POTENTIAL PREFERENCE EROSION FOR EGYPT'S AGRICULTURAL EXPORTS TO THE UNITED STATES

Analysis and Summary of Findings

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Summary

This report summarizes findings from an analysis of potential erosion of preference margins for Egypt's agricultural exports to the United States. The United States affords Egypt preferential access through the Generalized System of Preferences (GSP) and the Qualified Industrial Zones Agreement. Egypt exports agricultural goods to the U.S. under the preferential rates specified by these agreements as well as under Most Favored Nation (MFN) tariffs. The authors simulate a reduction in the United States' MFN tariffs and examine the effect on the relative price of Egypt's exports compared to other country's exports. The authors find that Egypt's competitiveness would not suffer for the majority of its key agricultural exports. The products for which Egypt stands to become less competitive account for only 25% of the total value of Egypt's key agricultural exports to the United States.

The report first describes the analytical framework used for the analysis, then presents the main findings. It closes with recommendations for future analyses. Among other recommendations, the report suggests that Egypt examine potential preference erosion for its exports to the European Union and proposes a methodology for the analysis. **Annex 1** is a more detailed description of the report's analytical framework. **Annex 2** is a list of the product categories included in the analysis. **Annex 3** is a guide to *Preference Erosion Analysis.xls,* the Microsoft Excel file that was used for the analysis and that accompanies this report.

Analytical Framework

The analytical framework for our analysis is explained in detail in **Annex One:** *Methodological Note on Analyzing Margins of Preferences.* We summarize the main points here.

Our principal analytical tool is a *relative price index*. It is a ratio that shows the price of Egyptian exports to the U.S. relative to the price of all other exporters' goods.

$$PI_x = \frac{(S_{E,p} * (1 + t_{E,p}) + S_{E,MFN}(1 + t_{MFN}))}{(S_{C,p} * (1 + t_{C,p}) + S_{C,MFN}(1 + t_{MFN}))}$$

Where,

- x is the product in question;
- t_{MFN} is the MFN tariff rate;
- $t_{E,p}$ is Egypt's preferential rate;
- $t_{C,p}$ is the preferential rate for Egypt's competitors;
- $S_{E,p}$ is the share of Egyptian imports which benefits from preferential rates;
- $S_{E,MFN}$ is the share of Egyptian imports that enters the U.S. under MFN rates;
- $S_{C,p}$ is the share of competitor imports which benefits from preferential rates;
- $S_{C,MFN}$ is the share of competitor imports falling under MFN rates.

For each product, we calculate the relative price index twice: once using 2005 tariff rates, and a second time with the United States' MFN tariff rates reduced according to the G20's[1] proposed formula. The following table shows the G20 formula for developed countries:

G20 Formula, Proposed October 2005

Tier		Cut
From	To	
0	20	45%
20	50	55%
50	75	65%

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[1] The G20 includes: Egypt, Nigeria, South Africa, Tanzania, Zimbabwe, China, India, Indonesia, Pakistan, Philippines, Thailand, Argentina, Bolivia, Brazil, Chile, Cuba, Guatemala, Mexico, Paraguay, Uruguay and Venezuela). The proposal is available at: http://www.ictsd.org/ministerial/hongkong/docs/G20proposal.pdf.

75	Above	75%
	CAP	100%

The analysis yields one of the following three outcomes for each product, as shown in the table below:

Preference Erosion Analysis: Possible Outcomes

Change in the relative price index (ratio) after the G20 tariff cut	What this means	Impact
Ratio increases	The MFN tariff cut makes Egypt's exports more expensive (i.e. less competitive) vis-à-vis competitors' exports.	Egypt is a less competitive exporter of the product in question.
Ratio does not change	The MFN tariff cut has no effect on the price of Egypt's exports relative to competitors' exports.	No change in Egypt's competitiveness for the product in question.
Ratio decreases	The MFN tariff cut makes Egypt's exports *less* expensive (i.e. more competitive) vis-à-vis competitors' exports.	Egypt is a more competitive exporter of the product in question.

We examined 57 product groups, defined at the HS6 level, that account for the vast majority of Egypt's agricultural exports. We call these product groups Egypt's "key agricultural exports" (see **Annex Two** for the list of product groups). Within each group, we identified all HS8 tariff lines under which Egypt traded in 2005 – a total of 48 HS8 lines. For each of these products, we calculated the relative price index before and after the G20 cuts.

Key Findings

The findings from our analysis are presented in the table below. The main findings from the analysis include the following:

- *The majority of Egypt's key agricultural exports enter the United States under MFN rates.* Only 25% of the total value of Egypt's key agricultural exports to the United States comes under preference programs. Three-quarters of exports enter under MFN rates. Of the exports that enter under preferences, the vast majority enter under the GSP program. Only 1% of Egypt's key agricultural exports to the U.S. in 2005 were under the QIZ Program.

- *Preference erosion would hurt Egypt's competitiveness for products that account for 25% of the value of Egypt's key agricultural exports to the U.S.* Preference erosion would reduce Egypt's competitiveness for 21 of the 48 key agricultural products that Egypt exported to the U.S. in 2005. These products are those for which Egypt is most "preference-dependent": over half of Egypt's exports of each of these products enters under preferences, and often much more than half. These products accounted for only **25%** of the total value of key agricultural exports to the United States in 2005.

- *The G20 tariff reduction would not harm Egypt's competitiveness for the products that account for 75% of the value of its key agricultural exports to the U.S.* The G20 tariff cuts would not reduce Egypt's competitiveness for 27 of the 48 key agricultural products that Egypt exported to the U.S. in 2005. These products accounted for **75%** of the value of Egypt's key agricultural exports to the United States in 2005, and include leading exports such as cotton and basil.

- *The G20 tariff cuts would* improve *Egypt's competitiveness for a number of exports.* For 16 of the 48 exports, Egypt's competitiveness would improve as a result of erosion of competitors' preferences. However, these products accounted for only four percent of the value of Egypt's key agricultural exports to the U.S. in 2005.

Erosion of Preferences for Egypt's Agricultural Exports to the United States

Summary of Analysis Using 2005 Trade Data[1]

HS8	Description	Exports ($)	% of Key Agricultural Exports[2]	Preferential Exports as a % of Exports	Impact on Competitiveness of Egypt's exports
52010060	Cotton, not carded or combed, having a staple length of 34.925 mm or	9,015,370	31.67%	0.00%	No change
12119090	Plants and parts of plants nesoi, of a kind used in perfumery, in pharm	4,775,845	16.78%	3.78%	No change
52010034	Cotton, not carded or combed, staple length of 28.575 mm or more bu	3,067,125	10.78%	0.00%	No change
15091040	Virgin olive oil and its fractions, whether or not refined, not chemically	2,203,538	7.74%	100.00%	Less Competitive
20098060	Juice of any other single fruit, nesi, (including cherries and berries), cor	2,105,683	7.40%	98.72%	Less Competitive
09095000	Seeds of fennel or juniper berries	1,990,924	6.99%	0.12%	No change
33012950	Essential oils other than those of citrus fruits, nesoi	1,128,974	3.97%	1.44%	No change
07108070	Vegetables nesi, uncooked or cooked by steaming or boiling in water, f	625,112	2.20%	98.53%	Less Competitive
07108093	Okra, reduced in size, frozen	422,510	1.48%	100.00%	Less Competitive
21069082	Food preps, nesoi, o/10% milk solids, neosi	337,169	1.18%	100.00%	Less Competitive
07122040	Dried onions whole, cut, sliced or broken, but not further prepared	323,298	1.14%	20.07%	More competitive
21041000	Soups and broths and preparations therefor	305,062	1.07%	100.00%	Less Competitive
20079910	Strawberry jam	287,666	1.01%	96.47%	Less Competitive
04069099	Cheeses & subst. for cheese (incl. mixt.), nesoi, w/o cows milk, w/butt	281,079	0.99%	0.00%	More competitive
07108097	Vegetables nesi, uncooked or cooked by steaming or boiling in water, f	183,368	0.64%	7.57%	More competitive
15159080	Fixed vegetable fats and oils and their fractions nesoi, whether or not r	170,217	0.60%	100.00%	Less Competitive
12119020	Mint leaves, crude or not manufactured, of a kind used in perfumery, i	139,725	0.49%	1.77%	No change
20079905	Lingonberry and raspberry jams	104,937	0.37%	100.00%	Less Competitive
04090000	Natural honey	103,326	0.36%	0.00%	More competitive
10063090	Rice semi-milled or wholly milled, whether or not polished or glazed, c	94,491	0.33%	0.00%	More competitive
20079920	Apricot jam	81,314	0.29%	88.47%	Less Competitive
12060000	Sunflower seeds, whether or not broken	65,250	0.23%	0.00%	No change
20079945	Jams, nesi	58,333	0.20%	77.13%	Less Competitive
07122020	Dried onion powder or flour	53,041	0.19%	54.33%	Less Competitive
12119040	Mint leaves nesi, of a kind used in perfumery, in pharmacy or for inse	49,448	0.17%	62.38%	Less Competitive
15091020	Virgin olive oil and its fractions, whether or not refined, not chemically	48,563	0.17%	100.00%	Less Competitive
10063010	Rice semi-milled or wholly milled, whether or not polished or glazed, p	43,448	0.15%	100.00%	Less Competitive
21069099	Food preparations not elsewhere specified or included, not canned or	41,709	0.15%	71.61%	Less Competitive
22021000	Waters, including mineral waters and aerated waters, containing added	41,220	0.14%	100.00%	Less Competitive
20019025	Artichokes, prepared or preserved by vinegar or acetic acid	40,101	0.14%	100.00%	Less Competitive
15179090	Edible mixt. & preps (ex. dairy products descr. in add. US note 1 to Cl	37,382	0.13%	0.00%	More competitive
20079935	Peach jam	35,996	0.13%	0.00%	More competitive
04069097	Cheeses & subst. for cheese (incl. mixt.), nesoi, w/cows milk, w/butter	35,431	0.12%	0.00%	More competitive
04069095	Cheeses & subst. for cheese (incl. mixt.), nesoi, w/cows milk, w/butter	28,451	0.10%	0.00%	More competitive
15162090	Vegetable fats and oils nesi, partly or wholly hydrogenated, interesterif	27,248	0.10%	0.00%	More competitive
12092220	White and ladino clover seed of a kind used for sowing	22,240	0.08%	0.00%	More competitive
04069043	Reggiano, Parmeson, Provolne, and Provoletti cheese, nesoi, not from	19,255	0.07%	0.00%	No change
17031030	Cane molasses imported for (a) the commercial extraction of sugar or	17,920	0.06%	50.22%	Less Competitive
12129990	Fruit stone & kernel (not apricot/peach/plum) & other vegetable proc	14,269	0.05%	0.00%	No change
08041040	Dates, fresh or dried, whole, with pits, packed in units weighing over 4	11,100	0.04%	100.00%	Less Competitive
20019038	Vegetables (including olives) nesoi, prepared or preserved by vinegar o	5,385	0.02%	45.87%	More competitive
20079975	Fruit jellies, other than currant and berry	5,250	0.02%	100.00%	Less Competitive
20079965	Fruit pastes and purees, nesi, and nut pastes and purees, being cooked	3,780	0.01%	0.00%	More competitive
20079915	Currant and other berry jams, nesi	3,375	0.01%	0.00%	More competitive
20079940	Pineapple jam	3,175	0.01%	0.00%	More competitive
07099014	Okra, fresh or chilled	2,438	0.01%	100.00%	No change
17049010	Candied nuts, not containing cocoa	2,230	0.01%	0.00%	More competitive
07082090	Beans nesi, fresh or chilled, shelled or unshelled	2,088	0.01%	0.00%	More competitive

Total Key Agricultural Exports 28,464,859

% of key agricultural exports under preferences (by value) 25%
Under GSP 24%
Under QIZs 1%
% of Exports Where Egypt Becomes Less Competitive (by Value) 25%

% of Exports Where There is No Change in Egypt's Competitiveness (by Value) 71%

% of Exports Where Egypt Becomes More Competitive 4%

Note 1 See *MasterAnalyis* worksheet for the full analysis.

Note 2 "Key Agricultural Exports" are the 57 HS6 product categories listed in column B of *Master Analysis*. Within each of these product categories, all HS8 lines under which Egypt exported to the US in 2005 are listed here.

Next Steps

The analysis we have performed should be viewed as a first step towards understanding the potential effects of preference erosion on Egypt's agricultural sector. We recommend the following as important next steps:

- *More comprehensive analysis of preference erosion in the U.S. market.* While the results presented in this study are instructive, a more refined analysis would be valuable. The relatively simple analysis we have performed does not account for the likely supply responses of Egypt and other competitors, nor does it incorporate demand responses in the United States. It also does not directly address the question of whether importers differentiate among exports of like products from different countries.[2] Finally, it examines only one tariff-cutting option – the formula proposed by the G20. Future analyses should incorporate elasticities of supply and demand and examine outcomes from a variety of tariff-cutting formulas.

- *Examination of preference erosion in other important markets.* Egypt should examine the potential effects of preference erosion in other top agricultural markets. The analysis performed here can be repeated for other countries *if* Egypt can obtain import data that is disaggregated by the duty applied. As CD/WTO staff are aware, this data is not as readily available for other countries as it is for the United States.

  - *Preference erosion analysis for the E.U.* Because the E.U. is one of Egypt's most important agricultural export markets, a preference erosion analysis for that market is a natural next step. However, while the E.U. does publish import data on the Eurostat website, this data is not disaggregated by duty applied (i.e. by preference program). The analysis is further complicated by the conditions of the E.U.'s Partnership Agreements with Egypt and other countries, which frequently include tariff-rate quotas. Despite these limitations, Egypt can still conduct a useful analysis of potential preference erosion in the E.U. We recommend the following steps:

    - Use TradeMap to determine (1) Egypt's key agricultural exports to the E.U., and (2) Egypt's competitors in the export of these products.

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[2] This issue is typically addressed in computable general equilibrium models through the "Armington assumption." This condition, which posits that importers differentiate among like products supplied by different countries, was originally proposed by economist Paul Armington. See Paul S. Armington, 1969 "A Theory of Demand for Products Distinguished by Place of. Production," IMF Staff Papers 16, (March), pp. 159-178.

- Consult the text of Egypt's Partnership Agreement with the E.U. to determine Egypt's preferential rates of duty in the E.U.[3]

- For each product and each competitor, (1) determine if the competitor enjoys access at preferential rates, and (2) use the E.U.'s TARIC interface to find the preferential duties (if applicable) or the MFN duty.[4] If preferential quotas apply, one could make note of the in-quota and out-of-quota rates, and choose to apply one or the other in the analysis (we used in-quota rates in our analysis for the U.S.).

- To our knowledge, the E.U. does not publicly distribute trade data disaggregated by applicable import duty. In order to conduct the analysis, one must thus *assume* a rate of utilization for Europe's preferences. For example, one could assume a utilization rate of 100% in every instance where a country enjoys preferential access. While this assumption would exaggerate erosion effects if there is underutilization of preferences, it could be useful for illustrating *potential* erosion if preferences were fully used).

- The analysis could then be completed using the relative price ratio methodology used here.

- *Comprehensive Welfare analysis.* Egypt's primary concern in the WTO agricultural negotiations should be to maximize the welfare of Egyptians. The analysis presented here examines a narrower question: the degree to which multilateral tariff cuts reduce the competitiveness of Egyptian exports via erosion of preferences. Preference erosion – in all markets –should be addressed within the context of a broader analysis of the potential effects of a new multilateral agriculture. A comprehensive welfare analysis requires specialized analytical skills, large data sets, and large investments' of researchers' time, but the lessons it yields are vital for Egypt to consider.

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[3] Available online at: http://trade.ec.europa.eu/doclib/docs/2004/june/tradoc_117680.pdf.

[4] TARIC is an internet-based interface through which one may find the tariffs that the EU applies to any product from any country. It is available at http://ec.europa.eu/taxation_customs/dds/en/tarhome.htm. One makes queries on a product-by-product, country-by-country basis. One must also specify the date of import, as the E.U. applies some tariffs on a seasonal basis. For this reason, one may wish to conduct the analysis on a single, simulated date.

Annex One: Methodological Note on Analyzing Margins of Preferences

Egyptian exporters benefit from preferential tariffs which are lower than MFN rates in both the US and EU markets. For example, the trade weighted preferential tariff for Egypt's major agricultural exports to the EU and US markets are 1.9% and 0.4%, respectively. The trade weighted average MFN tariffs in these same markets are 7.5% and 5.5%, respectively (See the attached table from the Trade Policy Analysis System). Since MFN rates are higher than preferential rates, Egypt benefits from tariff preferences in the EU and US markets.

The existence of preferential rates gives rise to a margin of preference between Egyptian goods and those of other exporters that must pay MFN rates. That margin of preference could be eroded by the tariff reforms of the Doha Round.

The situation is illustrated in the Table below for the G20 proposal.[5]

Table: Impact of G20 Proposal on Egypt's Margin of Preference in EU

and US Markets

	EU Market	US Market
Initial Situation		
MFN Tariff	7.4%	5.5%
Egypt's preferential rate	1.9%	0.4%
Margin of Preference*	5.5%	5.1%

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[5] This Table was derived from the Trade Policy Analysis System by simulating the G20 proposal under the assumption that the 5% tariff-lines with the highest rates are "sensitive" and need not be reduced.

After G20 proposal		
MFN Tariff	3.7%	3.1%
Egypt's preferential rate	1.0%	0.2%
Margin of Preference*	2.7%	2.9%

*The margin of preference is the difference between the MFN and preferential rate.

As a result of the G20 tariff proposal, the trade weighted MFN rate for Egypt's goods in the EU market falls from 7.4% to 3.7%. The margin of preference is cut in half from 5.5% to 2.7%. Similarly in the United States, the MFN rate falls from 5.5% to 3.1%, and Egypt's margin preference falls from 5.1% to 2.9%. It would appear, therefore, that the G-20 proposal leads to significant preference erosion for Egyptian goods.[6]

The above analysis looks only at Egypt. In fact, many other countries also benefit from preferential tariffs in the U.S. and EU markets. The preferential tariffs for some of these countries may even be lower than those for Egypt. *Since the margin of preference for these countries will also be eroded, any analysis of margins of preference must consider Egypt's position relative to that of all other countries*. To take an extreme example, suppose that all countries receive the same preferential tariff as Egypt. Under such circumstances, there is no preference erosion for Egypt since all countries are affected equally. As another example, assume that other countries have even lower preferences than Egypt. In this case, it is possible that Egypt benefits more from the erosion of preferences in other countries than it loses from its own the erosion of its own preferences.

In order to examine preference erosion, we construct a price index that reflects the price of Egyptian goods in the U.S. market relative to the price for all other exporters in that same market.[7] When the price of Egyptian goods falls as a result of lower tariffs, Egyptian exporters benefit. When the price of Egyptian goods increases as a result of lower tariffs, there is an erosion of Egypt's preferences, and Egypt may loose from tariff reform.

Essentially, this price index is a trade weighted average of the various tariffs paid by Egypt and other countries in a given market. Mathematically, the Egyptian price in a given market relative to that for other countries can be expressed as:

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[6] The erosion of preferences will reduce Egypt's benefits from lower tariffs, but does not necessarily imply that Egypt loses from the G20 proposal on market access. Because of lower tariffs, the US and EU will increase their overall demand for imports. Some of this increased demand may be supplied by Egyptian exporters even though preferences are eroded.

[7] With no loss of generality, we ignore transport costs and other factors by assuming that the price of Egyptian goods differs from those of other countries only by the tariffs. The price for each country is a trade weighted average of the MFN price (world price times one plus MFN tariff) and the preferential price (world price time one plus preferential tariff).

$$PI = (s_{E,p*}(1+ t_{Ep})*P_w + s_{E,MFN*}(1+ t_{MFN})*P_w))/(s_{C,p*}(1+ t_{C,p})*P_w + s_{C,MFN*}(1+ t_{C,MFN})*P_w))$$

where,

P_w is the world price for the commodity in question;

t_{MFN} is the MFN tariff rate;

$t_{E,p}$ is Egypt's preferential rate;

$t_{C,p}$ is the preferential rate for Egypt's competitors;

$s_{E,p}$ is the share of Egyptian imports which benefits from preferential rates;

$s_{E,MFN}$ is the share of Egyptian imports falling under MFN rates;

$s_{C,p}$ is the share of competitor imports which benefit from preferential rates;

$s_{C,MFN}$ is the share of competitor imports falling under MFN rates.

The above expression can be simplified by canceling out the world price:

$$PI = (s_{E,p*}(1+ t_{E,p}) + s_{E,MFN*}(1+ t_{MFN}))/(s_{C,p*}(1+ t_{C,p}) + s_{C,MFN*}(1+ t_{C,MFN}))$$

Example 1: Assume all Egyptian exports come into the US market at preferential rates, while all competitor exports come in at MFN rates. In this case, the shares become:

$s_{E,p} = 1$;

$s_{E,MFN} = 0$

$s_{C,p} = 0$;

$s_{E,MFN} = 1$.

Substituting these values into the price index, the price index becomes:

$$PI = (1+ t_{E,p}) / (1+ t_{C, MFN})$$

Using the U.S. data from the above Table, the value of the price index before Doha tariff reform is:

$$PI = (1+.004)/(1+.055) = .95$$

After implementation of the G20 tariff proposal, the value of the price index is:

$$PI = (1+.002)/(1+ .031) = .97$$

Since the price of Egyptian goods rises (from .95 to .97) relative to that of competitors after implementation of the G20 proposal, Egypt suffers from the erosion of its margin of preference in the U.S. market.

Example 2: Assume all Egyptian exports come into the US market at preferential rates and that all competitor exports come in at an identical rate. In this case, the shares are:

$s_{E,p} = 1$;

$s_{E,MFN} = 0$

$s_{C,p} = 1$;

$s_{C,MFN} = 0.$

Substituting these values into the price index, the price index becomes:

$$PI = (1+ t_{E,p}) / (1+ t_{C,p})$$

Since the preferential rates are equal, $t_{E,p} = t_{C,p}$ and $PI = 1$. In other words, the price index is a constant and is unaffected by lower MFN rates. As a result, lower MFN rates do not affect Egypt's margin of preference. There is no erosion of preference since all countries pay the same tariff.

Example 3: Assume all Egyptian exports come into the US market at MFN rates, while all competitor exports benefit from preferential rates. In this case, the shares are:

$s_{E,p} = 0$;

$s_{E,MFN} = 1$

$s_{C,p} = 1$;

$s_{C,MFN} = 0.$

Substituting these values into the price index, the price index becomes:

$$PI = (1+ t_{E,MFN}) / (1+ t_{C,p})$$

Using the data for the United States, the initial price index is:

$$PI = (1+.055)/(1+.004) = 1.05$$

After implementation of the G20 tariff proposal, the price index becomes:

$$PI = (1+.031)/(1+.002) = 1.03$$

Since the relative price for Egyptian goods falls after implementation of the G20 proposal, Egypt benefits from lower tariffs. In effect, Egypt benefits from the erosion of preferences received by other countries.

Conclusions: When analyzing the implications of Doha market access proposals on Egyptian exports, one must consider preferential tariffs for Egypt and for other countries. One way to do this is to construct a price index that shows the price of Egyptian goods relative to the price of all other countries in each of Egypt's major export markets. When this price index rises after MFN tariff reform, Egypt's margin of preference is being eroded. When this price index falls after MFN tariff reform, Egypt benefits from the eroding preferences of other countries.

Annex Two: Egypt's "Key Agricultural Exports"

The products in this list are Egypt's most important agricultural exports. We identified all U.S. TRQs that applied to these products.

COTTON	520100
RICE	100630
VEGETABLES	
Potatoes	070190
Onions	070310
Dried Veg	071220
Frozen Veg	071080
Dried Veg	071333
Fresh Veg Nes	070990
Fresh Legumes	070820
Cassava/Tubers	071420
Tomatoes	070200
FRUITS	
Citrus Fruits	080510
Grapes	080610
Fruits Other	081010
Fruits/Nuts Proc	081110
Dates, Figs	080410
Melons, Papaya	080711
FLAX	530110
OILSEEDS	

Medicine Plants	121190
Peanuts	120210
Seeds	120922
Sunflower Seeds	120600
Locust beans	121299
Oilseeds Other	120740
LIVE ANIMALS	
Animals Nes	010600/1
Live Poultry	010511
LIVE PLANTS	060220
SUGAR/MOLASSES	
Molasses	170310
Sugar	170111
Confectionary	170490
PROCESSED FRUITS/VEG	
Fruit Juice	200980
Veg Nes	200520
Prep Fruit/Veg	200190
Prep Veg Nes	200410
Jams	200799
ANIMAL/VEGETABLE OILS	
Animal/Veg Fat	151620
Other Veg Oils	151590
Soybean Oil	150790
Olive Oil	150910
Margarine	151790
Sunflower Seeds	151211
DAIRY, EGGS, HONEY	
Cheese	040690
Eggs	040700

Milk	040120
Honey	040900
Concentrated Milk	040210
TEA, SPICES	
Tea	090240
Seeds Anise, etc	090950
ESSENTIAL OILS	330129
WHEAT FLOUR	110100
PREPARED FOODS	
Soups	210410
Food Preps. Nes	210690
Extracts	210120
PREPARED LIQUIDS	
Sweetened Bev	220210
Ethyl Alcohol	220720
Water	220110
BREAD	190530/1

Annex Three: Conducting the Analysis Using *Preference Erosion Analysis.xls*

We conducted our analysis using the *Master Analysis* worksheet of *Preference Erosion Analysis.xls. Master Analysis* is a large table that contains two main sections: "Imports and Tariff Rates" and "Preference Erosion Analysis." These sections are described below.

Imports and Tariff Rates

"Imports and Tariff Rates" lists 2005 import values and tariffs for each product. The import data is from the U.S. International Trade Commission's *Dataweb,* which is accessible free of charge via the internet (http://dataweb.usitc.gov). Tariff rates also are from *Dataweb,* with two exceptions: for compound and specific MFN rates, we use AVEs submitted by the United States to the WTO[8]. For compound and specific preferential rates, we use AVEs from MacMap. Some of the products are subject to tariff quotas, including MFN quotas and quotas under the various preference programs. In such cases, we list the in-quota rate. Cells that contain in-quota rates contain red flags and comments stating the existence of the tariff quotas.

"Imports and Tariff Rates" is divided in two sections: "Egypt" and "Competitors." The "Egypt" section displays U.S. imports from Egypt of each product on the list. The data is disaggregated among three categories: imports at MFN tariff rates, imports under GSP, and imports under the QIZ program. The tariff rates applicable under each program appear to the right of each column of trade data.

For MFN rates, ad-valorem and specific components are listed, as are AVEs. A single, yellow-shaded column lists all ad-valorem-only tariffs along with the AVEs for products that have specific and compound rates. An orange-shaded column shows these ad-valorem rates and AVEs after application of the G20 cuts.

The MFN part of the "Egypt" section is shown in the screenshot below:

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[8] These AVEs are available via the WTO Members' site: http://members.wto.org. In *Preference Erosion Analysis.xls*, the full list of AVEs is copied in the worksheet entitled *USAVE.*

The "Competitors" section lists total imports from all other exporters of the products in the list. The import data for each product is disaggregated by preference program. The table includes all preference programs under which the products on the list were traded in 2005. These include:

- MFN (no preference)

- Generalized System of Preferences (GSP)

- Generalized System of Preferences (GSP) for Least Developed Countries (LDCs)

- African Growth and Opportunity Act (AGOA)

- Andean Trade Preference Act/Andean Trade Promotion and Drug Eradication Act

- United States-Australia Free Trade Agreement

- Caribbean Basin Initiative

- Caribbean Basin Initiative for Puerto Rico

- United States-Chile Free Trade Agreement

- United States-Israel Free Trade Area

- United States-Jordan Free Trade Area Implementation Act

- North American Free Trade Agreement, Canada (NAFTA-Canada)

- North American Free Trade Agreement, Mexico (NAFTA-Mexico)

- West Bank, Gaza, and Qualified Industrial Zones (QIZs)

Preference Erosion Analysis

The Preference Erosion Analysis section shows the data that were used to determine the impact of the tariff cuts on the competitiveness of Egypt's exports. This portion of the worksheet is shown below:

The columns in the Preference Erosion analysis contain the following information:

1. **"Price" of Imports from Egypt, Pre-cut and Post-cut:** these columns show the numerator in the price index for each product, calculated before the G20 tariff cut and after the cut. The MFN share is the dollar value of MFN imports for the product times 1 + the tariff rate for the product, while the preferential share is calculated by multiplying imports under each preference program times 1 + the tariff rate under that program, then adding the values together. The preferential share calculation, expressed algebraically, is:

$$(S_{E,p} * (1 + t_{E,p})) = (S_{E,GSP} * (1 + t_{E,GSP})) + (S_{E,QIZ} * (1 + t_{E,QIZ}))$$

Where:

$S_{E,GSP}$ is the value of Egypt's imports that entered under the GSP program,

$S_{E,QIZ}$ is the value of Egypt's imports that entered under the QIZ program,

$t_{E,GSP}$ is the tariff applicable under the GSP program,

$t_{E,QIZ}$ is the tariff applicable under the QIZ program.

2. **"Price" of Imports from Competitors, Pre-Cut and Post-Cut.** This is the denominator in the price index for each product. It is calculated the same way as the "Price" of Imports from Egypt, except that it sums imports from every exporter besides Egypt ("Egypt's competitors"), and includes trade values and tariff rates under every applicable preferential program. The preferential share calculation, expressed algebraically, is:

$$(S_{C,p} * (1 + t_{C,p})) =$$
$$((S_{C,GSP} * (1 + t_{C,GSP})) + (S_{C,AGOA} * (1 + t_{C,AGOA})) + (S_{C,Andean} * (1 + t_{C,Andean}))\ldots)$$

Where:

$S_{C,GSP}$ is the value of competitors' imports that entered under the GSP program,

$S_{E,AGOA}$ is the value of competitors' imports that entered under the African Growth and
    Opportunity Act (AGOA),

$S_{E,Andean}$ is the value of competitors' imports that entered under the QIZ program, Andean
    Trade Preference Act/Andean Trade Promotion and Drug Eradication Act

$t_{C,GSP}$ is the tariff applicable under the GSP program,

$t_{C,AGOA}$ is the tariff applicable under AGOA,

$t_{C,Andean}$ is the tariff applicable under the Andean Trade Preference Act/Andean Trade
    Promotion and Drug Eradication Act

And so on, for all applicable preference programs

3. **Relative Price Ratios, Pre-Cut and Post-Cut** lists the values of the relative price ratios before and after the application of the G20 tariff cuts.

4. **Impact** is the effect of the tariff cuts on Egypt's competitiveness vis-à-vis competitors, as inferred from the change in the relative price ratio.

5. **% of Exports Under Preferences (Egypt)**. The percentage of Egypt's exports of each product that entered the United States at preferential rates (under either the QIZ or GSP program).

6. **Exports as a % of Key Agricultural Exports**. Each product's share of the total value of Egypt's key agricultural exports to the United States in 2005.