



The Impact of EU Sugar Policy Reform on Developing Countries

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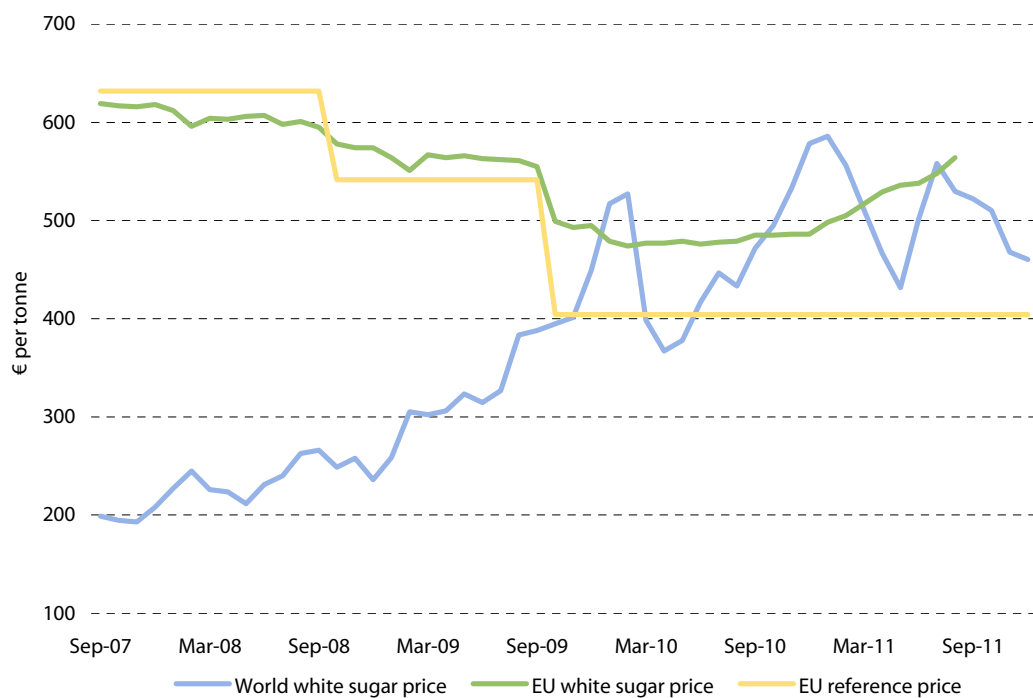
The Impact of EU Sugar Policy Reform on Developing Countries

The objective of this report is to assess the implications of further reform of the EU sugar regime on Afro-Caribbean and Pacific (ACP) and Least Developed Countries (LDC). To do this, we have modelled the outlook for the EU sugar market under a range of scenarios and assessed the viability of the sugar industries in LDC/ACP countries that currently rely, to a greater or lesser extent, on sales to the EU market. The report then draws on this analysis to highlight potential impacts on poverty and livelihoods in affected countries and discusses possible transitional assistance measures to mitigate negative impacts.

The outlook for the EU sugar market

The first round of reforms in the EU sugar market transformed the EU from a net exporter of sugar into one of the world's largest importers. As a result, prices in the EU need to trade at a premium to the world price in order to attract imports. The reform process coincided with a period of rising world prices, which has meant that prices in the EU have not fallen to the level expected during the reform process (Diagram 1). While this has been good news for ACP/LDC sugar industries, it also means that the EU price is now linked to the world price as the EU price has to be high enough to attract sugar imports that could otherwise be sold elsewhere.

Diagram 1: EU prices vs. world prices



The problem facing the EU has been the limited availability of preferential imports from LDC/ACP countries. This has meant that stocks in the EU have fallen sharply over the past few years, with the European Commission (EC) being forced to intervene in the market to boost supplies. It has done this in two ways:

- The reclassification of beet sugar that is sold for non-food use (so-called out-of-quota sugar) into quota sugar, which can be sold as food in the domestic market.
- Various tariff rate quotas (TRQs) to allow additional sugar imports into the market.

This situation is expected to continue for much of the period to 2015. If this happens, the price in the EU market can be expected to reflect the cost of importing world market sugar paying

the CXL¹ duty (€98/tonne), assuming that the Commission is able to manage the market correctly.

Looking ahead to the situation after 2015, much will depend on the future nature of EU policy. In particular, it will depend on whether quotas on beet sugar produced for food use are retained or abolished. We have considered the outlook for prices under four policy scenarios:

- **Beet sugar quotas retained.** In this scenario, the status quo is maintained, with the current sugar regime remaining intact.
- **Beet sugar quotas abolished.** Quotas are abolished but tariffs on world market and CXL sugar are retained.
- **Full liberalisation.** Quotas are abolished and tariffs on world market sugar are removed, liberalising the market completely.
- **Tradable quotas.** In this final scenario, quotas are retained but are tradable between countries allowing beet sugar production to gravitate towards the lowest cost producing regions.

Because the EU is now a major importer, a key determinant of domestic prices will be the world price. Due to the uncertainty surrounding this, we have conducted our analysis under a range of world prices of 15-25 cents/lb, with 20 cents/lb representing our base case.

In terms of the likelihood of each proposal, the Commission has already voiced its preference for the abolition of production quotas in order to create a more competitive market environment within the EU. This seems to be the most likely final outcome. However, the exact timing of when quotas are abolished will depend heavily on the negotiations that will take place over the next couple of years. The majority of EU beet sugar producers and the ACP/LDC Sugar Groups are lobbying in favour of maintaining beet sugar quotas. In the absence of pressure for the reduction of tariffs under the Doha Round, full liberalisation does not look likely in the near term.

Key conclusions

- If beet sugar quotas are maintained in the EU post-2015, ACP/LDC producers are likely to retain a preference over the world market. This is because we expect that duty-free imports will be insufficient to meet the EU's import requirement. This means that the preference will be at least the value of the CXL duty (€98 per tonne). However, much will depend on the EC and its willingness to intervene in the market to prevent prices from rising to high levels.
- However, if quotas are removed, the outlook for the EU market will depend heavily on the future level of world prices. If world prices remain high, our estimates suggest there is an opportunity for beet sugar and isoglucose (a liquid sugar substitute produced from corn or wheat) to expand. In this scenario, the EU's import requirement would fall, potentially squeezing out imports from some LDC/ACP countries. However, at lower levels of the world price, refiners are likely to hold a competitive advantage, increasing the demand for sugar imports.

¹ The CXL quota comprises sugar that has preferential access to the EU market as a direct consequence of enlargement. This quota totals 0.67 million tonnes.

- If world prices are high and domestic sweeteners expand, this is likely to erode the preference for LDC/ACP producers. Despite the theoretical preference offered by the import tariff, domestic prices are similar in both scenarios where quotas are abolished as prices reflect the cost of domestic beet sugar and isoglucose production rather than LDC/ACP imports. However, if the world price falls to a lower level, some level of preference is retained as the price in the EU has to be sufficiently attractive to encourage some expansion of domestic beet sugar and isoglucose production, which is higher than the cost of importing from duty-free sources.
- The expansion of domestic beet sugar and isoglucose production would also have significant implications for the EU refining sector. If world prices are high, and domestic sweetener sources expand, this implies that refining capacity will be under-utilised, particularly if preferential sugars are in limited supply. Similarly, if world prices fall to lower levels and imports are more competitive, this implies that an expanded beet sugar/isoglucose sector would have to pare back production. In other words, to be flexible, the EU would have to carry significant spare capacity so that consumers would have access to the lowest cost sugar supply. Given high fixed costs incurred in sugar processing and refining, it is questionable whether physical assets could be maintained during times when throughput is low. If refining capacity were to close, this would limit the opportunities for LDC/ACP industries to sell sugar to the EU going forward. This is an important factor for the European Commission to consider when it is designing policy for the period after 2015.

This analysis suggests that LDC/ACP industries will continue to benefit from a preference over the world market when selling sugar to the EU market if quotas are retained. If quotas are abolished, a preference is only retained if world prices are low because imports are more competitive than domestic sweetener supplies. If full liberalisation occurs, there is no preference as the EU market would simply be an extension of the world market.

The link between the EU and the world market means that the level of world prices is likely to be critical in determining the price received by LDC/ACPs in the future.

- The outlook for firmer world sugar prices means that prices are expected to remain above the current reference price unless the world price falls below 15 cents/lb.
- At low levels of the world price, there is little difference between the prices received if quotas are abolished or retained. This is because imports are more competitive to domestic producers at this price level. In this way, the EU market provides a safety net to LDC/ACP producers if world prices are poor.
- However, it highlights the fact that LDC/ACP producers will be exposed to considerable volatility in the future, which was not the case when guaranteed prices were in place. While there are good reasons to believe that world prices should be firmer over the next decade than the last 10 years, a few years of low world prices could create serious problems for LDC/ACP producers.

Implications for LDC/ACP sugar industries

The LDC/ACP groups contain a wide variety of industries, ranging from some of the world's lowest cost sugar producers to high cost industries that are heavily reliant on protected markets for their survival.

This means that the impact of EU reform will be greater for some industries than others. This will be dependent on two main factors:

- **Exposure to the EU market.** This is influenced by the proportion of sugar production that is sold in the EU market, as well as access to alternative markets if the EU becomes less attractive.
- **Cost competitiveness.** Clearly, higher cost industries will find it more difficult to compete in a more liberalised EU market than those with lower cost structures.

Table 1 presents a matrix summarising the situation facing each of the industries that have supplied the EU over the last few years.

- Industries with low costs and access to alternative markets in which to sell their sugar (Box 1) are best placed to cope with further reform of the EU regime.
- Conversely, countries with no/limited alternative markets and are high cost producers are likely to see the biggest impact. Countries in this category include Barbados, Mauritius, Guyana and Fiji (Box 4).
- Swaziland, Mozambique and Laos are all identified as low cost (or potentially low cost) producers. However, they are exposed to the EU market because of lack of alternative markets for their surpluses.
- While the industries in Box 3 are identified as relatively high cost producers, many of them have very limited exposure to the EU market because they are located in deficit markets themselves, or because they have access to alternatives. The exception to this is Jamaica, which sells a large proportion of its sugar to the EU. However, it does have a sizeable domestic market that could be supplied if it invested in refining capacity.

Table 1: Costs (av. 2008/09-2010/11) vs. market access matrix

	Alternative markets	No/limited alternative markets
High cost (US\$400 per tonne +)	Benin Cote d'Ivoire Dominican Republic Jamaica Kenya Madagascar Sierra Leone 3	Barbados Belize Mauritius Guyana Fiji 4
Low cost (<400 per tonne)	Cambodia Ethiopia Malawi Sudan Tanzania Zambia Zimbabwe 1	Swaziland Mozambique* Laos 2

* Mozambique is only classified as low cost at 2 mills. The other two are still in the process of rehabilitation but have the potential to be low cost in the future.

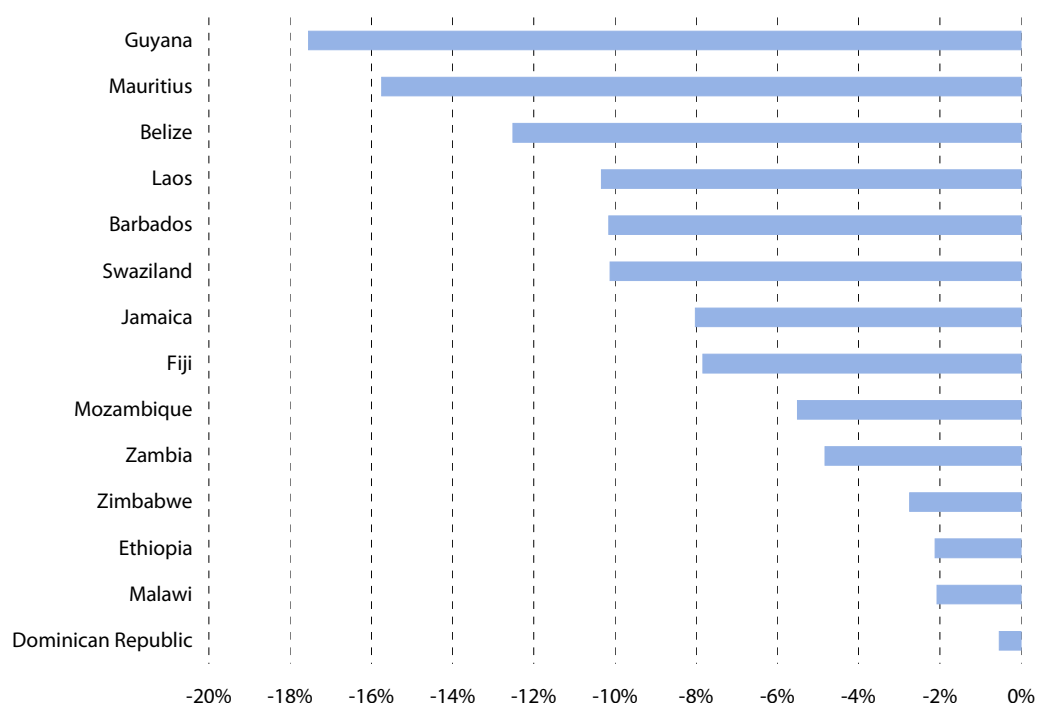
Impact on average selling prices

The removal of quotas is likely to reduce raw sugar prices in the EU by around €100 per tonne relative to the level of prices that can be expected if the current policy is maintained. Based on current supply volumes to the EU, which averaged 1.67 million tonnes per year between

2008/09-2010/11, this implies that the ACP/LDC group would incur revenue losses of around €170 million.

However, in practice, this calculation is more complex because access to alternative (domestic or regional) markets allows industries to mitigate partially these losses. Diagram 2 presents the impact of abolishing quotas on the average selling price received by each industry in 2020. These figures take into account the growth in production and expansion of alternative markets. When these factors are taken into account, losses are estimated at around €106 million. As the diagram shows, some industries are exposed to EU price reductions more than others, depending on whether they have alternative markets in which to sell their sugar. It should be noted that this analysis does not take into account the impact this price decline could have on the viability of some industries. This is discussed below.

Diagram 2: The impact of abolishing quotas on average selling prices in 2020



There are a number of industries that do not appear in the diagram. This is because we do not expect EU reform to impact on their revenues, as they would get the best returns from selling sugar in their domestic markets even if the EU does not reform its sugar policy. These countries are listed in Table 2, alongside countries that will be affected by reform in the EU.

Table 2: Impact of abolishing quotas in the EU

Countries affected by EU reform	Countries that can mitigate the impact of policy reform
Barbados	Benin
Belize	Cambodia
Dominican Republic	Cote d'Ivoire
Ethiopia	Kenya
Fiji	Madagascar
Guyana	Sierra Leone
Jamaica	Sudan
Laos	Tanzania
Malawi	
Mauritius	
Mozambique	
Swaziland	
Zambia	
Zimbabwe	

Impact on production

A decline in the average selling price as a result of EU reform could have a significant impact on the future viability of some industries, particularly those that have high costs and are heavily reliant on EU sales due to limited domestic/regional markets. In order to assess this issue, we have considered the profitability of each industry by comparing their projected average selling price under each policy scenario with their costs of production (cash and full cost basis).

- Some industries have higher costs and/or limited access to alternative markets where they can earn a premium over the world price. Production levels in these countries are under threat unless the industries are able to lower costs or boost revenues from another source (e.g. electricity or ethanol sales). These countries include Barbados, Jamaica, Guyana and Fiji (Table 3). While Mauritius does not fall into this group, this is in part due to the revenue the industry generates from the sale of electricity. The heavy reliance on the EU market means that production could be under threat if its production costs were to rise in the future.

Table 3: Industries needing to lower their full costs to ensure long term sustainability

World price	High (25 cents/lb)	Average (20 cents/lb)	Low (15 cents/lb)
Quotas retained	Barbados Jamaica Fiji Guyana	Barbados Jamaica Fiji Guyana Madagascar	Barbados Belize Benin Cote d'Ivoire Dominican Republic Fiji Guyana Jamaica Madagascar Sierra Leone
Quotas abolished /Full liberalisation	As above	As above + Belize	As above

- However, it should be noted that virtually all industries are able to cover their cash costs. This means that they are able to continue producing in the short term, although they will not generate sufficient revenue to reinvest in their industries (e.g. replace capital equipment etc.) which will undermine the competitiveness of the industry in the long term and could result in production falling over time.
- It is important to note that there is very little difference in the level of production under our various EU policy scenarios. The only country where the policy reform has an impact on production is Belize, where, on a full cost basis, if quotas were abolished, production would be scaled back to supply only the domestic and US markets, rather than export to the EU.
- While our results suggest that there is little difference between the impact of abolishing quotas and the full liberalisation of the EU market on production, in reality, full liberalisation is likely to result in greater volatility of prices within the EU, resulting in

LDC/ACP industries being much more exposed to movements in the world price. This volatility could threaten production levels in countries most exposed to the EU market.

- It is also important to note that this analysis is based on the average cost of each industry. In reality, there are a range of costs between the cane-growing regions and mills that make up an industry. There is a risk that a fall in the EU price could result in the loss of the higher-cost areas of production. This presents serious problems for sugar millers as it would lower their throughput, raising their costs of production and undermining their competitiveness. In other words, while the industry may be competitive on average, the loss of production from higher-cost cane farmers of the industry could undermine the competitiveness of the entire industry. Because of this, the impact of reform could be under-estimated in our analysis.

Key conclusions

- The countries at highest risk of being negatively affected by further policy reform are those countries with relatively high production costs and limited alternative markets in which to sell their sugar. These countries include Barbados, Belize, Jamaica, Guyana and Fiji. These countries would have to lower their costs in order to remain viable in the future.
- While further reform of the EU sugar regime will undoubtedly make the challenge facing these industries harder, in most cases, our model suggests it is not a key determinant of the industry's long term viability. Instead, the level of the world price is now the most important factor. However, EU reform will increase the vulnerability of industries to periods of low world prices, which could result in falling production and rising costs. In this way, EU reform could undermine the competitive position of many industries.
- This highlights an important change that would be brought about by further reform of the EU; industries that have historically sold their sugar in protected markets will be exposed to the volatile world sugar market. Since cane prices are linked to the average selling price of sugar, this will also have significant implications for cane farmers.
- There are a number of lower-cost industries that also generate surpluses that could be supplied to the EU. While the abolition of quotas would reduce the price received for this sugar, access to growing domestic and regional markets means that the EU market is expected to represent a relatively small proportion of total sales, limiting the impact of reform on these industries. These countries include Malawi, Zambia and Zimbabwe.
- Mozambique and Swaziland are surrounded by surplus-producing countries, limiting their access to neighbouring markets. As a result, a greater proportion of their sugar is sold to the EU. This implies that, despite being low cost, these industries are more exposed to a fall in prices if the EU market is liberalised.
- Other deficit countries, such as Kenya, Cote d'Ivoire, Sudan, Tanzania and Cambodia are less exposed to the EU because of access to growing domestic markets. These industries are expected to focus on selling sugar to these markets in the future.

The impact of EU policy reform on poverty

Headline poverty assessment

The study analyses the implications for poverty in 22 ACP countries of the different scenarios for further reform of the EU sugar regime. It looks at aggregate impacts at country levels and for all the 22 ACP countries considered by the year 2020. This analysis isolates the impact of possible further changes in the EU sugar regime compared to the continuation of the current system.

However, given that the original reform of the EU sugar regime has linked the EU price much more closely to the world price and made ACP industries more exposed to the world market, the analysis also looks at the impact that changes in the world price have on projected poverty rates.

Key conclusions

- Further reform of the EU sugar regime does not appear to have a substantial impact on the headcount of poverty when industries' production plans reflect the need to cover total production costs. The model estimates that policy reforms in the sugar market may put at most another 200,000 people into poverty, corresponding to an increase of 0.1% of overall poverty in the 22 ACP countries expected in 2020 under baseline projections.
- Countries most affected include those highly dependent on sugar, such as Swaziland, Belize and Guyana, and those with high poverty rates, such as Ethiopia, Malawi, Mozambique, Zambia and Zimbabwe.
- Changes in the world price have a greater impact on poverty headcount than reforms to the EU sugar regime, owing to the increased link between the EU sugar price and the world price. While the effects of reforms for any given price are limited, impacts owing to different world prices can be much greater. For example, under quota abolition, 35 times more people would be put into poverty when world prices are low compared to the status quo with high world prices. This is equivalent to around 6.7 million people or over 3% of the expected levels of poverty in the 22 ACP countries in 2020.

While this analysis looks at the impact of further reform of the EU sugar regime, some of these industries are already facing stiff challenges from the previous erosion of preferences, making their ability to face a new set of challenges even harder. The countries that face the greatest difficulties in remaining viable — Barbados, Belize, Guyana, Fiji, Madagascar and Jamaica — together provide employment for over 400,000 people directly or indirectly, whose future will be directly affected by the outlook for the world price and the future policy in the EU.

Case study analysis

While this analysis provides broad estimates of implications of the different reform and world price scenarios for poverty, sugar production often has more complex micro-economic impacts and a strong local or regional impact on poverty and livelihoods, particularly where production units are located in poorer regions of the country circumstances where few alternatives are available. This poverty analysis is therefore supplemented by more detailed consideration of the impacts on poverty in four countries with contrasting situations, namely: Guyana, Malawi, Mauritius and Mozambique.

In each case study, three key elements are analysed:

- The importance of the sugar sector in the national economy, looking at different dimensions, including weight in GDP, employment and land use.
- The importance of sugar production in the local economy, in terms of employment, wages and farming income, taking into account socio-economic characteristics of those areas.
- The impact of EU policy reform on sugar industry revenue and employment, highlighting possible options for diversification and adaptation in the sugar-producing areas, particularly for small-scale cane farmers.

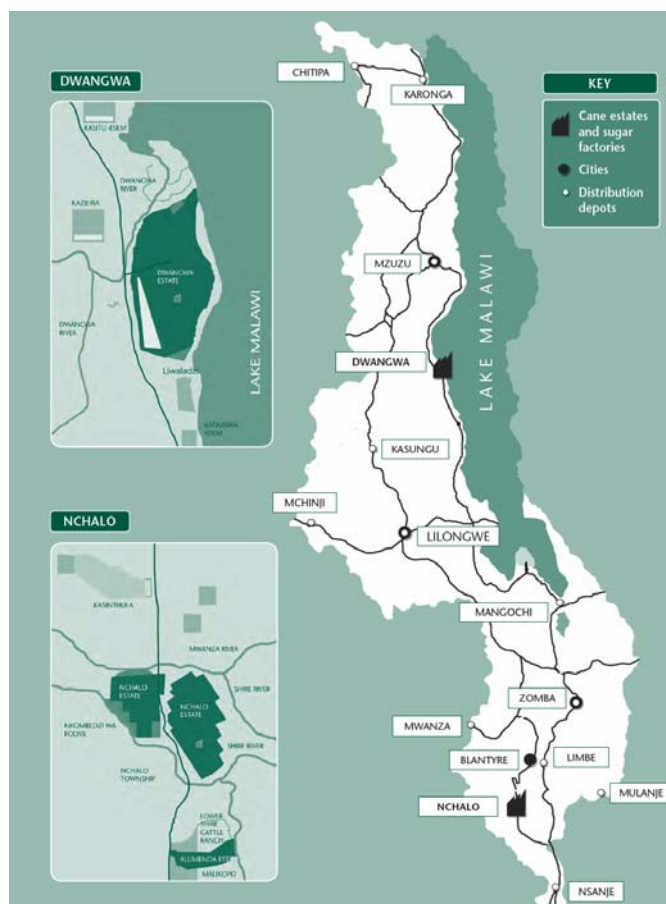
Looking more closely at the situation in the four countries reviewed, reveals these other dimensions to the analysis:

Malawi and Mozambique

Both Malawi and Mozambique are recognised as having competitive sugar industries. However, the industry in Mozambique is still going through a process of rehabilitation with the two mills in the centre of the country needing to reduce their costs in the future.

- Malawi produced around 350,000 tonnes in 2011/12 from 2 mills. Dwangwa on the shores of Lake Malawi in Nkhotakota District, Central Region, and Nchalo in the Shire Valley of Chikwawa District, Southern Region (Map 1).

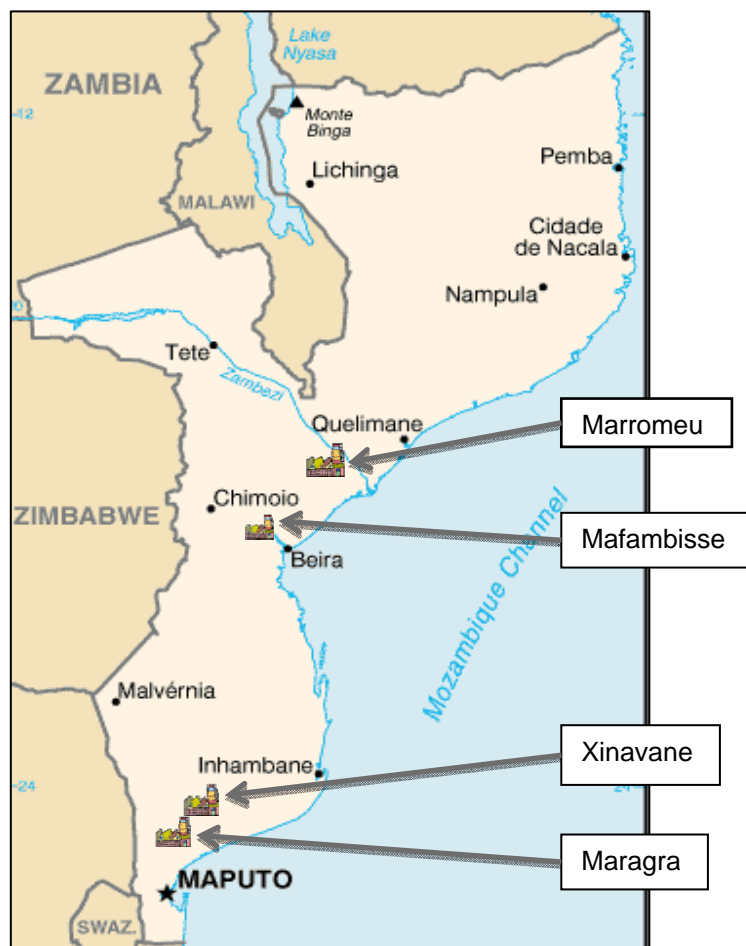
Map 1: Location of sugar production and mills in Malawi



Source: Illovo 2010.

- Mozambique produced around 385,000 tonnes of sugar in 2011/12 at four mills. Four milling companies currently produce sugar in Mozambique: two in the south of the country (Maragra and Xinavane) in Maputo province, and two in the central province of Sofala (Mafambisse and Marromeu) (Map 2).

Map 2: Location of sugar factories in Mozambique



Both of these industries are expected to continue to expand under EU reform. However, further reform is expected to increase the poverty headcount in both countries compared to what it would otherwise be if the status quo is maintained. This is because revenues generated from EU sales would fall if quotas are abolished compared to the level under the status quo.

By most measures, sugar is only a small part of the economies in Malawi and Mozambique. Both industries contribute around 1% to GDP in each country. However, while sugar production is not an important part of the national economy in these countries, it plays an important role in the livelihoods of households in sugar-producing areas, both through employment and income from cane production, which may be affected negatively by changes in industry revenue and reductions in average selling prices:

- Sugar companies will be under greater pressure to cut costs, potentially squeezing wages and cutting back social services. This would be more of an issue in Mozambique where average selling prices and profitability are worse affected by further reform than in Malawi.

- Returns from cane production will fall; while returns from cane production are likely to continue to be more attractive under reform compared to other crops, this would impact negatively on households' income.

Mauritius

The Mauritius industry has undergone a significant transformation over the last few years. Six milling companies currently produce sugar in Mauritius, down from the 11 factories that were operating in 2006. Moreover, the industry now concentrates on supplying refined sugar for direct consumption to the EU market, where virtually all of its sugar is sold. The industry also generates significant amounts of electricity for sale to the national grid. However, production has been falling back in recent years, with the industry producing around 430,000 tonnes in 2011/12.

Map 3: Location of sugar factories in Mauritius



Map source: US CIA, at <http://www.lib.utexas.edu/maps/mauritius.html>.

Sugar production in Mauritius is located in different parts of the island, principally in the coastal regions. It is particularly important in the southern and the eastern regions of the island (Map 3). In the South, production is concentrated in the Grand Port district, around the town of L'Escalier (Omnicanne Milling Operations) while in the East, production is concentrated in the Flacq district (Fuel Sugar Milling).

Sugar production is very important in Mauritius, accounting for over 50% of agricultural GDP, although it contributes less than 2% to national GDP. Sugarcane also accounts for around two thirds of agricultural land, although this figure has fallen in recent years.

For Mauritius, headline poverty is not expected to increase as a result of further EU sugar reform itself for two reasons:

- The substantial restructuring of the sugar industry has placed it in a good position to continue production under declining revenues, assisted by the industry's strategy to diversify production both within the sugar industry and into other sectors. However, there remains a risk that higher-cost producing areas could be lost if prices fall in the future.
- Overall baseline poverty is projected to be zero by 2019/20 under current rates of development across a diversified economy.

In addition, Mauritius is a highly diversified economy with options for alternatives both within the sugar industry and in other sectors. However, livelihoods will not be unaffected by the decline in the average selling price and revenue that could be triggered by further reform of the EU sugar regime:

- A reduction in revenue may place downward pressure on the share of sugar revenue allocated to growers, which currently stands at 78% of the sugar price, compared to around 60%-65% offered in most industries around the world. This will affect household incomes in rural areas and could result in the loss of cane area.
- Given the high proportion of land under cane production, there are limits to the extent to which farmers and the sugar industry can diversify out of cane production into alternative crops. Cane production plays an important stabilising role in livelihoods and employment, as a fairly low-risk crop with established production and marketing infrastructure. Alternative crops are higher risk, with limited markets, and cane will need to continue to work as an anchor in the development of a diversification strategy.

Guyana

Guyana produced around 220,000 tonnes of sugar in the 2010/11 season. Sugar production is concentrated in more densely populated and non-forested regions 3, 4, 5 & 6 (see Map 4) along the coast. In the Wales region (Western Demerara) GUYSUCO is by far the largest employer and the region's economy is almost totally dependent on sugar.

Guyana provides an example of an economy dominated by production of primary commodities and trade, where the sugar industry is a significant part of its national and local economy, and vulnerability to poverty impacts is high:

- In its current form, the Guyanese sugar industry is uncompetitive by global standards, suffering from relatively low cane yields and sucrose content compared to other industries. Moreover, throughput at the mills has also been low in recent years, with cane supply having fallen sharply. This has acted to inflate the industry's fixed costs of production.
- Guyana faces the largest reduction in its average selling price of the ACP sugar producers from further reform, putting the industry under increasing strain. The results of our analysis suggest that further reform of the EU sugar regime would have a

substantial negative impact on the sugar industry's revenue and the poverty headcount would rise.

- Households linked to the sugar industry tend to be less educated and more vulnerable to slipping into deepening temporary or permanent poverty than other households in the community.
- Aside from its importance in terms of weight in agricultural GDP and land use, the sugar sector plays a large role in providing social services, whereby workers benefit from services, such as education, health care, pensions and sports facilities. Such services could be negatively affected by further reform in the EU sugar regime and increased exposure to world market prices.
- There are various options for diversifying both within the sugar industry and out of cane production. However, it is unclear how viable these options are and how possible it is for households linked to the sugar industry to take advantage of them.

Map 4: Map of Guyana



Key:

- 1 Barima-Waini
- 2 Pomeroon-Supenaam
- 3 Essequibo Islands-West Demerara
- 4 Demerara-Mahaica
- 5 Mahaica-Berbice
- 6 East Berbice-Corentyne
- 7 Cuyuni-Mazaruni
- 8 Potaro-Siparuni
- 9 Upper Takutu-Upper Essequibo
- 10 Upper Demerara-Berbice

Source: World Bank – Guyana Poverty Map 2005.

Note: Sugar production is located in regions 3, 4, 5 and 6.

Transitional assistance

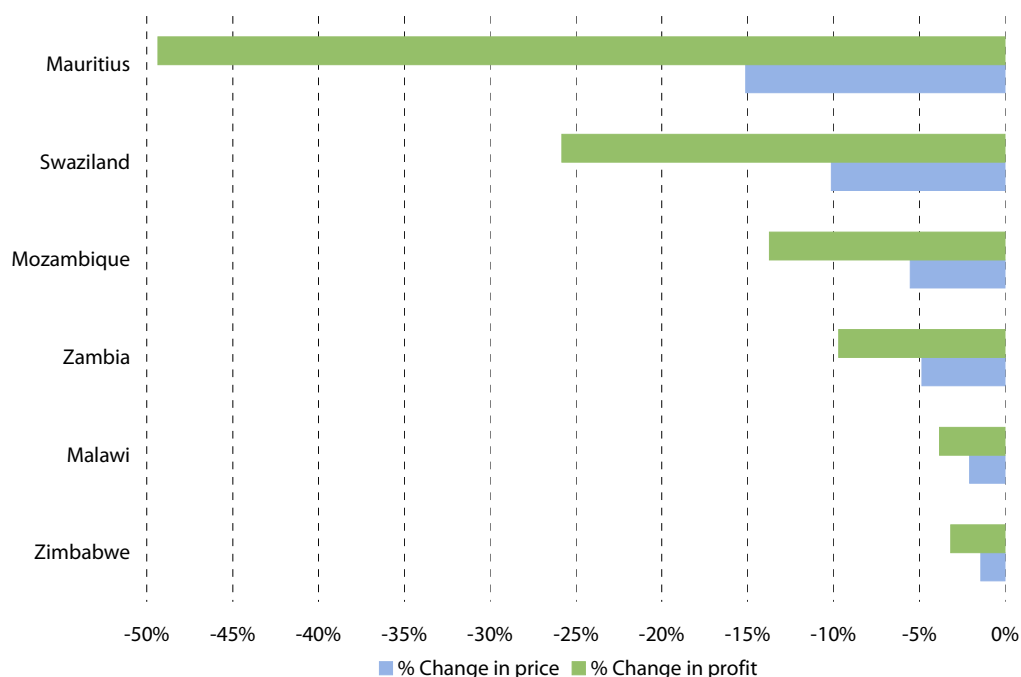
Based on the analysis of which industries could be most affected by further reform of the EU sugar regime, and drawing on experience with existing transitional assistance measures, the study discusses which countries could be the target of assistance measures, where such assistance could be targeted and what issues need to be taken into account in the design and implementation of any measures. However, any suggestions would need to be analysed in more detail for each country to provide a firm basis for any assistance measures.

Target countries

Table 4 classifies ACP/LDC sugar producers into three groups according to the potential impact of further EU sugar regime reform. According to the table, the countries most apparently requiring assistance under further reform of the EU sugar regime are those needing to restructure their industries in order to improve competitiveness and viability, concentrated mainly in the Caribbean.

However, the analysis of the potential impact of further reform in the EU on poverty levels indicated that support could also be usefully provided to more competitive industries in countries with high poverty rates. Here, further reform could hinder efforts to reduce poverty through squeezing income generated from cane production and wages. Sugar industries in these countries often also provide social services (including health care and education) to their local communities, some of which may not otherwise be provided. These could be threatened if the profitability of these industries is eroded as a result of further EU reform. This is demonstrated by Diagram 3, which compares the impact of abolishing quotas on profits as well as average selling prices.

Diagram 3: The impact of abolishing quotas on average selling prices and profits



Other industries are not expected to supply the EU in the future regardless of reform. These industries should be viewed as a lower priority in terms of assistance.

Table 4: Country groups negatively affected by EU reform

Group	Extent of impact	Countries
Group 1	Industries that face a significant challenge to ensure their future viability, particularly if the EU market liberalises further.	Barbados, Belize, Fiji, Guyana, Jamaica.
Group 2	Industries continue to be viable but revenues adversely affected by further EU policy reform.	Laos, Malawi, Mauritius, Mozambique, Swaziland, Zambia, Zimbabwe.
Group 3	Unlikely to be affected significantly by further policy reform.	Dominican Republic, Benin, Cambodia, Cote d'Ivoire, Kenya, Madagascar, Sierra Leone, Sudan, Tanzania

Allocation criteria

A longstanding discussion surrounding general Aid for Trade (AFT) measures is whether funds should be allocated according to need or as a function of compensation for the loss in income transfers arising from preference erosion. A dominant position is that country allocations should be clearly linked to the loss in income transfers arising from preference erosion since this measure is objective, simple and easily measurable in advance without the need for complex modelling (which could be contested) and should, in principle, be provided in addition to traditional aid.

However, the poverty analysis in the report indicates that some countries may be more negatively affected than others by any further drop in the EU sugar price due to relatively higher rates of poverty, and suggests that existing poverty rates could be factored into new allocation criteria.

This discussion would need to consider whether this would be possible and desirable or whether issues of additionality and measuring outcomes would weigh against this.

Even if allocation remains based on the principle of compensation alone, there are indications that some of the allocation criteria in the current AMSP programmes have proved difficult to measure. While some criteria could be retained, it is suggested that others are replaced with criteria for which more reliable estimates are available.

Types and level of assistance

Measures to enable sugar industries to improve competitiveness and viability can be grouped into three key categories:

- Cost-reduction measures by improving technical performance, economies of scale and optimisation of the use of milling capacity.
- Diversification within the sugar sector through value-adding activities, for example, by introducing electricity cogeneration and/or ethanol production.

- Diversification of sales into different markets, by supplying domestic and regional markets rather than focusing solely on exports to the EU, or by changing the type of sugar, e.g., increasing the proportion of refined sugar produced.

These measures confirm that the type of assistance offered under the current Accompanying Measures for Sugar Protocol countries (AMSP) programmes remains valid although it will differ between countries and may need to be adapted to the current state of evolution of each sugar sector.

However, experience of other Aid for Trade (Aft) programmes stressed the need to acknowledge when a sector could not be competitive and to pursue measures that would encourage countries to diversify outside their sugar sector, either partially or wholly. This implies the need to look carefully at alternatives and the support needed to pursue those alternatives successfully, including training, finance and infrastructure. In addition, where sugar sectors need to contract production and shed labour, social buffers may need to be provided to enable workers to transition out of sugar work or to compensate for losses of social services previously provided by local sugar companies.

The level of loss of revenue that the ACP sugar producers could suffer from further reform due to a drop in their average selling price could be a starting point for the calculation of the volume of funds for transitional assistance. The total revenue loss that could arise from the abolition of quotas in the EU, at historical world price levels, is equal to €106 million per year or approximately €850 million over the period up to 2019/20. However, if assistance is to be based on the need for support as well as compensation levels, more precise information on the needs of each industry and country affected by further reform of the EU sugar regime would need to be gathered.

Design and operational issues

A review of the experience of AMSP programmes and other Aft schemes identifies several issues critical to the success of such programmes:

- The volume of funds allocated to each country needs to be adequate to address wider constraints on competitiveness or diversification, and enable capacity to be built to design and implement appropriate measures. The Mauritian industry has shown that restructuring measures can improve the competitive position of an industry but this was achieved with a substantial volume of funds, and the investments required are often sizeable. Access to adequate levels of finance would therefore be a key issue for these industries.
- A realistic and appropriate strategic framework where objectives are linked to wider development objectives and comprehensive strategy will have a greater impact than a piecemeal approach based on small-scale projects that do not address wider constraints.
- Underpinning this is the need for adequate capacity to design and implement programmes, dealing with complex procedures. As this takes time to develop, it may require a longer lead-in time and a slower pace of implementation than provided under current AMSP programmes.