

THE SADC COUNTRIES AND THE URUGUAY ROUND AGREEMENT ON AGRICULTURE: A REVIEW OF PROGRESS AND CHALLENGES¹

Simphiwe Ngqangweni, Tonia Kandiero, Yemane Gebrehiwet & Johann Kirsten²

Abstract

Through the Uruguay Round Agreement on Agriculture (URAA), the multilateral trade negotiations saw a turning point in the inclusion of agriculture in the trade liberalisation debate. This development bears important implications for developing countries, including those of SADC, who have agriculture as a critical element of their economic growth, poverty alleviation and food security. This article reviews the progress of SADC countries towards implementation of the URAA. We find that the extent of SADC countries support to the agricultural sector is still within the URAA provisions. However, despite certain preferential trade agreements in place between SADC and the developed world, trade barriers are still high in many developed countries. A barrier-free access to developed country markets has important growth and poverty alleviation implications for SADC countries.

¹ Submitted for presentation at: The Biennial Conference of the Economic Society of SA, 17-19 September 2003. This paper is based on research work originally done as part of a World Bank project entitled, "Agriculture and the new trade agenda: Economic analysis of issues and options for SADC countries". The authors would like to thank Akima Mavian and Kisimba Mwenge, both formerly graduate students at the University of Pretoria, for their research assistance. Merlinda Ingco, John Nash and Helen Freeman of the World Bank, and an anonymous referee are thanked for their invaluable input. The views expressed in this article are exclusively those of the authors and not a representation of the position of the University of Pretoria or of the World Bank.

² University of Pretoria

1. Introduction

The original General Agreement on Trade and Tariffs (GATT) applied to agricultural trade, but did so somehow ineffectively, due to certain exceptions to the disciplines on the use of non-tariff measures and subsidies (Anon, 1999). This is why the inclusion of agriculture in the Uruguay Round through the Agreement on Agriculture marked a major turning point in the area of trade negotiations. As this momentous development has created a sense of euphoria among developing countries, challenges, however, still lie ahead. There is a consensus that accomplishments of the Uruguay Round Agreement on Agriculture (URAA) were rather modest in removing distortions by developed countries (Ingco & Kandiero, 2003). The attempt to liberalize the agricultural sector through the URAA to secure market access has had mixed outcomes. In the actual implementation of the URAA, developing countries did not gain much, due to the discriminatory nature of the Agreement. For one thing, developing countries strongly argue that market access opportunities have been greatly affected by increased protection and subsidies in developed countries (Adhikari, 2000).

The principal idea of the URAA was that agricultural policies of all types had the potential to distort trade under certain circumstances and were therefore a fit subject for international disciplines. If governments pursued policies whose predictable result was to encourage excess production of commodities, with resultant surpluses exported into world markets with price-depressing effects, that was not merely a domestic matter but something in which trading partners had a legitimate interest. This insight now seems a commonplace. However, it was not the operating principle for

agriculture under the pre-URAA General Agreement on Tariffs and Trade (GATT). Nor was it easily accepted by the nations that negotiated the Uruguay Round.

For Africa, including countries in the Southern African Development Community (SADC) region, the URAA and its principles bears important implications. According to Oyejide (undated), more specifically the URAA and the new World Trade Organisation (WTO) framework will affect efforts by African countries to expand agricultural output as well as to diversify agricultural exports. African agricultural policy makers, strategists and practitioners thus have many considerations to make, specifically relating to how and how far the URAA framework would affect national agricultural development policies as well agricultural import and export policies.

Although African countries entered the URAA fold ahead of much of the world - in that agricultural policy barriers were virtually absent in many countries in the continent following implementation of structural adjustment programmes (SAP's) - there are further market access improvements that could still be made (Oyejide, 1999). SADC countries have admitted that there have potential benefits to reap from their participation in multilateral trade negotiations under the WTO (SADC, 1996). It would, however, be interesting to get an idea of how far they have progressed in their own efforts to honour URAA provisions.

Against this background, this paper seeks to contribute to the debate on the on-going debate on participation of African countries in the multilateral trading system. It particularly focuses on the SADC region and highlights the progress in six of its

member states (Malawi, Mozambique, South Africa, Tanzania, Zambia, and Zimbabwe) towards the implementation of the URAA provisions and therefore progress towards agricultural trade liberalisation. The next section presents a brief background to the position of SADC countries in their participation in the WTO system. Section 3 presents a brief introduction to the URAA and how the SADC countries under review are affected. Sections 4, 5, and 6 discuss the selected SADC countries' progress with respect to elimination of tariff and non-tariff barriers, export subsidies, domestic support respectively. Section 7 assesses nominal protection in the selected SADC countries. Section 8 synthesises the main findings and concludes the paper.

2. The position of SADC countries

Countries in the SADC region are involved in the multilateral trade arrangements under the WTO. In addition, they are also involved, at various levels, in inter-regional (ACP-EU Cotonou) and regional (SADC) trade arrangements. The South Africa-EU free trade arrangement also comes into play. Some scholars have found that the overlaps and complications resulting from the various levels of integration of SADC economies into the world economy are not necessarily bad for the welfare of SADC countries (Lewis, Robinson & Thierfelder, 2001).

Economic integration within SADC took another step in the adoption of the SADC Trade Protocol in 1996, which foresees the establishment of a free-trade area in the region in a period of eight years. Despite many regional constraints hindering progress in the implementation of this Protocol, SADC member countries see their

goal of a SADC free trade area as a top priority. It is from this point of departure that they wish to approach the multilateral trading system (SADC, 1996).

3. Background to the URAA

The main pillars of the Uruguay Round Agreement on Agriculture (URAA) are market access, domestic support, and export subsidies. The implementation of the URAA brought some progress in the area of market access, although it is still incomplete. Agriculture protection in most of the SADC countries is characterized by cascading tariff structures, compound duties, and non-tariff barriers to trade (quotas, biosafety regulations). With respect to aggregate measure of support (AMS), Malawi, Mozambique, Tanzania, Zambia, and Zimbabwe do not have AMS reduction commitments. Support of their economies falls under the Green Box. Export competition policies applied by the majority of the SADC countries are within the URAA provisions and therefore do not require any adjustments. It is important to note that South Africa negotiated the URAA as a developed country, Zimbabwe as a developing country, and Malawi, Mozambique, Zambia and Tanzania as least developed countries. Based on the GATT status, developing countries have the flexibility to implement reduction requirements up to 10 years, while least developed countries shall not be required to undertake commitments (Article 15 of the Agreement on Agriculture).

4. SADC countries' tariff and non-tariff barriers

In brief, tariffs fall under the market access pillar of the URAA, which has three basis elements: (a) the tariffication of nontariff barriers (NTBs); (b) reduction of tariffs to reasonable levels; and (c) maintenance of current access levels for each individual product. Under tariffication, member countries are required to convert NTBs during the base period (1986–88) into tariff equivalents, and to establish a base rate of duty for individual commodities covered by the URAA. The average reduction of tariffs

after tariffication of NTBs should be 24 percent for developing countries and 36 percent for developed countries. Developed countries have a time frame of six years within which to decrease their tariff levels, while developing countries have ten years to cut tariffs. In the case of maintaining access level, as determined by the volume of imports in the base period (1986–88), minimum access should be established at not less than 3 percent to 5 percent of domestic consumption during the base period. The implication is that a share of commodity imports which had been previously been subject to NTBs can be allowed into the importing country at a lower tariff rate. Table 1 shows percentage of product lines that face NTBs in five SADC countries.

Even though tariffs remain as an important trade policy instrument in much of SADC, there has been progress in reduction of applied tariff in the region, which mostly occurred under the structural adjustment programme of the 1980s. According to Table 2, Malawi's average most favoured nation (MFN) applied tariff rates for all agricultural imports declined from an average of 31 percent in 1994 to 13 percent in 2001. Mozambique has also engaged in tremendous liberalization efforts, although the applied MFN rates are above the tariff peak rate of 15 percent. This gives Mozambique the opportunity to further reduce the tariff rates (Table 3). South Africa is committed to reduce its tariff band to six: zero, five percent, 10 percent, 15 percent, 20 percent, and 30 percent (Cassim & Onyango, 2002). So far, except for tobacco, the tariff rates for agricultural commodities are below 30 percent. South Africa has also abolished non-tariff measures such as quantitative restrictions, except for those designed to protect plant, animal and human life. About 28 percent of the imports to South Africa are subject to non-tariff measures (see Table 1).

Tanzania now has a comprehensive liberalized trade regime. External trade restrictions on imports have been removed (except for those items on which control is necessary for health or security reasons), export and import procedures have been simplified and single channel export of traditional export crops has ended. Tanzania is in the course of implementing major tariff reforms through concentration and reduction of tariff bands and rates within the Harmonized Coding System. The average MFN tariff for agricultural products from the world fell from the maximum rate of 40 percent in 1993 to 25 percent in 2000 (Table 4).

Compared to many other countries in Sub-Saharan Africa, Zambia has maintained relatively lower tariffs. In 1994, the highest MFN tariff for agricultural products was 40 percent. This dropped to 25 percent in the late 1990s (Table 5). The average MFN tariff for all agricultural products from the world declined from 32 percent in 1993 to 19 percent in 1997. Zimbabwe, on the other hand, is considered one of the most protectionist countries in the region, with average MFN applied tariff rates and effectively applied tariff rates as high as 80 percent and 100 percent, respectively, in 2001 (Table 6). The MFN rate for tobacco from the world increased from 30 percent in 1996 to 80 percent in 2001. It is not surprising that tobacco also has the highest rates, considering that it is one of the main exports.

Even though, on average, most of the SADC countries have liberalized, with the exception South Africa (40%), the region still maintains exceedingly high bound tariff rates. Malawi, Mozambique, Tanzania, Zambia and Zimbabwe have bound rates of 124%, 100%, 120%, 124%, 146%, respectively (Finger, Ingco, and Reincke (1996).

5. Export subsidies in SADC countries

The URAA requires countries to reduce their volume of subsidized exports by 21 percent over the six-year implementation period, while reducing the value of export subsidies in the same period by 36 percent. (Again, requirements are less stringent for developing countries). The URAA defined export subsidies in relatively broad terms, as subsequent case law has confirmed, though there were exclusions for bona fide food aid and some other measures. Malawi, Mozambique, Tanzania, Zambia, and Zimbabwe, like most of Africa countries, do not subsidize agriculture or its exports but rather tax agriculture either implicitly, by giving protection to industry, or more explicitly by taxing export commodities, or by maintaining government-controlled domestic prices below world prices. This implies that despite the window given by the WTO Agriculture Agreement to African countries to subsidize agriculture the countries do not stand to benefit.

South Africa introduced export incentives during the 1970s, which continued to be implemented well into the 1980's. The result of these incentives was in the form of increased exports especially in the manufacturing sector during the early 1990s, despite a parallel policy of import protection in place at the time. According to Cassim & Oyango (2002) increased exports was experienced at a cost to the fiscus. Under its WTO commitments, however, South Africa has had to phase out its export incentives.

6. Domestic support within SADC countries

Countries agreed to categorize, measure, and limit domestic support. Measures presumed to distort trade the most were classified in an “amber box,” capped (in the aggregate for each country) at the 1986-88 level, and reduced by 20 percent over the six-year implementation period. (The requirements were different for developing countries.) Non-trade distorting measures were exempted from reductions in a “green box.” Some amber box payments related to production-control programs were exempted from reduction through a so-called “blue box.” Malawi, Mozambique, Tanzania, and Zimbabwe were exempted from any reduction in this pillar of domestic support. Domestic support in these countries is within the URAA provisions.

7. Nominal protection of the agricultural sector in SADC

Malawi, Mozambique, Tanzania, Zambia, and Zimbabwe, like many African countries, have long been emphasizing the importance of the agricultural sector, and yet it is evident that their policies are often biased against the sector. Sources of bias mainly arise from sector policies such as export duties, subsidies, and parastatal margins that result in keeping farm prices of products below the world price and failure to adjust exchange rates against shocks. The former has a more direct (explicit) impact and the latter has an indirect (implicit) effect. A well-cited study by Krueger, Schiff, & Valdés (1991) on pricing policy in agriculture between 1960 and 1984 concludes that, in the case of Africa, direct intervention was positive on importables and negative for exportables. For total trade, the intervention was negative, concluding that the direct taxation on exports dominated the tax on imports. This is also the case in these five SADC countries. In recent years, the positive intervention in the importables has vanished and the bias for exportables has worsened.

Nominal protection is regarded as the simplest measure of protection. This measure of protection is a simple estimate of the extent to which the price of the particular product has been affected by government intervention. One of the notable flaws with this measure is that it does not control for variations in input prices. Nominal protection is generally measured as the Nominal Protection Coefficient (NPC) of a product. This measure is defined as the ratio of the product's domestic price to its international price (Pursell & Gupta, 1998).

If $NPC > 1$, then the product is protected.

If $NPC < 1$, then the product is disprotected or in effect taxed.

Nominal Rate of Protection is calculated as follows:

$$(NRP) = (NPC - 1) * 100$$

Specific country NPC and NPR results are presented Tables 7 to 16.

For Malawi, it is clear from Tables 7 and 8 that the producer price for the agricultural commodities are less than world price. With the exception of soybean, where the NPC increased from 0.44 in 1985 to 0.50 in the 1990s, the rest of the commodities' level of taxation increased. In the most recent year, highest levels (in absolute terms) of rates of protection appear in cotton seed (-96.93 percent), sugar cane (-88.84 percent), tobacco leaves (-85.17 percent), and groundnuts (-83.52 percent) (Table 8).³ Sorghum is the least protected out of the selected commodities. In 1986 and from period 1991-93, the NPC was higher than one. This means that the world prices either dropped slightly or remained the same, while domestic price went up. These figures indicate that there are some problems in terms of domestic policies.

³ The higher the number, the larger the wedge between the producer price and the world price.

Mozambique has also traditionally taxed agriculture. In 1985, policy biases against agriculture were more excessive for export crops (coffee, coconuts, sugarcane, cotton seeds, tea, and groundnuts), with domestic prices lower than world prices (Tables 9 and 10). In the case of food crops (rice, sorghum, and maize) the domestic prices were higher than the world prices, showing positive protection. This pattern is in line with the study by Krueger, *et al.* (1991) on pricing policy in agriculture between 1960 and 1984. They conclude that, in the case of Africa, direct intervention was positive on importables and negative for exportables. The story for the food crops was short lived. In the 1990s, the negative bias plagued food crops and worsened in the case of exports crops.

South Africa has also not been immune to the tendency of bias against the agricultural sector. Sources of bias mainly arose from indirect export subsidies such as electricity and transport rebates, export finance and credit guarantees and marketing allowances. During the implementation of the URAA, these programs, which led to positive intervention, were reviewed and phased out.

In the 1980s, Tanzania “taxed” agricultural products through giving protection to industry, taxing export commodities, maintaining government-controlled domestic prices below world prices through marketing boards, and maintaining overvalued exchange rates. This could have been a tactic by the government to ascertain food security. From Tables 11 and 12, the protection measures indicate that bananas, cotton seed, tea, and tobacco were in effect “taxed” in 1985, while maize rice, sorghum, and soybeans had producer prices higher than the world price in the period. Most of the

products that faced “taxation” are export products and low producer price created a disincentive to farmers. The second group of products are mostly import products for Tanzania. Higher producer prices would mean more incentives for farmers to produce, leading to more food sufficiency. For Tanzania’s export products, the levels of “taxation” worsened in the 1990s and for the import products; the incentive to produce was eroded. In the 1990s, the STEs were privatised but the process is slow. Also, fertilizer and input subsidies were lifted under the structural adjustment programs, leading to high cost of production. Like in most of Africa countries, poor infrastructure and high transportation costs have also contributed to taxation of agricultural commodities. In order for agricultural performance to improve, these constraints have to be addressed Tanzania’s policy makers.

In Zambia, the nominal protection rates (NPRs) for cotton and sugarcane were over 90 percent in 1985. In the recent years, the NPRs for these two products and other major imports have worsened, with “taxation” level close to 100 percent for the majority of the commodities. Policy biases against agriculture, which were more excessive for export crops (coffee, cotton seeds, groundnuts) than for food crops (rice, sorghum, and maize). In 1987, maize and sorghum had producer prices even higher than the world prices (Tables 13 and 14).

The long history of taxing agriculture in Zambia was a consequence of import substitution policies to promote the industrial sector. In the process, substantial resources were transferred from agriculture to industry. From the mid-1980s to the 1990s the exchange rates of the Zambia went through a series of devaluations. The devaluation policy substantially reduced the level of indirect protection to agriculture.

Currently, Zambia pursues more flexible exchange rate regimes. In addition, state owned enterprises were also a source of price distortion in Zambia. But since 1996, 204 out of 280 state owned enterprises have been privatised, although the process was slow (World Trade Organisation, 2002). Zambia's agricultural sector policies are mainly aimed at food security, poverty reduction, and cash crop promotion. Therefore, the planned establishment of a Crop Marketing Authority (CMA) still plays a part, where marketing boards were abolished. The CMA is also considered the buyer of last resort. Despite some progress in domestic pricing policies, high transportation costs, poor infrastructure, and low productivity continue to hurt the agricultural sector in Zambia.

Zimbabwe has also been largely biased against its agricultural sector. Sources of bias mainly arise from sector policies (such as export duties and parastatal margins) that result in keeping farm prices of products below the world price and failure to adjust exchange rates against shocks. In 1985, the protection level for food crops, for example, bananas, maize, rice, sorghum, and soybean, faces little or no taxation (Tables 15 and 16). Higher producer prices, which could also imply that these commodities were subsidized, gave the producer more incentives to produce. In the 1990s, however, all the products were subject to taxation or even more for those that were already subject to disincentives. The decline in the world prices of major products such as tobacco, the inconsistencies in Zimbabwe's agricultural policies, and some structural adjustment policies could have contributed to the "taxation" in the 1990s.

A decline in world price of major products often translates in currency depreciation. A scenario presented by Diao, Robinson, Thomas & Wobst (2002) shows that a 40 percent decline in the world price of tobacco is likely to cause Zimbabwe's exchange rate to depreciate by a maximum of 16 percent. This would also result in an increase in import prices. Like in the case of Malawi, the rise in fertilizer prices means that farmers have to pay a higher price in domestic currency to purchase the same amount of fertilizer inputs. In the 1990s, IMF and World Bank policies advocated for removal of input subsidies, which may have led to even higher production costs for, in particular small-scale farmers. Reintroduction of fertilizer and seed starter packs is likely to reduce the disincentives created over the last two decades. Government intervention policies through price controls, in particular in the case of food crops, privatisation of marketing boards, and less stock piling for food security reasons could improve the incentive structure in the agricultural sector. Better infrastructure and low transportation cost for the main export product such as tobacco, tea, sugarcane, and cottonseed is also likely to help the agricultural sector.

8. Conclusions

All of the SADC countries under review, with the exception of South Africa to an extent, have been characterised by policies that taxed agriculture as opposed to protecting and subsidising it. These countries' support is currently within the URAA provisions. South Africa on the other hand, which used to be actively engaged in a policy of export incentives (designed to counteract anti-export bias), has terminated its incentive programme and its agricultural sector is largely free of trade barriers.

The six countries under review made some improvement in the area of market access, but the work is still incomplete. Malawi, Zambia and Zimbabwe, in particular, still maintain high tariff bindings and applied tariff rates. It is crucial that SADC countries further reduce bound and applied rates using conservative option, and also move towards greater uniformity across products in their bound and applied tariff rates in order to capture the gains from the liberalization process.

Although such non-tariff measures as government licenses for imports still remain, SADC countries in general have put a significant effort to liberalise their economies since the mid-1980s. Even these measures have been significantly reduced by most SADC countries. Export controls have been reduced in these countries with view to promoting exports. The role of the marketing boards has also been curtailed.

There is, however, a caveat in this seemingly impressive record of African and SADC trade policy reform. The reductions in tariffs achieved by African countries are not “WTO-bound” and can therefore be changed. All the SADC countries under review have selected ceiling binding tariff levels as high as 146 (in the case of Zimbabwe), and have imposed other duties and charges to their agricultural products. Although these practises could serve to taint SADC’s trade policy credibility, they are comparably better than the fundamentally protectionist “dirty tariffication” applied by the developed world post-URAA (Oyejide, 1999).

In the context of the multi-lateral trading system, it therefore remains largely with the industrialised countries to act to eliminate their trade-distorting policies, whose effects

have been found to be harmful to developing countries and expensive to the countries practising them.

References

ADHIKARI, R, 2000. Agreement on Agriculture and Food Security: South Asian Perspective. *Journal of Asian Economics* 11: 43-64.

ANON (1999). The WTO agreement on agriculture: Limits on domestic support. Paper presented at the Workshop on Coordinated Support of Emerging and Small Farmers, Cape Town, 25 February 1999.

CASSIM, R & ONYANGO, D, 2002. The state of trade policy in South Africa. Trade and Industrial Policy Strategies (TIPS) Unpublished draft report.

DIAO, X, ROBINSON, S, THOMAS, M & WOBST, P, 2002. Assessing the impacts of declines in the world price of tobacco on China, Malawi, Turkey, and Zimbabwe. TMD Discussion Paper No. 91. International Food Policy Research Institute (IFPRI), Washington, D.C.

FINGER, J.M, M. D. INGCO, AND U. REINCKE, 1996, The Uruguay Round: Statistics on Tariff Concessions Given and Received. World Bank, Washington, DC.

INGCO, M & KANDIERO, T, 2003. Introduction, In South Asia and the new WTO trade negotiations in agriculture: Economic analyses of interests and options, *Directions in Development Series*(Ingco Ed), Washington DC: World Bank .

KRUEGER, AO, SCHIFF, M, & VALDÉS, A, 1991. *The political economy of agricultural pricing policy*, Vol. 4. Johns Hopkins University Press, Baltimore.

LEWIS, J, ROBINSON, S & THIERFELDER, K, 1999. After the negotiations: Assessing the impact of free trade arrangements in Southern Africa. Trade and Macroeconomics Division Discussion Paper No. 46. International Food Policy Research Institute (IFPRI), Washington DC.

OYEJIDE, TA, 1999. Agriculture in the Millennium Round of Multilateral Trade Negotiations: African interests and options. Draft paper presented at The Conference on Agriculture and the New Trade Agenda in the WTO 2000 Negotiations, Geneva, October 1-2, 1999. Available online at: www.worldbank.org

OYEJIDE, TA, undated. African agriculture in the WTO framework. WTO Framework Paper. Available online at: <http://www.aercafrica.org/DOCUMENTS/Agr.pdf>

PURSELL, G & GUPTA, A, 1998. Trade policies and incentives in Indian agriculture: Methodology, background statistics and protection and incentive indicators, 1965-95. World Bank Mimeo. World Bank, Washington, DC.

SADC, 1996. Statement by the Honourable AO Kigoda, Minister for Industries and Trade, Tanzania on behalf of the SADC States Members of the the WTO. Ministerial Conference, Singapore, 9-13 December 1996. WT/MIN(96)/ST/50. Available online at: http://www.wto.org/english/thewto_e/minist_e/min96_e/st50.htm

APPENDIX

Table 1 **Non-tariff barriers in selected SADC countries (% of all Products)**

Country	Non-Tariff Barriers (NTBs) (% of all Products)
Malawi	29
South Africa	38
Tanzania	15
Zambia	24
Zimbabwe	46

Source: UNCTAD Trains Database (2001)

Table 2 Malawi Effectively applied tariff rates (simple average)

Product code	Product Description	Africa			SADC			World		
		1994	1997	2001	1994	1997	2001	1994	1997	2001
01	Live animals	10.00	10.00		10.00	10.00		10.00	10.00	
02	Meat and edible meat offal	31.67	22.00		31.67	22.00		31.67	23.33	10.00
03	Fish & crustacean, mollusc & other aquatic invert	25.00	20.00		25.00	20.00		25.00	20.00	10.00
04	Dairy prod; birds' eggs; natural honey; edible pr	26.67	25.65		26.67	25.65		22.61	21.76	10.00
05	Products of animal origin, nes or included.	25.00	15.00		25.00	15.00		25.00	18.57	10.00
06	Live tree & other plant; bulb, root; cut flowers	33.33	25.00		33.33	25.00		20.50	22.00	10.00
07	Edible vegetables and certain roots and tubers.	24.85	18.28		24.85	18.28		24.74	17.94	
08	Edible fruit and nuts; peel of citrus fruit or me	39.17	26.36		39.17	26.36		38.82	26.29	25.00
09	Coffee, tea, mati and spices.	43.16	40.00		43.16	40.00		43.06	40.00	
10	Cereals	10.71	8.89		10.71	8.89		12.50	7.78	0.00
11	Prod.mill.indust; malt; starches; inulin; wheat g	31.11	24.50		31.11	24.50		28.91	21.38	0.00
12	Oil seed, oleagi fruits; miscell grain, seed, fru	23.33	20.00		23.33	20.00		23.33	21.25	12.50
13	Lac; gums, resins & other vegetable saps & extrac	25.00	20.00		25.00	20.00		25.00	20.00	0.00
14	Vegetable plaiting materials; vegetable products									
15	Animal/veg fats & oils & their cleavage products;	31.15	28.04		31.15	28.04		30.91	28.96	22.14
16	Prep of meat, fish or crustaceans, molluscs etc	45.00	40.00		45.00	40.00		45.00	40.00	25.00
17	Sugars and sugar confectionery.	38.00	33.13		38.00	33.13		39.79	35.33	10.00
18	Cocoa and cocoa preparations.	45.91	41.25		45.91	41.25		46.25	41.50	
19	Prep.of cereal, flour, starch/milk; pastrycooks'	41.48	38.64		41.48	38.64		40.73	39.05	25.00
20	Prep of vegetable, fruit, nuts or other parts of	47.08	41.43		47.08	41.43		46.97	41.53	
21	Miscellaneous edible preparations.	42.17	35.00		42.17	35.00		38.37	33.90	25.00
22	Beverages, spirits and vinegar.	47.39	19.44		47.27	19.44		47.08	19.57	25.00
23	Residues & waste from the food indust; prepr ani	19.09	15.56		19.09	15.56		18.33	14.62	
24	Tobacco and manufactured tobacco substitutes	39.88	33.33		39.88	33.33		40.35	31.11	
52	Cotton	57.04	35.00		57.04	35.00		61.28	35.00	
HSAgri	All agriculture products	31.26	26.01		31.24	25.90		31.36	26.27	12.53

Source: Wits Database

Table 3: Mozambique's effectively applied tariff rates (simple average)

Product code	Product Description	Africa			SADC			World		
		1994	1997	2001	1994	1997	2001	1994	1997	2001
01	Live animals	5.00	15.00		5.00	13.33		5.00	15.00	
02	Meat and edible meat offal	5.00	35.00		5.00	35.00		5.00	35.00	30.00
03	Fish & crustacean, mollusc & other aquatic invert	5.00	34.34		5.00	34.34		5.00	34.41	
04	Dairy prod; birds' eggs; natural honey; edible pr	5.00	29.04		5.00	29.04		5.00	27.72	23.21
05	Products of animal origin, nes or included.	5.00	13.33		5.00	13.33		5.00	10.63	2.50
06	Live tree & other plant; bulb, root; cut flowers	5.00	20.56		5.00	20.56		5.00	22.00	
07	Edible vegetables and certain roots and tubers.	5.00	31.38		5.00	31.38		5.00	29.22	30.00
08	Edible fruit and nuts; peel of citrus fruit or me	5.00	35.00		5.00	35.00		5.00	35.00	
09	Coffee, tea, mati and spices.	5.00	32.96		5.00	32.96		5.00	33.17	
10	Cereals	5.00	12.35		5.00	12.35		5.00	10.46	3.50
11	Prod.mill.indust; malt; starches; inulin; wheat g	5.00	16.30		5.00	16.30		5.00	15.74	7.86
12	Oil seed, oleagi fruits; miscell grain, seed, fru	5.00	5.75		5.00	5.75		5.00	4.48	2.50
13	Lac; gums, resins & other vegetable saps & extrac	5.00	2.50		5.00	2.50		5.00	2.50	2.50
14	Vegetable plaiting materials; vegetable products	5.00	2.50		5.00	2.50		5.00	2.50	
15	Animal/veg fats & oils & their cleavage products;	5.00	17.87		5.00	17.87		5.00	20.91	15.78
16	Prep of meat, fish or crustaceans, molluscs etc	5.00	35.00		5.00	35.00		5.00	35.00	30.00
17	Sugars and sugar confectionery.	5.00	13.39		5.00	11.73		5.00	15.36	7.50
18	Cocoa and cocoa preparations.	5.00	25.83		5.00	25.83		5.00	29.11	30.00
19	Prep.of cereal, flour, starch/milk; pastrycooks'	5.00	29.72		5.00	29.06		5.00	27.35	9.38
20	Prep of vegetable, fruit, nuts or other parts of	5.00	35.00		5.00	35.00		5.00	35.00	
21	Miscellaneous edible preparations.	5.00	28.04		5.00	28.04		5.00	27.09	18.75
22	Beverages, spirits and vinegar.	5.00	32.50		5.00	32.50		5.00	34.18	24.38
23	Residues & waste from the food indust; prepr ani	5.00	11.17		5.00	11.17		5.00	11.63	18.75
24	Tobacco and manufactured tobacco substitutes	5.00	23.18		5.00	23.18		5.00	19.71	
52	Cotton	5.00	28.78		5.00	28.78		5.00	31.39	
HSAgri	All agriculture products	5.00	17.10		5.00	17.08		5.00	16.93	12.97

Source: WITS database

Table 4 Tanzania's effectively applied tariff rates (simple average)

Product code	Product Description	Africa			SADC			World		
		1993	1997	2000	1993	1997	2000	1993	1997	2000
01	Live animals	10.00	20.00	25.00	10.00	20.00	25.00	10.00	17.41	24.00
02	Meat and edible meat offal	40.00	40.00	25.00	40.00	40.00	25.00	40.00	40.00	25.00
03	Fish & crustacean, mollusc & other aquatic invert		40.00	25.00		40.00	25.00	40.00	40.00	25.00
04	Dairy prod; birds' eggs; natural honey; edible pr	28.97	35.93	24.61	28.97	35.42	24.59	29.51	34.98	24.00
05	Products of animal origin, nes or included.	13.33	23.75	5.00	13.33	21.67	5.00	14.55	24.32	5.00
06	Live tree & other plant; bulb, root; cut flowers			25.00			25.00	10.00	31.25	14.52
07	Edible vegetables and certain roots and tubers.	20.00	36.82	18.75		36.82	18.75	28.84	31.12	18.60
08	Edible fruit and nuts; peel of citrus fruit or me		40.00	25.00		40.00	25.00	40.00	40.00	25.00
09	Coffee, tea, mati and spices.	40.00	40.00	25.00	40.00	40.00	25.00	40.00	40.00	25.00
10	Cereals	20.00	24.64	13.93	20.00	24.23	13.93	20.00	24.22	15.67
11	Prod.mill.indust; malt; starches; inulin; wheat g	20.00	30.00	25.00	20.00	30.00	25.00	20.00	30.00	23.94
12	Oil seed, oleagi fruits; miscell grain, seed, fru	16.67	22.27	16.67	18.18	22.27	16.67	18.90	23.13	13.31
13	Lac; gums, resins & other vegetable saps & extrac	10.00	20.00	5.00	10.00	20.00	5.00	10.00	20.00	5.00
14	Vegetable plaiting materials; vegetable products							20.00	30.00	5.00
15	Animal/veg fats & oils & their cleavage products;	20.00	27.69	19.00	20.00	28.89	18.08	19.33	27.05	18.69
16	Prep of meat, fish or crustaceans, molluscs etc		40.00	25.00		40.00	25.00	21.54	40.00	25.00
17	Sugars and sugar confectionery.	10.50	28.41	25.00	10.00	28.06	25.00	12.19	28.58	25.00
18	Cocoa and cocoa preparations.		40.00	25.00		40.00	25.00	20.00	40.00	25.00
19	Prep.of cereal, flour, starch/milk; pastrycooks'	16.67	35.33	22.50	16.67	35.00	22.50	17.40	35.24	22.09
20	Prep of vegetable, fruit, nuts or other parts of	20.00	40.00	25.00	20.00	40.00	25.00	19.52	40.00	25.00
21	Miscellaneous edible preparations.	23.08	37.65	23.10	22.73	37.50	23.33	23.65	36.50	23.20
22	Beverages, spirits and vinegar.	38.82	25.94	23.59	38.82	26.30	23.59	39.01	23.64	24.33
23	Residues & waste from the food indust; prepr ani	20.00	30.00	17.00	20.00	30.00	17.00	20.00	30.00	16.22
24	Tobacco and manufactured tobacco substitutes	40.00	24.62	11.67	40.00	24.62	15.00	40.00	28.83	21.18
52	Cotton	35.00	12.27	20.42	35.00	12.27	20.42	32.59	14.63	20.99
HSAgri		13.77	20.31	16.98	13.84	20.60	17.08	14.38	20.3	17.9

Source: WITS Database

Table 5 Zambia's MFN rates (simple average)

Product code	Product description	Africa		LDC		SADC		World	
		1993	1997	1993	1997	1993	1997	1993	1997
01	Live animals	21.82	7.73	24.29		21.82	7.73	21.62	7.00
02	Meat and edible meat offal	40.00	25.00	40.00		40.00	25.00	40.00	25.00
03	Fish & crustacean, mollusc & other aquatic invert	36.67	22.81	34.40	24.00	36.67	22.81	37.24	22.88
04	Dairy prod; birds' eggs; natural honey; edible pr	25.77	20.00	21.74		25.77	20.00	23.38	18.43
05	Products of animal origin, nes or included.	27.39	11.67	25.00	9.00	27.39	11.67	26.97	11.80
06	Live tree & other plant; bulb, root; cut flowers	27.00	12.50	24.00		27.00	12.50	27.41	11.15
07	Edible vegetables and certain roots and tubers.	34.94	21.74	34.36	25.00	34.94	21.74	34.68	21.46
08	Edible fruit and nuts; peel of citrus fruit or me	36.52	25.00	36.00		36.52	25.00	36.78	25.00
09	Coffee, tea, mati and spices.	40.00	25.00	40.00	25.00	40.00	25.00	40.00	25.00
10	Cereals	15.91	5.00	15.56	5.00	16.28	5.00	16.99	5.00
11	Prod.mill.indust; malt; starches; inulin; wheat g	26.90	15.00	28.28	15.00	26.90	15.00	26.52	15.00
12	Oil seed, oleagi fruits; miscell grain, seed, fru	27.95	11.00	30.00		27.95	11.00	26.83	10.48
13	Lac; gums, resins & other vegetable saps & extrac	20.00	5.00	20.00		20.00	5.00	20.00	5.00
14	Vegetable plaiting materials; vegetable products	30.00	15.00	30.00		30.00	15.00	30.00	15.00
15	Animal/veg fats & oils & their cleavage products;	27.70	12.91	27.10	11.00	27.70	12.91	27.29	13.57
16	Prep of meat, fish or crustaceans, molluscs etc	37.39	23.26			37.39	23.26	37.71	22.69
17	Sugars and sugar confectionery.	38.42	25.00	38.89		38.42	25.00	38.93	25.00
18	Cocoa and cocoa preparations.	32.00	21.67	35.00		32.00	21.67	32.06	23.00
19	Prep.of cereal, flour, starch/milk; pastrycooks'	39.05	23.82	40.00	25.00	39.05	23.82	38.40	23.17
20	Prep of vegetable, fruit, nuts or other parts of	38.40	24.49	40.00		38.40	24.49	38.20	24.55
21	Miscellaneous edible preparations.	34.49	21.67	34.00		34.49	21.67	31.84	17.10
22	Beverages, spirits and vinegar.	36.83	23.26	38.50	25.00	36.83	23.26	37.18	23.82
23	Residues & waste from the food indust; prepr ani	22.69	10.26	23.75	15.00	22.69	10.26	22.90	12.27
24	Tobacco and manufactured tobacco substitutes	32.63	23.57	31.43		32.78	23.57	32.50	24.17
52	Cotton	37.36	14.23	36.00	10.00	37.25	14.23	37.39	14.68
HSAgri		26.03	14.36	28.07	18.20	26.03	14.36	25.18	14.72

Table 6 Zimbabwe's effectively applied tariff rates (simple average)

Product code	Product description	Africa			SADC			World		
		1996	1998	2001	1996	1998	2001	1996	1998	2001
01	Live animals	27.50	6.61		22.50	6.61		28.64	10.34	25.00
02	Meat and edible meat offal	32.88	4.44		3.00	4.44		34.82	15.38	
03	Fish & crustacean, mollusc & other aquatic invert	19.33	14.79		0.91	14.79		21.78	15.43	20.00
04	Dairy prod; birds' eggs; natural honey; edible pr	44.58	23.31			23.31		37.98	27.51	31.00
05	Products of animal origin, nes or included.	21.46	13.54		9.75	13.54		26.19	11.80	5.00
06	Live tree & other plant; bulb, root; cut flowers	31.35	8.33		2.50	8.33		33.18	5.05	6.67
07	Edible vegetables and certain roots and tubers.	31.71	23.92		1.00	23.92		35.93	24.56	20.63
08	Edible fruit and nuts; peel of citrus fruit or me	40.00	27.42			27.42		41.54	27.17	
09	Coffee, tea, mati and spices.	40.93	12.27		0.00	12.27		44.87	11.62	40.00
10	Cereals	14.55	14.09		0.88	14.09		23.03	14.72	
11	Prod.mill.indust; malt; starches; inulin; wheat g	44.57	21.92		5.00	21.92		46.28	22.26	
12	Oil seed, oleagi fruits; miscell grain, seed, fru	21.78	7.50		0.50	7.50		26.74	7.62	5.00
13	Lac; gums, resins & other vegetable saps & extrac	30.00	17.50			17.50		29.30	15.00	11.67
14	Vegetable plaiting materials; vegetable products	26.00	5.00		6.00	5.00		28.15	5.00	
15	Animal/veg fats & oils & their cleavage products;	37.25	13.81		14.75	13.81		39.26	14.77	17.69
16	Prep of meat, fish or crustaceans, molluscs etc	36.93	24.06		3.00	24.06		38.15	26.78	31.25
17	Sugars and sugar confectionery.	34.88	30.95		2.67	30.95		41.02	32.50	40.00
18	Cocoa and cocoa preparations.	39.23	24.83			24.83		45.77	28.29	25.00
19	Prep.of cereal, flour, starch/milk; pastrycooks'	43.95	32.25			32.25		51.28	33.31	40.00
20	Prep of vegetable, fruit, nuts or other parts of	55.86	31.06		7.33	31.06		55.92	34.57	40.00
21	Miscellaneous edible preparations.	46.06	23.76		10.50	23.76		53.47	18.28	26.00
22	Beverages, spirits and vinegar.	26.33	41.36		8.00	41.36		30.75	42.09	43.64
23	Residues & waste from the food indust; prepr ani	19.08	13.56		0.94	13.56		29.04	27.18	29.44
24	Tobacco and manufactured tobacco substitutes	12.27	49.27		2.14	49.27		22.84	76.59	100.00
52	Cotton	37.90	18.59		11.88	18.59		48.73	21.53	23.00
HSAgri		34.87	19.00		10.81	18.99		40.93	21.41	18.77

Source: WITS Database

Table 7 Malawi – Nominal Protection Coefficients (NPC)

Commodities	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	Most Recent
Cassava	...	...	...	...	...	...	...	...	...	...	...
Cottonseed	0.08	0.10	0.06	0.07	0.07	0.07	0.07	0.06	0.06	0.01	0.03
Groundnuts in shell	0.29	0.44	0.55	0.39	0.30	0.30	0.29	0.35	0.32	0.10	0.16
Maize	0.65	0.71	0.78	0.64	0.80	0.90	0.94	0.65	0.94	0.29	0.38
Rice (paddy)	0.51	0.51	0.50	0.41	0.42	0.52	0.50	0.40	0.85	0.37	0.37
Sorghum	0.79	1.33	0.98	0.56	0.63	0.65	1.43	1.33	1.62	0.50	0.60
Tea (dry leaves)	0.32	0.29	0.28	0.37	0.33	0.37	0.45	0.35	0.34	0.13	0.22
Tobacco leaves	0.23	0.19	0.18	0.18	0.20	0.27	0.29	0.18	0.23	0.09	0.15
Sugar Cane	0.26	0.21	0.20	0.13	0.10	0.11	0.20	0.17	0.20	0.06	0.11
Soybeans	0.44	0.43	0.56	0.58	0.64	0.92	1.02	0.63	0.57	0.31	0.50
Coffee, Green	0.17	0.10	0.11	0.25	0.35	0.75		0.62	0.53	0.08	0.09

Source: Authors' estimates

Table 8 Malawi – Nominal Rate of Protection (NRP)

Commodities	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	Most Recent
Cassava	...	...	...	...	...	...	...	...	...	...	...
Cottonseed	-91.87	-90.30	-93.80	-92.67	-93.09	-93.35	-92.84	-93.59	-93.57	-98.52	-96.93
Groundnuts in shell	-70.65	-56.16	-44.69	-61.25	-69.65	-69.81	-71.26	-64.94	-68.39	-89.90	-83.52
Maize	-35.25	-28.67	-21.53	-35.80	-19.65	-10.13	-5.62	-35.22	-6.29	-71.45	-61.9
Rice (paddy)	-49.49	-48.59	-50.08	-59.07	-58.08	-48.40	-50.08	-60.13	-14.93	-63.36	-63.33
Sorghum	-20.79	32.86	-1.68	-43.94	-36.55	-34.55	42.87	32.78	61.82	-49.67	-39.65
Tea (dry leaves)	-67.66	-70.68	-71.99	-62.51	-67.27	-63.28	-55.15	-64.55	-65.55	-86.86	-78.05
Tobacco leaves	-77.43	-80.97	-81.80	-82.05	-80.20	-72.54	-70.50	-81.81	-77.30	-91.34	-85.17
Sugar Cane	-74.08	-78.87	-79.74	-87.36	-89.67	-89.49	-79.66	-82.90	-79.78	-93.88	-88.84
Soybeans	-56.13	-56.91	-43.65	-41.52	-36.20	-8.15	1.84	-37.21	-43.31	-68.85	-49.54
Coffee, Green	-83.35	-90.42	-89.48	-74.50	-65.32	-24.54		-38.18	-47.23	-92.42	-90.51

Source: Authors' estimates

Table 9 **Mozambique - Nominal Protection Coefficients (NPC)**

<i>Commodities</i>	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	Most Recent
Oranges	0.51	0.54	0.18	0.32	0.35	0.26	0.15	0.10	0.06	0.05	0.02
Cottonseed	0.04	0.04	0.01	0.03	0.02	0.02	0.01	0.01	0.00	0.00	0.00
Groundnuts in shell	0.54	0.09	0.50	0.73	0.60	0.42	0.25	0.23	0.11	0.06	0.04
Maize	2.16	2.90	0.98	1.21	1.24	1.10	0.63	0.41	0.23	0.17	0.09
Rice (paddy)	1.97	2.19	0.55	0.75	0.74	0.71	0.37	0.25	0.16	0.11	0.06
Sorghum	2.83	3.70	1.19	1.53	1.52	1.35	0.75	0.48	0.28	0.21	0.11
Tea (dry leaves)	0.62	0.69	0.21	0.38	0.35	0.27	0.00	0.00	0.00	0.00	0.00
Tobacco leaves	1.02	1.05	0.23	0.44	0.36	0.30	0.29	0.25	0.18	0.00	0.00
Sugar Cane	0.12	0.08	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.00	0.00
Coconuts	0.04	0.08	0.02	0.02	0.03	0.03	0.00	0.00	0.00	0.00	0.00
Coffee, Green	0.20	0.17	0.12	0.19	0.26	0.28	0.00	0.00	0.00	0.00	0.00

Source: Authors' estimates

Table 10 Mozambique - Nominal Rate of Protection (NRP)

<i>Commodities</i>	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	Most Recent
Oranges	-49.43	-46.36	-81.54	-67.60	-64.94	-74.43	-85.33	-90.24	-93.90	-94.84	-97.56
Cottonseed	-96.30	-96.19	-98.54	-97.15	-97.65	-98.10	-98.96	-99.34	-99.53	-99.62	-99.77
Groundnuts in shell	-46.36	-91.06	-50.50	-26.96	-40.48	-58.42	-74.81	-76.89	-89.47	-93.88	-96.15
Maize	116.33	190.47	-1.91	21.00	24.07	9.90	-37.08	-59.49	-77.14	-82.58	-90.73
Rice (paddy)	97.23	118.53	-44.64	-25.19	-26.04	-29.02	-63.12	-74.78	-84.13	-88.79	-94.29
Sorghum	182.78	270.11	19.00	53.21	52.41	34.90	-24.98	-52.04	-72.49	-78.94	-88.78
Tea (dry leaves)	-37.57	-31.01	-79.01	-61.75	-64.63	-72.75	-100.00	-100.00	-100.00	-100.00	-100.00
Tobacco leaves	2.22	5.26	-77.46	-56.32	-63.60	-70.48	-71.38	-74.51	-82.03	-100.00	-100.00
Sugar Cane	-88.35	-91.79	-98.34	-98.08	-98.36	-98.54	-98.74	-99.22	-99.61	-99.74	-99.86
Coconuts	-96.22	-92.12	-98.32	-97.74	-97.40	-96.56	-100.00	-100.00	-100.00	-100.00	-100.00
Coffee, Green	-79.69	-83.49	-88.13	-81.21	-74.50	-71.94	-100.00	-100.00	-100.00	-100.00	-100.00

Source: Authors' estimates

Table11 Tanzania - Nominal Protection Coefficients (NPC)

<i>Commodities</i>	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994Most Recent	
Bananas	0.40	0.14	0.11	0.15	0.11	0.13	0.13	0.13	0.12	0.13	0.15
Cottonseed	0.44	0.16	0.04	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Groundnuts in shell	1.20	0.73	0.64	0.40	0.25	0.24	0.26	0.33	0.23	0.19	0.23
Maize	2.84	1.39	1.29	0.67	0.51	0.60	0.63	0.55	0.49	0.52	0.53
Rice (paddy)	2.46	1.00	0.80	0.50	0.33	0.49	0.46	0.43	0.35	0.34	0.33
Sorghum	2.35	1.12	0.98	0.50	0.38	0.46	0.46	0.41	0.36	0.39	0.40
Tea (dry leaves)	0.17	0.09	0.07	0.07	0.05	0.05	0.06	0.06	0.05	0.06	0.07
Tobacco leaves	0.88	0.36	0.27	0.25	0.15	0.16	0.16	0.14	0.15	0.18	0.21
Sugar Cane	0.24	0.07	0.05	0.03	0.02	0.02	0.03	0.03	0.02	0.02	0.02
Soybeans	2.54	1.05	0.78	0.45	0.40	0.53	0.56	0.49	0.38	0.44	0.50
Coffee, Green	0.00	0.25	0.33	0.27	0.28	0.42	0.00	0.50	0.37	0.19	0.22

Source: Authors' estimates

Table 12 Tanzania - Nominal Rate of Protection (NRP)

<i>Commodities</i>	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994Most Recent	
Bananas	-59.68	-86.17	-89.37	-84.94	-89.25	-87.21	-87.32	-87.38	-88.24	-86.70	-84.61
Cottonseed	-56.32	-83.80	-95.80	-97.35	-98.20	-98.04	-97.81	-97.57	-97.92	-98.29	-98.34
Groundnuts in shell	19.87	-26.94	-35.74	-59.88	-75.17	-76.35	-73.91	-67.40	-76.91	-81.17	-77.26
Maize	183.58	39.05	29.39	-32.65	-48.70	-39.50	-36.71	-44.76	-51.42	-47.98	-47.04
Rice (paddy)	146.24	-0.37	-19.85	-50.13	-66.98	-51.18	-53.79	-56.93	-65.47	-65.73	-66.58
Sorghum	135.36	12.49	-1.56	-49.64	-61.70	-53.98	-53.63	-59.35	-63.79	-61.20	-60.33
Tea (dry leaves)	-82.85	-91.15	-92.84	-93.21	-95.16	-94.96	-93.64	-94.34	-95.17	-94.11	-93.10
Tobacco leaves	-12.05	-64.19	-72.59	-75.49	-85.22	-83.81	-83.90	-86.05	-84.71	-82.43	-79.45
Sugar Cane	-75.92	-93.30	-95.19	-97.33	-98.30	-97.98	-96.97	-97.46	-98.11	-98.21	-98.08
Soybeans	154.33	5.04	-21.75	-55.19	-59.53	-47.03	-43.97	-51.45	-61.61	-56.07	-50.19
Coffee, Green	-100.00	-74.54	-67.12	-72.67	-71.66	-57.85	-100.00	-50.22	-62.71	-80.62	-77.89

Source: Authors' estimates

Table 13 **Zambia - Nominal Protection Coefficients (NPC)**

<i>Commodities</i>	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	Most Recent
Oranges	0.37	0.20	0.33	0.46	0.26	0.23	0.18	0.08	0.06	0.05	0.03
Cottonseed	0.04	0.03	0.03	0.06	0.02	0.03	0.03	0.01	0.01	0.01	0.00
Groundnuts in shell	0.15	0.15	0.34	0.41	0.25	0.21	0.17	0.10	0.06	0.03	0.02
Maize	0.49	0.55	1.43	0.83	0.50	0.68	0.58	0.23	0.18	0.13	0.08
Rice (paddy)	0.40	0.29	0.60	0.50	0.32	0.35	0.34	0.14	0.12	0.08	0.05
Sorghum	0.51	0.45	1.41	0.86	0.50	0.68	0.69	0.32	0.25	0.18	0.11
Tea (dry leaves)	0.43	0.39	0.79	1.14	0.54	0.53	0.49	0.20	0.15	0.12	0.08
Tobacco leaves	0.23	0.15	0.28	0.57	0.21	0.41	0.30	0.08	0.08	0.06	0.04
Sugar Cane	0.06	0.04	0.06	0.06	0.03	0.03	0.03	0.01	0.01	0.00	0.00
Soybeans	0.53	0.47	0.95	0.80	0.52	0.61	0.48	0.19	0.13	0.10	0.07
Coffee, Green	0.22	0.14	0.47	0.59	0.41	0.57	0.46	0.23	0.15	0.05	0.03

Source: Authors' estimates

Table 14 **Zambia - Nominal Rate of Protection (NRP)**

<i>Commodities</i>	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	Most Recent
Oranges	-62.57	-80.02	-67.11	-53.68	-74.07	-77.10	-81.66	-92.16	-93.53	-94.92	-97.27
Cottonseed	-96.14	-96.65	-96.97	-94.28	-97.52	-96.91	-97.39	-98.65	-99.02	-99.46	-99.69
Groundnuts in shell	-85.11	-84.79	-66.08	-58.85	-74.90	-79.30	-83.04	-90.15	-94.05	-96.77	-97.69
Maize	-50.75	-45.12	43.00	-16.84	-50.29	-32.41	-41.85	-76.54	-82.37	-87.43	-92.47
Rice (paddy)	-60.44	-70.65	-39.54	-49.98	-67.58	-64.55	-66.04	-85.59	-87.85	-91.98	-95.39
Sorghum	-49.07	-54.70	41.14	-14.31	-49.93	-32.46	-31.44	-67.55	-75.35	-82.31	-89.25
Tea (dry leaves)	-56.88	-61.13	-20.51	14.07	-45.83	-47.48	-50.65	-79.72	-85.24	-88.02	-91.67
Tobacco leaves	-76.83	-84.85	-71.54	-43.27	-79.00	-58.63	-69.65	-91.92	-92.43	-94.21	-95.99
Sugar Cane	-93.93	-96.46	-93.62	-94.21	-97.38	-97.13	-96.98	-98.82	-99.21	-99.51	-99.69
Soybeans	-46.98	-52.87	-4.86	-20.36	-47.75	-39.22	-51.67	-80.64	-86.91	-90.08	-93.28
Coffee, Green	-78.27	-85.50	-53.08	-41.15	-59.16	-43.27	-53.95	-77.11	-85.25	-94.90	-96.55

Source: Authors' estimates

Table 15 Zimbabwe - Nominal Protection Coefficients (NPC)

<i>Commodities</i>	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	Most Recent
Bananas	1.12	1.22	1.31	1.23	0.92	0.63	0.39	0.42	0.41	0.35	0.06
Cottonseed	0.06	0.11	0.07	0.09	0.08	0.07	0.05	0.10	0.08	0.05	0.03
Groundnuts in shell	0.33	0.51	0.70	0.57	0.37	0.32	0.18	0.29	0.23	0.18	0.14
Maize	0.98	1.22	1.43	0.94	0.85	0.78	0.50	0.96	1.27	1.00	0.87
Rice (paddy)	1.24	1.28	1.68	1.11	0.88	0.91	0.53	1.02	1.35	1.02	0.40
Sorghum	1.06	1.30	1.49	1.02	0.89	0.82	0.47	0.62	0.76	0.60	0.53
Tea (dry leaves)	0.43	0.93	0.66	0.72	0.60	0.46	0.35	0.36	0.29	0.28	0.23
Tobacco leaves	0.63	0.70	0.48	0.82	0.56	0.73	0.65	0.43	0.35	0.63	0.27
Sugar Cane	0.18	0.12	0.12	0.07	0.05	0.10	0.07	0.07	0.05	0.04	0.02
Soybeans	0.87	0.97	1.07	0.71	0.70	0.75	0.46	0.74	0.85	0.76	0.54
Coffee, Green	0.54	0.74	0.91	0.89	1.04	1.14	0.75	0.74	0.40	0.15	0.19

Source: Authors' estimates

Table 16 Zimbabwe - Nominal Rate of Protection (NRP)

<i>Commodities</i>	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	Most Recent
Bananas	12.15	21.77	31.09	23.05	-7.92	-36.89	-61.07	-57.59	-59.31	-64.74	-93.87
Cottonseed	-93.81	-89.00	-92.89	-90.99	-92.11	-92.91	-95.04	-89.92	-92.12	-94.59	-96.67
Groundnuts in shell	-67.14	-48.89	-29.65	-43.32	-63.05	-68.00	-82.01	-70.84	-77.17	-81.82	-85.91
Maize	-2.25	22.45	42.98	-6.11	-15.06	-21.92	-50.22	-3.82	27.11	-0.30	-13.04
Rice (paddy)	23.78	27.94	68.12	11.29	-11.66	-8.99	-47.34	2.01	34.77	2.45	-59.83
Sorghum	6.48	30.01	48.67	1.89	-10.57	-17.86	-52.90	-37.90	-24.26	-40.34	-47.25
Tea (dry leaves)	-57.16	-7.36	-34.45	-28.24	-39.65	-53.91	-64.52	-63.62	-71.42	-72.04	-76.91
Tobacco leaves	-37.39	-29.77	-52.28	-17.93	-44.37	-27.49	-34.53	-57.02	-65.23	-37.17	-72.78
Sugar Cane	-82.32	-87.93	-87.89	-92.67	-94.69	-90.40	-92.98	-92.69	-94.76	-96.43	-98.39
Soybeans	-12.96	-2.59	7.18	-28.77	-30.32	-25.46	-53.72	-26.42	-15.21	-24.26	-46.09
Coffee, Green	-46.15	-25.78	-9.21	-10.89	4.16	13.71	-25.45	-26.10	-59.78	-84.61	-81.27

Source: Authors' estimates