The Competitive Dynamics of the Clothing Industry in Madagascar in the post-MFA Environment.[1]

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The last few years have witnessed two major shifts in global trading and industrialisation patterns. The first is the rise of China (with the South East Asian region in tow) as the dominant force reshaping the competitive dynamics between developing and developed countries as well as within the developing world itself. The second is exemplified in the rapid rise of a clothing industry sector, with a concomitant impact on wage employment, in some sub-Saharan African countries (amongst which Madagascar has been prominent), as a direct result of the African Growth and Opportunities Act (AGOA) of 2000. However, the end of the Multifibre Arrangement and the massive impact of China on the global dispersion of clothing production have threatened to substantially disrupt these processes. Despite the plethora of warnings, there is very little empirical analysis of the real changes taking place as a result of the changed global environment. Based on international trade data and field research undertaken in Madagascar, this article aims to analyze the clothing industry's current dynamics in Madagascar, given the impact of AGOA and the end of apparel quotas. The first section situates the clothing industry in Madagascar within the changing global environment. The second section provides an analysis of the competitiveness dynamics and global linkages operating in Madagascar based on primary research through firm level interviews undertaken in Madagascar in 2005. The article concludes by assessing the policy implications in the post-MFA world.

GLOBALISATION OF THE TEXTILES AND CLOTHING VALUE CHAINS

Globalisation in this new era is the global coordination of manufactured components into other components finally ending up as final products (Dicken 1998). Throughout the developed and developing world, firms tend to sell less and less into the perfectly competitive markets of economic theory, and more and more into the global value chains which are regulated by predominantly external global firms (Kaplinsky 2005). The clothing and textiles (C&T) value chain is particularly suited to global production networks as most products can be exported at each stage of the chain, making the sector highly trade intensive and sensitive to a country's trade regime. Furthermore, a large portion of clothing production is labour-intensive, requires low skill levels, has low barriers to entry and has been the source of rapid export-led industrialisation (Gereffi and Memedovic 2003). Generally, more complex, higher value-added tasks remain in developed countries with higher paid skilled labour, while less skilled tasks have moved to low-cost locations mainly in the developing world. Textile production is more capital-intensive and developing countries have struggled to create backward linkages.

The C&T value chain is dominated by large retailers, branded manufacturers and marketers who control global production networks and stipulate supply specifications. These retailers wield significant power over manufacturers in terms of price, quality, lead times and raw material inputs. Information flows directly from retailers to manufacturers where decisions are made on patterns, colours and material. Furthermore the buyers in these global clothing value chains are exceptionally demanding, and insist on lower prices, better quality, shorter lead times, smaller minimum quantities and supplier acceptance of risk (Flanagan 2003; Kaplinsky 2005).

Retailer power is attributed to two factors. First, consumers no longer demand standardised products but instead an increased variety of product choice leading to shorter product seasons, more rapid product cycle turnover and smaller minimum orders (Salinger *et al*, 1999). Furthermore, shopping patterns have changed: consumers spend smaller proportions of income on clothing but shop more frequently and buy a larger number of clothing items (Nordas, 2004). This coupled with globalisation has led retailers to source from manufacturers in the lowest cost locations in developing economies. These manufacturers must either absorb the

costs and lower their margins, or improve supplier productivity. Second, mergers and acquisitions have led to a greater concentration of retailers in developed economies providing them with the ability to increasingly manage the global supply network. By 2001, the top five retailers in the US accounted for 76% of sales among the top 20 retailers (Weathers, 2003). The UK clothing retail sector is similarly concentrated. According to Gibbon (2002a), the top five retailers accounted for 39% of total clothing sales in 2001, while the top 10 accounted for approximately 52%. It appears that this trend will only continue.

For the last quarter of the 20th century global trade and production in this sector was regulated by the Multifiber Arrangement (MFA), ratifying countries' rights to impose quotas on textiles and clothing imports. This allowed rich countries time to restructure their textiles and clothing industries before opening up to competition from poorer countries. In addition, each of the large importing blocs negotiated separate bilateral arrangements with developing countries to set up complex tariff schedules protecting the more capital-intensive parts of the chain, while reducing tariffs on labour-intensive products. The aim was to allow rich countries' domestic producers to take advantage of outsourced cheap labour for the unskilled labour-intensive part of the production cycle (Kaplinsky 2005).

The consequences were diverse. Firstly, quota-based preferential trade access spread production to an ever-increasing number of countries. Secondly, to counter quota limits key manufacturers organised garment production in under-utilised quota producer countries. Thus, third party organising and supply sourcing functions spread throughout the developing world to provide access to established markets. Chinese, Korean and Taiwanese producers spread their operations to the Caribbean and sub-Saharan Africa. Mauritius was one recipient of foreign investment, and as the clothing industry there matured and established its own footholds, Mauritian garment producers spread their operations to Madagascar. Asian producers, especially in Hong Kong and Taiwan, developed the capacity to mobilise and coordinate full-package manufacture (i.e. all the manufacturing stages) in the global textile and clothing value chain leading to "triangular production networks" (Gereffi 1999). In other words, production in one country (usually less developed) organised and coordinated by firms in another (mostly middle income) country, with products produced sold on to final buyers in yet a third (usually industrialised) economy.

In 2004 global clothing and textiles exports were valued at $452.8 billion, making it one of the world's most traded manufactured products (WTO 2005). Even more significantly, exports have increased at a compounded annual rate of 6.6% between 1990 and 2003. Currently, the US, EU and Japan are the largest consumers of textiles and clothing, yet the majority of clothing and textiles in these countries is imported. In 2003 the Japan Textile Importers Association estimated that 87% of clothes on sale in Japan are imported, while between 1995 and 2002, the US share of world imports of textiles and clothing increased from 14% to 21% (Flanagan, 2003). Although there is almost no clothing industry left in the US or Japan, a sizable clothing industry remains in the EU, especially Southern Europe (Morris, Barnes and Esselaar 2006).

On 31 December 2004 the Agreement on Textiles and Clothing (ATC) expired, terminating all quotas on textiles and clothing trade between member states of the WTO. The abolition of all quotas was expected to have dire consequences for most developing countries as China is expected to benefit the most from the quota-free environment, and become the "'supplier of choice' for most U.S. importers (the large apparel companies and retailers) because of its ability to make almost any type of textile and apparel product at any quality level at a

competitive price" (USITC 2004, xi). China is currently the world's largest exporter, successfully increasing the value of its clothing exports by 540% from $9.7 billion in 1990 to $62.0 billion in 2004 (Table 1). In 1990, China represented only 9% of the world's total clothing exports, but by 2004, its share had increased to 24%, and if Hong Kong with 10% of the world total is included, China effectively accounted for one third of world clothing exports. US data for 2005 show that total US C&T imports from China increased 54% from 2004 to 2005, from $14 billion to $22 billion (OTEXA 2006). In terms of volumes, US garment imports from China increased 98% (OTEXA 2006). Similar increases were seen in China's exports to the European Union.

Table 1: World trade in clothing by top 10 countries (US$ million)

Exports Clothing										1990-2004 % change	% World Total	
Country	1980	1985	1990	1995	2000	2001	2002	2003	2004		1990	2004
China	1,625	2,450	9,669	24,049	36,071	36,650	41,302	52,061	61,856	540%	9%	24%
Hong Kong	4,976	6,718	15,406	21,297	24,214	23,446	22,343	23,152	25,097	63%	14%	10%
Italy	4,584	5,320	11,839	14,424	13,384	14,220	14,643	16,191	17,925	51%	11%	7%
Germany	2,882		7,882	7,530	7,320	7,444	8,338	9,749	11,221	42%	7%	4%
Turkey	131	1,208	3,331	6,119	6,533	6,661	8,057	9,937	11,193	236%	3%	4%
France	2,294	1,935	4,671	5,659	5,414	5,469	5,882	6,935	7,865	68%	4%	3%
Mexico	2		587	2,731	8,631	8,012	7,751	7,343	7,197	1126%	1%	3%
India	673	930	2,530	4,110	6,179	5,484	6,037	6,459	6,620	162%	2%	3%
Belgium					3,941	4,206	4,649	5,353	6,235		0%	2%
USA	1,263	785	2,565	6,651	8,629	7,012	6,032	5,537	5,059	97%	2%	2%
World	40,590		108,129	158,353	197,498	194,490	202,310	225,940	258,097	139%	100%	100%
Imports Clothing												
USA	6,943	16,202	26,977	41,367	67,115	66,391	66,731	71,277	75,731	181%	24%	28%
Germany	8,326		20,411	24,550	20,183	19,330	19,647	22,219	24,076	18%	18%	9%
Japan	1,537	2,012	8,737	18,758	19,709	19,186	17,602	19,485	21,687	148%	8%	8%
UK	2,858	2,694	6,961	8,002	12,995	13,169	14,657	16,551	19,245	176%	6%	7%
Hong Kong	695	1,671	6,913	12,654	16,008	16,098	15,640	15,946	17,129	148%	6%	6%
France	2,637	2,707	8,381	10,639	11,412	11,769	12,402	14,771	16,791	100%	7%	6%
Italy	797	779	2,580	4,703	6,139	6,697	7,576	9,342	11,130	331%	2%	4%
Spain	152	121	1,649	2,492	3,847	4,279	4,965	6,559	7,732	369%	1%	3%
Belgium					4,828	5,013	5,272	6,249	7,156	0%	0%	3%
Netherlands	2,875	2,045	4,768	5,132	5,371	5,220	5,250	5,943	6,644	39%	4%	2%
World	42,271	50,822	112,236	162,871	207,093	203,820	211,765	236,035	269,473	140%	100%	100%

Source: DTI / WTO

It is up against this behemoth that developing countries have had to compete. Few have experienced similar growth. SSA is only a small participant on this global stage. It exported just $3 billion in clothing in 2004, compared to world exports of $258 billion (WTO 2005).

THE AFRICAN GROWTH AND OPPORTUNITY ACT (AGOA)

AGOA is the trade regime governing exports from selected SSA countries to the US. AGOA's main benefit to sub-Saharan African countries is that it gives clothing and textiles duty-free access to the US market. Initially intended to expire in 2008, the AGOA Acceleration Act of 2004 extended benefits until 2015. AGOA's rules of origin stipulate that clothing has to be made from US fabric, yarn and thread, or from fabric, yarn and thread that is produced in AGOA-beneficiary SSA countries. However, a special rule applies to less-developed countries (LDCs), defined as a per capita GNP of less than $1,500 in 1998, allowing them duty-free

access for clothing made from fabric originating anywhere in the world until September 2007. Therefore, clothing exports from LDC countries, Madagascar included, are subject to single-stage transformation (fabric to clothing), while clothing exports to the US from South Africa require a triple-stage transformation (i.e. spinning to yarn to fabric to clothing) in order to qualify for AGOA. The third country fabric provision, set to expire in September 2004, was extended until September 2007. This extension introduces an added measure of predictability and credibility to AGOA and is intended to provide business with greater confidence to invest in Africa. These changes may also mitigate somewhat the effects of the quota abolition, providing producers in Africa with a better chance of competing with low-cost producers based in the Far East.

Lesser-developed SSA countries have been given a valuable opportunity under AGOA as they have been shielded from open competition, as they have higher production costs than most Asian countries (Minor *et al* 2002). Exports from SSA are mainly low-price basic items such as trousers, t-shirts and sweaters that typically have long production runs, low labour content and few styling changes (USITC 2004; Economist Intelligence Unit 2004). Production and export of clothing and textiles is concentrated in a small number of SSA countries: Kenya, Lesotho, Mauritius, Madagascar, and South Africa, account for about 90% of African clothing exports (Gibbon 2002b, 2003).

Lesotho is the largest SSA exporter of clothing to the US, exporting US$390.7 million in 2005 (Table 2). Under AGOA, Madagascar's clothing exports to the US exploded between 2000 and 2004, jumping from US$109.5 million to US$323.3 million. Both Kenya and Swaziland have doubled their clothing exports to the US. South Africa trails substantially behind.

Table 2: Clothing exports from Africa to the US and EU (US$m)

	Kenya		Lesotho		Madagascar		Mauritius		South Africa		Swaziland	
	US	**EU**	**US**	**EU**	**US**	**EU**	**US**	**EU**	**US**	**EU**	**US**	**EU**
1990	2.5	2.5	24.5	5.6	0.4	10.8	121.2	522.7	0.0	32.3	3.4	
1995	34.0	6.3	61.7	12.6	6.7	122.0	190.3	573.3	55.7	66.9	11.7	
2000	43.9	1.7	140.1	1.6	109.5	234.6	244.7	638.5	140.9	78.6	31.9	1.1
2001	64.4	1.7	216.7	3.2	178.2	233.3	238.3	591.2	173.4	69.0	48.1	0.8
2002	125.9	1.1	321.0	2.1	89.4	145.6	254.4	642.3	180.6	68.7	89.1	0.2
2003	187.8	1.4	392.4	1.2	195.9	160.3	269.0	616.2	231.8	78.0	140.5	0.2
2004	277.2	3.2	455.9	1.0	323.3	196	226.4	635.7	141.3	70.3	178.6	1.1
2005	271		390.7		277		166.		86.5		160.9	

Source: Gibbon (2002b), USITC, Eurostat
Note: US $ exchange rates based on rates for 31 December in the relevant year

In respect of SSA exports to the European Union, in 2004 Mauritius was by far the largest African exporter of clothing to the EU (US$635.7 million), followed by Madagascar (US$196 million). Madagascar is thus a key player in respect of SSA clothing exports to both the US and the EU markets.

The vast bulk of SSA clothing exports to the US have been via AGOA's preferential trade access which has been the principal mechanism stimulating and maintaining the relatively major increase in clothing production in these countries (Table 3). The impact that this clothing-based industrialization process has had on creating wage employment and reducing poverty in these poor SSA countries is hugely significant.

Table 3: AGOA qualifying as share of total clothing exports to US, 2001 – 2004 (US$m)

Country	2001	%	2002	%	2003	%	2004	%
Lesotho	129.2	60.1	317.7	98.9	372.6	94.9	447.6	98.2
Madagascar	92.1	51.8	75.4	84.4	186.3	94.9	314.5	97.3
Kenya	51.7	80.0	121.3	96.6	176.2	93.9	271.5	97.9
Mauritius	38.9	16.3	106.5	41.8	135.0	50.2	147.8	65.3
Swaziland	8.2	17.1	73.7	82.7	126.9	90.2	175.6	98.3
South Africa	30.4	17.4	85	46.9	126.6	54.5	114.7	81.2

Source: US Department of Commerce, Otexa

Synthetic and cotton exports to the US have been protected by two factors: the percentage duty rate (tariff) and the dollar cost of buying import quota, which has since disappeared. The remaining defence developing countries with preferential agreements have is the duty rate imposed by the US. Duties rates of 32% for synthetic sweaters or 27.3% for men's suits offer substantial protection against cheaper competitors (Table 4). Cotton products, however, have on average only 14% protection with peaks rarely exceeding 20%), which may not be substantial enough to protect producers from Asian competitors.

Table 4: US customs duty rates and China-US quota costs

Item	General duty rate
Cotton garments	
Knit men's shirts	19.7%
Knit T-shirts	16.5%
Woven men's trousers	10.3%
Synthetic knit/woven garments	
Knit Sweaters	32.0%
Woven men's suits	27.3%
Woven women's dresses	16.0%

Sources: General US duty rates: Harmonized tariff schedule

Kaplinsky and Morris (2006) argue that the effective rate of protection for SSA countries is actually higher than the nominal tariff rate and hence contributing positively to SSA countries' current performance. Given that SSA countries can import fabric from third countries, often China, the calculated effective rate of protection AGOA provides relative to China is between 27% and 84%, depending on the product (Kaplinsky and Morris 2006).

At the request of clothing manufacturers in the United States, the US government has placed safeguards (i.e. quotas) on Chinese exports of cotton trousers, cotton shirts, man-made fibre shirts, men's and boys' cotton and man-made fiber woven shirts, and cotton and man-made fibre underwear among others (Otexa 2006). Safeguards protect 16 categories of apparel entering the United States; 10 of these overlap with Madagascar's top exports to the US. It is difficult to determine, however, what the effect these safeguards have had on US imports from Madagascar.

High production costs make SSA unattractive for investors: labour costs are higher than many competitors in Southeast Asia, productivity is lower and non-labour input costs are higher. Further disadvantages include logistics (notably transport costs and longer lead times), unreliable telecommunication systems and inadequate physical and technical infrastructure. Many argue that SSA firms will find it difficult to compete in the new quota-free environment. It is unclear whether US and EU preferences schemes will be sufficient to keep the industry competitive outside of the man-made fiber sub-sectors where SSA is considered competitive as

US import duties are high (Economist Intelligence Unit 2004). We have therefore sought to examine the industry's dynamics within Madagascar in the post-MFA environment.

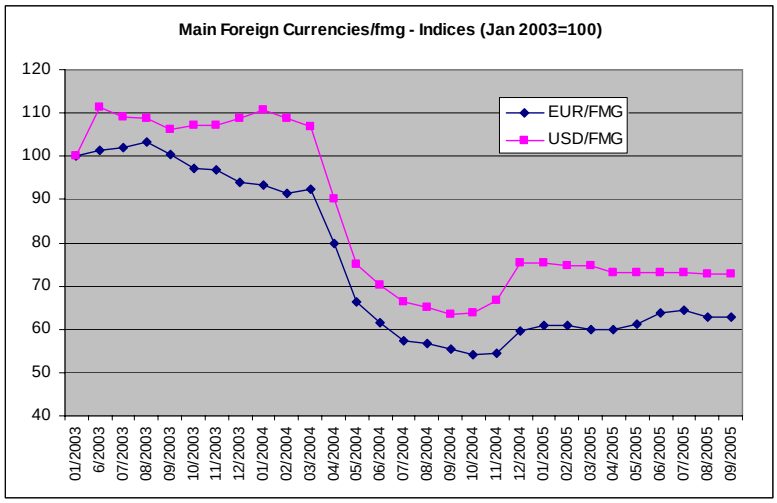
FINDINGS FROM MADAGASCAR

Besides general trade data, little information is available on firms in Madagascar, including date of establishment, main products, and export market. The 2002 political crisis interrupted normal data collection; most of the information currently available was collected before 2002. In addition, any information collected recently is rarely published rapidly. Thus, it was necessary to interview key informants to ascertain the current situation of the firms in the industry. According to the Ministry of Industry, Trade, and the Development of the Private Sector (MICDSP) and the GEFP[2], 118 clothing and textile firms operated in Madagascar at the beginning of 2005. A sample of 21 firms was drawn from this list and interviewed in April 2005. Essentially we asked the following sets of questions: What is maintaining or obstructing Madagascar's competitiveness in the global clothing industry, post-MFA? Which global markets are clothing firms accessing? What factors determine US and EU market access and have they changed post-MFA? Is AGOA still a major advantage in this new global environment? What is the role of global buyers in this process?

Macroeconomic factors affecting competitiveness and post-MFA performance

The exchange rate has played a key role in the survival of the clothing industry in Madagascar. Unlike Kenya, South Africa, Lesotho and Swaziland which all experienced an appreciation in their currencies, the Malagasy currency (franc malgache - FMG) lost half its value against the dollar and the euro between February and June 2004. Figure 1 shows the depreciation as indexed to January 2003.

Figure 1: Depreciation of the Malagasy Currency against the Dollar and the Euro



As firms are paid in dollars, local costs were suddenly reduced by half; the depreciation of the FMG gave clothing firms a 'bit of breathing space,' by stimulating exports and reducing the costs of production just before the end of the MFA (Ambassade de France, 2005).

The government offers little assistance to the clothing industry. Policy is currently focused on rural, not industrial development, confirmed by interviews with industry officials and firms. Firms repeatedly mentioned government's lack of interest in the industry, despite its

[2]Groupement des enterprises franches et partenaires – Association of Free Zone Enterprises and Partners.

employment and revenue generation importance. Internationally experienced firm managers argue the Malagasy government is comparatively inattentive to industry's needs.

"Government is concentrating on agriculture [so]… people 'will always have enough to eat'.

"In [other countries with textile factories], the government comes as soon as there is a problem to see if they can do something."

"The government [in Madagascar] is a wall. They are not interested in textiles. The companies in the EPZ are foreign firms, not Malagasy, so we are not considered important."

However, one important government program is the Export Processing Zone (EPZ) legislation, under which firms pay little or no corporate tax for the first five years of production.

In 2002, Madagascar experienced a political crisis lasting six months that had serious economic consequences. Before the crisis, an estimated 120,000 people were employed in EPZ clothing firms. Between 30 and 40,000 jobs were lost as companies restructured or closed permanently (Salinger 2003 and Manchester Trade Team 2005). Of the estimated 140 to 160 EPZ textile and clothing firms open in 2001, approximately 25% of them firms closed. Of the 21 firms interviewed, 17 were present and producing in Madagascar when the 2002 political crisis started; seven firms managed to stay open despite the conditions. Ten firms were unable to meet orders over the crisis period and closed. Firms that remained open continued to produce because they were concerned about losing longstanding buyers.

"During the crisis, it was better to get the product out no matter what than lose the client."

"We didn't lose any customers in 2002. We did everything possible to satisfy our customers, even flying raw materials in to Tana."

Interviewees stressed that they could not lose a client; it was unknown if the clients would come back after the crisis. The buying offices for MAST, Li & Fung, Eddie Bauer, Gap, Dockers and Levi's closed during the crisis or in its immediate aftermath and have not been reopened. Buying offices are quickly set up and quickly moved, a result of the industry's footloose nature. When there is no buying office in-country, there is an additional distance between the buyers and the producer, making it difficult for firms to have steady contact with buyers in Madagascar, and in turn, to obtain orders from buyers.

The impact of infrastructure (transport, electricity and rent) on competitiveness

Infrastructural factors play an important role in the competitiveness of firms. Logistical problems with customs, inland and sea transport, electricity costs and reliability, internet and telecommunications, and rent increase the vulnerability of producers in Madagascar. However, Madagascar is not alone in facing these problems; most SSA countries face infrastructural barriers to efficient trade (USTR 2005).

Despite the presence of textile factories in Madagascar, all but two of the factories obtained the majority of their fabric and accessories from other countries. One firm is vertically integrated, weaving and dyeing its own fabric, finding this more efficient than purchasing and shipping fabric from Asia. Another firm sources approximately 85% of their fabric from its own mill in Mauritius. Eleven firms (52%) source solely from Asia, six of whom said they only source from China. Other Asian countries mentioned include India, Sri Lanka, Indonesia and Pakistan. Within Europe, four firms source a portion of their fabric from Italy, three from France, one each from the Netherlands and Switzerland. Three firms (14%) said that they sourced fabric locally, but no more than 40% of their fabric needs. Many firm owners would

like to source from the local textile mill Cotona, but find its quality unacceptable for the international market and its prices too high. Some intra-African links exist: one firm sources jean fabric from a denim mill in Lesotho, and two firms source fabric from Mauritius.

The largest logistical problem, cited by 76% of the firms interviewed, is transport to, from, and within Madagascar. Inefficiencies and delays at ports and with transport associations make it difficult for producers in Madagascar to compete. The road between Antananarivo and the port town of Tamatave, a distance of 300 kilometres, is in bad condition: it can take up to one week for containers to travel between the factory and the port due to slow travel speeds. In addition the capital is plagued by traffic jams. Cargo trucks going in and out of the capital are limited by law to rolling only between the hours of 20:00 and 6:00. Road capacity is another issue: were production in Madagascar to increase, the roads might not be able to support a corresponding increase in traffic (Salinger 2003, 47).

Due to Madagascar's isolation from raw material suppliers and destination markets, it takes up to four months to complete an order, eliminating most time-dependent fashion lines for producers in Madagascar. The time breakdown in Table 5 shows how tight producers' deadlines are: fabric manufacture and delivery from Asia takes four to five weeks, plus an additional week from the port to the factory. Production can take up to three weeks, depending on the size of the order. Altogether, a minimum 13 week lead time from order placement to delivery is necessary.

Table 5: Production Steps and Corresponding Time for Firms in Madagascar

Production Step	**Time necessary**
Fabric production	1-2 weeks
Shipment of fabric and accessories	3 weeks (average, Asia to Madagascar)
Shipment from port to factory, including customs inspections	7 days Tamatave to Antananarivo 8-9 days Tamatave to Antsirabe
Manufacturing	3 weeks
Shipment back to port, including customs inspections	1 week
Shipment to destination market	3 weeks Tamatave to EU; 4 weeks (min) to US

Such long lead times limit producers' possible products by forcing a CMT focus and hinder the industry's and producers' ability to upgrade. Producers hence find it difficult to move up to higher value-added garments as they are usually more fashion-dependent and must be delivered to market quickly. Many echoed one informant's statement:

"Lead times are important for turn around. Madagascar is involved in replenishment goods: it is core products that are being done here. It is hard to do fashion-dependent items."

Transport costs to and from Madagascar have also been increasing. Margins are being squeezed as buyers demand cheaper prices and shipping costs rise at the same time. One manufacturer stated that transport costs add 30 US cents to each garment produced in his factory. According to a transportation industry official,

"The costs for maritime transport from Asia have increased the most. A 20-foot container in January 2004 cost $1200 to ship from Asia to Madagascar. In December 2004, that price rose to $1900. This is an increase of 58% . . . Now it is $2,230 (April 2005) due to rising petrol prices."

Prices for inland transport are high, reflecting the lack of competition amongst transport companies in Madagascar. These additional costs, plus the uncertainties associated with the

possibility of delays along the road between Tamatave and Antananarivo contribute to the precarious situation of garment producers in Madagascar.

Another difficulty that firms face is increasing rent costs. Six firms interviewed (29%) report high or increasing rent costs. The firms interviewed pay $2 to $5 per square meter per month, amounting to 10-20% of the price of the finished garment. One firm is considering moving elsewhere within Madagascar or relocating entirely due to rent costs.

Energy prices are also increasing for producers in Madagascar. Additional increases are expected to pay for the modernization of the outdated equipment that JIRAMA, the national electricity company, currently uses. According to an industry official in Madagascar, prices for electricity have increased an additional 30-60% in 2005, further squeezing producers' bottom lines. Besides cost increases, fluctuating power currents and power outages occur daily, making it difficult for producers to fill their orders.

Labour Factors

One of Madagascar main attractions is the low wage costs and relatively productive workforce. High productivity levels allow a firm to complete an order faster while lowering the number of workers needed to complete an order, thus lowering the average costs. Cadot and Nasir (2001) found that while worker productivity in Madagascar is low by international standards, improvements have been made. Madagascar falls about average when comparing different levels of productivity (Table 6). The index of unit labour cost means that, for example, in Madagascar it takes just over two cents of labour in Madagascar to make $1 in revenue.

Table 6: Unit Labour in Standardized Garment Production

	Madagascar	Kenya	Ghana	Lesotho	South Africa	India	EPZ China
Task Level Efficiency[a]	14-15	12-15	12	18	15	16	18-22
Monthly Wage[b]	$55-65	$60-65	$30-45	$82-95	$255	$70-75	$150
Index of Unit Labour Cost[c]	0.023	0.026	0.022	0.035	0.050	0.027	0.040

[a] The average number of shirts a machine operator can produce in a workday; [b] Wage for a semi-skilled sewing machine operator in the garments industry; [c] For men's casual shirts. Source: Cadot and Nasir (2001).

Over half (57%) of manufacturers feel that workers are not productive enough, despite incentive programs, agreeing with this statement:

"The Malagasies could produce more if they put their minds to it. Right now they just do enough to put food on the table, and nothing more."

"If workers in China can produce 10 shirts in a day, workers (here) can only produce 6 or 7".

"We now have 700 employees, but I find they are 40% more productive than when we had 1100 before the crisis. The crisis allowed us to restructure. But is this enough to compete with China? No."

A lack of training, mentioned by many interviewees, hinders efficient production. Due to the lack of a training school for textile and clothing workers, workers arrive without any skills and must be trained in-house. Firms continuously look for trained workers to fill empty positions. An ILO-sponsored workshop between producers, workers and government in Madagascar found the producers are not looking for a training school per se, but rather for government assistance with in-house training (ILO 2004).

Skilled workers are in high demand, and hence trained workers move between factories to obtain higher wages. Firms mentioned turnover rates of 2-10% of their total workforce. Knitting factories in particular reported high turnover at the beginning stages of training.

"Turnover is very high for new workers – after three days they leave. Empty machines don't produce anything. We always have empty machines"

Firm Nationality and Market Destination

For the field work, firms interviewed were chosen by nationality, in the proportion to the total number of exporting firms (Table 7). Nationality is important as it can act as a proxy for market destination (Gibbon 2002a, 2002b, 2003). The two major markets, the US and the EU, are quite different, and firms follow different strategies to access these different markets. Gibbon (2003) found that, due to buyers' differing requirements, clothing firms in Mauritius exported either to the US or to the EU, but not both. Orders for the US market are generally larger (absorbing 30-100% of a firm's capacity), contracts are stricter and quality requirements are higher. For the EU market however, orders are generally smaller (10-15% of capacity), with more flexible contracts and negotiable quality requirements. Gibbon (2002b, 2003) argued that in the South African and Mauritian clothing industries, Asian-owned firms generally exported to the US, while locally-owned firms exported to the EU.

Table 7: Nationalities of Clothing and Textile Firms in Madagascar

Nationality Groups	Population by nationality	Proportion by nationality	# of firms to interview	# of firms actually interviewed
Asian	30	25%	5	8
EU	28	24%	4.6	4
Malagasy	16	13.5%	2.7	5
Mauritian	17	14%	2.8	2
American	4	3%	0.6	2
Tunisian	1	1%	0.16	0
Unknown origin	22	19%	3.7	0
Total	118	100%	19.56	21

The firms interviewed (Table 7) fall roughly along the breakdown initially laid out. Nearly all the sample had production units and offices located in the capital of Madagascar, Antananarivo (two firms surveyed had production units in Antsirabe). Firms are concentrated in these two areas due to availability of infrastructure including water, electricity, factory shells, as well as proximity to the airport and availability of better-educated workers.

Firms sampled were broken down by five major nationality groupings (Table 8): Asian (Chinese and Sri Lankan), Malagasy, Mauritian, European (France and Netherlands), and US. Regional groupings such as 'EU' and 'Asian' are used because the sample size was not large enough to draw conclusions about individual nationalities.

Table 8: Key Characteristics of Firms Interviewed by Export Market (n=21)

Characteristics	Market of Destination: Predominantly US Market	Predominantly EU Market	Equally to Both Markets	All Firms
# of firms	**12**	**8**	**1**	**21**
Average Age	**5.8 years**	**10.4 years**	**14 years**	**7.3 years**
Nationality of firms (no. of firms brackets)	**Asian** (6) **Malagasy** (3) **US** (2) **EU** (1)	**EU** (3) **Malagasy** (2) **Mauritian** (2) **Asian** (1)	**Asian** (1)	**N/A**
Average # Employees	1819	1401	3500	1740
Average # of Clients: **Range:**	6 clients Range from 2-20	14 clients Range from 1-50	15	9 clients Range from 1-50

A firm was categorized as exporting predominately to one market if 70% or more of its production went to one destination. Firms exporting to the US were set up in 2001 arising from AGOA duty-free preference, hence are larger and younger, whilst firms exporting to the EU are smaller and older. Gibbon's (2002b, 2003) findings that the Asian firms were more likely to export to the US than to the EU were corroborated. Several firms exported to both markets, but one market destination was largely preponderate. One firm of Asian nationality exported equally to both markets. Mauritian and EU firms predominantly exported to the EU. Malagasy-owned firms were split, with three firms primarily exporting to the US and two exporting to the EU. Three firm managers said they would like to strike a better balance between the two markets rather than produce almost exclusively for one or the other:

"Currently, I'm 90% US and 10% EU. I'd like to see 70% US and 30% EU by the end of 2005. But the ideal is 60% US and 40% EU. The EU offers better prices, so I have a better chance of breaking even."

Exporting to both markets allows producers to balance large and small orders and ensures they have year-round production. There is also a difference between EU clients and US clients. US buyers, according to Gibbon (2002b), demand a high percentage of total production, making it difficult for producers to have other clients. Evidence in Madagascar supports this conclusion:

"To supply the US, the factory must work, for example, 10 days straight, 24 hours per day. This is difficult for a smaller producer to accomplish especially if they have other customers."

Serving the US market is more precarious as a firm never knows if the US buyer will return. EU clients, although demanding smaller orders, are seen as being more stable clients:

"With the EU firms, you build a relationship with the client, but with the US firm you are a yo-yo. The US client comes back to you when it suits them."

"We don't do the US. In 2002, we had 3 units dedicated to the US, but now our strategy is to get out of the US market. The US market is too demanding and strict with their orders. The EU is much easier to work with."

Madagascar produces mostly cotton apparel in both knitted and woven segments. Knitted or woven fabric garments fall into different product groups and face different levels of tariffs. Of the 21 sampled firms, six firms (29%) produced only knitted products. Sweaters alone

accounted for 9% of Madagascar's total exports in 2003. Six firms (29%) interviewed made cotton trousers for men and women, which accounted for 11% of Madagascar's total exports in 2003. These three categories of apparel together accounted for 20% of Madagascar's *total* exports making Madagascar is heavily reliant on a few categories for export revenue. (COMTRADE 2006). Three firms interviewed made cashmere sweaters, a high value-added product. Cashmere garments do not need to meet the rule of origin restrictions because cashmere is considered a scarce material.

The Role of Buyers

Madagascar's factories produce for a variety of buyers. Of the 21 firms interviewed, 18 specified the types of buyers they served. By far, firms served independent retailers the most (10), with most being US-based (Table 9). The next highest category served is the department store label, also for the US market. The lower end-market segments, including low-end department stores and discounters, are generally associated with lower margins and the US market (Gibbon 2002b). Firms in the sample serving the EU market were more likely to sell to supermarkets, mail-order catalogues, and high-end to mid department stores.

Table 9: Buyers Served in Madagascar (n=18)[3]

Type of Buyer	Examples of Types of Buyers Mentioned	No. of firms reporting as serving that buyer type
Supermarket	Carrefour, Auchan,	3
Department Store, High-end	Galleries Lafayette, Dillard's, P und C	5
Department Store, mid	Sears, JCPenny's	3
Department Store, Low-end	Mervyn's, C&A	3
Discounter	Kmart, Wal-mart, Target	3
Department Store Label	Gloria Vanderbilt, l.e.i., Columbia, Levi's, Jordache, US Polo	8
Independent Retailer	Gap Group, Benetton, Decathlon, Celio, The Limited, Zara	10
Wholesalers	Costco	2
Boutiques		1
Specialized workwear	Groupe Quintet	1
Mail-order	La Redoute, Vert Baudet	2

*Note: Firms reported serving different categories of clients concurrently.

How firms in Madagascar obtained their buyers is essential to understand what role Madagascar fills in the value chain as well as the vulnerability of its position. Are buyers seeking out producers in Madagascar or must producers chase after buyers? It appears that buyers flocked to Madagascar after AGOA preferences started, but most fled after the crisis.

"Buyers talked about Madagascar a lot in 2000-1, encouraging suppliers to come here, but no one is talking about it now."

Anecdotal evidence from Madagascar suggests that the structure of buying and sourcing within the international garment industry as a whole may be changing. Whilst US buyers generally still use a mix of independent sourcing and intermediaries, firms mentioned that relationships with buyers, mainly European, are becoming more direct, with fewer European buyers passing through intermediaries or sourcing offices now. [4] Some buyers have a dual strategy: they

[3] Classifications adapted from Gibbon 2003.

[4] Similar changes in using sourcing agents and have been noted in the *Wall Street Journal* (Fong, 26/11/2004).

source via buying or sourcing houses as well as directly with the manufacturers. For manufacturers with parent companies, buyers pass via the parent company office in Hong Kong, but the relationship between the buyer and the parent company was reported as usually being direct, with no intermediaries. This could signal a possible change in the nature of the relationship between buyer and producers in the post-MFA world, perhaps pointing to decrease in the importance of triangular manufacturing. Alternatively, in the absence of evidence from other producer countries, it could simply be highly specific to the particular conditions in Madagascar and a consequence of the political crisis.

The presence of buying offices appears to play an important role. Before the crisis, buyers from Levi's, the Gap, and Liz Claiborne and sourcing agents from MAST, Linmark, and Li & Fung had offices in Madagascar. Sourcing offices play a key role in sending orders to countries. Unfortunately, the crisis forced sourcing offices to close. This has significant repercussions for the future of Madagascar's clothing industry.

"If a buyer leaves, then so will the vendors [producers]. It is the buyers who decide the future of factories in Madagascar."

Buyers can do more than just give orders. In the automotive value chain, end-buyers assist their suppliers in upgrading their capabilities. The garment value chain works differently depending on the type of garment being produced. Generally, those producing the cheapest garments receive no assistance from end-buyers. Independent retailers like Gap and Benetton are "widely considered to usually make poor or non-existent contributions to improvements in supplier capabilities" (Gibbon 2002b, 38). Only firms that produce for high-end buyers mentioned that buyers helped them upgrade. One firm that has developed a long-term relationship with a high-end buyer has production specialists who help upgrade the firm's production processes.

Typology of Post-MFA Performance

Four distinct categories of status, based on the criteria of changes in employment levels and number of orders, emerged from the interviews. This section provides a snapshot of firms at the time research was undertaken. Firms are classified as 'shrinking,' 'stable,' 'wait and see,' or 'expanding'. A firm identified as *shrinking* had no orders past August 2005, were currently producing at partial capacity, and had permanently laid-off one-third to one-half of their employees. Closure appeared imminent. A *wait and see* firm had orders for six months, but was not making any investments in the near future as the future is unclear. Some 'wait and see' firms had temporarily laid-off workers. *Stable* firms have orders at least through next year and had no changes in employment levels. *Expanding* firms were increasing the number of production lines and employees. Using this, four (19%) firms were identified as are shrinking, two (10%) are wait and see, 11 (52%) as stable, and four (19%) as expanding (Table 10).

Table 10: Firm Current Status by Nationality and Market Destination

	Firm Nationality (identified by a randomly assigned letter)					**Market**	
						US	EU
Current Status	Asian	American	European	Mauritian	Malagasy		
Shrinking	F I K				N	F I K N	
Wait and see	O		S			O S	
Stable	HU B	W	A Q	R	CG J V	C H U V W B*	A G J RQ B*
Expanding	E	T	X	D		T	D E X

* Firm B exports equally to both markets

Market destination was the most significant factor in determining status. The four firms identified as shrinking and the two that are 'wait and see' serve the US market, indicating that half of those producing for the US have uncertain futures past 2005. Of the 11 firms considered stable, five serve the US and five serve the EU markets, with one additional firm serving equally both markets. Asian firms were spread over all categories, with only one amongst the expanding firms. Malagasy firms primarily occupied the stable category. The Mauritian, American, and EU firms were basically unthreatened by the situation. Product matters: 'shrinking' firms specialize in basic denim jeans and t-shirts and have seen prices forced down by intense international competition.

That firms producing for the US market have seen a decrease in production is corroborated by the 2005 US import data. Madagascar's exports to the US have fallen by 14%, as expected according to our assessment of the industry (Table 11). In comparing US imports in dollar amounts and square meter equivalent, imports increased by 6% in monetary terms but increased by 10% in square metre equivalent; garment prices are decreasing.

Table 11: US Clothing Imports from Selected Countries in 2005

	2004	2005	% change	2004	2005	% change
Total US Imports	64,767.67	68,714.52	6.09%	19,951.00	22,012.99	10.34%
	In US$ millions			In Square Meter Equivalent		
China	8,927.86	15,144.10	69.63%	2,972.52	5,885.40	97.99%
Cambodia	1,428.99	1,712.84	19.86%	634.68	709.99	11.87%
Vietnam	157.19	155.89	-0.83%	777.06	801.52	3.15%
Kenya	277.16	270.56	-2.38%	73.31	73.90	0.80%
Lesotho	455.75	390.71	-14.27%	111.16	95.25	-14.31%
Madagascar	323.11	277.07	-14.25%	69.41	62.57	-9.86%
Swaziland	178.66	160.88	-9.95%	61.47	54.99	-10.54%

Source: OTEXA (2006)

Two of Madagascar's most important exports are men's and boys' knit shirts and cotton trousers. Looking at these two specific categories, SSA countries have been affected in different ways (Table 12).

Table 12: US Imports of Selected Clothing Items in 2004 and 2005 (US$ millions)

	Category 338: Men's & Boys' Knit Shirts			Category 347: Men's & Boys' Cotton Trousers		
	2004	2005	% change	2004	2005	% change
Total US Imports	5182.366	5556.611	7.2%	5023.37	5291.514	5.3%
China	110.32	235.48	113.5%	110.326	383.001	247.2%
Cambodia	91.08	122.16	34.1%	111.163	131.388	18.2%
Vietnam	251.69	209.07	-16.9%	147.375	142.947	-3.0%
Kenya	8.4	8.31	-1.2%	57.942	36.485	-37.0%
Lesotho	84.33	66.31	-21.4%	105.757	108.271	2.4%
Madagascar	51.72	41.49	-19.8%	43.798	54.413	24.2%
Swaziland	9.97	6.40	-35.8%	19.955	28.264	41.6%

Source: OTEXA (2006)

For men's and boys' knit shirts, all SSA countries saw a decrease in exports, while Madagascar's main competitors, China and Cambodia, saw a surge in exports. Lesotho,

Madagascar and Swaziland saw decreases of 20% or more in this category. In cotton trousers however, Madagascar saw significant increases in exports. China saw a 247% increase in volume of exports in cotton trousers to the US.

Significantly, no firms serving the EU market are identified as shrinking or wait and see. Furthermore, three out of the four classified as expanding and half the firms identified as stable serve the EU market. Export data for January through October 2005 (annual data is not yet available) show us that total exports to the EU have risen 14% in accordance with the suggestion that firms exporting to the EU are faring better than firms exporting to the US. Knit exports are responsible for this increase: exports in knit clothing (HS 61) have risen almost 30%, while exports in the woven clothing category (HS 62) have dropped 3.6% (Table 13 and Table 14). The increase of 34% or €19.5 million in jerseys and pullovers (HS 6110) is largely responsible for the increase in the knit category. This single category is responsible for 51% of Madagascar's exports to the EU.

Table 13: Madagascar's major exports to the EU in HS 61 (knitted apparel) in euros

HS Item	Jan-Oct 2004	Jan-Oct 2005	% change
6110 – Jerseys, pullovers, cardigans, coats	€57,017,648	€76,512,487	34.2%
6108 – Women's or girls' slips	3,227,127	4,133,020	28.1%
6109 – T-shirts, singlets and other	2,237,966	4,013,872	79.4%
6114 – Special garments for professionals	2,598,880	1,932,582	-25.6%
6104 – Women's or girls suits, ensembles or swimwear	1,380,967	1,287,333	-6.8%
6111 – Babies Garments and Clothing or Hats	829,656	1,067,029	28.6%
Remaining items in HS Code 61	2,275,981	1,082,166	-52.4%
Total for HS Code 61	69,568,225	90,028,489	29.4%

Source: Eurostat Database (February 2006)

Woven articles of clothing destined for the EU have not fared as well as knits. In general, certain categories have done better than others: HS 6214 has increased 31% and HS 6205 has increased 20%. At the same time however, the two categories that were the largest in 2004, HS 6203 and 6204, have decreased 27% and 15% respectively in 2005.

Table 14: Madagascar's major exports to the EU in HS 62 (woven apparel) in euros

HS Item	Jan-Oct 2004	Jan-Oct 2005	% change
6214 – Shawls, scarves, mufflers	€9,365,341	€12,246,350	30.8%
6203 – Men's or boy's suits, ensembles or swimwear	15,525,385	11,409,908	-26.5%
6204 - Women's or girl's suits, ensembles or swimwear	12,450,719	10,649,290	-14.5%
6205 – Men's or boy's shirts (excl. vests)	4,370,132	5,268,318	20.6%
6211 – Track Suits or Ski Suits	5,032,022	4,078,420	-19.0%
6212 – Brassieres, Girdles, Corsets, etc.	3,629,305	3,306,962	-8.9%
Remaining items in HS 62	10,680,564	11,888,801	11.3%
Total for HS Code 62	61,053,468	58,848,049	-3.6%

Source: Eurostat Database (February 2006)

Within the woven category, increases in non-traditional categories like shawls, felt garments, handkerchiefs, and ties have helped offset the decreases in men's and women's suits. Specialized categories now make up 30% of Madagascar's exports to the EU in the woven category, whereas in 2004 they made up only 20%. This also means that Madagascar is diversifying its export base.

In the industry as a whole, only five of 118 textile and clothing firms closed, leaving 5000 people unemployed, while an additional three firms laid off 3000 people (Rambelo 2005a). Despite this, it appears that 70% of the sampled firms will survive at least until 2006.

Prices and Upgrading

As a result of unhindered competition, prices have decreased for core products that most factories in Madagascar produce. For producers who make basic denim products, which China produces in abundance, prices decreased substantially in 2005. Eleven firms (52%) reported that prices decreased 30-50% the past six months creating difficulties making ends meet. One firm said if prices fall further, it would be forced to close. Madagascar also has several cashmere producers, but the prices for cashmere products are relatively stable.

Only one firm reported on price, stating prices received per pair of basic five-pocket jeans dropped from $5.25 to $3.75, a 30% fall. This same firm has seen the margins on its products decrease from 55 cents per garment to 20 cents per garment. Yet firms mentioned that buyers are willing to pay more for a better product. *"The basic product price has decreased, but buyers are ready to pay for more value-added."* Producers reported receiving more orders and larger orders as their quality standards improve. Several firms mentioned quality improvements as a strategy for the future: the firms are trying to make more fashion-dependent items with higher value-added. In essence producers are trying to move up the value chain by acquiring higher rents within the value chain via quality improvements and more value-added.

For an overall picture of how prices have changed, we can look at US import data. Table 15 shows the unit prices changes between 2004 and 2005 for men's and boys' knit t-shirts, one of the major categories of US imports. Overall, unit prices have dropped. China shows the most marked change, with a 63% decrease in prices received for knit t-shirts. Madagascar saw a 12.7% drop in prices of knit t-shirts, while Lesotho saw a 9.2% drop.

Table 15: Price Changes for US imports of Men's & Boys' Knit Shirts (in US$)

	2004 Unit Price	2005 Unit price	% change
World	5.55	5.23	-4.5%
China	13.15	4.91	-62.6%
Cambodia	10.16	6.95	-31.6%
Vietnam	8.11	8.71	7.3%
Kenya	6.96	7.29	4.8%
Lesotho	6.09	5.53	-9.2%
Madagascar	7.15	6.24	-12.7%
Swaziland	5.13	4.39	-14.5%

Assessment of AGOA

Besides assessing the effects of the end of the MFA on Madagascar, we also assess the effectiveness of AGOA in increasing clothing exports from Madagascar to the United States and in assisting Madagascar in its economic development. AGOA offered two major benefits: duty-free and quota-free access to the US market. In 2005, the ability for sub-Saharan Africa as a whole to attract investment decreased as one of its major advantages, quotas, disappeared. This translated into a 14% decrease in exports to the US for Madagascar. The developmental impact of AGOA appears to be limited due to the temporary nature of the investment attracted

by AGOA preferences; most manufacturers set up shop in such a way as to be easily mobile. Some manufacturers exporting to the US closed production units in Madagascar to reopen elsewhere. The future for exports to US is uncertain. However, it is certain that AGOA preferences helped Madagascar expand its industry and increase the number of people employed from 2000 to 2005.

One of the intentions of AGOA was to spark local and regional industries in yarn and fabric production. Despite the increase in the number of factories and thus the need for fabric and yarn, local fabric and yarn producers have not expanded capacity. Only three firms of the 21 interviewed obtained their fabric from another sub-Saharan country. It appears that AGOA's intention of increasing regional production and trade has not born fruit, despite the great need for locally produced fabric to cut down the lead times for importing fabric from China.

Upgrading Strategies for post-MFA Survival

Some firms find the local problems within Madagascar too great and believe the future lies elsewhere, others can no longer survive in the new international context and have closed their doors. The vast majority of firms are upgrading either by increasing productivity, upgrading quality, or expanding to different markets to operate in the new context.

Five firms (24%) are focusing solely on offering more services to clients as a post-MFA strategy, four (19%) are working on increasing the product quality to attract more buyers and three (14%) are concentrating on productivity. Two firms are focusing on upgrading both services and quality, while one firm is focusing on both services and productivity.

In February 2005, a clustering organization called 'Text'Ile Mada' officially opened for business, intending to assist firms in Madagascar upgrade and compete at a higher level internationally. Supported with funds from the Centre for the Development of Enterprise (CDE) of the EU, the objective is to foster a textile cluster similar to those found in Italy and France and help firms in Madagascar survive the intense competition expected after the end of the MFA. The cluster hopes to limit vulnerability by acquiring new skills and experience via training sessions and knowledge-share between members.

There are currently 17 members of the cluster, each with a different specialization - garment and lingerie manufacturers, industrial and manual embroidery firms, quality controllers, and a transport company (Zafimaharo 2005). This grouping of different firms allows the cluster members to offer a wider range of services.

'The objective of the cluster is to seize the opportunity to offer Madagascar as an alternative to China. We are relying on the quality of production and on [offering] services. That's our focal point.'

The variety of firms available in Madagascar is one advantage of the cluster, providing clients with a 'one-stop shop' at which they can order fabric and embroidery and different styles of garments. Since many orders are too large for smaller firms to manage, the cluster will coordinate production sharing amongst members.

'*Some firms cannot offer more than 12,000 pieces of production capacity at a time. The cluster permits firms to share production capacity and access new opportunities in terms of orders'.*

The cluster hopes to help members to access new markets with the expansion of production capacity (Zafimaharo 2005). This will be done through production scale economies as well as benefiting from scale economies for transport. Already, the cluster has obtained a bulk discount of 25% on transport costs for members (Rambelo 2005b). The cluster also plans to

organize workshops on production techniques, orders, and training costs among members. By offering extra services offered to clients, higher value-added and better quality garments, and larger production capacity the cluster hopes to attract buyers who would have otherwise filled their orders in China.

However apart from these general upgrading activities, three firms in Madagascar in particular are following unique strategies.

- One firm is a wholly-owned subsidiary of a US brand name. Despite the global trend of disconnecting production from design, the parent company has embarked on a strategy of vertical integration - owning most of its production units outright rather than outsourcing. The advantage for this firm is a continuous production arrangement so that there is never a wait for raw materials and the sewing lines never stop. Its competitive edge is that the parent company purchases all the raw materials to receive bulk discounts, as well as takes care of the financing for transport and production. Costs are lower than if the stages of design, sourcing and production were separate entities. However, the Madagascar enterprise has little say in its future – if the strategy for the company as a whole is to pull out of SSA, there is little that can be done to ensure the factory remains.

- Having only one client might be risky, but one firm's strategy is to work with a single customer producing high-end garments for the European market. This CMT firm of 400 workers started working for a very high-end brand name in late 2003. All the raw materials needed to make the garments arrive in a container and the firm only assembles the final garment. The buyer seems intent on developing a long-term relationship with this firm. Technicians sent by the buyer visit and instruct the workers on a regular basis on how to assemble the garments due to the complexity of the garments. Due to the production line always working with the same type of garment and fabric, workers have increased their productivity. All production is consumed by the one buyer. Thus far, the firm is focusing on this one client; the firm's one-year contract with its buyer has been renewed for an additional year and it is in the running for a five-year contract.

- A Mauritius-based company with units in Madagascar has moved some production to India. The Mauritian parent found that buyers go to where the sourcing offices are located. If there is no sourcing office in a country, buyers are less likely to order from manufacturers in that country. Hence the parent company not only opened up an office and a factory in India in January 2005, but also expanded production units in Madagascar. '*We have been in India for two months now. Buyers go to India. Before, we had to go search for buyers, now they visit India twice a year . . . In India, there are all the [fabric and accessory] suppliers we need.*' This firm is also vertically integrated along its supply chain giving it access to fabric produced by a textile mill within its group. Approximately 80% of their fabric comes from the firm's own mill, with the rest coming from COTONA (the textile mill in Madagascar), China, Taiwan, and Indonesia. The parent company has been preparing for the effects of the end of the MFA for three years, and now feels competent to handle the new context. Simultaneously, the firm has focused on developing high levels of quality by employing quality control officers who are trained by the buyer and act on the buyers' behalf while the order is in production. This entire strategy has led to the firm being able to dictate prices to buyers and to operate at full production capacity.

CONCLUSION

Our conclusions are grouped into general (pertaining to SSA clothing producers operating under the current context of globalisation, post MFA, and AGOA) and Madagascar specific.

The most important general conclusion is that having access to preferential trade arrangements (as in AGOA) has played a crucial role for Madagascar. Hence the policy conclusion is that rules governing 'preferential trade access' should be maintained and pursued with extreme vigour by SSA countries. Furthermore, specifically with respect to AGOA, the consequences of the transition from single to triple transformation set to occur in September 2007 need to be analysed with great care and special policy negotiations may be required to ensure that the negative effects are mitigated.

The Madagascar case also suggests some interesting conclusions in respect of the operation of global clothing value chains. Clearly the final US and EU market destinations may be subsumable under the generic rubric of buyer driven value chains, but there exist fundamental differences between them in respect of governance, upgrading and survival strategies. Finally there is a further research issue that the Madagascar situation has revealed. Triangular manufacturing and third party coordination has been regarded as an integral aspect of the clothing value chain. However the Madagascar case implies that this may be changing. What is unclear is whether this is a general post-MFA shift, a characteristic of the EU dominated value chain, or simply a specific result in Madagascar due to the fall out of the political crisis.

With respect to Madagascar specific conclusions, it is clear that the future of the industry is dependant on a host of infrastructural issues which tighten producer abilities to deal with falling unit prices and buyer demands. Madagascar lacks reliable service delivery of electricity and roads, while the cost for these services are rising. Yet there are many support measures that can be implemented to assist firms. Something as simple as a highway 300 kilometres long between the capital and the port would lessen the vulnerability of firms in Madagascar. Government is focusing its energies and resources on rural development while neglecting industrial development. A basic program such as support for capital investment could help firms purchase capital equipment that would help stabilize their position in the international clothing context. Government pressure on the port authorities could accelerate the clearance time at the port, saving manufacturers valuable time in the production process. With a little support firms can continue to operate and expand in Madagascar, facilitating the industrial development of the country.

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