

Government of Malawi



Ministry of Trade and Private Sector Development

A Study into the Impact of the EU Sugar Reforms on Malawi

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1.0 Background to the EU sugar market and the proposed reforms

On 22 June 2005, the European Commission announced plans for substantial reforms to the European Union's common market organisation for sugar. The reforms will bring the EU sugar market in line with the rules of the WTO. The proposed EC Sugar Reform foresees a two-step cut totalling 39 percent, in the price of white sugar produced within the European market. Additionally, the reform anticipates the abolition of intervention in the sector and a voluntary restructuring scheme lasting four years to encourage less competitive European producers to leave the sugar sector. However, the current quota system for production within the EU will be maintained until 2014/2015.

Under the Everything But Arms Initiative (EBA), least developed countries will have unlimited access to the EU market at zero-tariff as from 2009. To avoid distortions of competition with LDCs benefiting from the EBA, the EU will continue to buy sugar to be imported under the EBA scheme at a price no lower than the guaranteed price for ACP countries. It is expected that while EU sugar production will reduce, its sugar imports from developing countries, in particular the poorest ones, could increase in the future.

Up to now, the EU has been importing a fixed quantity of 1.3 million tonnes of sugar per year from ACP countries, at zero duty and at a guaranteed price (€645.50 per tonne for white sugar and €523.70 per tonne for raw sugar, three times the world price). Following the sugar reform, this importation of white sugar will be fulfilled at a lower guaranteed price, reducing gradually over time, from €631.90 per tonne in 2006/07 to €385.50 per tonne in 2009/10. The implied price for raw sugar will be reduced to €496.80 per tonne in 2006/07 and to €319.59 per tonne in 2009/10.

However, ACP countries which traditionally export sugar to the EU will benefit from an assistance programme aiming at mitigating potential negative impacts and reducing the losses to be incurred by ACP countries in sugar-related export earnings following the EU sugar reform. The ACP assistance plan, in the form of accompanying measures to the sugar reform, will earmark €40 million for 2006 which Malawi stands to benefit from.

In summary the outlook for Malawian sugar remains uncertain. Sugar is one of the main export products from Malawi to the EU accounting for 21 percent of total exports to the EU. Malawi stands to lose significantly from the erosion of its preferences under the ACP sugar protocol, however the country will also benefit from improved access to the EU market under the EBA scheme (albeit at lower prices). As a sugar producer, Malawi may also benefit from higher world prices in general as a result of the EU sugar reforms, however higher world prices might equally disadvantage Malawian consumers.

The objective of the study is to analyse the proposed EU sugar reforms from the perspective of Malawi, to conduct economic analyses of the likely impact of the reforms on the Malawi sugar industry, and to ascertain the future prospects for production and exports to the EU market.

For the purposes of this brief paper, the changing sugar regime in the EU will be viewed primarily as an exogenous change in the export environment for Malawian sugar determined by the price and quantity of sugar that Malawi is permitted to export into the EU market.

Box 1: A brief history of world sugar

International trade in sugar first began in the 16th and 17th centuries with the growth in cane production in European colonies firstly in the Caribbean, but later spreading to South American and Southern Africa for export back to Europe. Repeated rebellions in the colonies during the late 1700s and early 1800s and the resultant disruption in supplies encouraged European countries to establish their own sugar industries and many subsidised sugar beet production. Such subsidies still continue in the European Union as part of the Common Agricultural Policy. A duty draw back system that allowed beet producers in Europe to reclaim (unpaid) import duty for domestically produced sugar and then export below cost helped sugar beet dominate the industry and reach a peak 60 percent share of world sugar production around 1900.

However, over the course of the twentieth century sugar cane overturned sugar beet production due to the removal of the European duty rebate system, falling transport costs and falling cane production costs. By 2000, sugar beet accounted for around 27 percent of world production.

The current sugar program in the European Union began in 1968, when sugar was first included in the Common Agricultural Policy. It has afforded EU sugar beet producers high and stable prices which have encouraged production, reduced consumption and imports, and contributed to making the EU the second largest net sugar exporter after Brazil.

Based on Mitchell (2004).

2.0 Malawi's sugar industry

2.1 Recent production and export trends

Since 2000, sugar has overtaken tea to become Malawi's second largest merchandise export in value terms. In 2004, sugar accounted for just over 12 percent of total national exports (MEPD 2005).

In recent years the area under cane has varied between 18,500 and 20,500 hectares, of which virtually all is irrigated. The yield per hectare during the 2004/05 growing season was 105 tonnes per hectare – only Zambia in the SADC region manages to achieve higher yields. Total cane production in the 2004/05 growing season was 2.06 million tonnes. The sucrose content of Malawian sugar, an indicator of quality, averaged 14.31 percent in 2004/05, higher than in any other country in the region. The industry provides direct employment for some 10,000 persons.¹

Table 1 shows that sugar production in Malawi has now reached approximately 260,000 tonnes per year, of which some 100,000 tonnes is refined. In 2004, Malawi exported approximately 90,000 tonnes of raw sugar and 30,000 tonnes of refined sugar.

Malawi generally exports to the EU under three schemes; (i) The EU-ACP Sugar Protocol (approx. 20,000 tonnes/year); (ii) Special Preferential Sugars, for ACP countries which used to export sugar to Portugal prior to Portugal becoming a

¹ All statistics in this paragraph from Illovo Sugar (Malawi) 2005 *SADC Sugar Statistics*.

member of the EU (approx. 10-11,000 tonnes/year); and (iii) Everything But Arms (EBA) initiative (approx. 10,000 tonnes/year, increasing by 15 percent each year). Malawi's preferential US quota is approximately 10-11,000 tonnes/year. Malawi exported a total of 53,000 tonnes of sugar to preferential markets in 2004. The vast majority of this total was lower value unrefined (raw) cane sugar.

Table 1: Malawi – sugar production and destinations, tonnes, 2000-2004

		2000	2001	2002	2003	2004
Sugar production	Raw	119,363	125,984	162,530	146,753	157,653
	Refined	88,437	89,549	97,974	113,125	100,400
	<i>Total</i>	<i>207,800</i>	<i>215,533</i>	<i>260,504</i>	<i>259,878</i>	<i>258,053</i>
Exports to preferential markets	Raw	41,883	49,022	47,157	52,040	52,799
	Refined	8,500	6,176	2,346	660	504
	<i>Total</i>	<i>50,383</i>	<i>55,198</i>	<i>49,503</i>	<i>52,700</i>	<i>53,303</i>
Exports to SADC	Raw	0	0	586	181	1,200
	Refined	0	0	10,430	12,320	7,406
	<i>Total</i>	<i>0</i>	<i>0</i>	<i>11,016</i>	<i>12,501</i>	<i>8,606</i>
Exports to ROW	Raw	19,861	23,329	52,842	31,625	36,218
	Refined	16,537	38,406	12,599	33,042	20,693
	<i>Total</i>	<i>36,398</i>	<i>61,735</i>	<i>65,441</i>	<i>64,667</i>	<i>56,911</i>
Domestic consumption	Raw	59,228	48,408	61,509	71,288	69,622
	Refined	66,684	49,536	60,151	65,473	68,378
	<i>Total</i>	<i>125,912</i>	<i>97,944</i>	<i>121,660</i>	<i>136,761</i>	<i>130,000</i>

Source: Illovo Sugar (Malawi) Ltd (2004)

In recent years, the SADC market has opened up as a new and modest destination for refined sugar. However, the major growth in Malawi's sugar exports over recent years has been to other countries (rest of world), principally Kenya – one of Malawi's partners in COMESA.

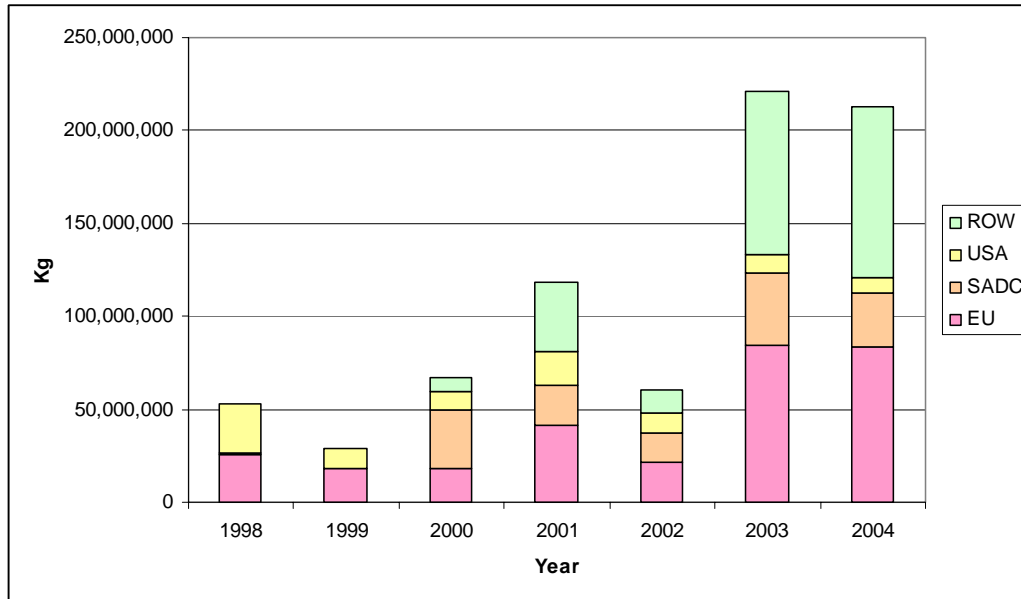
However, official statistics are likely to underreport actual exports to the region. Recent UNCTAD research estimates that more than 20 percent of sugar production is exiting Malawi to Mozambique, Zambia and Tanzania through undocumented or informal trade (UNCTAD 2005).

While domestic consumption has risen somewhat, due to higher growth in production the share of Malawi's sugar production directed towards the domestic market has fallen slightly from 61 percent in 2000 to 50 percent in 2004.

Figure 1 and Figure 2 chart the performance of Malawi's sugar exports by volume and value between 1998 and 2004. Preferential exports account for a greater share of total sugar exports when measured by value due to the higher prices received in the EU and US than in other markets.

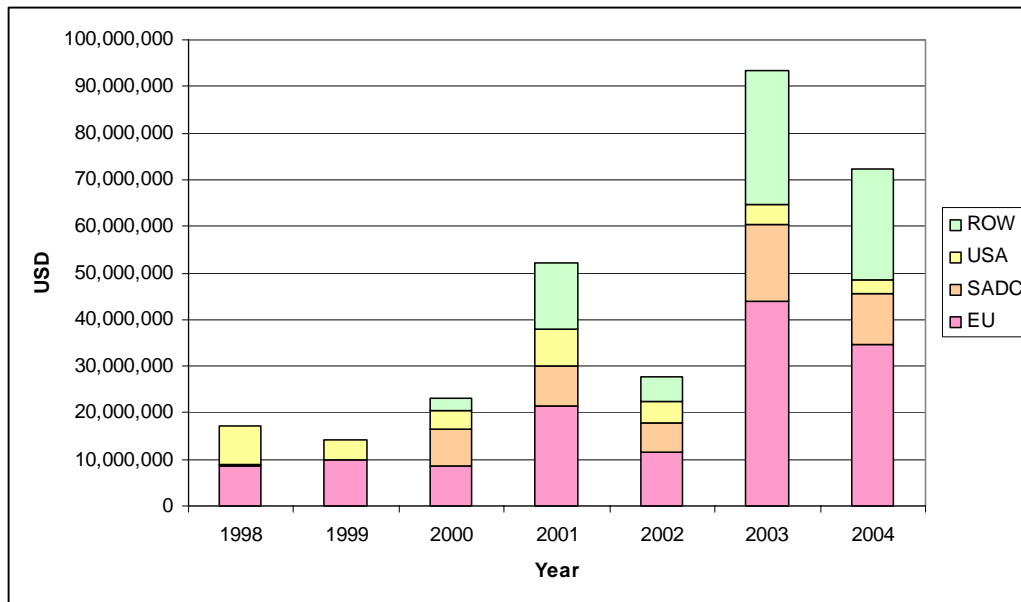
Figure 1: Malawi – raw cane sugar exports, by volume, 1998-2004²

² Note that NSO statistical years do not always match cane growing years, hence in Figure 1 and Figure 2 a portion of the exports for 2002 has been allocated to 2003. Therefore, the overall trend is actually more consistent than the data indicate.



Source: NSO (2005)

Figure 2: Malawi – raw cane sugar exports, by value, 1998-2004



Source: NSO (2005)

[Poor quality of NSO data – doesn't seem to accurately match other sources???

2.2 Competitiveness

In the sugar industry, “competitiveness” is relevant only to that part of the world sugar market that is not subject to preferential pricing agreements. Roughly 80 percent of world production and 60 percent of world trade is at subsidised or protected prices. Hence, the “residual” market for sugar has historically been subject to periodic sharp increase followed by long periods of low and declining prices (Mitchell 2004).

The EU, Brazil and India are the three largest sugar producers by some margin. Brazil has been rapidly expanding the production of sugar for export over recent years and is likely to strengthen its position as the number one sugar exporter, particularly as EU sugar exports drop due to the reform of export subsidies. Australia, Thailand and Cuba are the other major sugar exporters (see Table 2).

Table 2: Sugar production and net exports, 1997-2002 average by country

Producers			Net exporters		
Country/region	Million tonnes	% of world	Country/region	Million tonnes	% of world
EU-25	20.4	15.3	Brazil	9.6	24.9
(EU-15)	(16.9)	(12.7)			
Brazil	19.6	14.7	EU-25	7.9	20.5
			(EU-15)	(7.3)	(19.0)
India	18.0	13.5	Australia	4.0	10.4
China	9.2	6.9	Thailand	3.5	9.1
US	7.6	5.7	Cuba	3.1	8.1
Thailand	5.5	4.1	South Africa	1.2	3.1
Mexico	5.1	3.8	Guatemala	1.2	3.1
Australia	5.1	3.8	Columbia	1.0	2.6
Cuba	3.8	2.8	India	0.6	1.6
ACP	6.2	4.7	ACP	2.9	7.5
ACP Sugar Protocol	4.2	3.1	ACP Sugar Protocol	2.4	6.2
Malawi	0.21	0.2	Malawi	0.06	0.2
World	133.5	100.0	World	38.5	100.0

Source: FAOSTAT (2004)

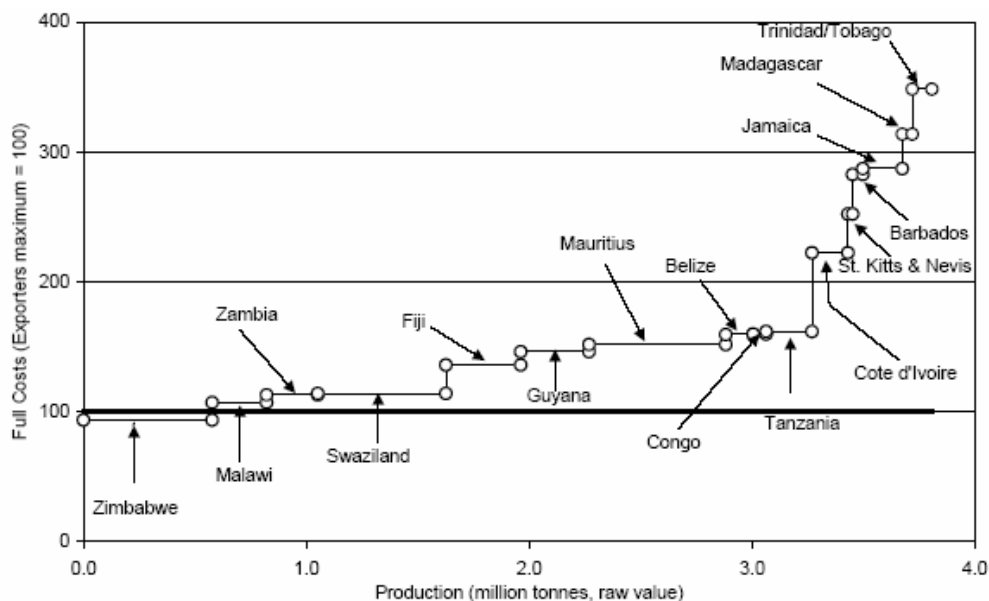
Various studies (including LMC/OPM (2003), Kadale/Imani (2002) and others) have suggested that Malawi would be one of only a handful of ACP sugar producers that would remain competitive in the absence of preferential market access. Most ACP sugar producing countries in the Caribbean and Pacific will not be able to compete on world markets. The ODI/LSE (2004) study suggests that in Sub-Saharan Africa, only Malawi, Zambia and Zimbabwe would be able to compete on world markets given current production costs. The study estimates the cost of production for raw cane sugar in Malawi to be approximately 7-8 cents/lb, roughly comparable to production costs in the world's leading sugar exporters.

An investigation into the erosion of ACP sugar preferences by LMC and OPM (LMC/OPM 2003), points to three distinct groups when comparing current industry profitability with post-reform profitability based on estimated production costs:

- countries where sugar production is viable under current domestic industry structure / restructuring plans: Congo, Malawi, Swaziland, Tanzania, Zambia and Zimbabwe;
- countries where sugar production is potentially viable if restructuring beyond existing plans is undertaken: Fiji, Guyana, Mauritius; and,
- countries where sugar production will be no longer viable under any circumstances: Barbados, Belize, Cote d'Ivoire, Jamaica, Madagascar, St Kitts, and Trinidad and Tobago.

Figure 3 (below) shows a comparative cost analysis of Malawian sugar compared to other ACP producers.

Figure 3: Current cumulative cost curve (full costs), ACP sugar producers



Source: LMC/OPM (2003)

However, while it is reassuring to note that the consensus among researchers is that Malawi sugar is viable in a post-EU reform world, this does not give any indication as to how healthy the industry will be in terms of production, exports, revenue and employment.

While, many ACP countries will be forced to reduce sugar exports following the proposed EU reforms, the major benchmark for Malawi in terms of competitiveness is the cost of production in the major non-preferential sugar exporters: Brazil, Australia and Thailand (also the three countries that mounted the WTO appeal against the EU in 2004).

Independent research carried out for Illovo Sugar (Illovo Sugar 2005) suggests that in terms of the relative cost per tonne of white sugar, Malawi is the third most competitive producer in the world, after Brazil and Zimbabwe, but ahead of Zambia, Australia, South Africa, Swaziland and Thailand.

Figure 4 shows how world sugar prices in the residual have experienced significant volatility over recent decades. World Bank data indicates that since 2003, prices in the residual world market have risen somewhat from around 16 cents/kg (7.3 cents/lb) to almost 20 cents/kg (9.1 cents/lb). The world price is forecasted (in the absence of structural reform) to be in the range of 17-18 cents/kg through 2006 and 2007. It is clear that at such prices (which are vastly below the prices received with preferential access to the EU and US), only the most competitive countries will be able to survive, and even then in very low margins (World Bank 2005).

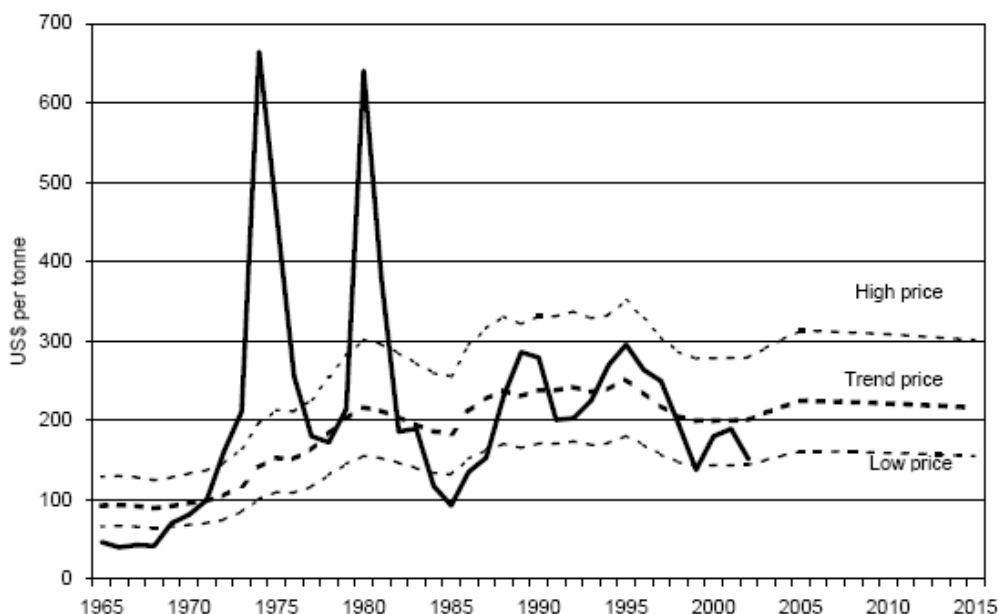
Table 3: Sugar prices, cents/kg

	2003 (Jan-Dec)	2004 (Jan-Dec)	2005 (Jan-Jul)	2006 (Forecast)	2007 (Forecast)
EU domestic³	59.72	66.97	67.87	-	-
US domestic	47.37	45.47	46.77	-	-
World	15.63	15.80	19.70	18.0	17.0

³ The EU domestic price of sugar has risen over the period in this table due to the appreciation of the Euro against the US dollar.

Source: World Bank (2005)

Figure 4: World sugar prices, 1960-2000

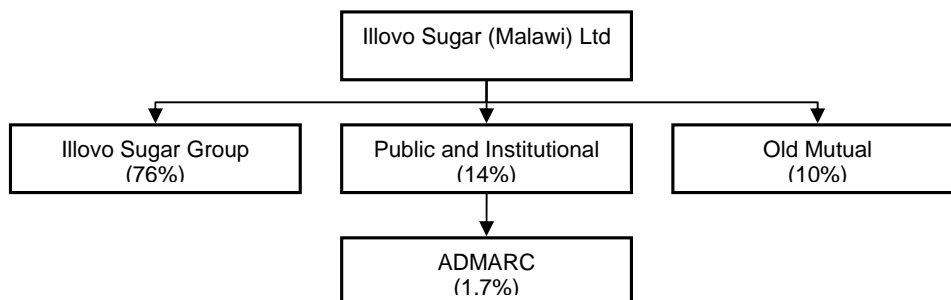


Source: OPM/LMC (2003)

2.3 Ownership

The sugar industry in Malawi is dominated by Illovo Sugar (Malawi) Ltd, a subsidiary of the South African based Illovo Sugar Group. Illovo acquired a controlling 60 percent share in the previously state-owned Sugar Corporation of Malawi (SUCOMA) in 1998 from Lonrho PLC and has increased its stake to 76 percent in 2005. Illovo/SUCUMA owns two production estates and factory operations (mills and refineries) at Nchalo and Dwangwa. These two operations account for 100 percent of Malawi's milling and refining capacity. There are also out-grower schemes associated with each of these operations (Dwangwa Cane Growers Limited and Kasinthula Cane Growers Ltd) which account for around 10 percent of cane supplied to the Dwangwa and Nchalo mills. Figure 5 shows the current ownership structure of Illovo Sugar (Malawi) Ltd.

Figure 5: Ownership structure of SUCOMA / Illovo Sugar (Malawi) Ltd



Source: Illovo Sugar (Malawi) Ltd

Illovo Sugar is also heavily involved in sugar production in other countries in the region including Zambia (95 percent of national production), Tanzania (55 percent of

national production), South Africa (50 percent of national production), Swaziland (35 percent of national production), and Mozambique (30 percent of national production) (Illovo Group website). The firm is also a significant manufacturer of downstream products.

3.0 Analysis of the welfare impact on Malawi

Studies over recent years attempting to measure the value of income transfers from the EU to sugar protocol countries put the total welfare value of transfers at between USD 200 million and USD 600 million. McDonald (1996) estimated that the total welfare gain from EU sugar preferences for Malawi was worth some USD 3.2 million, Milner *et al.* (2003) estimated USD 12.2 million, while LMC/OPM (2003) estimated USD 13.8 million. While the exact figure is disputed according to the changing size of Malawi's quota and changing exchange rates, it is clear that the reforms will reduce this value, although other forces might mitigate the loss.

The welfare effects of the proposed EU sugar reforms can be divided into five separate channels as follows:

1. Change in producer surplus (revenue) due to falls in the price of sugar exported to the EU market under preferences;
2. Change in producer surplus due to increased access to the EU market under the EBA initiative (from 2009);
3. Change in producer surplus due to increased access to third country markets due to reduction of EU exports;
4. Change in producer surplus due to increased prices received in third country markets (world prices); and,
5. Change in consumer surplus due to changes in the world price, and therefore the price paid by consumers in Malawi.

Estimates of the welfare changes will therefore need to investigate all the proximate causes of change in these channels and estimate the net effect under various scenarios.

3.1 Changes in producer surplus due to falls in the price of sugar exported to the EU market under preferences

Currently the EU imports sugar from ACP preferential producers (including Malawi) at a guaranteed price of €645.50 per tonne for white sugar and €523.70 per tonne for raw sugar. The EU sugar reforms foresee a two-step drop in the price of sugar sold in the EU market of 39 percent. Following the sugar reform, this importation of white sugar from preferential producers will be fulfilled at a lower guaranteed price, reducing gradually over time, from €631.90 per tonne in 2006/07 to €385.50 per tonne in 2009/10. The implied price for raw sugar will be reduced to €496.80 per tonne in 2006/07 and to €319.59 per tonne in 2009/10.

Table 4 gives estimates of the potential loss in revenues to Malawi sugar exports as prices fall according to the proposed EU reforms. It should be noted that proposed price cuts are merely a framework and hence these estimates should be taken as rough approximations. Even so, total revenue for sugar exports to the EU are set to decline from approximately €21 million in 2004/05 to €13.5 million in 2009/10. Note that for the sake of simplicity, the EBA quota accorded to Malawi has been assumed to be constant over the period while in actual fact it will rise progressively, hence the total annual revenue loss due to the price reforms of €7.5 million should be seen as a maximum figure.

Table 4: Estimates for revenue losses due to price reductions in EU market⁴

	Quota (tonnes)	€ gross revenue (2004/05)	€ gross revenue (2006/07)	€ gross revenue (2009/10)	€ annual loss by 2009/10
Price (ACP SP and EBA), €/tonne		523.70	496.80	319.59	
Price (SPS) ⁵ , €/tonne		418.96	418.96	319.59	
ACP SP (Fixed)	20,824	10,905,529	10,345,363	6,655,142	4,250,387
SPS (Average 2000-02)	10,918	4,574,205	4,574,205	3,489,284	1,084,922
EBA (Average 2000-02)	10,532	5,515,608	5,232,298	3,365,922	2,149,687
Total		20,995,342	20,151,866	13,510,348	7,484,995

It should also be noted that the implied price of €319.59/tonne, which is equivalent to 39.6 cents/kg or 18.0 cents/lb (at €1 = \$1.24) is still significantly above current world prices.

3.2 Change in producer surplus due to increased access to the EU market under the EBA initiative

From after 2009/10, EBA countries (including Malawi) will have unlimited access to the EU sugar market at zero tariffs. Hence, while in the short run the revenue from sugar exports to the EU will decline (due to price falls), there is the potential in the medium term to offset such declines with increased volumes.

However, whether Malawi is able to exploit this opportunity to increase exports to the EU depends on the capacity of the industry to scale up production during a period when revenues are falling. Table 5 shows information from Illovo Sugar (Malawi) Ltd regarding the current production and estimated potential production from the company's two estates.

Table 5: Potential for expanded production in Malawi

	Current production (tonnes)	Potential production (tonnes)
Nchalo	160,000	194,000
Dwangwa	100,000	126,000
Total	260,000	320,000

Source: Illovo Sugar (Malawi) Ltd

This information suggests that Malawi has the potential to produce an additional 60,000 tonnes of sugar (therefore requiring approximately 250,000 additional tonnes of cane from smallholders). This represents a volume increase of 23 percent on current production.

However, given the period of price compression that will be experienced by the Malawi sugar industry during 2006/07 to 2009/10, the industry may not have the

⁴ Data is for raw cane sugar

⁵ SPS prices are set at 80 percent of the SP and EBA prices, however the proposed EU reforms do not envisage SPS prices falling below the floor of SP and EBA prices.

capacity to invest significantly in increased production and instead divert exports from the “rest of world” markets to the EU following the granting of full EBA access if the price differential remains beneficial. Nevertheless, Table 6 gives forecast maximum values for sugar export revenues in the post 2009/10 environment when Malawi will have unrestricted access to the EU market.

Table 6: Gross revenue forecasts under various scenarios of exporting to the EU market

Scenarios	€ gross revenue (2004/05)	€ gross revenue (post 2009/10)
EU sugar export revenues if no change in volumes	20,995,342	13,510,348
Maximum revenue if production scaled up by 60,000 tonnes and all exported to the EU under EBA	-	40,170,742
Maximum revenue if production remains the same and exports are diverted from other non preferential markets and exported to the EU under EBA (<i>assuming 18 cents/tonne in world markets foregone</i>)	-	32,333,209
Maximum revenue if production is scaled up <i>and</i> exports are diverted from other markets	-	72,503,951

As per Table 4, if no action is taken, Malawi’s sugar revenues from exports to the EU will decline from approximately €21 million per year in 2004/05 to approximately €13.5 million from 2009/10. If Malawi was able to expand production by 60,000 tonnes per year in time for EBA liberalisation and find markets for this total, exports to the EU might conceivably rise to a maximum of just over €40 million – a net benefit of nearly €27 million per year.

However, merely to maintain current sugar export revenues from the EU of around €21 million, Malawi would need to increase production for export to the EU by at least 23,000 tonnes – an increase of some 55 percent on the current quota exports of 42,000 tonnes.

If instead of scaling up production, Malawi’s sugar industry merely diverted existing exports from the SADC and rest of world markets to the EU, then total exports to the EU would rise to €32 million. The net additional benefit would be €11 million once the revenue foregone from less profitable export markets is subtracted. This might be considered to be something of a risky strategy given the dangers of being too dependent on one export destination, nor is it certain that the EU price premium would remain post 2009/10 if other EBA producers significantly increase exports to the EU, or if EBA access is widened to additional countries.

Finally, total exports might reach a maximum of €73 million if production was scaled up *and* exports were diverted to the EU sugar market.

It should be noted that these figures are maximum values and it is unlikely that Malawi would be able to attain such levels of exports (nor might it be advisable to divert large export volumes from other markets), however they indicate the potential value of the EU sugar market to Malawi post 2009/10. LMC/OPM (2003) estimate that Malawi might feasibly export an additional 28,000 tonnes into the EU once full EBA access is granted.

3.3 Change in producer surplus due to increased access to third country markets due to reduction of EU exports

The ODI/LSE (2004) study suggests that, in common with other low cost producers in the region, Malawi has suffered adversely from EU sugar dumping. With the planned reduction in EU output levels, it follows that Malawi might be able to take advantage of new opportunities to export greater volumes to countries that currently import from the EU, sugar as Kenya. The EU is responsible for just over 20 percent of world sugar exports (approximately 8 million tonnes). This volume is likely to drop significantly (if not entirely) once the EU reforms have been implemented and export subsidies abolished. A study by UNCTAD in 2005 suggests that EU sugar exports are likely to drop to close to zero in the event of a cut in the EU intervention price of around 40 percent. Such a gap in the market could represent a major opportunity for Malawian sugar exports, particularly in the African region.

Unfortunately, it is difficult to estimate the amount by which Malawi would be able to take advantage of such opportunities. However, if as indicated in Table 5, Malawi increased sugar production by 60,000 tonnes and exported this total to the rest of world market at the same average price received in 2004 (USD 0.26/kg), then an additional USD 15.6 million (€ 12.6 million) in revenue could potentially be earned.

3.4 Change in producer surplus due to increased prices received in third country markets (world prices)

Several studies have attempted to analyse the quantitative impact of sugar reforms in developed country markets on world prices, as summarised in Table 7. Estimates of world sugar price increases vary from 3 percent to 53 percent depending on the degree of liberalisation proposed. It is, however, important to note that such estimates are sensitive to assumptions made about the potential supply responses of the major producing countries and the elasticity of demand for sugar substitutes.

Table 7: Impact of liberalisation on world sugar prices

Author	Base period	Change in world price (%)	Scenario
Anderson and Tyers (1986)	1986	10	Liberalisation by East Asia and Western Europe
Webb <i>et al.</i> (1987)	1984	53	Complete liberalisation
OECD (1988)	1979-81	11	Reduction in support to OECD sugar producers
Wong <i>et al.</i> (1989)	1985	33	Liberalisation of Japan, EU and US markets
Borrell and Duncan (1990)	1984	17	Complete EU liberalisation
Huff and Moreddu (1990)	1982-88	5-25	Multilateral trade liberalisation
Lord and Barry (1990)	1990	10-30	Multilateral trade liberalisation
UNCTAD (1995)	2000 projection	5	Implementation of Uruguay round
ABARE (1998)	2000 projection	5.3	Implementation of Uruguay round
Borrell and Pearce (1999)	2000	38	Complete liberalisation
Borrell and Hubbard (2000)	2000	30-38	Complete liberalisation
NEI (2000)	2000	8	10 percent cut in EU

			production quotas
CIE (2002)	2000	3	EU doubles import quotas
		16	EU intervention price halved

Source: Milner *et al.* (2003) [from Gillson, Hewitt and Page (2004)]

The CIE (2002) study appears to present the scenario and forecast that is closest to the proposed EU reforms, hence it would be prudent to take a 16 percent increase in the world price of sugar as the best estimate.

Such an increase would be beneficial to Malawi given that some 55 percent of exports are sold in SADC and on other rest of world markets at world prices. In 2004, Malawi exported approximately USD 38 million of sugar to non-preferential markets. A 16 percent increase in the world price would therefore yield Malawi an additional USD 6.1 million in revenue (€4.9 million).

3.5 Change in consumer surplus due to changes in the world price, and therefore the price paid by consumers in Malawi

Similarly, the analysis of taking a 16 percent estimated increase in the world price of sugar from section 3.4 can be extended to consumers in Malawi.

The retail price of sugar is currently MWK 75 per kg.⁶ This equates to 60 US cents a kilo at USD 1 = MWK 125). In 2004, approximately 130,000 tonnes of sugar were sold on the domestic market, equal to USD 78 million at the final retail selling price. Hence a 16 percent increase in the world price of sugar would therefore reduce consumer welfare by USD 12.5 million (€10.1 million).

This analysis, is of course rather simplistic and does not take into account the elasticity of consumers demand with respect to a price increase, nor the multiplier effects of higher sugar prices. Also since sugar is produced locally, the “lost” consumer welfare would not be “lost” from the economy, merely transferred from sugar consumers to other agents, including retailers, transporters and producers.

Subtracting the loss to consumers from the benefit to producers allows us to estimate the net welfare benefit to Malawi from an increase in world sugar prices. Hence, a 16 percent increase in world prices would increase producer welfare in Malawi by €4.9 million, but consumer welfare would fall by €10.1 million. The net effect would be a loss in total welfare of €5.2 million.

3.6 Summary of net effects

Table 8 presents a summary of the five impact channels as discussed in the paragraphs above. It should be noted that the estimated costs and benefits associated with each of the channels are estimates that rely on a large number of simplifying assumptions, and therefore should be treated with some caution as merely indicators rather than exact values.

Table 8: Summary of estimated welfare effects

Channel	Effect	Estimated cost/benefit
1: Change in producer surplus (revenue) due to falls in the price of sugar exported to the EU	NEGATIVE	- €7.5 million

⁶ In PTC stores in Lilongwe as of September 2005.

market under preferences		
2: Change in producer surplus due to increased access to the EU market under the EBA initiative (from 2009)	POTENTIALLY POSITIVE	From zero to €26.7 million ⁷
3: Change in producer surplus due to increased access to third country markets due to reduction of EU exports	POTENTIALLY POSITIVE	From zero to € 12.6 million
4: Change in producer surplus due to increased prices received in third country markets (world prices)	POSITIVE	+ €4.9 million
5: Change in consumer surplus due to changes in the world price, and therefore the price paid by consumers in Malawi	NEGATIVE	- €10.1 million
TOTAL EFFECT	INDETERMINATE	From - €12.7 to + €14.0 million per year ⁸

The key conclusion that should be drawn from this table is that the negative aspects of the proposed EU price cut are certain, while the positive aspects for the most part are only *potentially* positive and dependent on increasing Malawian sugar production. However, the potential benefits of channels two and three are both large and may outweigh any losses in the other impact channels.

4.0 Policy options (including the role of the proposed EC ACP assistance package)

The reality of the EU sugar reforms is that they are primarily a domestic policy issue concerned with the EU Common Agricultural Policy (CAP). The major aim is to reduce the budgetary costs of supporting excess and non-competitive sugar production within the EU. While the reforms have to some extent been forced upon the EU by the WTO, they fit a generalised pattern of reducing the EU's excess agricultural production by shifting farm subsidies from production subsidies to land payments. The EU currently produces around four times as much sugar as the ACP group of countries and hence it is important from Malawi's perspective to appreciate that the issues of ACP and LDC sugar producers are somewhat peripheral to the EU domestic sugar issues.

The EU is proposing an ACP assistance plan, in the form of accompanying measures to the sugar reform to ease the transition among countries set to see their preferences eroded. The EU will earmark €40 million for 2006 which Malawi stands to benefit from. However, it is not yet clear how much Malawi in particular is set to receive. €40 million is actually quite a modest amount given that Malawi alone stands to lose €7.5 million per year in lost revenues resulting from the proposed reforms and this total of €40 million needs to be shared among 15 ACP sugar producers. The less competitive producers of the Caribbean region which are likely to become totally uncompetitive will presumably be given priority over countries such as Malawi.

While the assistance package in other ACP producers might focus on export diversification and assistance with a sugar exit strategy, in Malawi the focus should

⁷ Maximum figure of €27 million is based on the calculated net benefit from increasing sugar production by 60,000 tonnes and exporting all of this total to the EU market under EBA (See Table 6).

⁸ Note that the potential benefits of channels 2 and 3 are mutually exclusive – i.e. increased production for exports would need to be shared between the EU market and the world market.

be on raising output in order to increase exports to the EU market and offset price reductions, and on increasing productivity and efficiency to maintain profitability and competitiveness.

For Malawi, the major challenge is meeting the investment requirements during 2006 to 2009 to scale up production to take advantage of unrestricted EU sugar market access from 2009/10 under EBA. However, this period coincides with the period that Malawian sugar will see a significant revenue drop due to the EU price cut. Hence, it is proposed that the assistance package for Malawi should aim to equalise the lost revenue accruing to Malawi during 2006/07-2009/10, and cover the investment costs of increasing production from 2009/10 such that from that point forward the impact of the reforms on Malawi is revenue neutral.

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Statistical appendix

Malawi - raw cane sugar, exports (QTY – kg)

		EU	SADC	USA	ROW	TOTAL
1998	QTY	25,350,000	1,025,000	26,854,000	-	53,299,000
	USD	8,551,567	257,584	8,240,853	-	17,050,004
1999	QTY	18,124,000	483,000	10,587,000	-	29,194,000
	USD	9,840,527	198,685	4,180,224	-	14,219,437
2000	QTY	18,301,218	31,298,138	10,175,000	7,210,000	66,984,356
	USD	8,685,476	7,721,752	4,163,203	2,432,320	23,002,752
2001	QTY	41,074,915	22,211,856	17,438,028	38,023,950	118,748,749
	USD	21,336,562	8,814,561	7,754,652	14,262,155	52,167,929
2002	QTY	21,717,925	15,170,260	10,736,800	13,183,702	60,808,687
	USD	11,566,290	6,105,464	4,613,792	5,406,669	27,692,215
2003	QTY	84,547,897	39,113,734	9,640,000	87,886,077	221,187,708
	USD	43,933,668	16,493,868	4,391,031	28,669,103	93,487,670
2004	QTY	83,486,950	29,274,948	8,284,000	91,414,399	212,459,297
	USD	34,650,158	10,986,660	2,755,365	23,980,661	72,372,844

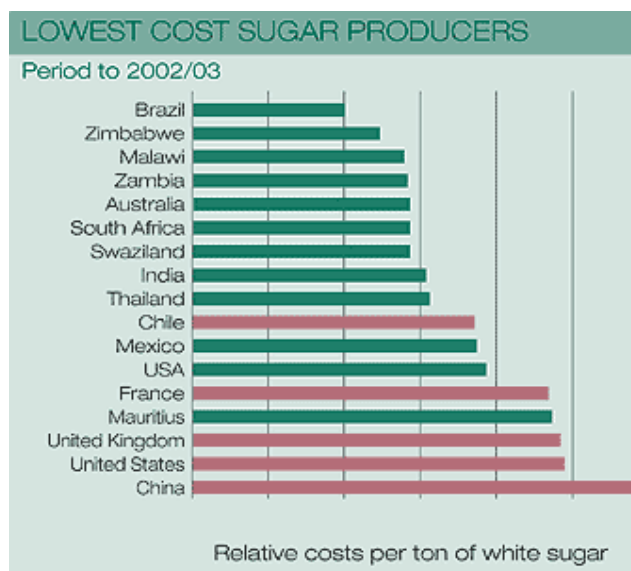
Source: NSO 2005

Malawi – all sugar products, exports

		EU	SADC	USA	ROW	TOTAL
1998	USD	26,788,995	592,939	8,240,853	-	35,622,787
1999	USD	14,607,132	5,707,001	4,180,224	4,978	24,499,336
2000	USD	13,506,611	8,696,439	4,163,203	2,829,992	29,196,246
2001	USD	30,134,099	11,008,694	7,754,652	14,439,794	63,337,238
2002	USD	14,241,867	8,011,457	6,451,880	6,292,346	34,997,550
2003	USD	45,460,829	21,783,531	4,391,031	34,951,764	106,587,155
2004	USD	34,664,699	12,435,412	2,755,365	25,755,817	75,611,293

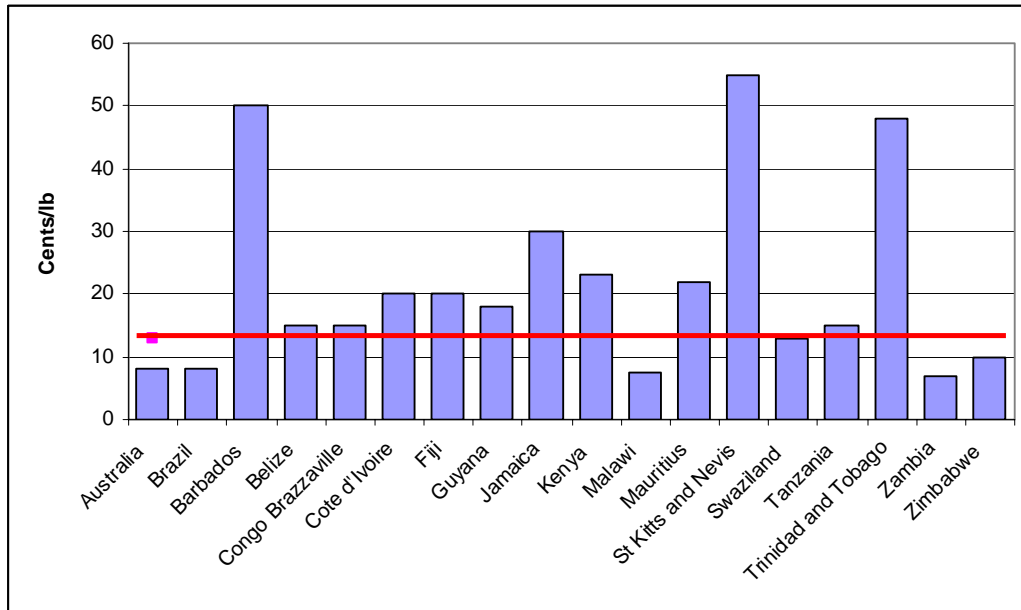
Source: NSO 2005

Figure 6: Illovo survey of worldwide sugar production costs, 2002/3



Source: Illovo website

Figure 7: Production costs and average world sugar price, 1980-2004 (Cents/lb)



Source: ODI/LSE (2005)