement (CBA) covers all members of UFEA indiscriminately. European advocacy campaigns in support of 'flower' workers have focused on

flower buyers, particularly retailers, who are far less engaged in the cuttings GVC. European campaigns by international NGOs have put pressure on European buyers (largely supermarkets) to be more accountable for workers' conditions in their supply chains.

Collective Bargaining Agreement (2010). The most concrete outcome of social governance in Uganda was the negotiation of the CBA and the associated wider advocacy by trade unions and national and international NGOs (focused on the priorities of women workers). The CBA was finalized in 2010 by UFEA and the two national trade unions representing floriculture workers: UHAWU and NUPAWU. The CBA covers all workers, including non-union members. It consists of two separate agreements. Phase I covers conditions of service, which is negotiated every two years. Phase II is on salaries and wages, negotiated annually (UFEA and UHAWU 2011). On recruitment, all workers are issued with temporary contracts (maximum of six months), followed by a one-year renewable contract. Only those on permanent one-year contracts are entitled to full benefits, which consist of paid annual leave of 21 days; maternity leave of 60 days; paternity leave of 4 days; and sick leave approved by the farm clinic. The CBA includes provisions to put in place a sector sexual harassment policy and to take steps to eliminate and prevent sexual harassment in the workplace (UWEA 2011).

The CBA stipulates that farms must provide protective gear to workers. It establishes a grievance procedure on all farms, which includes the union branch representative and farm management (human resources). At the time of the research, the agreement on pay had not been finalized. Other benefits, such as housing allowance and transport, provision of day care and medical services, are not included in the CBA. However, all cuttings and most flower farms provide medical services of varying quality; all cuttings farms provide day care and most provide housing allowance, although only one (cuttings) farm provides transport for general workers. The Ministry of Gender, Labour and Social Development and the Uganda Flower Exporters Association (UFEA) were engaged in the CBA discussions. They supply farms with condoms (for HIV/AIDS prevention), and the Ministry of Labour has committed to undertake farm inspections as required by law.

Public governance. The national labour laws are one of the few forms of public governance to support the flowers GVC through legislation and monitoring of the health and safety conditions on flower farms. There is no minimum wage in Uganda. The Uganda National Bureau of Standards has been working with private sector associations and donors to assist in training farmers to meet Global GAP standards, but these are aimed at smallholders and traders and not medium or large floriculture farms. Similarly, the Ugandan Export Promotion Board has not engaged with floriculture farms. At the time of the research, neither the East African Community nor donors' Aid for Trade had any programmes to support flowers (or cuttings) GVCs.

Government of Uganda fails to support to flowers and cuttings. There is a clear lack of government support for flower producers in Ugandan, which see themselves as in a more disadvantaged position than their counterparts in Kenya and Ethiopia. One cuttings farm manager who had previously worked in Kenya illustrates the general point made by the majority of floriculture producers (both cuttings and flowers). 'The Kenyan government has helped Kenyan growers produce roses of the same quality as Ecuador […] Together the Kenyan growers with the government have a vision. It is unbelievable what they have achieved […] The EU is also trying to protect their own growers in Europe.' There is no such support in Uganda. There are no partnerships with the government of Uganda to support research and development into new varieties and better processes. Absence of investment in infrastructure (irrigation, transport, power)

has been a significant barrier to upgrading, causing unpredictable power supplies and high energy costs. All flower and cuttings farms are required to run their own generators and 'high power tariffs have led to a 200 per cent increase in operational costs' (author's interviews).

Donor support to floriculture. Most public support to floriculture has come from donor agencies. The Royal Netherlands Embassy supported capacity building for UFEA members on standards (e.g. MPS, GAP). The US Agency for International Development (USAID) Strengthening the Competitiveness of Private Enterprise (SCOPE) Project helped in the development of a National Business Plan (2005-2010) to boost production and competitiveness in floriculture. It also supported UFEA in training and capacity building for its members for seven years. Donors have also provided technical support to help improve cool chain management and logistics at the airport and supported successful research into the viability of chrysanthemum cuttings (IDEA 2001). However, it was argued that further support from the government to assist Ugandan farmers in upgrading did not materialize (author's interviews). The UN Industrial Development Organization (UNIDO) has contributed to research into improving production efficiencies and the development of more environmentally friendly chemicals (although producers claim they cannot get government approval for these). The EU has provided technical support in improving capacity for compliance with standards and marketing and support for Ugandan producers to participate in trade fairs. The Centre for the Development of Exports from developing countries (CBI), a Dutch business development agency, has provided coaching support to flower producers on promotion and packaging programmes.

Training institutions are supported by private companies and NGOs. Government does not provide specific training or research to support floriculture. However, it does support the main training institution for flowers and cuttings, the Mountains of the Moon University (MOMU), which has links with national and international NGOs, including the Dutch NGO SNV, as well as with the flower farms, which provide training opportunities for graduates. MOMU provides training on the horticultural and agricultural supply chains from inputs to propagation, crop agronomy, animal husbandry, harvest, post-harvest handling, marketing, processing and consumption.[21]

This section has presented the key characteristics of the flowers and cuttings GVCs. The next section presents our findings on social and economic upgrading.

6. Social and economic up/downgrading in Uganda's flowers and cuttings GVCs

This section presents our findings on economic and social upgrading in cuttings and flowers GVCs. First, we introduce the concepts; then we summarize the experiences of cuttings producers that have upgraded and flowers producers where there has been downgrading. The final section provides a critical discussion of social upgrading, which has been significant, although there remains room for improvement.

6.1 Key concepts: social and economic upgrading and downgrading

The concept of economic upgrading has been well developed in research on value chains, and applied mainly to firm- or country-level performance (see Bernhardt and Milberg 2011; Gereffi et al. 2001; 2005; Humphrey and Schmitz 2002; Milberg and Winkler 2010). Social upgrading of workers is a newer concept; both are central to our analysis (Barrientos et al. 2011). Economic upgrading refers to processes by which flowers and cuttings producers are able to capture more of the value generated across the whole of the GVC by producing higher value-added products (product

[21] http://www.mmu.ac.ug/index.php/academics/school-of-agricultural-sciences

upgrading); by getting involved in more functions in the value chain (functional upgrading); and/or producing more efficiently (process upgrading) and shifting into new but often related industries through chain upgrading (Humphrey and Schmitz 2002). Social upgrading refers to workers' experience in relation to the nature of employment contracts (casual, permanent), wage levels and working hours as well as changes in gender equality in the workplace and freedom of association.

6.2 Economic upgrading: cuttings producers

All cuttings produced in Uganda are organized through vertically integrated outsourcing operations of European propagators. In value terms, these five companies accounted for the vast majority of Uganda's cutting exports in 2011. Approximately 3,000 workers were employed on these five farms; about 75 percent of workers were on permanent contracts and 25 percent were temporary. They were actively cultivating in greenhouses covering approximately 82 hectares (50 percent of the sample and 35 percent of the total area under floriculture (author's interviews). All were MPS-GAP, MPS-SQ and/or MPS-C or Global GAP certified.

All five cuttings producers interviewed had previously been flowers exporters and had diversified to cuttings. The three companies that were fully integrated subsidiaries and the two independent companies in joint ventures with the MNCs were managed by Dutch nationals. All considered their relationships with the lead companies supportive and essential for their future success. All cuttings farms were able to upgrade as a result of the MNC partners' direct investment in technical and management expertise and in farm equipment, as noted earlier. This included investments in technology: water purification, upgrading of greenhouses; reorganization of the production and processing sites; and modern satellite communication systems and upgrading refrigerated trucks.

All companies said most of their cuttings were shipped directly to Europe (especially The Netherlands and increasingly Belgium, where airport handling is less bureaucratic); a small percentage of output was shipped (under the orders of the MNC) directly from Uganda to Asia, Latin America and South Africa. Three companies are wholly owned subsidiaries of the propagation companies. Some house operations of more than one MNC propagator under one farm. These vertically integrated operations are the largest cuttings companies (and larger than the majority of flower farms), employing about 70 percent of the cuttings workforce. They were established when the floriculture industry took off in the late 1990s. By 2005/06, all three had stopped exporting roses; two produced cuttings only and one produced cuttings as well as conducting a small project producing new rose varieties for supply to Kenyan producers, among others. Below, we examine differences between the independent joint ventures and the fully integrated subsidiary companies.

The two joint venture operations are independent companies, smaller and more recently established than the subsidiaries (from the mid-2000s), with their own horticulture operations as well as the main cuttings business, which is MNC-led. Both joint venture operations are Dutch-owned and managed. Both managing directors have strong practical farming background in Europe as well as Kenya and both are increasing the production of cuttings; one is diversifying away from horticulture (currently 20 percent of production) to cuttings (chain upgrading), even though it is a successful fresh fruit and vegetable supplier to national, regional and global supermarkets. The other has plans to increase horticulture/agricultural production within the next five years. This company had restarted three years prior to the research after the previous company nearly collapsed owing to poor business management. 'Saved' by investment from the multinationals, the new shareholders were family and friends along with two propagation MNCs. The MNC receive 50 percent (royalties) from the cuttings produced by this company. At the time of

research, the farm was operating at 50 percent of capacity but expects that, within 10 years, it will have increased production four-fold, mainly through productivity improvements (process upgrading).

6.2.1 Recent trends

All producers reported that cuttings production had increased since 2001, particularly from the mid- to late to 2000s to the present. One joint venture (small producer) company did not reveal by how much production had increased, but reported that employment in cuttings had more than doubled since 2007. Another joint venture reported that production and revenues both had increased by 25 percent per year between 2006 and 2011. Another wholly owned subsidiary, among the largest farms, had expanded its production area by about 10 percent and employment by about 20 percent between 2008 and 2011.

Shifting end markets and regionalization of GVCs. Cuttings producers reported increasing pressure on margins in the industry, which is consistent with the slower growth in exports noted in Section 2. For example, one producer claimed that 90 percent of its clients (e.g. nurseries that buy cuttings for growing into flowers and plants) are making structural losses owing to a depressed European market. All producers were acutely aware of increasing pressures across the cuttings GVC, arising primarily from the economic downturn in Europe. These developments in Uganda reflect the shifting ends markets and regionalization of GVCs analysed more broadly by Gereffi (2013). Europe remains the primary market for Ugandan cuttings and flowers exporters. However, according to the managing director of a major vertically integrated cuttings company in Uganda, 'Uganda is a platform for Europe – Europe is not of interest anymore.' Until 2008, cuttings MNCs focused on Europe and not Asia or South America. However, since then, their sales in Europe have dropped 'big time'. The propagation companies now see their future heading west to (Brazil) to supply US and Canada and to the east to Vietnam as a base for access to China and other Asian economies. Key informants point to growing markets in Brazil, Canada, Asia, Japan and Malaysia. For example, one vertically integrated company had just purchased a farm in Vietnam, which has been a success. While others say chrysanthemums are still popular in Europe, the market is changing, with the number of varieties declining and quantities rising. The trend is that clients buy in bulk and demand less variety. This is a demand Ugandan producers seem well suited to meet.

Cuttings producers say they were not as exposed to the Iceland volcanic ash shock as flower producers because cuttings have a longer shelf life. In any case, airlines put on extra flights and were willing to fly direct through Italy (some cancelling their regular stop at Addis Ababa, for example), which meant a more accessible route than through Amsterdam or Belgium. Key informants say prices increased by about 5 percent in 2011. Nonetheless, in this environment, all cuttings suppliers were under pressure to improve performance.

One producer suggested pot plants had not been as hard hit as flowers, since in Europe people are spending more time at home gardening, and growing flowers and pot plants, although we cannot verify this. A number of cuttings producers see pot plants cuttings as the next step in upgrading. For example, in 2011 a leading cuttings industry spokesperson echoed views expressed by some cuttings producers in our field studies, that pot plants would replace chrysanthemum cuttings in the longer term. In 2011, the chairman of UFEA forecast that, by 2015, pot plants would make up 50 percent of the sales of his company. 'Pot plants are a huge market that has not yet developed in Africa. There's huge potential for this sector to encourage more

investors to come here and get the industry growing. Because of the climate, any crop can be grown here quicker, cheaper and with less chemicals than in Europe.'[22]

6.2.2 Economic upgrading: product, process, functional and chain upgrading

Chain upgrading. Three of the companies interviewed were supplying roses to the flowers GVC in the late 1990s and early 2000s. At that time, it had become apparent that cuttings were more suited to the Ugandan climate than roses. These three companies diversified into cuttings early on, and by the mid-2000s all three were producing cuttings only. There is a need to better understand how companies were able to chain upgrade.[23] However, it is notable that no African or non-European companies have diversified into cuttings. The two joint venture companies covered in our research, both Dutch-owned, have also upgraded their value chains, diversifying away from horticulture (fresh fruit and vegetables) and flowers to cuttings. These joint venture arrangements are mutually beneficial and considered a safer and more lucrative GVC to be involved in than either horticulture or flowers. The lead company takes responsibility for meeting standards, finding buyers and dealing with the marketing end of business; both managing directors, who are experienced farmers, are able to concentrate on the production side of their businesses.

Functional upgrading. There were two additions to the chain upgrading trajectory among the early cuttings producers. One vertically integrated producer moved part of its operations down the flowers GVC to grow flowers for testing and developing new varieties. These were sold locally to Nakumatt (a Kenyan-owned supermarket). This stopped, according to the production manager, because the value-added in cuttings production was higher and cuttings and roses cannot be grown together. 'Flowers and stock are very different, don't go together, the stock have zero tolerance of pests […] not amenable to pest management control […] a single pest can totally destroy a shipment/lot.' Another vertically integrated cuttings producer is currently running three operations for different MNCs. The smallest is developing new varieties of roses, which the MNC sells on to Kenyan flower producers, among others. In this example, about 15 percent of the farm's greenhouse area is devoted to the development of new rose varieties.

Process upgrading. All cuttings producers report that price pressure (e.g. rising costs and constant prices for their products) is driving greater efficiencies. The urgency to improve efficiencies was expressed most strongly by the independent cuttings producers. Among all cuttings suppliers, the lead company had recently invested in more efficient technology, new management and logistics systems in order to improve the way they produce (product upgrading) through reduced losses and improved quality (owing to better sanitation, improved production systems and cool chain and more efficient logistics through global sourcing via new computerized systems) and better quality of cuttings production. 'This reduces risk and in the long run cuts costs. It's better to use modern technology, better to innovate.' Farms also reduced costs through changes in stock management, switching from importing stock for the whole year, to working with monthly stocks.

Product upgrading. Diversifying away from cuttings to chrysanthemums and the development of new varieties and expansion of pot plants cuttings represents potential product upgrading for producers. Though this is driven by the head office of the MNC, local managers and joint venture owners are strongly supportive of this approach, and Ugandan producers have climatic advantages compared with other producers in Africa and Asia.

[22] http://www.new-ag.info/en/developments/devItem.php?a=1936

[23] Donor support to floriculture farms, including from The Netherland and US, assisted the flowers GVC from the late 1990s until the mid-2000s (discussed elsewhere in the paper).

On the other hand, one senior manager in one of the largest vertically integrated operations suggested there was no future for cuttings in Uganda because of its dependence on the European market. As noted in Section 2 and 3, cuttings (and flowers) trade is regionally structured. This means African cuttings producers supply European markets, which are currently growing slowly, while at the same time demanding ever more stringent standards. With demand in East Asia and North America growing faster than that in Europe (and standards being less stringent), it was suggested that lead companies in cuttings GVCs may seek to move their production sites to South East Asia and Latin America to supply growing markets in East Asia and North America.

6.3 Economic downgrading: flowers GVCs

The trade data presented in Section 2 illustrate the sharp decline in Ugandan flower exports and market share. At the time of our research in 2011 and early 2012, 10-12 UFEA-member flower farms were operating along with an unknown number of independent flower farms.[24] We interviewed four UFEA companies supplying flowers GVCs. Together, these farms accounted for the majority of Uganda's flower exports (80-90 percent). All of the four flower farms interviewed were engaged in long-term contracts supplying European, Asian and Middle East markets. At least two were supplying UK supermarkets. These four farms covered about 40 hectares; one accounted for half of the total area. Their operating capacities at the time of research are not known. Two of the flower farms had foreign ownership (Indian, UK) and two were Ugandan-owned.

6.3.1 Recent trends

All farm mangers interviewed reported that flower markets were depressed, but three of the four reported their production levels had remained relatively stable in recent years. The fourth reported significant declines. All flower producers stressed production costs in Uganda had increased substantially from 2009 to 2011, but prices had either remained stable or in some cases declined over that period. All farms saw serious pressures on margins as problematic for the future. Problems cited were the demands of meeting buyers' requirements, which were not rewarded with higher prices; the high costs of inputs, including payment of royalties to breeding companies; and the difficult working environment in Uganda (power cuts, poor irrigation, poor roads, high inflation). One flower farm, part of a larger Ugandan-owned conglomerate, claimed the margins had declined to the extent that flower exporting was no longer economically viable. Although this farm had been planning expansion of its flowers greenhouses, this was now in doubt. It had been suggested (press reports) that this farm was seeking to switch into cuttings, but this could not be confirmed in interviews with the manager, nor were there any obvious cuttings operations taking place on site.

The least successful of the farms (Ugandan-owned) appeared to be in a state of decline. Although it was still operating and supplying buyers in The Netherlands, it seemed to be a holding operation. Interviews with workers corroborated this view. The managing director rarely visited the farm, and was not considered hands-on by key informants. Employment had declined in the past year (from 272 workers in 2010 to 236 in 2011). There had been no overtime in the past year, suggesting demand was slowing, and workers were reported to be leaving to work on other farms in the area.

6.3.2 Downgrading pressures on Ugandan flowers GVCs

An underlying source of weakness in the Uganda flowers GVC is that Uganda is not well suited to growing roses, and particularly not the higher-value large-headed roses produced in Kenya and

[24] Press reports in the year following the field research (July 2013) said that at least 10 African-owned rose companies (two of which were UFEA members) had moved out of roses in the past year. Source: http://www.independent.co.ug/business/business-news/7981-flower-gloom

Ethiopia. The Ugandan climate is far better suited to cuttings than flowers, and the farms that have upgraded to cuttings have been more successful.

The more immediate downgrading pressures are linked to flower exporters' dependence on European markets. The 2008 financial crises and ensuring recession in Europe had the effect of depressing flower prices and reducing demand for Ugandan flowers. Flower exporters report that buyers have become more reluctant to purchase Ugandan flowers. 'This forced flower exporters to lower their prices in an attempt to remain in business, but this also results in losses. This was particularly true for producers supplying supermarkets. In 2010 flower margins fell' (author's interviews). Shocks, such as the Iceland volcanic ash disaster, affected both cuttings and flowers exporters. But cuttings exporters were in a better position to withstand the interruption of exports and the short-term reduction in exports.

In a context of increasing competitive pressures in the flowers GVC and weak demand in Uganda's major markets, governance of the GVC has been a negative factor for Ugandan exporters. All producers interviewed in our case studies reported increased pressure to comply with stringent international standards – with MPS GAP and MPS Social becoming the norm. At the same time, increasingly demanding requirements from individual buyers, including changes in orders with short lead times (e.g. in stem size, colour and variety) put further pressure on. Even the more successful flower farms found meeting buyers' standards was exacting and cutting into their margins. It was estimated that the costs of MPS-C, MPS-GAP and MPS-SQ certification was about $18,000 compared with €8,000 in 2009 (author's interviews). Ugandan producers' have begun to diversify to growing markets. However, it is unclear if this can solve the underlying constraints to upgrading facing Ugandan flower exporters: unsupportive private governance and public governance, a low-quality product, rising input costs and poor infrastructure.

6.4 Social upgrading and downgrading in flowers and cuttings GVCs: an overview

This section presents key findings on social upgrading in flowers and cuttings GVCs. Approximately 6,000-7,000 people (75 percent women) were directly employed in cuttings and flowers GVCs in Uganda at the time of our research. Although the secondary data suggest the share of women has remained constant, three cuttings farms interviewed report the share of women workers has increased over the past five years.[25] The farms in our interviews employ the vast majority of cuttings workers (over 2,500), and about 60 percent of flower workers (about 2,000) in Uganda.[26] Employment on these flower farms had declined since 2001, and particularly since 2007. However, all cuttings farms reported that employment had increased by 10-15 percent since 2007. Floriculture workers have a fairly high number of dependants and are estimated to support an additional 35,000 people, largely children and the elderly (USAID 2006).

Both flowers and cuttings workers have experienced substantial social upgrading, particularly since 2007. For workers in both GVCs, there have been improvements in benefits (annual leave, sick leave, maternity leave, medical) for permanent workers since 2001, and most markedly since 2007. At the same time, there have been significant gains for women workers, through provision of maternity leave and measures to reduce sexual harassment, from which women suffer more than men. Starting wages have increased for all workers. The biggest gains have been made by flower workers, whose starting position (in terms of wages, benefits etc.) was below that of workers on

[25] One vertically integrated farm reported that the percentage of women had increased from 20 percent to 55 percent of the total workforce, and 80 percent of growers/harvesters/pickers. Another vertically integrated cuttings farm estimated the share of women had increased from 60 percent to about 75 percent of the total.
[26] Percentages of the total calculated on the basis of employment, by farm, in UWEA (2011).

most cuttings farms. In 2011/12, on cuttings farms, the quality of benefits was better, and opportunities to earn higher wages were greater. Despite these improvements, real wages have not risen sufficiently to keep up with the costs of living. Most workers (cuttings and flowers) report their incomes are insufficient to meet their basic needs and those of their dependants (food and clothing, housing, transport, education and health care).

6.4.1 Elements of social upgrading

Nature of contracts. The share of workers on casual contracts has declined. In 2001, approximately 65 percent of workers were classified as casual; this fell to about 24 percent in 2007 (UWEA 2011) and remained at that level until 2011/12. Workers on flower farms were more likely to be casual (76 percent) than those on cuttings farms (48 percent) in 2007. Overall, we found the share of workers reportedly on permanent contracts had increased to 70-85 percent of the workforce in both cuttings and flowers. However, there were exceptions: only 40 percent were on permanent contracts on one joint venture cuttings farm, up from 30 percent in 2008. Both flowers and cuttings workers reported that, in the past, they had had difficulties in renewing contracts, but since 2010 (when CBA was signed) it had become much easier.[27]

*Working hours, wages and benefits***.** Nominal wages have increased since 2007 from a range of USH 50,000-80,000 per month ($21.32-34.12) (UWEA 2011) to USH 67,000-104,000 for a 26-day month ($27.04-41.60). In dollar terms, this represents a 22-27 percent increase in monthly wages, with the baseline for new workers rising slightly faster than the highest level. Mandatory overtime has been eliminated and overtime pay formalized. The normal working week is six days, eight hours, Monday to Saturday (Saturday is a half day, but some cuttings workers are paid for the whole day). Overtime has become voluntary and is paid at 1.5 times the normal hourly rate. In addition to wages, workers receive benefits (discussed below) and a monthly housing allowance of USH 10-15,000 ($4-6) on four of the five cuttings farms.

Pay and benefits on the four flower farms are slightly lower, on average, than on the cuttings farms. The lowest-paid workers and lowest benefits are on the smallest and worst-performing flower farm we visited (USH 2,500 per day, equivalent of $1 per day, or $26 per month). Wages on vertically integrated cuttings farms are the highest; next highest are wages on joint venture farms. Those on African flower farms are in the lowest range. The highest rate (USH 104,000) is earned only by pot plant production workers on a fully integrated subsidiary cuttings farm. In the words of one vertically integrated cuttings farm manager, 'In 2003/04, when producing roses and mums, turnover was high. These were bad times for this farm. We couldn't provide the benefits we provide now, pay is better now.'

Wages and benefits on the vertically integrated cuttings farms had been above the minimum required by the CBA in 2010. Effectively, the CBA brought flower workers' wages and benefits and those of the independent joint venture cuttings farms in line with those of the MNCs. With the introduction of the CBA, workers on the vertically integrated cuttings farms were given additional bonuses (above those required by the CBA). For example, the largest of the cuttings farms (vertically integrated) provided workers with an additional six days of maternity leave and additional salary increments (one performance-based in addition to that stipulated in the CBA). Generally, we found that the food, crèche, medical benefits and medical facilities were of better quality on all of the cuttings farms than on any of the flower farms surveyed.

[27] In 2011, MPS /SQ auditors re-emphasized the need for companies to provide renewable and written contracts.

Wages not sufficient to meet living costs. The majority of workers, on both cuttings and flower farms, reported that their incomes were not sufficient to cover the basics of food, housing, school fees, transport and family medical costs. Although it has been suggested that 90 percent of floriculture workers have no supplementary income (Djikstra 2001), FGDs with workers suggest it is common for women workers in particular to be engaged in petty trade to supplement their incomes in order to pay school fees and cover debts (author's interviews). 'In the current situation, we cannot make ends meet. We are always in debt and we depend on loans which we also take long to pay back.' Another said, 'We live in a cycle of poverty. We cannot afford to pay our rent, and provide for our families and our children cannot go to good schools […] Our children go to school but we can't afford school fees. Our children are always sent back home for school fees […] We cannot see our children's performance at school unless we have cleared the fees.' Housing costs are high compared with salaries. Rent for one-room accommodation without electricity is normally well above the housing allowance, for those who receive it, although it varies slightly across farms. Rent for one room without water or electricity ranged from USH 20,000 ($8) to USH 40,000 ($16). A house renting for USH 50,000 ($20) may have electricity but no water. 'Our landlords end up lining at the personnel's office to demand for rent payment.' None of the workers could afford charcoal or kerosene for cooking, and use firewood instead (this is difficult to get).

Health and safety. Improvements in health and safety have been implemented with the CBA, according to the trade union leadership. Workers reported mixed results. Women worker representatives report a decline in the incidence of miscarriages, associated with exposure to chemicals. However, women workers also reported that improved health and safety had been more beneficial for sprayers (all men), who are given protective clothing. Spraying is normally done in the evening after workers have left. But farm workers say that, during peak periods, 'when production manager is under pressure, sometimes we enter the greenhouse too soon after spraying'. Workers on seven of nine farms (cuttings and flowers) report harvester and general workers (majority women) are most exposed to chemicals because they do not use masks or long gloves or, 'They have short gloves, but when they dip the chemicals splash up the arms. Production workers don't have masks; only sprayers have masks. We tried to raise this with human resources […] They don't want you to raise your voice; they are just there to press you down. We are demanding long gloves and masks for production workers.'

There are some differences in health and safety issues for flowers and cuttings workers. More chemicals are used on cuttings than on flower farms because, with cuttings, the soil is fumigated for each new crop. Flower workers suffer from cuts from thorns, whereas cuttings workers cut their fingers with secateurs. Cuttings greenhouse work is less arduous and painful since cuttings are grown on tables, not on the ground (because it is cheaper to fumigate this way). Injuries from bending are reported as common among flower workers.

Cuttings managers stressed high levels of absenteeism and worker turnover on cuttings farms. On all farms, issuing long-term contracts (one year) helped reduce turnover. Four of five cutting farms provided additional incentives to reduce absenteeism and turnover, including long service and attendance bonuses. These four cuttings farms reported declines in absenteeism, from 8-15 percent in 2006 to 5-6 percent in 2011/12, but peaking at 10 percent in the hot rainy season owing to malaria. The cuttings farm that did not provide attendance benefits (and had fewer workers on permanent contracts) reported that absenteeism had not changed and reached as high as 40 percent. Workers from this cuttings farm reported, 'We don't get a single allowance; no bonus, no motivation. Contract signed for one year […] since human resources changed, things are worse.' None of the flowers farms interviewed paid these bonuses and some workers complained their

employers did not provide them. On one African-owned flower farm, it was reported that there had been no new investment in recent years, and no improved productivity. Workers said they were 'not motivated like in other farms where workers are paid performance bonus […] We have poor production tools […] When we ask for tools the employer gives excuses.'

*Skills and training***.** Quality and variety are universally acknowledged as the number one factors for cuttings producers and flowers managers. This requires quality and skills among workers. However, some cuttings farm managers stress that motivation and attitudes of workers are more important than skills, since much of the training takes place on the farm.

Cuttings production is more labour and skill intensive than flower production. For all farms, training is done at induction. For flowers farms, this usually amounts to three days of training spread over the first few weeks (all paid). Training on cuttings farms is longer and more systematic, and the culture of training is stronger than on flowers farms. Cuttings farms have more detailed training schedules than flowers farms. One fully integrated subsidiary cuttings farm (which is expanding pot plant production) had the most detailed training schedule of all the farms. The three-month training schedule was incremental, mapping levels of training against expected increases in productivity. Two other cuttings farms (one a partially integrated joint venture; the other a fully integrated subsidiary) also had a strong training culture, for production workers, supervisors and mid-level managers. It has a good relationship with MOMU, from which it selects the best students, providing them with 13 months (paid) training and often placing them as farm supervisors.

*Skills are increasingly critical***.** On eight out of ten farms (flowers and cuttings), managers say the minimum educational requirement is at least primary seven level and the ability to read and write. Workers from the majority of both cuttings and flower farms commonly reported that the only requirements needed for recruitment at the gate were a medical form and an introductory letter from Local Council 1 level.[28] However, farm managers on four out of five cuttings farms and one of four flower farms say they are moving towards secondary-level certificates as a basic requirement for all workers. In one Ugandan-owned, medium-sized flower farm, management has introduced a policy of recruiting only degree holders to work as supervisors, regardless of their experience (successful flowers farm). A cuttings (vertically integrated) farm manager said, 'It's hard to deal with a person who has not gone to school at all; they are difficult to train. Educational requirements of our workers are increasing.' This is especially true for those producing pot plants: 'reading and writing is necessary; workers need to be able to understand and explain things in clear language.'

A number of cuttings managers emphasized that MOMU does not provide the right skills, that graduates lack the practical knowledge required of a manager. They must know the 'whole business from start to finish and understand the important linkages in the whole system'. Training at MOMU is not problem-solving-focused, not creative enough to provide 'good trained supervisors/team leaders who are the bridge between management and the workforce, particularly to harvesters, who are the most important […] Training is "head banging" rather than teasing out ways to solve the problems.' The onus is therefore on the farms to provide work-based training. The largest cuttings employer (vertically integrated) spends €25,000 per year on training. A much smaller (joint venture) cuttings farm spends about €10,000 per year on training and 'five times that if you cost managers' time spent training the workforce'.

*Promotion prospects***.** Promotion prospects have improved on cuttings farms, according to workers, but not on flowers farms. In cuttings, both men and women have been promoted from production

[28] The lowest government structure, at village level.

work to higher-paid and supervisory and quality control jobs. Even on the cuttings farm that had the highest turnover and no bonus payments, workers in a FGD agreed, 'If you are a mere harvester, it used to be no promotion for you. These days it's changed, if you performed, it's okay, then you can get a promotion. This is because workers complained. Now the company work structure considers performance.'

Freedom of association and workers' rights. Both flower and cuttings workers say freedom of association and knowledge of their rights have improved since 2007. The union was well regarded by workers, particularly those on flowers farms, where conditions have improved more dramatically as a result of the CBA. Farms have implemented a mixture of management-led and worker/union-led grievance mechanisms. Most cuttings farms and two flower farms have implemented grievance procedures for workers through human resources, where the union representative is present along with the complainant and their supervisor/manager and project-level administrators. All farms claim workers are free to join the union. However, in seven of eight FGDs, workers raised the issue of victimization of union members, particularly union leaders (on both cuttings and flowers farms). According to workers, antagonism towards the union (from all farm management, especially human resources) remains an issue on all farms. Although workers' awareness of their rights seems to have increased over the past five years, many workers report that union membership has declined.

6.4.2 A focus on gender dimensions of work and social upgrading

Gender social norms shape the working environment in GVCs (Christian et al. 2013). Furthermore, women workers (more so than men) need to fit in their family responsibilities, including care for young children and/or elderly relatives. The inclusion of maternity leave in the CBA and company provision of crèches and breastfeeding breaks all represent important progress in improving the conditions of women workers. Most cuttings farms have a family planning programme and two farms provide women with free sanitary pads. Two cuttings farms give anti-malarial drugs and mosquito nets to pregnant women. Pregnant women are given rest periods or lighter duties on at least one cuttings and one flower farm. Several of the cuttings and flowers farms allow pregnant women breastfeeding breaks, although workers say the time allowed is not sufficient (30 minutes) to walk from the workstation to the crèche. If women use their lunch hours to go home to their children, or breastfeed, they say that if they return late they are 'posted as late', sent home and lose a day's pay. Most farms provide a day care centre for workers but in FGDs workers said many prefer to leave their children at home under the care of friends in the village; supervisors and managers usually hire someone else to look after their children.

Gender norms clearly shape the division of labour on flower and cuttings farms, where women are concentrated in harvesting and pack house work. The particular qualities of women workers are openly recognized by farm managers: 'Most of the work is done by women; they are more honest […] the stereotype has caught up, men don't want to do harvesting […] This is women's work. Anyway, the ladies are faster […] Harvesters are the most important people in the plant, 80 percent are women, they are more precise […] It's better to work with the women. They are more careful and more committed compared to the men and they produce good quality work' (author's interviews with production managers, human resource managers and managing directors of from cuttings and flowers farms).

The majority of flowers and cuttings production workers were referred to as 'unskilled', and the majority of these are women. Key informants used no formal or consistent definition of skilled and unskilled workers. Human resource managers referred to all production workers as unskilled, whereas office workers, supervisors and managers were all considered 'skilled'. This reflects a

source of underlying gender bias in attitudes to women workers, whose skills are considered critical, but innate or 'natural' and therefore not remunerated (Elson and Pearson 1981). A woman worker on a vertically integrated cuttings farm summed it up well: 'Women are good at harvesting, man can't bend for a long time, can't tolerate working for little money, they work in cultivation, construction […] women are always there, the key workers and they're paid less than men. They are the majority of the workers, so to increase their pay is expensive for the company.' Male managers make the most important decisions at the farms with the female managers and supervisors primarily involved in implementation of those decisions (UWEA 2011).

Workers and managers acknowledged that sexual harassment of women at work and travelling to and from work are common. Farm management, local and international NGOs (UWEA and Women Working Worldwide) and the trade unions have established mechanisms for reducing sexual harassment, including the implementation of a sexual harassment policy. This was in place or in progress on eight of the nine farms interviewed. Workers brought to the management's attention that the structure of farm management, which gave supervisors excessive power over production workers, contributed to sexual harassment in the workplace. This led to changes in management structures and reducing the discretionary power of supervisors. 'Before, supervisors determined workers' job, salary, their entire being […] but now we have made them understand that they are here because of their performance.'

The trade unions as well as the companies are educated on the conditions facing women workers, and the costs of failing to meet the needs of women workers – both to the companies and to the women themselves. Testimonies from workers emphasized the importance of both UWEA and Women Working Worldwide. Although supportive, the union was not always sensitive to the needs of women workers and the requirement to establish institutions that continue to protect women workers' rights. 'Male leaders can't know the problems women have. The union was there, but UWEA helped us to develop the Women's Committee.' Women workers can raise problems with the Women's Committee that they could not with the union representative or with company human resource managers. The strong gender dimensions of social upgrading are largely explained by national and international campaigns focused on the priorities of women workers.

7. Conclusions and policy messages arising from the research

7.1 Conclusions

This paper has argued that African flowers and cuttings, although closely related, are two different GVCs with different dynamics and different prospects for social and economic upgrading and downgrading for producers and workers. Both GVCs are closely tied into European markets, where growth has been depressed since 2009 and consumer demand for floriculture products has slowed. This has increased competitive pressures and pushed prices down in both GVCs. Producers supplying flowers and cuttings GVCs have experienced these pressures in very different ways, with different results.

The Ugandan-based producers that have been successful in upgrading have switched from flowers to cuttings GVCs (chain upgrading). Despite the downturn in Europe, cuttings producers have continued to increase production and enhance their positions through quality and efficiency improvements (process upgrading) and in diversifying to higher-value products (from chrysanthemums to pot plant cuttings), expanding their product range (product upgrading). By contrast, the position of Ugandan producers supplying flowers GVCs has worsened over the past decade. Reliance on the European market has exposed flower producers to downgrading

pressures, in terms of lower prices, fewer orders and increasing demands to meet various industry standards and buyer-specific requirements.

Governance of the cuttings GVCs is controlled by European MNCs through ownership of the Ugandan production sites, which enables them to control intellectual property rights, on which their royalties depend. MNC direct ownership and investment in and close engagement with trusted suppliers have been key factors in enabling producer upgrading in Uganda. This has been particularly helpful in the Ugandan economic context of unreliable power infrastructure, poor transport and irrigation infrastructure and inadequate training institutions.

The experience of flowers producers supplying more flexible buyer-driven GVCs stands in stark contrast to this. Ugandan flower exports have declined in absolute terms and global market share of Ugandan flowers has reduced vastly since 2001. European buyers initially enabled Ugandan flowers exporters to access higher-value markets. In the more recently depressed European markets, producers have suffered from pressures across the GVC and exacting relationships with buyers have contributed to the downgrading pressures on flower suppliers.

Social upgrading among workers in Uganda has been relatively unaffected by the depressed markets for flowers and cuttings. The collective bargaining of trade unions, the CBA and long-term advocacy work by national and international NGOs have been the principle drivers of social upgrading among flowers and cuttings workers in Uganda. Workers' greater awareness of their rights and stronger freedom of association on farms bode well for workers' prospects for sustaining the momentum of social upgrading. Engagement with women workers and the formation of women's committees will help institutionalize the advances made in supporting the priorities of women workers and gender equality in the workplace.

Flower workers' pay and conditions tend to be inferior to those of cuttings workers. However, flower workers have experienced the most improvement, since they started from a lower base in terms of wages and benefits. Economic downgrading in flowers GVCs will inevitably reduce employment and put downward pressures on pay and conditions. Workers' gains cannot be protected when farms close down. Finding new jobs in cuttings is possible, although new skills are required and educational requirements for workers are increasing. The long-term prospects for flowers workers will depend on the extent to which they are able to upgrade their skills and find new jobs on cuttings farms.

Workers in cuttings have higher-quality benefits, are better trained and have greater potential to earn higher incomes than flower workers. Thus, economic upgrading in cuttings has also contributed to social upgrading among cuttings workers. Producers' emphasis on skills and continuity of employment has been particularly beneficial for cuttings workers.

7.2 Future challenges for social and economic upgrading

The regional dimensions of these GVCs pose a challenge to suppliers of both cuttings and flowers GVCs. Weak consumer demand in Europe and regional shifts in growth to the East and West of Europe are driving changes in both flowers and cuttings GVCs. These are creating new pressures for Ugandan producers. Flower producers have greater flexibility in the buyer-driven flower GVC, since they are not tied into closed GVCs as in cuttings. They are comparatively free to switch to new markets and new buyers. However, so far, Ugandan exporters have had only limited success in diversifying to new markets. They face limitations owing to the inferior quality of Ugandan roses, especially in light of alternative suppliers in neighbouring Ethiopia and Kenya. However,

opportunities also exist for product upgrading within flowers GVCs and/or chain downgrading to horticulture, for example, by supplying supermarkets through regional value chains (Evers et al. 2014) and possibly chain upgrading to cuttings GVCs.

7.2.1 Link between economic and social upgrading: education, training and workers' rights

Education, training and valuing workers' rights are key and mutually reinforcing for both economic and social upgrading. Producers' goals of quality and efficiency cannot be achieved without well-trained, motivated, appropriately skilled and valued workers. Decent work, with adequate pay to meet needs, safe and fair working conditions for both women and men and recognition of workers' rights are central to social upgrading. Recognizing these mutual benefits to producers and workers can help sustain both economic and social upgrading in cuttings value chains in Uganda.

7.2.2 What future for the Ugandan flowers GVC?

Policy actors and private companies could consider the extent to which reversing the downgrading trend is possible and future engagement in the flowers GVC is sustainable. This may include considering prospects for**:**

- Functional upgrading (downstream) in flowers GVC, such as development of rose breeding stock;
- Product upgrading to produce higher value-added flowers;
- Chain downgrading to horticulture, including fresh fruits and vegetables to supply regional value chains;
- Chain upgrading to cuttings (as joint ventures).

7.2.3 Possibilities of cuttings joint venture model

While there are opportunities for cuttings producers to upgrade, these are largely shaped by internal MNC strategies. Should MNCs shift outsourcing to South East Asia and Latin America, as suggested in interviews, the wholly owned subsidiaries will have no choice but to move production locations, with the loss of thousands of jobs. However high the costs of switching MNC partners, continued engagement in cuttings GVCs with global propagators remains a possibility for the joint venture cuttings companies. This requires further exploration.

Cuttings producers, even more so than those in flowers GVCs, are locked into supplying European markets. Those engaged in joint ventures may consider the possibility of continuing to supply European MNCs, albeit in a more slowly growing market. These captive value chains represent a possible model example for future upgrading for the more successful flower farms in Uganda. More research is needed to better understand the nature of these joint venture relationships with propagators and possibilities for opening up entry to more Ugandan producers.

7.2.4 Create a more enabling environment for workers and producers upgrading with better public services and investment

The field studies focused on cuttings and flowers producers. However, they also point to broader areas in which government and donor support could enhance the positions of both workers and producers in other horticulture GVCs. Examples from the case studies point to crucial gaps in the following areas: government approval of environmentally bio-chemicals; implementing fair labour laws; monitoring health and safety in workspaces; improving public investment in roads, transport and power infrastructure and maintenance; increased public and private investment in more appropriate and commercially viable training of managers and supervisors (e.g. horticulture training

at MOMU); and investment in primary schools in areas where workers live to help reduce their education costs and keep children close to home.

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