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**IN THE WAKE OF THE
URUGUAY ROUND
WHITHER AID POLICIES?**

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**In the Wake of the Uruguay Round.
Whither Aid Policies?**

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EXECUTIVE SUMMARY

USAID is engaged in a strategy-crafting process to help vulnerable developing countries address impacts of the Uruguay Round GATT agreement on food security. Specifically, the Agency is exploring a range of assistance strategies to address needs for food price stabilization and other complementary policies which improve food security, and more broadly, to help developing countries prepare for the next round of multilateral trade negotiations. This paper contributes to that process.

The Uruguay Round's Agreement on Agriculture brought discipline to world trade in agricultural products for the first time. Developed and developing countries committed themselves to a range of regime reforms, the purpose of which was to reduce distortions in agricultural markets and thus improve the economic efficiency of production and trade.

On closer evaluation, the impact of rules changes brought about by the Round has been slight in terms of their effect on domestic and international agricultural market prices. Definitions of acceptable policy interventions, base periods, tariff ceilings, and new tariff implementation modalities were creatively cast, resulting in an international policy regime committed in theory to reform but bound in reality by a number of continued loop holes.

In fact, the biggest accomplishments in agricultural policy reform have taken place *not* as a result of the Uruguay Round itself, but in response to fiscal and diplomatic pressures, felt in developed and developing countries alike. Mounting budget costs of distortions in developed countries led to a scaling back of the most costly supports. General economic disequilibrium in developing countries led to structural adjustment programs, supported by donor financing. Nevertheless, the Round was politically useful because it harmonized and codified many of these reforms undertaken in individual countries.

In many ways, **reforms in developed countries constitute the most important policy regime changes with respect to developing country food security.** Developed, net food exporting countries are reducing direct support to agriculture, reducing or suspending subsidy of exports, and shifting from a system of production controls (production targets, land set asides,) to one of direct farmer income support. The short-term effect of these policy changes was upward pressure on world prices, witnessed in 1996, as protection was reduced for production of basic commodities and food stocks fell. However, those pressures were temporary. World markets adjusted to these stock reductions, and stocks are in fact being rebuilt as supply responds to the international price peaks. The longer term effect of these reforms will be a reallocation of production resources into more efficient activities, stimulating production – and trade – of agricultural commodities and reducing prices. While the original adjustment may have threatened vulnerable net food importing countries, in the longer term the Round should bring greater, lower priced supplies of basic foodstuffs.

In many developing countries, the reforms introduced under structural adjustment exceeded the scope of commitments made by these countries during the Round. Where implemented, these reform programs have typically led to the conversion of non-tariff import

barriers into tariffs and the replacement of state-run trade and marketing offices with private actors, food markets operate more efficiently today. Where trade and marketing barriers have fallen, the net effect has been positive for consumers, whose prices have come down. The ensuing reallocation of resources to more competitive sectors should also result in increased employment opportunities and higher incomes, with a concomitant increase in domestic food security, although these efforts have yet to materialize in many reforming countries.

The *direct* effect of the Uruguay Round itself on food security in developing countries is less clear. To begin with, least developed countries are exempt from reform commitments. During the Round, many other developing countries negotiated a wide policy berth for themselves, resulting in very little real policy reform in their countries. Officially, the ceiling rates at which border protection is bound post-Uruguay Round in developing countries increased dramatically, although the rates of import taxation actually being implemented are in many cases below these ceilings. Still, in some developing countries, the net effect of these changes has been an increase in agricultural protection over time.

In some instances in both developed and developing countries, agreement to the Agreement on Agriculture was only won at the expense of new distortions, such as tariff-rate quotas. Also, the Round by and large ignored reform of the underlying institutional regime governing agricultural production, marketing, and trade, leaving agricultural trade policy in the hands of state trading organizations. Among other effects, this precludes the adoption of market-based measures for managing food security by private actors.

Thus the Round's outcomes may result in increased food insecurity for least developed countries and net food importing developing countries whose agricultural adjustment programs fall short of what is required to transform their countries' food regimes. Moreover, increased food prices, or world food price variability, may hamper vulnerable countries' ability to afford food purchases during times of drought or civil strife. Reduced availability of food aid may also contribute to increased food insecurity of vulnerable populations during periods of food supply stress.

However, concerns about increases in food prices or price variability miss the point. The literature on trade openness, economic growth, and poverty reduction is now clear that the gains of multilateral trade negotiations are greatest from countries' own economic reforms. Increased openness to world markets promotes economic growth, which in turn raises incomes and helps to alleviate poverty. **The biggest food security threat to the most vulnerable developing countries is thus the persistence of trade barriers and lack of integration with the global economy.**

Thus, developing countries which have implemented real policy reforms – encouraging a shift into more efficient crops and production techniques, accessing world markets to supply some portion of food requirements when more efficiently produced abroad, reducing distortions at the border so that imports and exports will at relatively low cost, allowing private actors to assume a greater proportion of market functions, and encouraging the development of

market-based mechanisms for managing risk - will not suffer adversely from structural adjustment or the Uruguay Round, and should prosper instead

Aid policies will best be directed toward encouraging recalcitrant developing countries to push on with these liberalization efforts and to strengthen incentives to prevent policy backsliding In order to ensure that developing countries maximize their understanding of and returns from these talks, aid organizations should ensure that alternative negotiation positions are prepared in partner developing countries and careful impact assessments undertaken by them in order to empower them to act with authority and conviction and to bring back meaningful benefits for their countries

Beyond economic models, developing countries should pursue a three-pronged negotiation strategy in the next Round of multilateral agricultural trade negotiations *First*, they should push their developed country partners to continue to reform their own agricultural economies in order to stop exporting international price instability, with which the developing countries are ill-equipped to cope *Second*, they should continue to lobby for improved market access in developed countries for their own agricultural and non-agricultural exports *Most importantly*, they should push the next Round to call for continued reductions in agricultural trade barriers in developing countries to use as leverage against backsliding and for continued reform back home

BACKGROUND

An interagency working group of U S Government organizations, comprised primarily of the Departments of State and Agriculture and the U S Agency for International Development, is working on a strategy for stabilizing the food import burden for vulnerable developing countries (U S Interagency Working Group, 1997) This paper will address a number of this group's concerns

In the following section, the commitments made by WTO members to agricultural policy reform are discussed The agricultural policy reforms made to date by developing and OECD countries both prior to and since the UR, as reported in available secondary literature, are then summarized One example, that of Morocco's agricultural market and institutional reforms, is offered in greater detail as indicative of the complexity of the agricultural reform process Other examples are drawn from recent World Bank conferences reviewing post UR experiences in Latin America and South Asia and from trade policy information gleaned from the Internet with regard to sub-Saharan Africa

Following this inventory, policy options for OECD countries to increase food security in vulnerable developing countries are described Finally, agricultural issues being identified for the upcoming round of multilateral trade talks, due to begin in 1999 or 2000, are reviewed, with an eye to a proposed work program for assisting developing countries with the analysis required to bring them through the next round as more equal partners

Accomplishments of the Uruguay Round

In 1994, the world community completed the Uruguay Round (UR) of multilateral trade negotiations in which it committed itself to a new set of trade principles which included, for the first time, trade in agricultural products Independent of these talks, many developing countries were already undergoing programs to reform the underlying policy structures of their productive sectors, including agriculture, with the technical and financial support of bi- and multilateral development aid agencies This paper is written from the optic of four years of experience with implementation of the Agreement on Agriculture, signed as part of the Uruguay Round Agreement (URA), and fifteen years of experience with implementation of structural adjustment programs, in order to review the status of reforms and their effect (actual and anticipated) on food security

The URA's Agreement on Agriculture focuses on increasing access to heretofore protected markets and reducing domestic and export support to producers The exact commitments are explained below

Increasing Market Access

As part of the Agreement's effort to increase market access, all non-tariff barriers were converted into tariff equivalents (a process referred to as "tariffication"), based on the difference between domestic and world prices in 1986-88.¹ Developed countries are obliged to reduce these tariff ceilings by 36 percent over six years, while developing countries (least developed countries excluded) will reduce ceilings by 24 percent over ten years.

In some instances, tariffication has resulted in the consolidation of official ceiling rates at quite high *ad valorem* levels, while actual application rates are much lower. This practice of "dirty tariffication" gives countries significant flexibility with regard to maintaining agricultural protection. Within the ceiling, for example, a country may still employ import price sensitive border protection mechanisms, such as price bands or variable levies (Carson, 1997, Konandreas and Greenfield, 1997).² If a country opted to introduce ceiling bindings on the import of a particular commodity, however, no recourse to special safeguards is allowed.³

In countries for whom conversion from quantitative restriction to *ad valorem* tariff in one step was too drastic a reform, tariffication was made in the form of tariff-rate quotas (TRQs). In this case, market access is regulated via tariff for a fixed quantity of imports, with above-quota amounts subject to prohibitively high duty rates.⁴ In the case of particularly sensitive goods in four countries, quantitative import restrictions were maintained, subject to minimum market access requirements, as part of a special treatment clause.⁵

¹ Because 1986-88 was a period of depressed world prices, tariffication was biased upward, i.e. the difference between domestic and world prices resulted in a higher *ad valorem* tariff equivalent than if trend prices had been used.

² Low (1997) notes that variable import charges, if defined with an objective of domestic food price stability, applied with equal force to upward and downward international price swings, and anchored to international rather than domestic reference prices, may pass WTO scrutiny.

³ Contingency measures, such as safeguards, antidumping clauses, and countervailing duties are allowed for agricultural trade as per earlier GATT rules, when the domestic market is under specific threat from predatory imports. These measures may help to preserve domestic price stability in the face of sudden drops in international food prices.

⁴ Tariff-rate quotas present a number of drawbacks. Their use may introduce quota rents into an economy (under certain circumstances) exacerbate domestic price instability compared with a pure tariff policy and can also introduce instability with respect to the timing of import transactions, as importers play games to juggle their imports in under a quota or delay until the new calendar year or quota period (Abbott and Paarlberg, 1997). Most importantly they introduce a new level of government intervention into the management of agricultural trade exactly the opposite of UR objectives.

⁵ Japan, Korea, and the Philippines, for rice, and Israel, for sheep meat and certain dairy products.

Reduction of Measures of Support

The Agreement also mandates reductions in aggregate measures of support (AMS) resulting from any production and export policies not included in an allowable "green box" category of interventions (i.e. those with minimal impact on trade such as research, disease control, infrastructure, and food security). Developed countries will reduce the total AMS by 20 percent over six years, relative to a reference period (1986-88), while developing countries (again, least developed countries excluded) will reduce by 13 percent over ten years. However, most developing countries reported very low AMS levels to begin with. If the aggregate AMS in developing countries does not exceed 10 percent of the total value of agricultural production, a separate *de minimus* clause permits direct price support.

Direct export subsidies, such as the U.S. Export Enhancement Program, are to be reduced in value by 36 percent and in volume by 21 percent below a 1986-90 reference period over six years. Developing countries again enjoy special treatment, with reductions equivalent to two-thirds of those for developed countries, implemented over a ten-year period. No new export subsidies may be introduced.

Expected Impact of the Uruguay Round on Food Security

Food security could be affected in a country in a number of ways by the UR. It may result in increases in levels of world prices, which would have an odious effect on a country's food import bill. It may result in tighter availability of food surpluses, which (aside from the world price effect) would limit the availability of concessional food aid. And it may affect a country's ability to manage its food security, from an institutional perspective.

World market prices for basic foodstuffs could be affected by UR-induced changes in a number of ways. For example, the reduction in protection to food exporting countries could result in a shift out of production and reduced availability of exports of those protected commodities, putting upward pressure on prices. The introduction of minimum market access thresholds into Japanese and Korean markets for certain foodstuffs could result in increases in the international demand for specific food products, and again raise prices. Reductions in protection in food surplus countries could (and did, in 1995-96) lead to a drawing down of international food stocks, which could (and did) put upward pressure on world prices. Moreover, this tightening of food supply conditions may squeeze the quantities of food available at concessional terms. Such food aid is especially critical to developing countries undergoing episodic, rather than chronic, food insecurity.

Since the conclusion of the UR, most analysts' evaluations have suggested there will be minimal negative impacts for developing countries. Most of the general equilibrium models run since the conclusion of the URA, which incorporated all policy commitments and included policy feedback effects in both developed and developing countries, suggest world price increases on the order of 3 to 10 percent for grains and oils (Sharma, Konandreas, and Greenfield, 1997) due directly to UR reforms. This must be evaluated in the context of

expected continued declines in real world prices as projected by the U S Department of Agriculture (1997) Valdes (1997) cautions that the impact of the UR Agreement will be felt differently in individual countries, depending on whether a country is a net exporter or importer of agricultural products, and which products are involved

Slightly higher expected international agricultural prices may be beneficial to developing country exporters of these commodities However, net importing developing countries, particularly those whose overall import bill is dominated by food expenses, will end up paying more for their food imports than they otherwise would have paid

International food price instability may also increase, at least in the short run, as governments in developed countries reduce their domestic support to agriculture and allow their stocks to be drawn down Unpredictable instability of prices is an additional complication requiring forward planning or hedging, which may be difficult for state trading organizations or inexperienced private traders to handle The effect of the stock drawdown on prices may already have been felt In 1996, for example, wheat prices rose by nearly 40 percent compared with averages from 1990-95, while maize prices rose by 50 percent These spikes were the result of grain stock declines to 14 percent of world cereal consumption, less than the 20 percent deemed by FAO at the time to be necessary to maintain world grain market stability Since then, stocks have stabilized between 15 and 16 percent of world grain consumption, and world prices have calmed back down

In response to these risks, the URA's "Decision on Measures Concerning the Possible Negative Effects of the Reform Programme on Least-Developed and Net Food Importing Developing Countries" (referred to hereafter in this paper as "vulnerable countries"⁶) states that the most vulnerable countries "*may experience* (italics added) negative effects in terms of the availability of adequate supplies of basic foodstuffs from external sources on reasonable terms and conditions, including short-term difficulties in financing normal levels of commercial imports of basic imports " The Decision committed the WTO to a number of actions Specifically, the WTO's Committee on Agriculture and the broader Ministerial Conference (the supervisory body of the WTO) will

- review periodically the level of food aid and initiate negotiations to ensure commitments of sufficient levels of aid during the reform program,
- adopt guidelines to ensure that an increasing proportion of basic foodstuffs is provided to the most vulnerable countries in fully grant form and/or on appropriate concessional terms,
- give full consideration to requests for financial and technical assistance in the area of improving agricultural productivity and infrastructure, and

⁶ According to the WTO Committee on Agriculture, this includes the least developed countries as recognized by the Economic and Social Council of the United Nations plus Barbados Botswana, Cote d'Ivoire, Dominican Republic Egypt, Honduras Jamaica, Kenya Mauritius, Morocco, Pakistan, Peru, Saint Lucia Senegal, Sri Lanka, Trinidad and Tobago Tunisia and Venezuela World Trade Organization, G/AG/5/Rev 2 March 17 1997

- grant differential treatment in favor of said countries with regard to the availability of agricultural export credits and international financial institution resources for short-term difficulties in financing normal levels of commercial imports

The Decision's reinforcement of the idea that developing countries are different and deserve special treatment with respect to liberalization expectations and roles in the international market perpetuates the notion that such special treatment will lead to improved economic outcomes, which has not been borne out in the past. Moreover, some of these actions, such as the commitment to increase the provision of concessional food grants, may not enhance food security and may in fact further jeopardize a local economy's ability to provide all consumers with affordable access to food. Nevertheless, these commitments were reiterated at the Rome World Food Conference in 1995 and again at the WTO Singapore Ministerial conference in 1996. At the latter, the WTO Committee on Agriculture proposed, and the Ministerial Declaration endorsed, the development of food aid commitment recommendations, at levels sufficient to meet the legitimate needs of developing countries during the period of agriculture reform (through 2004).

There is concern that the UR will bring negative consequences to certain regions, especially to sub-Saharan Africa (SSA) (Harrold, 1995, Martin and Winters, 1996). Purdue University's Global Trade Analysis Project (GTAP) finds that two important aspects of the UR, i.e. erosion of Lomé Convention market access privileges in Europe and elimination of textile and apparel export restraints on Africa's competitors, result in small but negative impacts on economic welfare in Africa (about one-tenth of one percent of real income) (Hertel, Masters, and Elbehri, 1998). Both Martin and Winters and Hertel et al. agree that far greater costs derive from the fact that Africa liberalized less than other regions of the world, than from specific actions undertaken outside of Africa. Interestingly however, GTAP foresees a strong rise in export orientation of Africa's non-grain crops sector, due to rising comparative advantage of African nontraditional crops stemming from its relatively cheaper labor supply and land costs in the face of increasing growth in Asia, which more than compensates for any anticipated increase in the basic food import bill.

Experiences with Agricultural Policy Reform

Developing Countries

Experiences Prior to the Uruguay Round

The World Bank examined the effects of trade, exchange rate, and pricing policies on agricultural incentives in eighteen developing countries prior to the period of structural adjustment and prior to the Uruguay Round.⁷ In general, the study found that agricultural

⁷ The countries examined were Argentina, Brazil, Chile, Colombia, Côte d'Ivoire, Dominican Republic, Egypt, Ghana, Republic of Korea, Malaysia, Morocco, Pakistan, Philippines, Portugal, Sri Lanka, Thailand, Turkey and Zambia. See Krueger, Valdes, and Schiff, 1988.

production was taxed in most countries, on the order of -30% relative to international reference prices. This is in strong contrast to its special protected position in most developed countries.

Interestingly, the policy of indirect protection, i.e. the cumulative effect of protection in the industrial sector and the linked effect this has on the equilibrium exchange rate, as well as other foreign exchange regime distortions contributing to overvaluation of the local currency, taxed agriculture nearly three times as heavily (-22%) as did direct policy interventions (-8%) (Schiff and Valdés, 1992, p. 15). That pattern of taxation was not consistent across commodities. Exportables were taxed much more heavily (-35%) than importables (-9%) or staples (-16.5%). From the perspective of direct taxation only, importables were in fact *protected* (14%) compared with taxation (-13%) of exportables (Schiff and Valdés, 1992, p. 19).

Intervention in agricultural markets was often justified by developing country policy makers as necessary in order to stabilize prices to farmers,⁸ and evidence of successful price stabilization was found by the study. Most surprisingly, contrary to the common wisdom that agriculture is taxed in order to keep food prices low for urban consumers, it was found that consumer food prices were commonly taxed relative to border prices.

Experiences in North Africa: Morocco

These patterns are fairly typical of the experiences of Morocco, one of the eighteen countries profiled by Krueger, Valdés, and Schiff. Since the 1960s, Morocco's dualistic agricultural sector has been managed by a complex of state marketing, trading, and processing organizations (Swearingen, 1987; Tuluy and Salinger, 1989). Dryland and irrigated production of subsistence grains and sugar crops for import substitution exists alongside mostly irrigated horticulture for export. The net effect of trade and pricing policies in the subsistence grains sector in the early 1980s was taxation relative to border prices (nominal protection of -11 to -13% for bread and durum wheat, and -18% for barley), while sugar crops were protected (nominal protection of 27% for beet and 31% for cane). Overvaluation of the domestic currency (dirham) increased nominal taxation by a further 10%. On the other hand, flush with revenues from phosphates exports during the commodity booms of the 1970s, consumers of bread wheat flour were substantially protected, paying 40% below reference prices for the staple consumption item.

By the early 1980s, however, the world commodity booms of the 1970s had faded, public finances were pinched, and expenditure reforms were necessary. Efforts to reduce

⁸ Most developing countries lack the market based risk-diffusion mechanisms needed to allow agricultural producers themselves adapt to highly volatile world prices. Futures markets are non-existent in most developing countries, and the combination of capital controls and lack of experience still precludes the use of foreign futures by domestic actors in many developing countries.

consumer prices for bread, sugar, and vegetable oils were met with intense popular resistance, threatening political stability, and were quickly abandoned

In 1984, the Government of Morocco embarked on a long series of agricultural policy analyses (Government of Morocco, 1986, 1990) as part of a comprehensive agricultural sector reform program, which was supported by a series of World Bank-led lending in the areas of agricultural sector adjustment and investment, public enterprise reform, private sector strengthening, agro-industrial development, and rural development. As described in internal World Bank documents ten years later, in-depth sectoral analyses increased comprehension of the adjustment process within the Government and improved its sense of ownership of the operations. The prices and incentives studies undertaken by the Government of Morocco identified a range of policy constraints impeding efficient sector operation. These included fixing of producer, consumer, and input prices, and marketing, storage, processing, and trading margins, as well as the direct regulation of international trade in foodstuffs. Reform of these constraints set the agenda for the agricultural sector adjustment program.

However, domestic political economy issues began to complicate the reform process just as understanding of it deepened. For example, intra-governmental disputes over access to resources brought in by the adjustment process thwarted policy making consensus. As various stakeholder groups outside of the government became more familiar with the implications of the adjustment program for their particular interests, their lobbying efforts further held up the process of reform.

At the same time, Moroccan agricultural policy makers took on significant roles during the Uruguay Round, lobbying on behalf of special treatment for developing countries. As the Round dragged on, momentum for reform was waning, both internationally and within Morocco. Moreover, Morocco won agreement from its donors that the results of the GATT UR negotiations would take precedence over any reform commitments negotiated directly between Morocco and its aid partners. This won considerable policy maneuver room for Morocco, as the Marrakesh Agreement was considerably less stringent in its reform expectations of developing countries.

By 1994 Morocco's agricultural reform program had stalled in several significant ways (Wilcock and Salinger, 1994). Since the Uruguay Round, the Government still controls cereals imports management and downstream marketing to flour mills, and manages border prices. Private traders are allowed to effect imports, but subject to quantities and qualities determined by the state grain trading company. There are no formal mechanisms for operating on forward international markets for commodities or foreign exchange. The government view seems to be that the market cannot be relied on to import grain in quantities sufficient to maintain market stability.

In contrast with earlier findings of nominal taxation of grains, Morocco has raised domestic prices in the face of downward world price trends to the point where its cereals producers are substantially protected relative to world prices. Tyner and Arndt (1996) reported that the nominal protection of bread wheat was 23 percent in 1996, relative to a CIF price in

1996 of \$230 per ton. Compared with an import price closer to trend of \$165 per ton CIF, Morocco's nominal protection on bread wheat would actually be closer to 70 percent. This compares with the ceiling rate submitted to the WTO for bread wheat of 190 percent (Wilcock and Salinger, 1994, p. 23). Thus, if by the year 2005 Morocco reduces its protection on bread wheat imports by 24 percent, it will still enjoy maximum protection of 144 percent.⁹ With respect to consumer prices, although domestic consumers are told that their wheat flour costs are subsidized, this is in a financial sense only, relative to the domestic financial cost of wheat, based on the subsidized price. When compared with economic reference (world) prices, consumers are taxed by almost 20 percent, compared with a trend world price for 1996.

Morocco is a somewhat unique example of developing country experience with the UR, given its early involvement with agricultural sector reform and its active participation in the Round. It also benefited from ten years of agricultural policy analysis support from the World Bank and the U.S. Agency for International Development (albeit not financed under the Agricultural Policy Analysis Project). This contributed to its ability to "manage" the process of analysis and reform toward an outcome protective of its agricultural sector. However, Morocco's experience is typical of those in other developing countries in the sense that structural adjustment pressures had already created a pro-reform environment in many developing countries, leading to a good deal of trade and currency regime liberalization taking place outside of the context of UR commitments.

Experiences in South Asia

In South Asia for example, exchange rates had been significantly devalued from the mid-1980s to the mid-1990s (IATRC, 1997). Trade liberalization reform under the Uruguay Round was also quite substantial in Bangladesh, Pakistan, and Sri Lanka, while Nepal (still not a member of the WTO) had always maintained a fairly open regime.¹⁰ India's agricultural economy, however, remains quite controlled. For example, import licenses and outright bans still exist in India, while they are virtually non-existent elsewhere in the region. Moreover, about 55 percent of India's value of agricultural and livestock production remain under control of state trading enterprises (STEs), which retain license to set domestic prices well in excess of border prices. STEs also exist in a number of other South Asian countries, although to a far lesser degree. Pakistan still maintains export licensing via STEs for a number of agricultural commodities.

With regard to tariffication, although quite a number of quantitative restrictions were retained by South Asian countries under a balance of payments exemption, most countries in South Asia converted quantitative restrictions by presenting the WTO with tariff ceilings. With

⁹ Other countries have done similarly. Bangladesh, for example, set a uniform ceiling rate on agricultural imports of 200 percent, yet it currently applies a 7.5 percent customs duty on imports of rice and a 15 percent duty on imports of other grains (Chowdhury, Rahman, and Zohir, 1996). As a least developed country, however, Bangladesh is exempt from commitments on tariff or aggregate measures of support reductions.

¹⁰ Individual country reports are available in Blarel (1997).

the exception of Sri Lanka, which bound agricultural import tariffs at a maximum of 50 percent, the other three South Asian members of the WTO chose extremely high ceilings of 100 percent or higher (Pakistan 100%, India at 100% or 150%, Bangladesh 200%) Actual rates of import duty are much lower Also, in India tariff escalation is quite high according to the degree of processing Of future concern is the fact that protection for manufactured goods is not bound in most countries Should protection levels for manufacturing rise again, South Asian countries' agricultural sectors risk indirect deprotection as a consequence Another concern is that India still uses a fair number of contingent clauses (antidumping, local content requirement,) to regulate trade, which are inherently protectionist

South Asian countries by and large did not submit AMS declarations to the WTO, either because the levels were negative to begin with (India, Pakistan), the level was below the *de minimus* cut-off (Sri Lanka), or because as a least developed country the country was exempt from reduction commitments (Bangladesh)¹¹

Experiences in Latin America

Many Latin American countries also underwent significant reform independent of the UR (IATRC, 1997) Quantitative restrictions were converted into tariff equivalents, and reduced Many export taxes, quotas, and licenses had already been removed, and many state trading enterprises controlling agricultural imports had already been eliminated Indirect taxation of agriculture via protection on the industrial sector and overvalued local currencies was a concern for agricultural producers and exporters, however

Many Latin American participated actively in the UR as part of the Cairns Group, including Argentina, Brazil, Chile, Colombia, and Uruguay¹² These countries understand the trade-offs involved between introducing agricultural reforms domestically and achieving reforms in OECD countries for their export markets Consequently, seventeen major Latin American countries bound 100 percent of their agricultural imports, in many instances at ceilings which were lower than the actual tariff rates in effect at the time, thus imposing considerable discipline on their actors Argentina, Chile, the Dominican Republic, and Paraguay bound their tariffs at below 40 percent, Brazil and Uruguay bound at about 55 percent, and only Colombia stands out for having bound in excess of 100 percent (actually 125% or higher)

In seven out of seventeen countries, quantitative restrictions were tariffed However, this led to the creation of about 200 tariff-rate quotas Even in these seven countries, less than 20 percent of their agricultural imports were actually tariffed, with the rest covered by ceiling bindings With regard to AMS reduction, only five countries (Brazil, Colombia, Costa Rica, Mexico, Venezuela) reported any pre-existing AMS levels, and of these only Venezuela (AMS

¹¹ See Annex A for a complete list of least developed and net food importing countries

¹² Individual country assessments are available in Cordeu Valdes and Silva (1997)

equivalent to 36.3% of agricultural GDP) is of any note, requiring an important reduction commitment. As for export subsidies, five countries declared such policies and submitted reduction commitments of 25 percent reduction commitments (Brazil, sugar, fruits, vegetables, Colombia, rice, cotton, fruits, Mexico, sugar, Venezuela, rice, coarse grains, and Uruguay, rice, butter).

Concerns to be discussed in future reform talks include use of various contingent measures against imports by Latin American countries including technical barriers to trade, sanitary and phytosanitary measures, antidumping and countervailing duties, minimum customs values, fluctuating tariffs as part of price band schemes, which are particularly popular in Latin America. For their part, Latin American countries are concerned about the non-transparent nature of tariff-rate quota administration in OECD countries, which affect their export quotas to these markets. They are also concerned about the increasing recourse by OECD countries to antidumping measures against Latin American and Caribbean exports.

Experiences in Sub-Saharan Africa

By all accounts, Sub-Saharan Africa only participated in a limited fashion in the UR. This is not surprising, given that in 1992 its exports only accounted for 1 percent of world trade (Barry and Belchika, 1996). To a large extent, the era of structural adjustment had already brought significant trade liberalization progress to Sub-Saharan Africa countries. Most countries have reduced both the number of tariff positions and the levels of import duties, eliminated import licenses, converted quantitative restrictions into *ad valorem* equivalents, reduced the number of export controls, eliminated or reduced the value of export taxes, and liberalized their foreign exchange regimes to facilitate access by traders to foreign exchange at market-determined rates.¹³

However, trade liberalization in SSA is still far from effective. Frequently, a combination of import duties, taxes, surcharges, stamp fees, and general import fees are assessed on the CIF value of imports, leading to quite high cumulative rates. Wang and Winters (1997) estimate that tariffs average 26 percent in SSA compared with 17 percent in other developing countries, total charges on imports average 33 percent compared with 26 percent, and non-tariff barriers coverage ratios average 34 percent compared with 18 percent. Some countries (especially Nigeria) still have foreign exchange controls and manipulate the official rates at which duties must be paid. Pre-shipment inspection requirements may be complex. Even if import licenses have been revoked, import "certificates" may still exist, especially for more sensitive goods. In the face of high rates of import taxation, exporters who manufacture partly on the basis of imported raw or intermediate goods are penalized by the frequent lack of duty drawback or rebate schemes, bonded warehouses, or export processing zones. Export controls, especially on the most sensitive goods, often still exist.

¹³ Information on SSA countries' trade regulations and standards taken from www.tradeport.org/ts/countries/index.html, an international trade/defense conversion initiative website sponsored by BAYTRADE and LA Trade with support from the U.S. Department of Commerce.

Most SSA countries have joined the WTO Membership obliges policy makers to ensure that domestic trade policies are reviewed in the context of multilateral commitments, even if, as least developed countries, most SSA countries are exempt from them. However, the general consensus is that increased integration of SSA with the world economy will help to promote economic growth and thus help to reduce poverty (*inter alia*, Stryker and Pandolfi, 1996). Thus, SSA policy makers need to pay attention to the issues which will preoccupy negotiators during the next round of multilateral agricultural trade talks. Wang and Winters (1997) argue that it is in the interest of principal SSA suppliers of food and agricultural commodities to the European Union (which takes over half of SSA's exports) to negotiate in regional blocs.

Developed Countries

Prior to the UR, developed countries employed a complex regime of production quotas, resource allocation requirements, price supports, import restrictions, and export subsidies to maintain high levels of protection to producers of a broad range of commodities.

Producer subsidy equivalents (PSE) were over 40 percent, on average, for OECD countries, see the table below. Since their peak in the late 1980s, levels of protection have gradually been declining, a phenomenon due more to sharp increases in world prices than actual reductions in support. There is significant variation among OECD countries. One group (Australia, Canada, New Zealand, United States) has cut its support to agriculture significantly, or has modified its support in the form of direct income support. Another group (European Union, Japan, Norway, Switzerland) continue to maintain support levels well in excess of OECD averages. A newer group of member countries (Czech Republic, Hungary, Mexico, Poland, Turkey), not shown here, are middle income countries whose economies have been in flux and whose PSEs are thus more difficult to evaluate. For those European countries seeking to join the European Union, agricultural sector reforms are being undertaken to make their programs more compatible with those of the Common Agricultural Policy.

Average Producer Subsidy Equivalents (%)					
OECD sample	1979-86	1986-88	1989-92	1993-95	1996e
Australia	12	10	12	10	9
Canada	34	42	45	26	22
EU	37	48	46	49	43
Japan	66	73	69	75	71
New Zealand	25	18	4	3	3
Norway	71	74	75	74	71
Switzerland	68	79	76	81	78
US	27	30	27	18	16
OECD	37	45	43	41	36
Sources: OECD (1993, 1997)					
Notes: EU-12 for 1986-94, EU 15 from 1995. Includes GDR post 1990					
e estimate					

While maintaining liberal language, developed countries have been creative in their definitions of "padded" tariff schedules and the choice of reference or base periods (1986-88) when agricultural support was at its peak thus mitigating the need for reductions of support below that which has already taken place (Josling, 1997) Also, the European Community and the United States agreed to categorize cereals policies in a special "blue box" category, with less stringent requirements than subsidies allowable in the WTO "green box," thus obviating the pressure for reform in this highly sensitive sector In addition, least developing countries monopolize the bad reputation for having set tariff bindings at unrealistically high levels, one must consider some of the ceilings which will be in effect in 2000 in certain OECD countries and accept that tariff reduction for improved market access still has far to go in these countries as well

- EU dairy (178 percent), sugar (152 percent)
- US dairy (93 percent), sugar (91 percent)
- Japan dairy (326 percent), wheat (152 percent)

The net results of these maneuvers, for major OECD agricultural producers/exporters, is summarized here from Josling (1997, 1998)

- United States The UR has had a modest impact on U S agricultural policy to date Minimum access to U S import markets is guaranteed for sugar, beef, and dairy products via the replacement of Section 22 of the Agricultural Adjustment Act with TRQs However, actual quantities imported may not change substantially and for FY95 were in fact below quota for all beef and dairy categories Only raw cane sugar imports exceed the TRQ that year U S export subsidies had already fallen since 1986-87, prior to the conclusion of the Round, obviating the need for further reductions to meet UR commitments However, further reductions in Export Enhancement Program quantities of wheat and vegetable oil will likely be necessary, as world prices fall below their 1995 peaks No impact of the UR is expected on domestic support levels Since the passage of the 1996 Farm Bill, and its decoupling of production support payments by converting into direct income support to farmers, most U S programs now fit firmly in the green box of acceptable support measures
- Canada The UR has had a profound impact on agricultural policy in Canada, especially in the dairy and poultry sectors Import barriers are tariffed and bound with TRQs at prohibitively high levels Export transportation subsidies have been eliminated
- European Union Although Europe's Common Agricultural Policy underwent substantial reform in 1992, further reforms were required to make agreement to the UR possible An eleventh-hour concession made to the EU allows variations on the cereals variable import levy and horticulture products import reference prices themes to remain in place The importation of other sensitive commodities is regulated by TRQs with prohibitive above-quota rates With its farmer compensation scheme now categorized in a "blue box," aggregate support and export subsidy levels are now well below UR limits The volume of EU export subsidies has increased, however, since the start of

the UR, and thus constraints are likely to become binding for wheat, sugar, beef, cheese, and butter

- Japan Minimum domestic market access requirements were negotiated for rice (4 percent, moving to 8 percent), though these are not likely to have a major impact on domestic prices, as distribution and mark-ups are still largely controlled. Wheat, barley, dairy products, and pork imports are now subject to tariffs, citrus and beef imports were already tariffed in 1991. Aggregate support will have to be reduced, but Japan, too, will likely convert its support to green box policies. Export subsidies have never been a major policy intervention for Japan.

From the perspective of developing countries, the elimination of certain non-tariff barriers and their conversion into TRQs or tariffs and the reduction in existing tariffs have resulted in significant increases in export opportunities from developing countries. For example, Brazil has witnessed average tariff reductions in the U.S. of 53 percent and in the European Union of 32 percent, as a consequence of the UR (Brandão, Lopes, Pereira, 1997). Using the UNCTAD Trade Policy Simulation Model, it is estimated that these will result in expansion of exports by 4 percent to the U.S. and 5.4 percent to the EU.

Comparison of Developing and Developed Country Experiences

Overall, 81 percent of developing country imports were bound under the Uruguay Round process, compared with 31 percent of imports prior to the Round (Finger and Winters, 1998).¹⁴ Developing countries chose to bind 29 percent of their imports at rates below the rates actually being applied, for an 8.3 percent tariff reduction on those imports, or a 2.3 percent reduction across all imports. Applied tariff rates in developing countries average 13.3 percent, compared with bound rates of 25.2 percent.

In comparison, 89 percent of developed country imports were bound after the Round, compared with 80 percent prior. Developed countries bound 30 percent of their imports at rates below actual levels, for a 3.2 percent tariff reduction on those imports, or a 1.0 percent reduction across all imports. Applied tariff rates in developed countries average 2.6 percent, compared with bound rates of 3.7 percent.

The general prognosis made by international economists several years after the UR signing is that the WTO now offers a system of rules regarding international trade that at least in theory provides a level playing field for all member countries (Finger and Winters, 1998).

¹⁴ The analysis looks at data submitted by all industrial and transition economies as well as by twenty-six of ninety-four developing countries to the WTO Integrated Data Base. Of the latter, coverage includes middle income countries (Tunisia, Turkey), South Asia (India, Sri Lanka), East Asia (Indonesia, Korea, Macao, Malaysia, Philippines, Thailand), Eastern Europe (Czech and Slovak Customs Union, Hungary, Poland, Romania), Latin America (Argentina, Brazil, Chile, Colombia, El Salvador, Jamaica, Mexico, Peru, Uruguay, Venezuela) and sub-Saharan Africa (Senegal, Zimbabwe).

This system of rules helps governments in their trade liberalization efforts in the face of potential policy backsliding propelled by pro-protectionist lobbies

The general prognosis offered by one sub-Saharan African observer (Hirsch, 1998) is that the WTO needs to address the lack of world consensus around the issue of whether governments have any role to play in promoting development besides that of protecting the market from interventions. From the developing countries' point of view, as noted by Hirsch in his review of the opinions expressed at the recent UNCTAD IV meeting in South Africa and Kuala Lumpur conference on "The World Trade Organization Perspectives from the South," the system of rules and procedures into which developing countries have bought has dramatically increased the reporting requirements of technical ministry staffs whose human capital resources are often quite thin. Also, developing countries have concerns about the backloading of reform timetables, particularly with respect to the Agreements on Agriculture and Textiles and Clothing. Finally, developing countries are calling for increased assistance to analyze the gains, losses, and distribution effects of the UR on individual countries.

Monitoring and Improving Food Security

Recent work by U S government and international working groups have presented definitions of food insecurity and vulnerability.¹⁵ The U S Government is committed to the World Food Summit goal of reducing the number of chronically undernourished people in the world by half, from its current level of approximately 840 million people. In order to accomplish this, a separate study is underway at AIRD (Stryker, 1998),¹⁶ the objectives of which are

- to review the evidence that exists regarding past trends in and future projections of production, consumption, and trade of the world's food by major region,¹⁷
- to analyze the realism of key assumptions that underlie these different projections,
- to examine the evidence that exists regarding the incidence of under-nutrition in relation to region (or country), per capita household income, rural/urban milieu, etc ,
- to investigate the role that policy, public expenditure, and investment choices play at the national and international levels in the production, marketing, distribution, and consumption of food, with special attention to the under-nourished, and

¹⁵ See USIWG 1997, and the FAO Committee on World Food Security, www.fao.org/UNFAO/Bodies/cfs/cfs24/default.htm

¹⁶ These scenarios will be presented for feedback to government agencies next month. A report will then be prepared presenting various policy options and their budgetary implications. This report will serve as the basis for further presentations to concerned national security and foreign policy agencies.

¹⁷ The analysis will in large part be based on a number of sets of food gap projections undertaken by USDA/ERS (2005), FAO (2010) and IFPRI (2020). In addition, USDA/ERS/MTE/TAB and the University of Minnesota have elaborated a model which allows comparisons of alternative strategies for meeting the Rome target region by region.

- to elaborate a series of scenarios that capture the principal underlying assumptions and policy and investment choices facing the international community, in general, and the U S Government, in particular

The effect of a number of policy alternatives and their direct and indirect effects on reducing hunger will be simulated. These include policies which may affect the domestic price of food (policies affecting international food supply and demand, and trade policies which intervene between the border price and domestic), entitlements or incomes (food aid and other transfer programs),¹⁸ the distribution of those entitlements by class, region, and at an intra-household level (consumer food subsidies, etc), and social variables such as rates of female education, access to safe drinking water, etc

Assisting Developing Countries with Expected Trade Reform Agenda for 1999

A new round of multilateral trade negotiations is due to begin shortly. The UR, although it began the process of trade reform with respect to agricultural products, has left many aspects unfinished and, in the process, has inadvertently created some new barriers to liberal trade. Momentum is therefore building for a new round of trade talks to address these issues. Numerous suggestions are now being made for the issues to be included in the next round's agenda (IATRC, 1997, Hanrahan, 1998, Josling, 1998). Although the list of possible agenda items is much longer (Schott, 1996), the following are of interest in the context of agricultural trade

- *Market access and levels of agricultural protection* Tariffication has resulted in exceedingly high levels of protection in some instances, even where countries are actually protecting at levels below tariff ceilings. The average level of agricultural tariff protection is about 40 percent, before considering the protection effect of remaining specific duties and remaining non-tariff barriers. This well exceeds the average level of manufacturing tariff protection, which is between 5 and 10 percent. Progress in reducing tariff ceilings will be sought
- *Tariff-rate quotas* These were introduced as a definitely-not-first-best policy reform option in difficult-to-pry-loose situations of extreme protection. In the meantime, their existence has led to the creation of a new system of rent seeking around access to quotas. Potential exporters under TRQs complain that the rules governing access to them, in the United States for example, are not transparent. One way to address these concerns is to expand gradually the quota quantities to the point where they do not become binding. The minimum access conditions for entry into restricted East Asian markets also need revisiting
- *State trading enterprises* STEs can introduce market distortions due to their monopoly control of certain markets. Moreover, administration of TRQs and the ensuing rent-seeking activities has resulted in deep entrenchment of STEs, which in turn constrains

¹⁸ Amartya Sen was one of the first to speak of poverty and famine hunger in terms of entitlements or market-conditioned access to goods via assets and income. See *inter alia* Sen (1981)

the private sector's role in this area. Many countries are reforming operational rules for their STEs which would make them more responsive to market incentives. Rules governing such reforms might be introduced under a new WTO round. Developing countries have an interest in such reforms to the extent that their own private sectors are constrained from operating efficiently in domestic food markets, and that national food security is thereby compromised.

- *Domestic measures of support* While the U S has already substantially reformed its system of agricultural sector support, away from production-distorting measures and toward direct income support, the European Union has not made equivalent CAP reform progress. Blue box policies need to be revisited. This issue is of little concern to developing countries, most of whom have not notified the WTO of significant AMS levels.
- *Application of safeguards* Although demonstration of injury to domestic producers is required before a country may introduce the use of special safeguard measures with respect to imports of manufactured goods, the same is not true for agriculture. Increased formalization of application rules is required to enhance the transparency of the trigger mechanism. Strengthening the transparency of rules applications improves the efficiency of market operations for all players.
- *Biotechnology product guidelines* The U S may be interested in guidelines for regulating trade of biotechnology products or genetically engineered/modified products, which are becoming an important new product area for U S businesses. As witnessed in the beef growth hormone dispute with the EU, import restrictions or outright bans, particularly in light of the mad cow disease scare in the U K could threaten international markets for these products. The U S may wish to push for adaptation of the use scientific protocols before justifying trade restrictions.
- *Export subsidies* Export subsidies, although subject to reduction, are still a legitimate trade tool. Loopholes abound, allow Canadian and European milk and milk products, for example, to be sold below cost to exporters or processors in ways that circumvent the export subsidy reduction commitments. Also, the availability of export credit and credit guarantees, if offered at terms more generous than prevailing market rates, is a form of export subsidy which has heretofore escaped reduction pressures. Rules on export subsidies therefore need tightening. Food producers in developing countries should expect to benefit from the ensuing strengthening of world food prices.
- *Food aid to developing countries* As a quid pro quo for continued trade liberalization and in light of declining food stocks and levels of monetary development assistance, developing countries are insisting *inter alia* on a new food aid convention that will establish new minimum food aid commitments by donor countries.¹⁹ Agricultural interests in developed countries support this agenda as a not terribly disguised, but WTO-compatible, way to increase protection, since such an amassing of increased food stocks to supply in-kind food aid is WTO-legal. Developing countries would do better to emphasize agricultural policy liberalization in their own countries, and avoid food aid, which can have distorting effects on local markets.

¹⁹ An International Food Aid Convention is due to be renegotiated prior to the next round.

More broadly

- *Environmental and labor standards* Developed countries have been pushing for environmental and labor standards as a part of the international trade regime. Developing countries are understandably concerned that this reflects disguised protection.
- *Other special assistance to developing countries* Developing countries have lobbied hard for special trade-related technical assistance to help them comply more readily with administrative requirements of existing WTO agreements, understand the implications of upcoming round negotiations on their economic welfare, and prepare for future negotiations as equal-strength partners. Some effort is being made in this area.²⁰

Of these potential agenda items, the areas of improved market access, enhanced transparency of tariff-rate quota mechanisms, and enhanced transparency of the rules governing application of safeguard mechanisms would best serve developing countries' interests in more efficient and stable international commodity markets. *Less emphasis*, rather than more, on food aid would better serve developing countries' desires to guarantee food security. Developing countries have a clear interest in the outcome of the discussion on environmental and labor standards and should use it as a chip in prying developed country markets open further. Finally, developing countries are eager for increased exposure to the international trading environment and training in tools which will help them interpret its impact on them.

In order to assess the current and potential impacts of actual and potential UR policy positions, economists in ministries of trade and agriculture need a range of policy analysis tools.²¹ The simplest are partial equilibrium models of profitability, protection, and comparative advantage which allow analysts to test the effect of, say, a reduction in input and product tariffs on effective protection and the competitiveness of production, relative to international prices, of a certain commodity. Commodity supply and demand models dynamize the analysis, by integrating supply and demand elasticities. This allows the analyst to project shifts in production and consumption, and net demand, i.e. net imports. An agricultural sector or multimarket model allows the analyst to incorporate resource shifts among commodities, while a general equilibrium model integrates the analysis across sectors, allowing a focus on labor markets and relative wage rates at a microeconomic level or trade and other macroeconomic balances at a broader level. Each successive level of modeling complexity requires additional, more exacting data which may not be readily available within the country. However, increasingly sophisticated modeling work is being undertaken elsewhere, and technical assistance may allow an international trade negotiations and modeling unit to simulate

²⁰ See the website of the Trade & Development Centre of the World Bank/WTO www.itd.org. It disseminates information on trade-related technical assistance and training opportunities, offers electronic fora for the exchange of ideas on trade-related issues, highlights trade status and reforms in regions of the world, and offers trade-specific links and case studies to understand trade reforms being undertaken by developing countries.

²¹ A good survey book of these is found in Sadoulet and de Janvry, 1995.

appropriately, using parameters borrowed from countries with similar demographics and levels of development

Beyond economic models, developing countries should pursue a three-pronged negotiation strategy in the next Round of multilateral agricultural trade negotiations

- *First, they should push developed countries to continue reform of their own agricultural economies in order to stop exporting international price instability, with which the developing countries are ill-equipped to cope* Commitment to agricultural policy reform in developed countries is easy when international prices are high and demand is strong. However, when prices begin to sag, and demand chokes due to financial/debt crises in various parts of the world, domestic political instincts reassert their protectionist roots. For instance, a policy of intervention in food markets of a net exporting nation under the guise of building a food reserve to service international food aid needs re-opens the door to active market intervention, stockpiling, thus contributing pressure to release stocks on the international market at depressed prices. Such policy backsliding would again export instability to world markets, making food security planning more difficult once again for net importing countries.
- *Developing countries should continue to lobby for improved market access in developed countries for their own agricultural and non-agricultural exports* If it is clear that increased openness and integration with world markets ultimately promotes higher growth, higher incomes, and increased food security for vulnerable developing countries, an obvious *quid pro quo* on which they should insist is that developed countries put their money where their economic philosophies are and open their own markets to increased imports of commodities, high value food stuffs, manufactures, and services. For example, developing country textile and clothing exporters are rather nervous about the severe backloading of the quota liberalization calendar under the Agreement on Textiles and Clothing, by which 49 percent of all quotas will only be eliminated at the conclusion of the ATC ten years after its signing in 1994, and the possibility of disloyal implementation of the Agreement. Until explicit evidence is seen of developed countries' good faith in this area, it may be hard to generate support from developing countries for continued, one-sided reforms.
- *Most importantly, developing countries should push the next Round to call for continued reductions in agricultural trade barriers to use as leverage against policy backsliding and for continued reform back home* As signatories to the WTO, 132 member countries have committed to successive rounds of multilateral trade negotiations. In calling for substantial tariff reductions beyond those achieved in the UR, trade negotiators can return home and use this as a tool to pry loose further reforms in-country. Moreover, when domestic lobbies lobby for increased protection from domestic policy makers, pro-reform elements will have coverage from these international commitments. This politico-diplomatic aspect of the WTO and its agreements is perhaps one of its best features for guaranteeing long-term, progressive implementation of trade liberalization.

CONCLUSION

The Uruguay Round was not in and of itself responsible for the vast changes in domestic and international agricultural policy reform witnessed over the last ten to fifteen years. Rather, it served as a backdrop for a panoply of reform activities introduced contemporaneously in many countries around the world during the period 1986 to present. It also helped, by the time it was concluded, to coalesce a consensus around a set of reform principles to which developed and developing countries would adhere.

Arguments that the UR would compromise the food security of least developed and net food importing countries have not been confirmed. *Au contraire*, evidence mounts that countries which themselves introduce reforms to bring their economies into the global marketplace, obliging their enterprises to interact with others on a competitive footing, are the ones which not only raise incomes but which reduce poverty as well.

Policy makers in developing countries need to be cajoled, via trade concessions on the part of developed countries, to go further toward this end. They need technical assistance and support in order to comply with all the trade negotiation complexities which WTO membership brings. The result should be a more interdependent world economy in which food security is assured because people everywhere have access to income-generating opportunities and thus to nutrition.

Annex A List of Least Developed and Net Food Importing Countries

<i>Least Developed Countries</i> (Source www.undp.org/uncdf/ldc.htm)		<i>Net Food Importing Countries</i> (Source WTO G/AG/5/Rev 2 17 March 1997)
Afghanistan	Malawi	Barbados
Angola	Maldives	Botswana
Bangladesh	Mali	Cote d'Ivoire
Benin	Mauritania	Dominican Republic
Bhutan	Mozambique	Egypt
Burkina Faso	Myanmar	Honduras
Burundi	Namibia	Jamaica
Cambodia	Nepal	Kenya
Cape Verde	Nicaragua	Mauritius
Central African Republic	Niger	Morocco
Chad	Rwanda	Pakistan
Comoros	Samoa	Peru
Djibouti	Sao Tome & Principe	Saint Lucia
Equatorial Guinea	Senegal	Senegal
Eritrea	Sierra Leone	Sri Lanka
Ethiopia	Solomon Islands	Trinidad and Tobago
Gambia	Somalia	Tunisia
Guinea	Sudan	Venezuela
Guinea-Bissau	Tanzania	
Haiti	Togo	
Kiribati	Tuvalu	
Laos	Uganda	
Lesotho	Vanuatu	
Liberia	Zaire	
Madagascar	Zambia	

Annex B Acronyms

AMS	Aggregate measure of support
CIF	Cost, insurance, freight
EU	European Union
FAO	Food and Agriculture Organization
FOB	Free on board
GATT	General Agreement on Tariffs and Trade
GDP	Gross domestic product
GTAP	Global Trade Analysis Project
IATRC	International Agricultural Trade Research Consortium
OECD	Organization for Economic Cooperation and Development
PSE	Producer subsidy equivalent
SSA	Sub-Saharan Africa
STE	State trading enterprise
TRQ	Tariff-rate quota
UR	Uruguay Round
URA	Uruguay Round Agreement
USAID	U S Agency for International Development
USIWG	U S Interagency Working Group
WTO	World Trade Organization

Annex C Sources Cited

Abbott, Philip C and Philip L Paarlberg (1997) "Tariff Rate Quotas Structural and Stability Impacts in Growing Markets " Presented at International Agricultural Trade Research Consortium meetings, San Diego, CA, December

Barry, Abdoul and Ndaya Beltchika (1996) "Trends in African Trade " Paper prepared for Economic Analysis for Policy Reform in Africa Workshop, held in Washington, DC, July 17-19, 1996 Cambridge, MA Associates for International Resources and Development

Blarel, Benoit, Garry Pursell, and Alberto Valdés (1996) "World Bank/FAO Workshop Implications of the Uruguay Round Agreement for South Asia The Case of Agriculture " Papers presented at workshop held in Kathmandu, Nepal, May

Brandão, Antônio Salazar P , Lopes, Mauro de Rezende, and Pereira, Lia Valls (1997) "Trade Liberalization in Brazilian Agriculture Qualitative and Quantitative Analysis " In Cordeu, Valdes, and Silva, eds , *Implementing the Uruguay Round Agreement in Latin America The Case of Agriculture* Rome and Washington, DC Food and Agriculture Organization of the United Nations and World Bank, pp 159-169

Carson, Chris (1997) "The Removal of Quantitative Restrictions, Tariffication and Minimum Access Provisions As They Affect Importables " In Cordeu, Valdés, and Silva, eds , *Implementing the Uruguay Round Agreement in Latin America The Case of Agriculture* Rome and Washington, DC Food and Agriculture Organization of the United Nations and World Bank, pp 81-89

Chowdhury, Nuimuddin, Habibur Rahman and Sajjad Zohir (1996) "Bangladesh Agriculture and the Uruguay Round Policies, Commitments, and Prospects " Paper presented to World Bank/FAO Workshop on Implications of the Uruguay Round Agreement for South Asia The Case of Agriculture, Kathmandu, May

Cordeu, Jose Luis, Alberto Valdes, and Francisca Silva, eds (1997) *Implementing the Uruguay Round Agreement in Latin America The Case of Agriculture* Rome and Washington, DC Food and Agriculture Organization of the United Nations and World Bank

Finger, J Michael and L Alan Winters (1998) "What Can the WTO Do for Developing Countries?" In Anne O Krueger, ed , *The WTO as an International Organization*, pp 365-391 Chicago University of Chicago Press

Hanrahan, Charles E (1998a) "Agriculture in the Next Round of Multilateral Trade Negotiations " CRS Report for Congress, 98-254 ENR Washington, DC Congressional Research Service, Library of Congress March 13

_____ (1998b) "The Food Security Commodity Reserve The Replenishment Issue " CRS Report for Congress, 98-398 ENR Washington, DC Congressional Research Service, Library of Congress April 21

Harrold, Peter J (1995) "The Impact of the Uruguay Round on Africa " Discussion Paper no 311, Africa Technical Department Series Washington, DC The World Bank

Hertel, Thomas W , William A Masters, and Aziz Elbehri, "The Uruguay Round and Africa A Global, General Equilibrium Analysis," *Journal of African Economies* 7, 2 (1998, forthcoming)

Hirsch, Alan (1998) "Comment on the Paper by J Michael Finger and L Alan Winters " In Anne O Krueger, ed , *The WTO as an International Organization*, pp 392-397 Chicago University of Chicago Press

International Agricultural Trade Research Consortium (IATRC) (1997) *Bringing Agriculture into the GATT Implementation of the Uruguay Round Agreement on Agriculture and Issues for the Next Round of Agricultural Negotiations* Commissioned Paper Number 12

Josling, Tim (1997) "Developed Country Agricultural Policies in the Post-Uruguay Round Era " In Cordeu, Valdés, and Silva, eds , *Implementing the Uruguay Round Agreement in Latin America The Case of Agriculture* Rome and Washington, DC Food and Agriculture Organization of the United Nations and World Bank, pp 141-152

_____ (1998) *Agricultural Trade Policy Completing the Reform* Washington, DC Institute for International Economics, April

Konandreas, Panos and Jim Greenfield (1997) "Uruguay Round Commitments on Domestic Support and Export Subsidies Their Implications for Developing Countries " In Cordeu, Valdés, and Silva, eds , *Implementing the Uruguay Round Agreement in Latin America The Case of Agriculture* Rome and Washington, DC Food and Agriculture Organization of the United Nations and World Bank, pp 119-140

Krueger, Anne O , Alberto Valdes, and Maurice Schiff (1988) "Agricultural Incentives in Developing Countries Measuring the Effect of Sectoral and Economywide Policies " *World Bank Economic Review* 2, no 3 255-71

Low, Patrick (1997) "Safeguards, Antidumping, Countervailing Duties, and Observations on Administrative and Technical Barriers to Trade " In Cordeu, Valdes, and Silva, eds , *Implementing the Uruguay Round Agreement in Latin America The Case of Agriculture* Rome and Washington, DC Food and Agriculture Organization of the United Nations and World Bank, pp 91-105

Martin, Will and L Alan Winters, eds (1995) "The Uruguay Round and the Developing Countries " World Bank Discussion Papers no 307 Washington, DC The World Bank

Morocco, Government of (1986) *La Politique de Prix et d'Incitations dans le Secteur Agricole* Ministry of Agriculture and Agrarian Reform, with Associates for International Resources and Development

_____ (1990) *Etude de la Politique de Prix et d'Incitations dans le Secteur Agricole phase II* Ministry of Agriculture and Agrarian Reform, with Associates for International Resources and Development

Organization for Economic Cooperation and Development (1993) *Agricultural Policies, Markets and Trade Monitoring and Outlook 1993* Paris OECD

_____ (1997) *Agricultural Policies in OECD Countries Measurement of Support and Background Information* Paris OECD

Sadoulet, Elisabeth and Alain de Janvry (1995) *Quantitative Development Policy Analysis* Baltimore Johns Hopkins University Press

Sarris, Alexander (1997) "World cereal market instability and developing country response " Paper presented at EC/Solagral Markets and Institutions for Food Security conference, Brussels, December 10-12

Schiff, Maurice and Alberto Valdés (1992) *The Political Economy of Agricultural Pricing Policy, Volume 4, A Synthesis of the Economics in Developing Countries* Baltimore The Johns Hopkins University Press

Schott, Jeffrey J (1996) *WTO 2000 Setting the Course for World Trade Policy Analyses in International Economics* 45 Washington, DC Institute for International Economics

Sen, Amartya (1981) *Poverty and Famines An Essay on Entitlement and Deprivation* Oxford Clarendon Press

Sharma, Ramesh, Panos Konandreas, and Jim Greenfield (1997) "Synthesis of Results on the Impact of the Uruguay Round on Global and LAC Agriculture " In Cordeu, Valdes, and Silva, eds , *Implementing the Uruguay Round Agreement in Latin America The Case of Agriculture* Rome and Washington, DC Food and Agriculture Organization of the United Nations and World Bank, pp 41-63

Stryker, J Dirck (1998) "Meeting the Food Summit Target The United States Contribution " Submitted to USAID/G/EG/AFS under the aegis of the Agricultural Policy Analysis Project Mimeo

_____ and Selina Pandolfi (1996) *Impact of Outward-Looking Market Oriented Policy Reform on Economic Growth and Poverty* Prepared under the CAER project for USAID Cambridge, MA Associates for International Resources and Development November

Swearingen, Will D (1987) *Moroccan Mirages Agrarian Dreams and Deceptions, 1912-1986* Princeton University Press

Tuluy, A Hasan and B Lynn Salinger (1989) *Trade, Exchange Rate, and Agricultural Pricing Policies in Morocco* World Bank Comparative Studies, The Political Economy of Agricultural Pricing Policy Washington, DC The World Bank

Tyner, Wallace E and Channing Arndt (1996) *Moroccan Policy Reform in Cereals, Sugar, and Oilseeds* Report prepared for the World Bank Morocco Integrated Rural Development Strategy Cambridge, MA Associates for International Resources and Development

U S Department of Agriculture (1997) *International Agricultural Baseline Projections to 2005* Agricultural Economic Report Number 750 Washington, DC USDA/Economic Research Service

U S Interagency Working Group (1997) "Discussion Paper on International Food Security " Prepared by U S Department of State, Office of Special Representative for Food Security, Washington, DC

Valdes, Alberto (1997) "Brief Overview of the Global Impact of the URA and Lessons from Early Reformers " In Cordeu, Valdes, and Silva, eds , *Implementing the Uruguay Round Agreement in Latin America The Case of Agriculture* Rome and Washington, DC Food and Agriculture Organization of the United Nations and World Bank, pp 65-80

Wagner, Lynnett (1997) "Marrakesh Decision on the Effects of the Uruguay Round on Least Developed and Net Food-Importing Countries " Internal USAID memorandum December 7

Wang, Zhen Kun and L Alan Winters (1997) "Africa's Role in Multilateral Trade Negotiations " Policy Research Working Paper no 1846 Washington, DC The World Bank, November

Wilcock, David and Lynn Salinger (1994) *Moroccan Cereals Policy Reform at the Crossroads Final Report of the Cereals Market Reform Project* CMR Report No 20 Prepared for U S Agency for International Development, Rabat Bethesda, MD Development Alternatives, Inc

World Trade Organization Committee on Agriculture (various) Notifications by sub-Saharan African countries regarding progress with compliance with Agreement on Agriculture G/AG/N/[country code]/[number]

Www tradeport org/ts/countries/[country]/regs shtml (1997) "Trade Regulations and Standards " Country-specific trade policy reports