

Working Paper

INTERNATIONAL MONETARY FUND

IMF WORKING PAPER

© 1996 International Monetary Fund

This is a *Working Paper* and the author(s) would welcome any comments on the present text. Citations should refer to a *Working Paper* of the International Monetary Fund, mentioning the author(s), and the date of issuance. The views expressed are those of the author(s) and do not necessarily represent those of the Fund.

WP/96/8

INTERNATIONAL MONETARY FUND

Policy Development and Review Department

Implications of the Uruguay Round for Kenya

Prepared by Rupa Chanda 1/

Authorized for distribution by Naheed Kirmani

January 1996

Abstract

This paper studies the implications of the Uruguay Round for Kenya's own trade regime and its external trading environment. The analysis indicates that Kenya did not undertake significant liberalization commitments under the Uruguay Round. There are however, several effects on Kenya's external trading environment due to most-favored nation tariff cuts, erosion of preference margins, and changes in food prices. These effects are determined using simple computational techniques in a partial equilibrium framework. Overall, the results indicate that the effect on Kenya's balance of payments in the medium-term may be negative but modest, and can be offset by pursuit of appropriate structural adjustment policies.

JEL Classification Numbers:

F13, F14, F17

1/ The substantive work on this paper was done when the author was in the Policy Development and Review Department. The author is grateful to Mr. Peter Uimonen, who provided useful research assistance and comments, and to Mr. Arvind Subramanian, Mr. Clinton Shiells, and the staff of the International Trade Division of the International Economics Department of the World Bank for their helpful comments and suggestions.

<u>Contents</u>	<u>Page</u>
Summary	iii
I. Introduction	1
II. The Uruguay Round and Kenya's Trade Regime	2
III. The Uruguay Round and Kenya's External Trading Environment	5
1. Kenya's export structure and the Uruguay Round	5
2. Estimating the Uruguay Round's impact on Kenya's exports	6
3. Discussion of results	9
4. Impact of changes in world agricultural prices	14
5. Overall balance of payments effect	17
IV. Other Commitments in the Uruguay Round	18
1. Services	18
2. Subsidies	19
3. Trade-related investment measures	19
4. Intellectual property rights	19
V. Concluding Remarks	20
Text tables	
1. Kenya: Tariff Bindings in the Uruguay Round	4
2. Kenya: Concessions Received on Exports	7
3. Kenya: Impact of EU Tariff Cuts on Exports	10
4. Kenya: Impact of Japan's Tariff Cuts on Exports	11
5. Kenya: Impact of U.S. Tariff Cuts on Exports	12
6. Kenya: Summary Impact on Exports to the EU, Japan, and the U.S.	13
7. Kenya: Impact of Changes in World Agricultural Prices	16
8. Kenya: Overall Balance of Payments Effect	17
References	21

Summary

The Uruguay Round Agreement improved market access in agricultural and industrial products and introduced new areas into the multilateral framework of rules and disciplines. Trade liberalization achieved under the Round is expected to have significant implications for international trade and medium-term growth prospects for developing and industrial countries. There are, however, some concerns about possible adverse effects on certain developing countries owing to preference erosion and food price effects.

This paper examines the implications of the Round for Kenya. Kenya was chosen because it provides a good case study for demonstrating some of the effects that are of concern to developing countries. The paper analyses the commitments made by Kenya under the Round to determine their impact on the country's domestic trading environment. It also analyses the concessions made by Kenya's main trading partners in the Round to assess their implications for the country's external trading environment and its exports to major partner markets.

The analysis indicates the Uruguay Round will not lead to any major changes in Kenya's domestic trade regime and imports since Kenya made few significant commitments under the Round. On the export side, however, there will be several effects. The results of a simple partial equilibrium simulation exercise indicate that there will be export gains for a few commodities owing to cuts in most-favored-nation tariffs, but that these will be largely offset by export losses arising from preference erosion and lower prices of important agricultural exports. Overall, the results indicate a small negative effect on Kenya's medium-term balance of payments.

The use of partial equilibrium methodology is subject to the usual caveats; the results of the study should therefore be treated as indicative. The quantitative results conform to the intuitive analysis. The study highlights areas that will need to be closely monitored in order to assess the Round's implications for developing countries like Kenya. It also demonstrates that these effects will partly depend on the policy response by authorities to take advantage of the opportunities created by the Round as well as to facilitate the adjustments necessitated by it.

This page intentionally left blank

I. Introduction

The Uruguay Round is in many respects one of the most far-reaching GATT rounds ever. Its main achievements include improved market access for industrial and agricultural products, the inclusion of agriculture and textiles and clothing in the multilateral framework of rules and disciplines, integration of new areas such as services and intellectual property into the multilateral framework, and strengthened rules, procedures, and institutions.

Various studies have assessed the potential impact of the Agreement on different groups of countries. 1/ While the results vary across studies, all point to gains in real income for the world economy as a whole and for developing countries in general. Developing countries are expected to gain from increased market access due to reductions in most-favored nation tariffs, elimination of various quantitative restrictions, liberalization of agricultural trade, and phasing out of the Multi Fiber Agreement (MFA) governing trade in textiles and clothing and removal of other restrictions in this sector. 2/ Moreover, the binding of tariffs and other commitments made by developing countries themselves in the Round provide for more stable and transparent trade regimes.

There are, however, two potential adverse effects of the Uruguay Round Agreement that concern developing countries. The first relates to net food importing countries which may be hurt by higher prices of food imports following the liberalization of agricultural trade. 3/ The second relates to erosion of preference margins for developing countries in the markets of industrial countries due to increased competition from previously restricted, nonpreferred sources in these markets following generalized MFN tariff cuts and phasing out of the MFA. 4/ According to some estimates, these effects could be significant for some developing countries.

This paper studies the implications of the Uruguay Round agreement for Kenya. The choice of Kenya is motivated by the fact that it provides a good case study for illustrating some of the common concerns of developing

1/ See, for example, the recent studies on the Uruguay Round by François, McDonald, and Nordstrom (1995), Ingco (1995), Goldin and van der Mensbrugghe (1995), and Hertel, Martin, Yanagishima, and Dimaranan (1995).

2/ See Harmsen and Subramanian (1994) for a discussion of the results of the Uruguay Round.

3/ Recent estimates based on actual liberalization commitments in agriculture by industrial countries indicate very small increases in food prices and therefore only a negligible impact on food importing nations. See, Goldin and van der Mensbrugghe (1995), Table 3, p. 28.

4/ However, estimates indicate that the losses are likely to be less than suggested by the MFN tariff cuts and for many countries, will be mitigated by long run gains from increased market access. See, UNCTAD (1994) and Yeats (1993).

countries, in particular, preference erosion. The analysis indicates that the main implications of the Round are in the context of Kenya's external trading environment, mainly due to the erosion of preference margins in major industrial markets for some of Kenya's key exports. Simple computational techniques are used to demonstrate these effects in a partial equilibrium, static framework. 1/ The study also examines the implications of the changes in world agricultural prices, expected as a result of the Agreement, for Kenya's trade in agricultural products. The analysis reveals that agricultural price effects will have virtually no impact on Kenya's import costs but may have adverse implications for Kenya's export earnings due to lower prices for some key agricultural exports. Overall, the study suggests that the net impact on Kenya's balance of payments in the medium-term will be negative but not large.

The paper is organized as follows. Section II examines the commitments made by Kenya in the Uruguay Round and their implications for its trade regime and imports. Section III analyses the effects of the Agreement on Kenya's external trading environment. It discusses the structure of Kenya's trade, the expected impact on Kenya's exports due to changes in market access and preference conditions, the effect on Kenya's food exports and imports due to changes in agricultural commodity prices, and the overall balance of payments impact. Section IV briefly discusses the status of Kenya's commitments with regard to services, subsidies, trade related investment measures, and intellectual property rights. The concluding section provides a preliminary assessment of the Uruguay Round's significance for Kenya and its importance relative to recent unilateral trade liberalization in the country.

II. The Uruguay Round and Kenya's Trade Regime

The analysis in this section focuses on Kenya's liberalization commitments with respect to trade in goods in the Uruguay Round and their implications for its trade regime. 2/ It focuses primarily on Kenya's commitments in the form of tariff bindings for agricultural and industrial products.

1/ Note that welfare effects are not assessed in this paper in contrast to other studies that have used computational general equilibrium models.

2/ Note that the rules for these liberalization commitments differ across agricultural and industrial products. As a developing country, Kenya must reduce its tariffs, domestic support, and export subsidies at two-thirds the level of industrial countries for agricultural products, with certain exemptions. For industrial products there are no set rules for tariff cuts and Kenya is exempt from export subsidy commitments until its GDP per capita reaches US \$1,000 or it reaches export competitiveness in individual products.

Like many developing countries, Kenya chose a high uniform ceiling tariff binding of 100 percent for all items included in Annex I of the Agreement on Agriculture, to take effect with the entry into force of the Uruguay Round agreement. However, since this exceeds the currently applied rate for all agricultural imports, it has no significance for actual liberalization in this sector. For instance, applied tariffs on agricultural products are in the range of 0 to 45 percent and the average applied tariff in this sector has been in the range of 40 to 50 percent, significantly below the level at which agricultural tariffs have been bound under the Uruguay Round. 1/ Similarly, for the few industrial products bound under the Round, Kenya's bound rates exceed the ad valorem base rates of duty, often by a significant margin (Table 1). Even where the bound rate lies below the base rate, the reductions are generally small and to be phased over five years. 2/

Kenya has made no other commitments with regard to tariff reductions or concessions relating to quantitative restrictions. 3/ In this respect, Kenya's unilateral steps to liberalize trade through general reductions in tariff levels, tariffication of quantitative restrictions, homogenization and simplification of the tariff structure, and removal of foreign exchange and import licensing restrictions and future trade reforms that are envisaged, are much more significant. 4/ These unilateral measures rather than the few and arbitrary tariff bindings that Kenya has committed to in the Round have been instrumental in creating a more liberal and open trade regime and also in terms of their impact on imports and customs revenues in Kenya.

1/ GATT TPRM, Kenya, August 1993.

2/ Note however, that the base rates mentioned in the schedules do not always reflect the currently applied rates. Also, rates bound in the Uruguay Round may not necessarily be those that are actually applied as countries may choose to apply a rate lower than the bound rate.

3/ Many of the measures required with respect to quantitative restrictions under the Uruguay Round have already been implemented unilaterally by Kenya, such as the elimination of the import licensing system and the tariffication of quantitative restrictions.

4/ Unilaterally, Kenyan authorities have significantly liberalized the trade regime in recent years by lowering the number of tariff bands, lowering the maximum duty rate from 62 percent in 1993/94 to 45 percent in 1994/95 and reducing the weighted and unweighted average tariff rates to 19 percent and 26 percent in 1994/95 from 21 percent and 32 percent in 1993/94, respectively. In the context of the 1995/96 budget, the number of tariff bands will be further reduced to six with the highest duty rate declining to 40 percent.

Table 1. Kenya: Tariff Bindings in the Uruguay Round

Tariff item number	Description of Products	<u>Base Rate of Duty</u>		<u>Bound Rate of Duty</u>
		Ad valorem	Unbound/ Bound	Ad valorem
0302	Fish, fresh or chilled, excluding fish fillets	70	Unbound	62
0303	Fish, frozen, excluding fish fillets and others	70	Unbound	62
3003	Medicaments	35	Unbound	35
3006	Pharmaceutical goods	15	Unbound	18
3105	Minerals or chemical fertilizers	0	Unbound	62
3901	Polymers of ethylene in primary form	25	Unbound	31
8701	Other tractors	0	Unbound	62

Source: GATT commitment schedules

Note: U indicates unbound duties.

III. The Uruguay Round and Kenya's External Trading Environment

The Uruguay Round Agreement will affect Kenya's exports in important industrial markets by changing conditions for market access and preferential treatment. These changes will result from tariff and nontariff liberalization commitments made by industrial countries in the Round. This section provides a brief discussion of the structure of Kenyan trade to highlight the key products and export markets that are relevant to assessing the impact of the Uruguay Round. Following this is a discussion of the methodology and results of the partial equilibrium analysis that was undertaken to quantify the effects on Kenya's exports to selected destination markets.

1. Kenya's export structure and the Uruguay Round

Kenya's exports consist mainly of agricultural products, accounting for about 50 percent of total export earnings ^{1/} Among agricultural products, coffee and tea are the main export crops, accounting for over one-third of total export earnings, while the horticultural sector has become increasingly important in recent years. Manufacturing exports are about 46 percent of total exports with refined petroleum and food products accounting for almost half of total manufactured exports and the rest consisting of machinery, metals, chemicals, and textiles and leather products. ^{2/}

The direction of Kenya's trade is quite diversified as both industrial and neighboring African countries constitute important export markets. Industrial countries account for more than 50 percent of Kenya's exports, with the EU comprising the largest share (about 39 percent). More than 70 percent of Kenya's agricultural exports--mainly coffee, tea, and horticultural products--and about 40 percent of Kenya's manufactured exports--mainly food and beverages, and leather, hides, and skins are directed to industrial markets. Neighboring African countries have grown increasingly important in recent years, accounting for about one-third of

^{1/} The importance of agriculture has been falling in terms of its share of GDP and export earnings due to deteriorating terms of trade (not including the recent boom in commodity prices for important items like coffee) and production disincentives and anti export biases towards the agricultural sector.

^{2/} GATT TPRM (1993).

Kenya's total exports and over half of Kenya's manufactured exports, including refined petroleum, metals, cement, and machinery. 1/

Given the country's export structure, the effects of the Uruguay Round agreement are likely to be concentrated in agricultural exports, particularly, coffee, tea, and horticultural products, and to a much smaller extent in industrial exports. The effects are also likely to be concentrated in industrial markets like the EU, since they absorb the bulk of Kenyan exports and also account for the main tariff and nontariff concessions in the Round relevant for Kenya. The impact on Kenya's exports to developing country markets is likely to be limited despite their growing importance as trade partners, since the latter as a group have made no major concessions in the Uruguay Round that would substantially alter access to these markets. These observations on the product and market concentration of the effects on exports are broadly confirmed by Table 2 which summarizes the concessions received on Kenyan products in industrial and developing country markets. 2/

2. Estimating the Uruguay Round's impact on Kenya's exports

This section presents the results of a partial equilibrium simulation exercise that was used to estimate the potential effects of the Uruguay Round on Kenyan exports. The exercise consisted of analyzing detailed commodity level data on Kenya's exports to selected industrial markets, namely, the European Union, the United States, and Japan, and comparing the pre and post-Uruguay Round tariff and nontariff environment facing Kenya's exports to these markets. 3/ Simple computational techniques were next

1/ Member countries of the regional preferential trade agreement, COMESA have become very important export markets in recent years. Kenya is a member of COMESA in Africa. Under this arrangement it has engaged in reductions of tariff and nontariff barriers vis a vis other member countries and applies preferential rates to certain imports from member countries. New integration efforts under the Cross-Border Initiative are currently underway.

2/ The table shows that agricultural exports will be the most affected as they will receive the bulk of tariff concessions. Also, exports to industrial markets will be most affected since concessions by industrial countries will affect a larger share of Kenya's exports in almost all product categories while developing country tariff concessions are mainly on items that constitute a very small part of Kenya's total exports.

3/ The disaggregated information on commodity exports and tariff and nontariff barriers were obtained at the harmonized system product category level, using the SMART data base and IMF sources on the commodity composition and direction of trade. Note that the analysis focuses solely on Kenya's exports to industrial markets, since as pointed out earlier, no major changes are likely to occur in Kenya's developing country partner markets.

Table 2. Kenya: Concessions Received on Exports

Summary Category	By OECD Countries				by Selected Developing Countries			
	Export- Weighted Average Tariff Reduction	% of Exports Affected	Export- Weighted Average Tariff Post- Uruguay Round	Value of Exports ('000)	Export- Weighted Average Tariff Reduction	% of Exports Affected	Export- Weighted Average Tariff Post- Uruguay Round	Value of Exports ('000)
Agriculture	1.7	86.9	8.6	655,000	5.1	53.5	27.9	20,700
Fertilizers, Minerals								
Ores, Scrap	1.9	11.6	0.0	4,010	29.1	22.3	7.8	1,380
Mineral Fuels	0.0	0.0	0.0	0	0.0	0.0	0.0	3,220
Chemicals	2.5	85.0	0.5	2,440	45.0	1.2	10.5	15,900
Basic Manufactures	1.1	59.2	1.7	59,700	7.3	8.6	14.3	8,030
Machines, Transport Equipment	4.0	59.1	1.0	9,120	9.1	12.7	17.5	1,940
Misc. Manufactured Goods	3.0	70.3	6.3	14,500	13.9	6.1	14.7	641
Goods not Classified by Kind	0.0	0.0	0.0	17,100	0.0	0.0	0.0	0
All Merchandise Trade	1.7	81.7	7.6	762,000	6.5	24.3	17.8	51,800

Source: Finger, M. and U. Reinke (1994).

Note: Agriculture includes estimated tariff equivalents of tariffed nontariff barriers.

used to quantify the implications of these changes in Kenya's external environment for the value of Kenya's exports to these markets, both at an aggregate level as well as for specific products of export interest and potential.

The analysis reveals that there are essentially two types of effects on Kenyan exports to industrial countries. The first relates to products on which Kenya faces MFN tariffs in industrial countries. For these products, the generalized MFN tariff cuts following the Uruguay Round will lower tariff protection and increase Kenya's exports of these items. The increase in exports termed in this study as the MFN effect is calculated as the percentage change in price in the importing market times the import demand elasticity for the product. 1/ Data on Kenyan exports indicate that MFN tariffs are applicable to less than 5 percent of exports to the EU, Japan, and the United States. Hence, the MFN effect does not play an important part in the post-Uruguay Round period. 2/

The second effect pertains to Kenyan exports that currently receive preferential treatment in industrial markets under arrangements such as the Lomé protocol in the EU and the Generalized System of Preferences in the United States and Japan. 3/ For products subject to preferential or below-MFN rates, the generalized MFN tariff reductions will lead to an erosion of preference margins. This will result in a loss of exports as some trade will be diverted to previously non-preferred and efficient suppliers of these products. The preference erosion effect is calculated as the percentage change in the price of the product in the import market times the cross-price elasticity of demand for the import. 4/ The disaggregated commodity level data used for the analysis indicates that more than

1/ U.S. import demand elasticities from Stern, Francis, and Schumacher (1976) were used in the calculations.

2/ Note that this assessment is based on a static framework. In a dynamic framework, gains from MFN tariff reductions may be larger as new opportunities in new products may arise for Kenya.

3/ Kenya is a signatory to the Lomé Convention between the EU and 69 ACP developing countries of sub-Saharan, Caribbean, and Pacific regions. Under this scheme, Kenya gets tariff and quota-free entry into the EU market for most industrial exports and for agricultural exports not subject to the CAP. Under the GSP scheme, Kenyan products get preferential tariff treatment for exports of tropical beverages, nuts, pyrethrum, handicrafts, leather, fish, textiles, and horticultural products.

4/ The percentage change in price of the product in the import market is given as the ratio of the tariff decrease to one plus the initial MFN tariff. The cross price elasticity of demand for the import is approximated by the negative of the import price elasticity of demand, following the method of Rousslang and Parker (1984), were scaled down by the ratio of total merchandise imports to absorption of goods (nonservices GDP plus imports less exports). The import demand elasticities were those obtained for the US from Stern, Francis, and Schumacher (1976).

90 percent of Kenya's exports to the EU, Japan, and the United States enter under preferential rates, usually of zero. Hence, preference erosion is likely to be the dominating and deciding effect in the post-Uruguay Round period. 1/

Both MFN and preference erosion effects were quantified separately for Kenya's exports to the EU, Japan, and the United States using the methodology described above. The results obtained for each market are provided in Tables 3 to 5, respectively, and the net impact on Kenya's main exports across all three industrial markets is summarized in Table 6.

3. Discussion of results

The results of this study indicate that the main impact of the Uruguay Round on Kenya will be in the form of preference erosion effects on Kenyan exports, with an estimated net decline of about US\$7 million across the three markets, or 1.5 percent of the value of Kenya's total exports to the three markets. These effects are likely to be spread out over the next five or six years.

Market-wise the impact is heavily concentrated in the EU. The EU accounts for 97 percent of the total impact with Kenya's export earnings in this market estimated to decline by US\$6.7 million compared to relatively minor declines of US\$0.2 million in the United States, and virtually no impact in the case of Japan. In terms of the share of Kenya's exports to each market that will be affected, these estimated declines translate into losses of 1.7 percent, 0.4 percent, and 0.5 percent in the EU, Japan, and the United States, respectively.

The effects are also highly concentrated in a few products. Agricultural products dominate, accounting for 85 percent or US\$6 million of the total preference erosion effects. Within agriculture, two categories of products, namely tropical products which include coffee and tea and horticultural products which include cut flowers and bulbs, vegetables, and fruits, constitute the bulk of the affected products. In particular, preference erosion effects in tropical products account for nearly

1/ Note that there is a potential third effect that is not very important for Kenya. This concerns the impact on exports due to the elimination of quantitative restrictions. Estimates of the incidence of nontariff coverage of Kenya's exports in the pre-Uruguay Round period indicate a rather low level of 3.5 percent. These barriers are mainly in the form of health and sanitary standards or miscellaneous noncommercial regulations and primarily on items such as horticultural products, leather and footwear products, and food products and beverages. Although in some cases these measures may be operating as effective barriers and their elimination may increase market access for Kenyan exports, the gains are unlikely to be large given the low pre-Round incidence level. Also, the removal of many of these kinds of nontariff measures may not directly result from the Uruguay Round Agreement.

Table 3. Kenya: Impact of EU Tariff Cuts on Exports 1/
(In thousands of U.S. dollars)

HS Code, Commodity	Average Value of Exports 1990-92	Pre- Round Tariffs	Post- Round Tariffs	Type of Trade	Import Demand Elasticity	Percentage Change in Exports	Change in Exports
09 Tropical products	229388.2	8.46	2.29	Preferential	-0.365	-2.08%	-4767.3
41 Hides and skins, raw leather	36136.3	2.69	2.20	Preferential	-0.511	-0.24%	-88.1
20 Juices, jams, jellies	32144.2	25.04	18.78	Preferential	-0.365	-1.83%	-587.9
07 Vegetables	22066.5	11.24	8.33	Preferential	-0.365	-0.96%	-210.9
06 Flowers and bulbs	21932.9	10.50	5.70	Preferential	-0.365	-1.59%	-348.1
08 Fruits	17145.0	11.62	8.66	Preferential	-0.365	-0.97%	-166.1
71 Precious stones	14635.0	2.23	0.41	Preferential	-0.647	-1.15%	-168.5
53 Flax, hemp, jute	4676.4	5.14	3.20	Preferential	-0.369	-0.68%	-31.8
03 Fish and fish products	4551.8	13.35	11.47	Preferential	-0.365	-0.61%	-27.6
17 Sugar	4010.7	14.00	9.98	Preferential	-0.365	-1.29%	-51.7
84 Nonelectrical machinery	1924.8	4.07	1.15	Preferential	-0.330	-0.93%	-17.8
51 Wool and wool products	1845.0	7.69	4.55	Preferential	-0.369	-1.07%	-19.8
90 Scientific instruments, equipment	1365.8	5.63	2.08	Preferential	-0.666	-2.24%	-30.6
12 Oilseeds	1354.8	2.52	1.08	Preferential	-0.365	-0.51%	-7.0

Memorandum items:

Total Exports to EU = 403367.2

Total Market Access Effects in the EU = -6681.6

MFN Effect = 0

Preference Erosion Effect = -6681.6

Total Effect on Agriculture = -5582.5 (83.6%)

Total Effect on Other Products = -1099.1 (16.4%)

Percentage change in total exports to the EU = -1.7%

Sources: IMF; GATT schedules of country offers.

1/ Note that only exports exceeding US\$1 million in value are shown in this table, but market access effects include all export items.

Table 4. Kenya: Impact of Japan's Tariff Cuts on Exports 1/
(In thousands of U.S. dollars)

HS Code, Commodity	Average Value of Exports 1990-92	Pre- Round Tariffs	Post- Round Tariffs	Type of Trade	Import Demand Elasticity	Percentage Change in Exports	Change in Exports
08 Fruits	1902.1	15.83	9.14	Preferential	-0.29	-1.67%	-31.8
09 Tropical products	1675.3	5.95	3.49	MFN	-1.13	2.62%	44.0
10 Wheat, rye, barley, etc.	1650.6	3.38	4.57	MFN	-1.13	-1.30%	-21.5
53 Flax, hemp, jute	1620.1	5.91	2.74	Preferential	-0.23	-0.69%	-11.3
03 Fish and fish products	1478.4	6.85	4.83	MFN	-1.13	2.14%	31.6
25 Nonmetallic minerals	720.3	0.48	0.23	Preferential	-0.41	-0.10%	-0.7
32 Dyes, finishes, pigments	689.0	4.61	3	Preferential	-0.42	-0.65%	-4.4
14 Vegetable products	370.0	3.17	1.93	MFN	-1.13	1.36%	5.0
13 Gums, resins	300.9	6.47	3.44	MFN	-0.69	1.96%	5.9
05 Miscellaneous animals and parts	256.6	1.52	0.42	Preferential	-0.23	-0.25%	-0.6
76 Aluminum products	242.8	6.93	3.72	Preferential	-0.73	-2.19%	-5.3
71 Precious stones	228.9	3.26	1.26	Preferential	-0.41	-0.79%	-1.8
44 Wood and wood products	159.2	5.78	2.84	Preferential	-0.14	-0.39%	-0.6
46 Baskets	149.0	5.62	3.69	Preferential	-0.14	-0.26%	-0.4

Memorandum items:

Total Exports to Japan = 11800

Total Market Access Effects in Japan = 7.8

MFN Effect = 66.6

Preference Erosion Effect = -58.9

Total Effect on Agriculture = 21.4

Total Effect on Other Products = -13.7

Share of Exports to Japan Affected = 0.1%

Source: IMF; GATT schedules of country offers.

1/ Note that only exports exceeding US\$100,000 are listed in this table, but market effects include all export items.

Table 5. Kenya: Impact of U.S. Tariff Cuts on Exports ^{1/}
(In thousands of U.S. dollars)

Commodity	Average Value of Exports 1990-92	Pre- Round Tariffs	Post- Round Tariffs	Type of Trade	Import Demand Elasticity	Percentage Change in Exports	Change in Exports
Agricultural Products	32099.8	7.7	5.5			-0.84%	-271.1
Tropical products	20179.7	1.7	1.1	Preferential	-0.41	-0.24%	-49.4
Horticultural products	10839.7	10.5	7	Preferential	-0.41	-1.31%	-142.5
Fish and fish products	309.7	1.3	0.9	Preferential	-0.41	-0.16%	-0.5
Other Products	3152.1	6.7	3.8			2.70%	85.1
Textiles and Clothing	1662.1	12.9	8.9	MFN	-1.14	4.04%	67.1
Food and Beverages	622.6	9.6	6.9	MFN	-1.13	2.78%	17.3
Machinery	430.4	3.4	1.6	MFN	-1.02	1.78%	7.6
Leather, hides, and skins	319.4	7.3	5.9	Preferential	-0.58	-0.76%	-2.4
Chemicals	117.5	8.2	3.7	Preferential	-0.93	-3.86%	-4.5

Memorandum items:

Total Exports to the U.S. = 35251.9

Total Market Access Effects in the U.S. = -186.0

Total Effect on Agriculture = -271.1

Total Effect on Other Products = 85.1

Share of Exports to the U.S. Affected = 0.5%

Source: IMF; GATT schedules of country offers.

^{1/} Note that due to data accessing problems for the U.S. in the Harmonized System, the data could not be obtained at the same level of disaggregation as for the EU and Japan. More broad product category level information is thus provided in this table.

Table 6. Kenya: Summary Impact on Exports to the EU, Japan, and the U.S.
(In thousands of U.S. dollars)

	EU	Japan	U.S.	Total
Agriculture	-5582.5	21.4	-271.1	-5832.2
Tropical products	-4767.3	44.0	-49.4	-4772.7
Horticultural products	-725.1	-31.9	-142.5	-899.5
Fish and fish products	-27.6	31.6	-0.5	3.5
Other Products	-1099.1	-13.7	85.1	-1027.7
Food products and beverages	-649.1	6.3	17.3	-625.5
Leather and leather products	-89.6	-0.1	-2.4	-92.1
Textiles and clothing and footwear	-38.3	-0.1	67.1	28.7

Memorandum items:

Total Market Access Impact = -6859.9

o/w Agriculture = -5832.2 (85%)

Other Products = -1027.7 (15%)

o/w EU = -6681.6 (97%)

Japan = 7.7 (0.1%)

U.S. = -186 (2.7%)

Percentage of exports affected across all three markets = 1.5%

Source: GATT schedules of country offers.

US\$5 million or 70 percent of the total impact, primarily due to significant reductions of 50 percent or more in Kenya's preference margins for coffee and tea in the EU.

Other exports also experience preference erosion effects on net, with an estimated decline in export earnings of US\$1 million across the three markets. This decline is mainly concentrated in some food and leather products exports. There are small market access gains in the U.S. market, particularly in textiles and clothing, reflecting the present exclusion of certain manufactures from the GSP system of preferences and the gains to be realized from tariff reductions on these products.

Overall, the results of the simulation exercise reflect Kenya's export structure and orientation. The dominance of the EU in these results is explained by the latter's importance as an export market for Kenya. The dominance of agricultural products and especially tropical products in the total impact is explained by their importance in Kenya's total exports as well as in Kenya's exports directed at industrial markets in particular. The results also reflect the depth and coverage of preferences currently received in different industrial markets. Preference erosion effects are strongest where current preferences cover a wider range of products and at significantly below-MFN rates such as in the EU under the Lomé Protocols, compared to the less extensive preferences received in the United States and Japan under the GSP. ^{1/}

In sum, the overall effects of the Agreement on Kenya are rather small both in absolute terms and as a percentage of Kenya's exports to these markets, notwithstanding the fact that several of Kenya's main export items such as coffee and tea will experience considerable reductions in preference margins. The significance of these losses is further reduced by the fact that they are likely to be spread out over a period of five or six years. Thus, given measures that can be undertaken over this transition period to improve capacity and competitiveness, to promote exports and diversify the export structure, and to continue the trade reforms of recent years, the preference erosion effects are likely to be dwarfed.

4. Impact of changes in world agricultural prices

The liberalization of trade in agriculture under the Uruguay Round is expected to cause changes in world agricultural prices. As noted earlier, several developing countries, particularly in Africa, have voiced concerns

^{1/} Note that these results do not incorporate the positive potential impact on Kenya's exports from the income effect that is expected to result from the Round. Greater stability and certainty about multilateral rules and disciplines and enhanced growth potential for the world economy could boost exports from developing countries like Kenya, especially given that the income elasticity of demand for imports from developing countries has been shown to be quite high by some studies.

about higher prices of agricultural imports, especially food imports following the Round. In the case of Kenya, the analysis indicates that there is virtually no impact on the agricultural import bill. Instead, Kenya presents an interesting case where the price effects are felt mainly on the export side due to declines in prices of important agricultural export items.

Agricultural imports

Kenya's agricultural imports constitute a mere 2 percent of total imports consisting mainly of wheat, rice, cotton, rubber, and vegetable and vegetable materials. 1/ Using recent estimates of the changes in the prices of these products following the Round and assuming a full pass through of these price effects to Kenya's import bill, the impact on the value of Kenya's agricultural imports was derived. 2/ These results are summarized in Table 7 and indicate that there is a very limited impact on Kenya's costs of importing agricultural products. There is an increase of less than US\$1 million across all of Kenya's principal agricultural imports, mainly due to slightly higher cost of wheat imports. 3/ This constitutes less than 1 percent of Kenya's total imports. The significance of this impact is further reduced by the fact that these price effects are not immediate but spread out over the transition period of the agreement in agriculture.

Agricultural exports

On the export side, the impact of these price effects is slightly larger. Using the same methodology as for imports, the impact of agricultural price changes on export earnings was derived. The results summarized in Table 7 indicate an estimated loss of US\$6 million in export earnings due mainly to the expected decline in coffee and tea prices with

1/ Note that this low share may partly reflect the historically high levels of protection in the agricultural sector.

2/ See, Goldin and Mensbrugghe (1995), Table 3, p. 28 for estimates of the changes in world agricultural prices. Estimates for benchmark case II (where the benchmark level corresponded to the most recent average level of protection in the pre-Uruguay Round period) were used in the calculations. These percentage changes in the prices of different agricultural products were multiplied by the most recently available value of Kenya's imports for the respective products, yielding the impact on the import bill.

3/ The estimated effect of the change in world agricultural prices deriving from the Uruguay Round on Kenya's net agricultural import bill is broadly in line with the results obtained in Eiteljoerge and Shiells (1995). The differences are due to differences in the coverage of agricultural commodities between the two studies as well as differences in the trade values for individual agricultural commodities (to which the estimated price changes were applied to derive the impact on the import bill) arising from different base periods and data sources.

Table 7. Kenya: Impact of Changes in World Agricultural Prices

Product	Value (In millions of U.S. dollars)	Estimated Change in World Price (In percent)	Impact of Price Change on Value of Imports and Exports (In millions of of U.S. dollars)
Principal Agricultural Imports:			
Wheat	17.8	3.8	0.7
Rubber	7.6	0.8	0.1
Cotton	6.9	-1.2	-0.1
Rice	4.4	-0.9	0.0
Vegetable materials	4.0	0.8	0.0
Vegetables	2.6	-1.4	0.0
Principal Agricultural Exports:			
Coffee	201.4	-1.5	-3.0
Tea	198.7	-1.4	-2.8
Crude vegetable materials	31.8	0.8	0.3
Fresh vegetables	31.5	-1.4	-0.4
Fish	19.8	-1.4	-0.3
Maize	15.2	2.3	0.3
Vegetable fiber	12.7	0.8	0.1
Fruits and nuts	7.8	-1.4	-0.1
Memorandum items:			
Total Impact on Agricultural Imports = US\$0.7 million			
Total Impact on Agricultural Exports = -US\$5.9 million			

Source: Staff estimates, Goldin, I. and van der Mensbrugghe (1995), and GATT, Kenya TPRM (1993).

minor declines in export earnings for the other products. ^{1/} This represents less than 1 percent of the value of total exports. However, the Kenyan case is useful for illustrating that the concern over agricultural price effects does not solely concern food importing countries but may also be important for developing countries that rely heavily on agricultural exports.

5. Overall balance of payments effect

The overall balance of payments effect is derived by combining the effects on imports and exports stemming both from the market access and agricultural price related effects discussed in the preceding sections. These results are summarized in Table 8. They indicate that on net there is a deterioration of about US\$13 million in the current account balance mainly due to negative effects from preference erosion and reduced prices for major exports. This amounts to a little over 2 percent of the current stock of Kenya's international reserves.

Table 8. Kenya: Overall Balance of Payments Effect

Effect	Magnitude (In millions of U.S. dollars)
1. Change in imports	0.7
from liberalization	0.0
from changes in world agricultural prices	0.7
2. Change in exports	-12.7
from MFN tariff cuts	0.2
from preference erosion	-7.0
from changes in world agricultural prices	-5.9
3. Net effect on the balance of payments	-13.4

Source: The agricultural price effect related numbers are obtained from Table 7 and the export numbers are obtained from Tables 3 to 6.

^{1/} Note that these price changes will be spread out over a five to ten year period and that they are below the price movements that are associated normally with instability in world commodity markets. Also note that Kenya does not benefit from higher prices of agricultural products like cereals, dairy, and meat products since these are not important in its export structure.

The timing of these effects varies depending on the transition period for phasing in the commitments. For the most part, the full effects of preference erosion and agricultural price changes are likely to be felt in 2000/2001, five to six years after the entry into force of the WTO.

IV. Other Commitments in the Uruguay Round

One of the main achievements of the Uruguay Round is that it brings areas such as services, subsidies, trade related investment measures, and intellectual property rights into the multilateral domain of rules and disciplines. The following discussion examines Kenya's commitments in each of these areas.

1. Services

The General Agreement on Trade in Services (GATS) requires countries to guarantee transparency and most-favored-nation treatment (nondiscrimination between foreign providers of services). 1/ In addition, countries are obliged to make specific commitments on market access and national treatment (nondiscrimination between domestic and foreign service providers) for services included in their schedule of commitments.

Kenya's liberalization commitments in services do not significantly alter the present state of regulations and restrictions in this sector. Kenya is one of the seven African countries that have made commitments in more than 10 percent of all service sectors. 2/ In all, it has made 84 commitments across the communications, financial services, tourism, and transport sectors. For the most part it has committed not to impose any restrictions in these sectors. It has also made policy commitments for a given mode of supply within these sectors. 3/ In the tourism, communication, and transport services sectors for instance, Kenya has guaranteed not to impose any restrictions.

The main exception is the financial services sector where some restrictions remain with regard to commercial presence. These are mainly in the form of limits to the share of equity capital that can be held by foreigners such as for brokerage and insurance and reinsurance services. There are however, no restrictions on market access or national treatment in

1/ Note that although the MFN is a general obligation, the GATS contains an Annex allowing countries to invoke an exemption to MFN to last no longer than ten years and subject to negotiation in future trade liberalizing rounds.

2/ It was the only country among the seven African countries with sizeable dependence on service sector export earnings to make commitments under the GATS at the time of signing in Marrakesh. See Harrold (1995).

3/ There are four modes of supply, namely, cross-border supply, consumption abroad, commercial presence, and presence of natural persons.

banking and other financial services including lending and financing transactions and consumer and mortgage credit services.

2. Subsidies

The Uruguay Round requires countries to reduce domestic and export subsidies in agriculture by prescribed amounts and over defined periods depending on the income level of the country. 1/ Kenya's schedules do not contain such reduction commitments as it does not subsidize agriculture. For industrial products, developing countries with per capita GNP above US\$1,000 are required to eliminate export subsidies. Kenya is exempt from this requirement as it falls below the threshold per capita income level.

3. Trade-related investment measures

The Uruguay Round Agreement covers some trade related measures such as local content, domestic sales, trade balancing, and foreign exchange balancing requirements. Countries that notified the WTO before March 1995 about their use of these prohibited TRIMs can avail of a transition period to phase them out. 2/ Kenya is among those countries with potentially prohibited TRIMs that failed to notify the WTO in time to avail of the transition period. In principle this implies that Kenya needs to eliminate these restrictions which consist of job creation and local sourcing targets that are used by the Kenyan government in deciding whether to approve foreign investments.

4. Intellectual property rights

The Uruguay Round agreement on intellectual property requires national treatment, high minimum standards of intellectual property protection in the areas of patents, copyrights, trademarks, industrial designs, and trade secrets, and commitments to ensure effective and timely enforcement of intellectual property rights. Kenya has five years to put in place the agreed minimum standards of protection along with an additional five years in areas where no protection had previously existed. The MFN and national treatment provisions however, are to be implemented within the first year of the entry into force of the WTO.

1/ Industrialized countries must reduce the value of direct export subsidies to agriculture by 36 percent below the 1986-90 base period level and reduce the quantity of subsidized exports by 21 percent over a six year period. Reductions required of developing countries are two-thirds those of the industrialized countries over a ten year period while no reductions are required for the least developed countries.

2/ The transition period varies depending on the classification of the country. Least developed countries have a seven year transition period, developing countries have five years, and the others have two years.

V. Concluding Remarks

This study indicates that the Uruguay Round agreement will not produce major gains for Kenya's exports in terms of increased market access. For the most part, Kenya's exports will experience a modest loss in export earnings due to reduced preference margins in key export markets like the EU. The effects will also be heavily concentrated in a few products and in a few markets.

The analysis also indicates that there may be modest adverse effects on Kenya's export earnings due to a decline in world prices for its main agricultural exports. In the latter regard, the study suggests that changes in world agricultural prices following the Round do not concern only food importing developing countries. Both food exporting and food importing developing countries may stand to gain or lose from the changes in agricultural prices depending on the commodity composition of their agricultural trade and the extent to which there is effective trade liberalization in the agricultural sector.

On the domestic front, the study indicates that the Uruguay Round agreement will have little or no impact on the trade regime. Most changes will be determined by unilateral trade liberalization measures and reforms. The latter will also help mitigate some of the preference erosion effects resulting from the Agreement. Domestic measures to diversify and promote exports, to improve productivity, and other structural adjustment measures to adapt and respond to changes in the multilateral trading system could play an instrumental role in offsetting losses in export revenue due to preference erosion. These unilateral measures may also be important for creating and enhancing opportunities for improved market access.

In sum, given the relatively small magnitudes of the effects found in this study, their phased nature, and the scope for corrective domestic policy responses in the interim, the Uruguay Round Agreement is not likely to have a significant impact on Kenya's balance of payments.

References

- Brandao, A.S.P, and W. Martin, Implications of Agricultural Trade Liberalization for the Developing Countries (Washington: World Bank, 1993).
- Finger, J. Michael and Ulrich Reinke, The Uruguay Round and the Developing Economies: Tariff Concessions Given and Received (Washington, DC: World Bank, 1994).
- François, Joseph, B. McDonald, and H. Nordstrom, Assessing the Uruguay Round (London-Geneva: CEPR-WTO, 1995).
- General Agreement on Tariffs and Trade (GATT), Kenya: Trade Policy Review Mechanism (Geneva: The GATT Secretariat, 1993).
- General Agreement on Tariffs and Trade, An Analysis of the Proposed Uruguay Round Agreement, with Particular Emphasis on Aspects of Interest to Developing Countries (Geneva: GATT Negotiations Committee, 1993).
- Goldin, I., O. Knudsen, and D. van der Mensbrugghe, Trade Liberalization: Global Economic Implications (Paris-Washington: OECD-World Bank, 1993).
- Goldin, I., D. van der Mensbrugghe, The Uruguay Round: An Assessment of Economywide and Agricultural Reforms (Paris-Washington, DC: OECD-World Bank, 1995).
- Harmsen, R. and A. Subramanian, "Economic Implications of the Uruguay Round," in Kirmani, N. and others, International Trade Policies: The Uruguay Round and Beyond, Volume II, Background Papers (Washington: International Monetary Fund, 1994), pp. 1-31.
- Harrold, Peter, The Impact of the Uruguay Round on Africa: Much Ado about Nothing? (Washington, DC: World Bank, 1995).
- Hertel, Thomas, W. Marin, K. Yanagishima, and B. Dimaranan, Liberalizing Manufactures Trade in a Changing World Economy (Washington, DC: World Bank, 1995).
- Hoekman, B., Tentative First Steps: An Assessment of the Uruguay Round Agreement on Services (Washington, D.C.: World Bank, 1995).
- International Monetary Fund (IMF), Comprehensive Trade Paper--The Uruguay Round-Economic Implications (Washington, DC: IMF, 1994).
- Ingco, Merlinda, Agricultural Trade Liberalization in the Uruguay Round: One Step Forward, One Step Back? (Washington, DC: World Bank, 1995).

Low, P. and A. Subramanian, TRIMs in the Uruguay Round: An Unfinished Business? (Washington, D.C.: World Bank and IMF, 1995).

Rousslang, D. and S. Parker, "Cross-Price Elasticities of U.S. Import Demand," The Review of Economics and Statistics, Vol. LXVI, No. 3, August 1984, pp. 518-23.

Stern, R., J. Francis, and B. Schumacher, Price Elasticities in International Trade: An Annotated Bibliography (London: Trade Policy Research Centre, 1976).

United Nations Conference on Trade and Development (UNCTAD), Review of the Implementation, Maintenance, Improvement, and Utilization of the Generalized System of Preferences (Geneva: UNCTAD, 1994).

United Nations Development Program (UNDP), Kenya: The Challenge of Promoting Exports (Washington, DC: UNDP-World Bank Trade Expansion Program, 1993).

Yeats, A., What are the OECD Preferences Worth to Sub-Saharan Africa (Washington, DC: World Bank, 1993).