

**TRADE LIBERALIZATION AND POVERTY REDUCTION: A REVIEW OF THE  
LITERATURE AND LESSONS FOR NAMIBIA**

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## 1. INTRODUCTION

According to Chen and Ravallion (2004), Africa now accounts for one-third of the world's poor people, defined as people living on less than \$1 a day. This is up from one-tenth two decades ago. The vast majority of those people are dependent on agriculture for their livelihood and for much of the food they eat. Namibia is no exception with about 65 percent of the total population living in rural areas according to the preliminary results of the latest Household Income and Expenditure Survey. Various possibilities have been put forward to alleviate people's poverty, including increased aid flows and raising agricultural productivity in Sub-Saharan Africa (SSA). One possibility that has become increasingly the object of debate is through free and fair trade, through speedy conclusion of the Doha Development Agenda (DDA).

The World Bank and other International agencies, with a per capita income of about US\$2000 in 2004, classify Namibia as a lower middle-income country. Using this criteria alone, the country ranks quite well on a global scale, ranked 65 out of 175 countries. However, when using the Human Development Index, combining income with other capability measures such as health and education, the country slides 59 places to a rank of 124. To a greater degree than most countries, income is a poor measure of development for Namibia. According to the 2004 Millennium Goals Development Report, 38 percent of all households in Namibia were living in relative poverty in 1993/94, while the proportion of households living in extreme poverty was 9 percent and the gini coefficient 0.7 percent.

The beneficial poverty reducing affects of the comprehensive multilateral trade reform as envisaged under the DDA, has been questioned by many. In particular, Panagariya (2004) cites two reasons why poverty reducing effects of multilateral trade reform might not apply to SSA countries. One is that those countries that are net importers of food would face higher food import prices. The other is that those countries that are net exporters of farm (and textile) products already enjoy duty-free access to key developed markets under various preferential trade schemes and to cut to most-favored-nations (MFN) import tariffs by rich countries would erode SSA preference margins. In addition, Kym, Martin and Van Der Mensbrugge (2005), argue that SSA terms of trade could deteriorate through export expansion of a small number of similar products following the region's own trade liberalization, should it choose to participate in multilateral reform.

The next section of this paper attempts to answer the question why one should be concerned about poverty. Section 3 examines the interlinkages between poverty and trade, that is to say the various channels through which trade might affect poverty, including the indirectly through growth, and directly via prices, income, the labor, etc. Section 4 describes the key features of the Doha Round, including the latest progress since the Hong Kong discussions in December 2005. Section 5 examines the potential impact of the DDA on poverty in the world. It essentially reviews some of the studies conducted by the World Bank and others that estimates the potential welfare effects of trade liberalization in developed and developing countries. Based

on the results of section 5, section 6 attempts to draw some lessons for Namibia. Section 6 Concludes.

## **2. WHY WORRY ABOUT POVERTY**

It has been five years since the Millennium Declaration was signed by 189 countries in 2000, and one decade remains to achieve the Millennium Development Goals (MDGs). Namibia played a key role in the formulation of the Millennium Declaration, with the President and Prime Minister as co-chair of the Millennium Summit and President of the General Assembly, respectively. Several events and publications in 2005 marked this milestone, including the UN World Summit in September and the World Trade Organization meetings in December. The Global Monitoring Report (GMR) of 2006, which reports on progress towards meeting the MDGs finds that the favorable global growth environment that has helped to sustain poverty reduction in recent years continued in 2005. Growth per capita for both low and middle-income countries averaged just fewer than 5 percent in 2005, well above historic rates and supported by buoyant trade, low interest rates and strong growth in OECD countries. This growth helped to reduce projected total poverty in developing countries by 10 percent between 2000 and 2005, moving over 100 million people above the \$1 a day poverty line.

However, while strong overall growth has helped reduce poverty, the gains remain uneven. All regions have, to varying degrees shared in the recent favorable growth, but there are major differences in regional performance in reducing poverty and in individual country performance. Much of the improvement occurred in East and South Asia and in Eastern Europe and Central Asia as stronger growth resumed after the Asian financial crisis, and the transition economies adjusted to market systems. In Latin America, growth is up over the past two years, but is still too low to make strong inroads into poverty reduction. African growth has also improved, outpacing its historical average, by accelerating to more than 2 percent per capita, in 2005, but on current trends, few African countries will reach the MDG income-poverty target. However, several countries within Africa, including Namibia have performed well over the last decade, due to a combination of better policies, enhanced trade performance and a favorable external environment. This demonstrates the potential for more rapid progress.

Near-term prospects for growth and income-poverty reduction appear good, but the global environment also poses risks. High oil prices threaten to slow growth in low-income oil importing countries such as Namibia, particularly if non-oil commodity prices would to weaken. Other risks include an abrupt adjustment in global current account imbalances, further increases in global interest rates and the failure of the Doha Round talks.

Strengthening poverty reduction will require greater emphases on the domestic growth environment through improving the investment climate, strengthening access to infrastructure and enhancing opportunities for the poor. The quality of the investment climate contributes strongly to growth, employment and productivity, all

of which are important for sustainable poverty reduction. Tools for monitoring the investment climate (Investment Climate Surveys and Doing Business Assessments) show that poor countries place the highest burden on entrepreneurs and on reform business regulations the least. Africa had the lowest reform intensity in 2004, and Eastern Europe and Central Asia the highest. Basic infrastructure services, such as transport, electricity, water, sanitation, telephones, are key both to a strong investment climate and to sustained progress in human development outcomes. For the rural population and for the poor in both rural and urban areas, access gaps are large and reinforce their vulnerability. More resources and greater innovation in service delivery and easy to maintain technologies are needed.

### **3. INTERLINKAGES BETWEEN POVERTY AND TRADE**

Trade liberalization and poverty cannot be measures easily. While freer trade, or “openness” in trade, is now widely regarded as economically benign, in the sense that it increases the size of the pie, the recent anti-globalization critics have suggested that it is socially malign on several dimensions, among them the question of poverty (Bhagwati and Srinivasan: 2003). Their contention is that trade accentuates not ameliorates, deepens not diminishes poverty in both the rich and the poor countries. This raises the questions: does trade liberalization cause poverty or does it contribute to its alleviation; and what is the connection between trade liberalization and poverty. McCulloch et al. (2001) identifies three channels by which trade policy might affect poor individuals, namely those of enterprise (through profits, wages and employment), distribution (the transmission of changes in border prices to consumers) and government (in which trade reform affects government revenues and thus the scope for pro-poor expenditure). It is possible to distinguish between both static and dynamic components to the linkage. Static effects include the reallocation of resources towards sectors in which the country in question enjoys a comparative advantage. Dynamic effects are those achieved through economic growth if the more efficient allocation of resources increases growth. Either might reduce poverty. Short to medium-term adjustment costs (for example, jobs lost in the industries rendered uncompetitive) could increase.

#### **3.1 Indirect/Dynamic Effects**

The central argument of the indirect or dynamic approach to trade liberalization and poverty is that trade promotes growth; and growth reduces poverty (Bhagwati and Srinivasan:2003). Unless growth seriously worsens income distribution, the proportion of the population living in absolute poverty will fall as average incomes increase. The balance of evidence, however, seems to be that although growth can be associate with growing inequality (or economic decline with narrowing inequality), the effects on poverty tend to be dominated by the advantageous direct effect of growth<sup>1</sup>. Overall, therefore, if there is truth in the claims that openness enhances

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<sup>1</sup> See for instance Demery and Squire (1996) on Africa.

growth, one might expect it to have beneficial effects on poverty through that route alone. Theoretically, therefore, how does openness affect output. Bhagwati and Srinivasan present several possibilities. Generally, they argue the effects of trade policy on growth must proceed through links between trade and two fundamentals: accumulation and innovation (in the use and productivity of resources). There are several reasons to think that trade will affect both favorably. For instance, the increased variety of inputs available from trade will enable an economy to get around constraints placed on access to such variety under protection when absence of scale economies can reduce the available variety from domestic production alone. Also, high protection is likely to constrain marginal efficiency of capital by confining sales to domestic markets compared to open economies where the world defines the market, thereby reducing the incentive and hence the rate of investment.

The empirical evidence, however, that trade liberalization supports growth is not conclusive. There is a widespread belief that openness, broadly defined stimulates growth. This view is for instance supported by Frankel and Romer (1999), Dollar (1992) and Sachs and Warner (1995). Rodriguez and Rodrik (2001), however, point out that these studies suffer from several flaws in terms of their definition of openness and econometrics employed; hence, the results should be treated with caution. On openness, for instance, they show that because the Sachs and Warner's definition includes not having an export monopoly, most of Africa is defined as closed and hence Africa's poor growth performance contributes strongly to the positive overall view of openness. However, if Africa's poor performance has a different origin, they argue, the attribution of growth to openness would be misplaced, and Africa's salvation would lie elsewhere than in trade policy.

Winters (2001), however, argues that the weakness of the empirical link between liberal trade and growth reflects the difficulties of measuring trade stances once one comes inside the boundary of near autarchy. For example, tariff need to be aggregated, quantitative restrictions assessed and then aggregated, and the degree of credibility level of enforcement measured. Overall, he argues that, while open trade alone has not yet been unambiguously and universally linked to subsequent economic growth, it has certainly not been identified as a hindrance. Moreover, trade liberalization has a positive role as part of a package of measures promoting greater use of the market, more stable and less arbitrary policy intervention, stronger competition and macroeconomic stability. Krueger (1990) argues that with exception of macroeconomic stability, an open trade regime is essential to support the long-run achievement of the other elements. Thus, taken as a whole, trade liberalization is a major contributory factor in economic development.

Winters (2001) further argues that the link from openness probably operates at least partly by enhancing technical progress. For instance, by making new inputs, new technologies or new management techniques available to local producers. Such flows could arise from trade – either imports or exports – or from direct flows of technology from abroad. In this connection, Esfahani (1991) and Feenstra et al (1997) show link between imports and enhanced performance is quite strong, while

the link from exporting to technology, on the other hand, is weaker. While macro studies and case- studies have suggested links, detailed an formal work based on enterprise data is doubtful, even in the case of FDI as shown by Haddad and Harrison (1993). Winters conclude that in both cases the problem is one of causation: efficiency and exporting are linked because efficient firms export FDI and efficiency because investors choose efficient firms and sectors. While there is undoubtedly, a connection between openness and the dynamism of an economy it is more complex than economists sometimes choose to believe. Openness probably needs several related policies or conditions before it will generate growth. In addition, technological flows need not depend just on trade or commercial transfer of expertise; they may arise autonomously or through direct interventions in research and development in favor of developing countries.

A very sensitive issue in the area of openness and technology is intellectual property. The Uruguay Round trade in intellectual property rights (TRIPS) agreement resulted in developing countries having to pay more for using certain technologies. This will ultimate reduce income and curtail the use of such technology in developing countries. On the other hand, the increased rewards may stimulate the flow of technology to developing countries, although to date firm evidence to that effect is lacking. The commercialization of intellectual property may also bias it away from meeting the needs of the poor, since collectively they present such a small market. Thus, coterminous with the creation of intellectual property rights, serious attention should be paid to the older publicly funded sources of technology, and to ensuring the IPRs do not shut off routes for the cost-effective development of crop technologies and health products for the poor.

So far, we have seen how trade can affect growth. What about the second link, namely that from growth to poverty reduction. Again, different models are possible. If labor is in elastic supply to the growing areas, as in the Arthur Lewis models, then growth will pull more of the reserve army of labor into gainful employment. If, however, growth is modeled in a way where it does not affect a segmented pool of the poor, as regions that are not linked to the mainstream or inner cities that are structurally de-linked from the main city where growth is occurring then growth will pass the poor by. In some cases, growth may even immiserize the poor further, for example, when the poor are working tiny plots of lands to produce farm products whose prices fall because of the larger farms implementing the Green Revolution. The evidence on growth and poverty is perhaps best approached through detailed focus on two countries that have huge comparative advantage in poverty: China and India. Indeed, a vast majority of the world's poor live in the rural areas of China and India. Both countries achieved significant reductions in poverty during 1980-2000 when they grew rapidly. According to the World Bank (2000) estimates, real GDP grew at an annual average of 10 percent in China and 6 percent in India during these two decades. The effect on poverty reduction in both countries was dramatic, in line with the hypothesis that growth is a principal of poverty reduction. According to the Asian Development Bank (2000), estimates, the incidence of poverty declined from 28 percent in 1978 to 9 percent in 1998 in China, while the Government of

India's estimates show that the poverty incidence fell from 51 percent in 1977-78 to 27 percent in 1999-2000. It is also relevant that these were also the decades in which both China and India increased their integration in the world economy. Obviously, the experience of the two giant economies of China and India in achieving faster growth and poverty reduction through greater integration in the world economy is commendable. Other economies also have had similar experiences. For example, in Vietnam the estimated incidence of poverty declined from 75 percent to 37 percent over a ten-year period that coincided with greater global integration and higher growth rates.

## **3.2 Direct Effects**

We now turn to the direct effects of trade shocks on poverty. These effects, also called comparative static effects connect trade liberalization to poverty via prices, factor rewards (mostly wages) and government revenue. It is mostly microeconomic in approach and for fairly well known reasons, much more ambiguous on the sign of the relationship. Static economic analysis tells us that the impact of trade reform on a poor or potentially poor household will depend on how it affects goods and factor prices and on the household's sources of income, consumption bundle and ability to respond to shocks. All of these differ both idiosyncratically across households and systematically between sectors, regions and countries, so generalization will be elusive. They also differ across different kinds of trade shocks and policy reform.

### **3.2.1 House Holds and Markets**

Treating the household as the basic unit over which poverty is defined, Winters (2005) ask how the price changes generated by trade reforms impinge on poor households given their consumptions and production bundles. The starting point is that, given labor and transfer incomes, the first order approximation of the welfare effect of a small change in prices is the product of the vectors of net sales and price changes. An important aspect of the price effects on poverty is whether trade policy changes on the border are transmitted into price changes for the poor or nearly poor households. This depends on factors such as transport costs and other costs of distribution; the structure of markets; and infrastructure, domestic taxes and regulations. Some impediments, such as transport costs, are inevitable, while others represent direct economic inefficiency. Attention among policy economists is increasingly focusing on transactions costs, which can be very high in poor countries. An interesting indirect indicator of their effect at the aggregate level is Djankov, et al. (2006), who finds that the time taken to move goods from factor/farm to port are excessive in most African countries and estimate that these severely curtail trade volumes.

If trade brings benefits by creating opportunities, one needs to ask whether the poor are able to adjust to take advantage of them. Winters (2005) argues that transactions costs provide natural protection to local producers of import competing products, that price transmission is likely to be ineffective for poor people living in remote areas and could prevent transactions altogether. An application of this sort of

analysis is to predict the poverty effects of trade shocks such as the ongoing Doha Development Agenda (DDA). Nicita (2005a) suggest that the poor in Ethiopia barely feel the consequences of trade negotiations because they are so isolated, while Nicita (2005b) finds relatively weak effects for Madagascar. The latter are progressive, however, with the poor showing stronger gains than the rich do from the DDA. Similarly, Brambilla and Porto (2005) find weak impact for Zambia because the poor are little exposed to trade. Such isolation saves the poor from negative shocks emanating from international trade but it also prevents them from experiencing positive shocks or the secular benefits from openness. One also needs to consider adjustment in households, of consumption patterns and more importantly of labor supply. In poor farm households, wage employment, self-employment and consumption are potentially jointly determined, so that shocks to one affect the other. Thus, the policy conclusion of most of the literature is that governments should pursue complementary reforms such as infrastructure or human capital accumulation to try to connect the poor to the border, while at the same time remaining aware of the possible adverse consequences for sub-sets of the newly connected populations.

### **3.2.2 Wages and Employment**

Obtaining employment is one of the surest ways out of poverty, while loss of job is probably the most common reason for the sudden declines into poverty that catch most public attention. The structure of the labor market is critical to how trade liberalization is translated into wage and employment changes. There are many studies of the labor market effect of trade reform. Most of these studies, however, assume segmented markets and deal only with the manufacturing factor (Winters 2005). This makes it difficult to draw conclusions about overall poverty. The most striking common feature of these studies is the smallness of the wage and employment effects they find.

One interesting observation made by a number of studies of relative wage movements in Latin America and East Asia is that recent liberalizations have widened the so-called skills gap. This does not necessarily have implications for poverty because it could be that all wages are rising even if by different proportions. A key lesson of the empirical studies on labor is that it is not inevitable that least-skilled workers (the most likely to be poor) will be the most intensively used factor in the production of exportable goods. For example, the wages of workers with completed primary education may increase with trade liberalization, while those of illiterate workers may not.

### **3.2.3 Government Revenue and Spending**

A frequent concern about trade liberalization is that it will reduce government revenue. The share of trade taxes in total revenue is negatively associated with the level of economic development, with governments in many low-income countries receiving about half or more of their revenue from trade taxes. There is, however, no simple link between trade reform and revenue. In many cases tariff reductions

increase revenue since they are associated with reductions in exemptions, less evasion and an enlargement of the tax base as trade increase. There are, of course, cases in which revenue does fall, but even this does not necessarily translate into worse services for the poor. It is essentially a political decision as how the decline is accommodated, albeit one constrained by a country's administrative capacity (Winters 2005). Nevertheless, in the event that trade liberalization do lead to revenue reduction, it is important that welfare spending on the poor is safeguarded, especially spending on the one who are hurt by the trade liberalization process. Likewise finding alternative taxes is essentially political, although economic analysis can make two observations. First, some taxes are more progressive than others, with VAT doing well in this direction on low-income countries. This is because food is usually exempted, agriculture sometimes is, and small-scale self-employed entrepreneurs fall below the taxation threshold. Second, some taxes are more distortionary than others typically because they have greater variance over sectors.

#### **4. THE DOHA DEVELOPMENT AGENDA**

The Doha round was launched in late 2001 and was scheduled to be completed by January 2005. After the collapse of the Cancun Ministerial in September 2003, however, it became clear that this goal would not be achieved. At Cancun, developing countries made it clear that further progress would not be possible without a commitment by high-income countries to significantly lower their import barriers and agricultural subsidies. An intense period of consultations in July 2004 ended with a Decision on how the Doha Work Programme should proceed (WTO 2004). The Agreement that emerged from that Decision (the so-called July Framework Agreement) reiterated the importance of keeping development at the heart of the Doha agenda and particularly stressed agricultural reform as key to that. In its Annexes, the Decision provided guidance as to how a Doha agreement might be structured with frameworks for establishing modalities for agriculture and non-agricultural market access, and for negotiations on trade facilitation, as well as providing recommendations for trade in services. At the Hong Kong Ministerial, Ministers renewed their commitment to complete the negotiations successfully in 2006. However, despite some concrete results at the Hong Kong Ministerial, overall progress since the start of the negotiations remains limited. The roadmap that emerged from the Hong Kong talks still requires concurrence on the most divisive issues, agriculture and industrial products. With the deadlines for agreeing negotiating modalities on agriculture and manufacturing fast approaching, there is concern that an ambitious outcome from the Doha Round is now at risk. The roadmap is scheduled to be agreed on by April 2006, and finalized by October 2006. Other outcomes of the Hong Kong meetings were modest. Agricultural subsidies are to be phased out by 2013, conditional on disciplining equivalent programs such as food aid. Duty-free and quota-free access to developed country markets for products from the LDCs was significantly weakened by the likely exemption of 3 percent of tariff lines in key products. Subsequent paragraphs examine in more detail the principal issues in the Doha negotiations, main mains issues agreed upon at the Hong Kong Ministerial and the way forward from Hong Kong.

## 4.1 Principal Issues in the Doha Negotiations

The Doha Round is called that because it was launched in Doha, Qatar, in November 2001. It is the ninth round of international trade negotiations conducted under the General Agreement on Tariffs and Trade (GATT), and the first since the GATT was incorporated in the World Trade Organization (WTO) in 1995. GATT/WTO membership has grown from less than 30, mostly high-income countries in the 1950s to nearly 150 countries today. The communiqué launching the Doha Round recognized the profound changes in the organization in the preamble, declaring, “*The majority of WTO members are developing countries. We seek to place their needs and interest at the heart of these negotiations.*”

### 4.1.1 Agriculture

The commitment to make this a “development round” is one reason why agriculture holds such an important place in the negotiations. By far the highest remaining trade barriers in rich countries are in agriculture, many developing countries have a comparative advantage in agriculture, and most poor people in low-income countries live in rural areas. The average bound tariff (the tariff agreed in negotiations) is 62 percent compared to 29 percent for industrial products. Although some countries apply rates below those bound, the average applied rates are also twice as high for agriculture: 17 percent compared to 9 percent. The most protected products are sugar, dairy products and tobacco. For the US, the highest tariff is 350 percent on tobacco; for the EU, 470.9 percent on milk and cream. For developing countries, this depresses potential export earnings and the income of domestic producers.

**Table 4.1 Overall protection in Agriculture by Industrial Countries**  
(Percent tariff equivalent)

Type of Protection	United States	Canada	European Union	Japan
Tariff	8.8	30.4	32.6	76.4
Subsidies	10.2	16.8	10.4	3.2
Total	19.9	52.3	46.4	82.1

Source Cline: 2005

The structure of tariff makes negotiations difficult: while the average tariff of developed countries are normally substantially lower than the averages of developing countries, the structure tends to be flat in developing countries, while there are high peaks in developed countries. Any formula that targets high averages will hit developing countries. One, which focuses on peaks, will hit developed economies. The fact that agriculture products are a declining and now in some cases small share of developing country exports does not mean that this is a declining issues. While higher income elasticities would be expected to cause faster growth in manufactures trade than in agriculture, the differences observed are much greater than this could explain: the protection has held agricultural trade down. For sub-Saharan Africa, the Caribbean and some Latin American economies agriculture

remains important. Agriculture also has symbolic importance: agriculture and access to medicines are the two central development issues in the ongoing negotiations.

Another key issue for developing countries as far as agriculture is concerned is that of subsidies. Indeed the continued permissibility of subsidies to exports and production makes agriculture different from other sectors in the WTO. The Uruguay Round Agreement on Agriculture classified subsidies into three types: Those defined as being clearly distorting (amber box), including production or export-related payments; those which might be distorting because they are related to production, but which were intended to limit production (blue box); and those defined as having little trade distorting effect (green box). In developing countries, subsidies by developed countries help consumers of those products, but hurt competitors.

**Table 4.2 Countries dependent on exports of goods subsidized in other WTO members**

Country	Share of exports affected (percentage)
Benin	85
Mali	84
Chad	82
St Kitts and Nevis	78
Burkina Faso	76
Malawi	76
Burundi	73
Tanzania	68
St Lucia	64
Uganda	63
Sudan	60
Zimbabwe	59
Rwanda	59
Dominica	58
St Vincent	57
Paraguay	55
Cuba	51
Cote d'Ivoire	49
Guinea Bissau	40
Nicaragua	40

*Source: Hoekman, B., Ng, F. and Olarreaga, M. (2002)*

If the subsidies were removed, some might still be uncompetitive, most of the sugar producers gain from the subsidies because of quotas, but would face less serious barriers, and some would gain significantly. On the import side, where subsidies could be an advantage, only two have more than 20 percent of important affected by subsidies: Comoros 24 percent and Algeria 20 percent. In mid-2003, four West African cotton exporters, Benin, Burkina Faso, Mali and Chad cited the cost to them of subsidies and placed this as a separate item on the agenda for Cancun. Cotton is between 5 and 10 percent of their GDP, and more than 60 percent of exports. They requested a new type of agreement: in addition to any negotiations on subsidies in

the Doha context (which could not take effect until at least 2005) an interim settlement reducing subsidies to cotton by a third a year in 2004-06 and, until then, compensation for Least Developed cotton producers. This would be paid by subsidizers, falling in line with reduction in subsidies.

#### **4.1.2 Non agricultural market access**

Non-agricultural market access (NAMA) is a less important issue than agriculture because barriers are lower and the current structure of protection is less restrictive and less complex. Although most exports from developing countries are non-agricultural, these do not excite the same pre-conceptions about livelihoods and poverty that agricultural exports do, and no developed country would now admit to having industries that are protected for social reasons. The outcome will be defined in terms of modalities of tariff cuts, any differential treatment of developing countries, and the rules of binding. While in agriculture, most countries have bound their tariff as part of the Agreement on Agriculture, in manufacturing, there are still countries, which have not bound all tariffs.

Developing countries, especially from Africa, put the emphasis on reduction in peaks and escalation. The highest peaks, in both developed and developing countries, are in textiles and clothing. Other highly protected goods are fish, rubber, and leather products. Specific duties are also important in some non-agricultural goods, notably textiles and garments; their effect has increased because prices have fallen.

#### **4.1.3 Services, Trade Facilitation and Intellectual Property**

Neither the Doha mandate nor the July 2004 framework has specific aims for services. Negotiations on services use a system of countries requesting specific trading partners to open specific activities in particular sectors and then countries offering to open sectors, with the opening on an MFN basis (to all countries) Special treatment for developing countries has taken the form of asking for less opening, not offering preferential access as in goods. Services, including somewhere negotiations are in place such as tourism, are very important for developing countries. Many services rely on semi-skilled labor and are often in regions of the country where other activities are not possible, so that there can be direct effects on incentives for education and on rural poverty. Movement on labor (Mode 4 of services) remains the most restricted part of services, so potential gains are high. Workers remittances are already a significant source of income for developing countries (on average more than 1 percent of GDP).

Trade Related Aspects of Intellectual Property (TRIPS) were added to the coverage of the WTO in the Uruguay Round and the effect of this on developing countries has been a major issue. The questions most prominent in the Doha negotiations are related to production and trade in generic pharmaceutical products; extending the use of “geographical indications”; some issues in patenting life forms; and traditional knowledge. All raise important issues of principle, but only the results on pharmaceuticals seem likely to have major effects on poverty in the short run.

The EU suggested that investment, competition policy, transparency in government procurement and trade facilitation be added to the WTO agenda, and that agreements on them are negotiated in the Doha Round. Most developing countries strongly opposed all of them as unnecessary extra burdens to an already crowded negotiation, and the first three as potentially damaging to their development strategies. At Cancun, the EU eventually agreed to remove the first two from the agenda, and indicated potential agreement to remove the third and by July 2004 had been withdrawn from the agenda. Some developing countries had seen merits in securing progress on this issue, although preferring that it should be done through technical assistance rather than new rules. The costs of trading are higher on developing countries, whose customs services lack technology, training, or good administration. Most of the efficiency effects, however are obtainable by countries' unilateral action, and are not really WTO issues. Many require increased investment in infrastructure, which can conflict with other spending priorities for development. Increased regulation of procedures would take away this choice and to the extent that the inefficiencies are intentional barriers to imports, new rules would reduce countries' policy freedom.

## **4.2 Main outcomes of the Hong Kong Meetings**

### **4.2.1 Agriculture**

It was agreed that agricultural export subsidies should be phased out by 2013. Although 2010 was the preferred date for those countries with offensive interest in Agriculture (e.g., the G20, the US and the Cairns Group), the compromise around a later date was required to accommodate the EU. Agricultural export subsidies account for only a small share of the overall support given to agriculture in OECD countries (less than 2 percent if one considers only primary agriculture). Nevertheless, the decision has an important symbolic effect.

Debate on disciplines on exports measure with equivalent effect to export subsidies (e.g., export credits, export credit guarantees and insurance programs, state trading enterprises and food aid) continue to be controversial. With respect to food aid, the Ministerial Declaration introduced the concept of a "safe box" with the view of ensuring that bona fide food aid dealing with emergencies will not be impeded by these disciplines.

In Hong Kong, Ministers agreed on the structure of formulae for cuts with respect to domestic support and border barriers (market access). Specifically, it was agreed that there should be three bands for reduction of agricultural domestic support with higher linear cuts in higher bands. This will imply that for the overall cut in domestic support, the EU will be in the highest band, the US and Japan in the second band, and other countries in the lowest band. Four bands will be adopted for structuring tariff cuts. In both cases, the thresholds for the bands and the size of the cuts remain to be agreed.

No concrete agreement was reached on treatment of sensitive products, but it was agreed that “the greater the deviation from the tariff reduction formula the greater the increase in tariff quotas.” Developing countries will have the right to self-designate and appropriate number of tariff lines as special products. The declaration also confirms that developing countries should have access to special safeguard mechanism based on import quantity and price triggers – guided by the criteria of food security, livelihood security and rural development. The details of this mechanism, however, are yet to be decided.

With regard to cotton, a commitment was made to eliminate export subsidies for cotton by 2006, to provide duty free and quota free access to cotton exports from LDCs from the commencement of the implementation period of the DDA, and to reduce domestic support for cotton on a faster track and more ambitiously than generally applicable under the formula for cuts in domestic support for other products. The market access commitment is largely symbolic since tariffs (and non-tariff barriers) are already close to zero in major cotton importing countries. The critical decision in this area concerns the commitment to substantially reduce distortion associated with domestic support for cotton. However, the ultimate impact of these reforms will depend on the final level of ambition agreed upon in the context of the overall agricultural negotiations.

#### **4.2.2 Non-Agricultural Market Access**

With respect to non-agricultural market access (NAMA), the Hong Kong ministerial agreed on the adoption of a Swiss formula for tariff cuts. The Swiss formula, meaning that higher tariff will be subjected to deeper cuts, has the potential to generate significant tariff cuts and reduction of tariff peaks. However, the number of coefficients (the higher the coefficient in the formula, the lower the tariff cuts) for developed and developing countries, as well as the degree of flexibilities granted to developing countries remain to be decided.

The fact the declaration mentions more than one coefficient opens the door to either a Swiss formula with two coefficients as proposed by the US, or multiple coefficients proposed by Argentina, Brazil and India. The declaration makes special mention of sectoral initiatives in the NAMA negotiations and reaffirms the special and differential treatment that is to be granted to developing countries. Concerning the treatment of unbound tariff lines, the declaration endorses a non-linear mark-up approach to determine the base rates for commencing tariff reduction. Finally LDCs are expected to increase their level of binding and there seems to be growing consensus that this – rather than liberalization commitments – will be the main yardstick to judge their contribution to the round.

#### **4.2.3 Services, Intellectual Property and Other Development Issues**

The annex on services to the draft declaration proved to more controversial than initially expected. Before the ministerial meeting, a number of developing countries

stressed that the draft text had not yet been agreed upon by members. A particular concern was the reference to an attachment to a chairman's report listing the sector-and-mode related objectives that had been identified by individual members and the language of the paragraph on plurilateral negotiations making it mandatory for members to take part in these negotiations if they are requested to do so by other WTO members<sup>2</sup>. The annex ultimately agreed upon for the ministerial declaration uses softer language (in both regards) than the initial draft. A footnote to the paragraph on sector and mode-specific objectives notes that the relevant attachment to the chairman's report has no legal standing. The declaration also states that members will not be obliged to participate, but shall consider the request that have been presented to them in accordance with the flexibilities that are granted to developing countries in the GATS (Paragraphs 2 and 4 of Article XIX of the GATS).

The Doha Ministerial Declaration emphasized the importance of special and differential treatment (SDT), stating, "Provisions for special and differential treatment are an integral part of the WTO agreements." Paragraph 44 called for a review of SDT provisions with the aim of "strengthening them and making them more precise, effective and operational" (WTO 2003). On the basis of this, developing countries made 88 proposals addressing SDT language in various WTO agreements. The proposals included calls for improved preferential access to industrialized countries' markets, further exemptions from specific WTO rules, and binding commitments on developed countries to provide technical assistance to help implement multilateral rules. With the collapse of the Cancun Ministerial, none of these proposals were "harvested" even though there was broad agreement on 28 of them.

Progress in negotiating these proposals has been limited. In preparations for the Hong Kong Ministerial, WTO members agreed to focus on five LDC agreement-specific proposals. Duty-free and quota-free access for LDCs was the most controversial among them. In Hong Kong it was agreed that developed countries shall provide duty-free and quota-free access on a lasting basis for products originating from LDCs by 2008 or no later than the start of implementation period of the DDA. Developing countries in a position to do the same should also do so. Members (particularly the US and Japan) could not agree, however, on 100 percent coverage of products (given sensitivities in products such as clothing, leather and rice). The compromise reached was to agree that at least 97 percent (defined at tariff line level) should be covered. This significantly diminishes the value of this result for LDCs since it will allow industrialized countries to exclude key products in

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<sup>2</sup> The plurilateral process is a complementary mechanism to the standard bilateral request-offer mechanism that has characterized the services negotiations. Group of countries with common interest can present plurilateral request in specific sectors (e.g. telecommunications, legal, financial services) or with respect to specific modes of delivery (e.g. temporary movement people to supply services) to groups of target countries.

which LDCs are competitive<sup>3</sup>. Moreover, the overall implications of the duty-free/quota-free treatment will greatly depend on the character of rules to be adopted to implement the proposal. The declaration simply says that they should be transparent and simple. The more liberal the rules of origin adopted, the greater the potential positive impact for LDCs.

At the Hong Kong Ministerial there was a renewed commitment to further clarify and improve rules regarding anti-dumping, subsidies and countervailing measures (including fisheries subsidies), as well as disciplines on regional trade agreements (RTAs), but no significant progress occurred. On dumping the declaration reaffirmed the objective of improving rules covering: determinations of dumping, procedures governing anti-dumping investigations, and the level, scope and duration of measures. Concerning RTAs, most of the debate continues to focus on the meaning of “substantially all trade” requirement, the length of RTA transition periods and RTA developmental aspects. No consensus, however, has yet emerged.

The implications of the rules on trade-related intellectual property rights (TRIPs) for poor country access to affordable pharmaceuticals are a high profile issue in the Doha round. On the one hand the argument is that the protection of pharmaceutical patents, prevents the under-resources health services of developing countries badly affected by HIV/AIDS (particularly SSA) from obtaining cheaper generic versions of key anti-retroviral drugs; and more generally increase the prices that health services pay for drugs which constitute major threats to public health. On the other hand, the pharmaceutical industries argue that providing exemptions from intellectual property protection for drugs of relevance to the world’s poor reduces the profitability of such drugs and thus the incentives for research into cures for these diseases. At the Hong Kong meetings, Ministers noted the amendment to the agreement on TRIPS, concerning the use of compulsory licensing for public health reasons. They welcomed the TRIPS council’s decision to extend the transition period for LDCs until July 01, 2013 to comply with the TRIPS requirements. Progress on the negotiations for the establishment of a multilateral system for notification and registration of geographical indications for wines and spirits remains elusive. Moreover, no consensus exists on how to move forward on the relationship between TRIPS and the Conventions on Biological Diversification or on extending the protection of geographical indications to other products beyond wines and spirits.

### **4.3 Developments since Hong Kong**

Target dates have been set for achieving full modalities in agriculture and NAMA. In both cases, modalities, i.e. formulae and parameters for liberalization efforts, were expected to be reached no later than April 30, 2006, and comprehensive draft schedules based on these modalities for liberalization to be submitted no later than

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<sup>3</sup> To illustrate, 70 percent of Bangladesh’s exports to the US are covered by only 70 tariff lines, which together account for less than 1 percent of all US tariff lines (the total number of tariff lines at the 8 digit level is 10 500).

July 31, 2006. With regard to services, plurilateral request was expected to be submitted by February 28, 2006 and a new round of revised offers is expected to be submitted by July 31, 2006. Final draft schedules of service commitments, in turn, should be ready by October 31, 2006.

There has been some procedural progress in the negotiations since the Hong Kong Ministerial and, according to public statements from several negotiators and from the WTO Secretariat, an improvement in the “atmospherics” under which the negotiations are being conducted has been observed. Notably events that happened since the Hong Kong Ministerial include Trade Ministers Meeting from about 27 countries in Davos, Switzerland during the World Economic Forum meetings on January 27 and 28. Discussions there focused on the schedule and process that the negotiations should follow in order to be completed by the end of the year. On February 07, 2006, the Trade Negotiations Committee (TNC) discussed a detailed timeline concerning the Doha Work Programme, highlighting critical dates for concluding the negotiations successfully in 2006. The TNC statement fleshes out in greater detail the work agreed in the areas where the Hong Kong declaration is more general. In addition to the Hong Kong dates, the TNC statement mentions the following dates: Consolidated draft text on rules (including anti-dumping and fisheries subsidies) are to be submitted by July; a first full draft of the text on trade facilitation is also expected by July; developed countries are to notify the means by which they will implement duty-free and quota-free access for LDC exports by September; and the aid for trade task force was set up to provide recommendations to the WTO General Council on how to operationalize aid for trade by July 2006.

## **5. ESTIMATED BENEFITS OF TRADE LIBERALIZATION**

In the months, leading up to trade negotiations estimates of the economic gains from trade liberalization normally becomes news worthy. There are various ways to estimate the welfare effects of trade liberalization, including through cross sectional econometric modeling and detailed country studies. This section will focus on work done by the World Bank and Cline using Computable General Equilibrium models.

### **5.1 World Bank Estimates**

This section explores the benefits of trade liberalization made by the Global Trade Analysis Project (GTAP) model, the best known and most widely used of the major trade models and by the World Bank LINKAGE model. Table one contrast their forecasts of the benefits of complete liberalization published in 2002-03 versus 2005. In both cases, the later estimates of global benefits have fallen to about one third and the benefits to developing countries have fallen to about one fifth of their previous levels. Both use the GTAP 6 database, describing the world economy as of 2001, the latest version of the standard database used by virtually all CGE trade models. Both incorporate trade agreements reached through 2005, including China’s entry into the WTO, the expansion of the EU in 2004 and the end of the Multi-Fiber Agreement in their baseline.

**Table 5.1 Benefits of complete liberalization, GTAP and LINKAGE**

Model	Year	Benefits (US dollar billions) to	
		Developing Countries	World
GTAP	2005	22	84
GTAP	2002	108	254
LINKAGE	2005	90	287
LINKAGE	2002	539	832

Source Ackerman: 2005

The updated data is the principal reason why GTAP and LINKAGE now predict much smaller gains from liberalization than they did only 2-3 years ago. As of 2002-03, the models used the GTAP 4 or 5 databases, describing the world as of 1995 or 1997. Although some earlier forecast attempted to look ahead and incorporate the expected effects of scheduled trade agreements, they did not completely anticipate the rapid pace of recent reduction in trade barriers, the rapid growth of East Asian economies, and other economic changes that affect the models.

### 5.1.1 GTAP Results

As may be seen from table 1 the benefits estimated applying GTAP in 2005 under full liberalization amounts to US\$84 billion (Hertel and Keeney 2005). This is a modest benefit worldwide, equivalent to US\$14 per day or US\$.04 per day, per capita. In addition, as Hertel and Keeney show, it is very unevenly distributed. Most of the benefits, US\$55.7 billion, come from agriculture; the great majority, US\$47.6 billion results from liberalization in high-income countries. Table two shows that most of the most of the benefits of high-income agriculture (90 percent) comes from improved market access, i.e. elimination of tariffs and quotas. Most of the benefits of eliminating tariffs accrue to the high-income countries themselves, since their consumers are presumed to enjoy lower prices.

**Table 5.2 Benefits of Trade Liberalization**

Policy	Beneficiary Region			
	High-income	Transition	Developing	World
Import market access	31,811	1,608	10,376	43,795
Export subsidies	2,554	-488	-1,023	1,043
Domestic support	2,450	76	284	2,810
Total	36,815	1,196	9,637	47,648

Source Ackerman: 2005

As may be seen from table 2, the benefits from eliminating high-income countries' export subsidies and domestic support are quite small and largely concentrated in the high-income countries. Elimination of subsidies to high-income country export is on balance a setback for developing countries. In addition, the elimination of domestic support policies in rich countries does not yield a significant benefit to the developing world.

Turning to the aggregate benefits of complete liberalization, Ackerman (2005) presents the numbers in three different ways: as total amounts in billions of dollars; as per capita amount in dollars per person; and as percentage of GDP. He shows that high-income countries come out ahead in total dollars and per capita amounts, while developing countries do better in terms of percentage of GDP. However, neither rich nor poor countries as a whole stand to gain as much as 0.5 percent of GDP. These results are presented in table three for agriculture, textiles, other and total.

**Table 5.3 Benefits of complete liberalization (GTAP)**

Liberalizing sector	Beneficiary region			
	High-income	Transition	Developing	World
<b>Total amounts, billions of dollar</b>				
Agriculture	41.6	2.2	11.9	55.7
Textiles	1.3	-0.2	8.8	9.8
Other	16.6	1.0	1.4	18.9
Total	59.5	2.8	22.1	84.3
<b>Per capita, dollars per person</b>				
Agriculture	40.00	5.37	2.54	9.09
Textiles	1.25	-0.49	1.88	1.60
Other	15.96	2.44	0.30	3.08
Total	57.21	6.83	4.72	13.75
<b>Percentage of GDP</b>				
Agriculture	16	25	24	18
Textiles	1	-2	18	3
Other	7	11	3	6
Total	23	32	44	27

Source Ackerman: 2005

Evidence of trade liberalization differentially favoring developing countries is confined to the third part of table 3. As a percentage of GDP, liberalization is worth more to developing countries, according to Hertel and Keeny estimates. The difference, amounting 44 percent versus 23 percent of GDP, results almost entirely from the benefits of textile liberalization. It should, however, be kept in mind that these percentage gains are quite small, especially since they are one-time, not continuing, improvements. If trade liberalization were phased in over a number of years, the benefits would presumably be spread out as well, with even smaller annual gains.

### 5.1.2 LINKAGE Results

The World Bank's LINKAGE model is similar in design to GTAP, but adds selected dynamic features, attempting to describe some change over time (Anderson et al 2005). Starting from a 2001 base year, it estimates annual growth through 2015, including the effects of trade negotiations. The estimate for global benefits in 2015 from complete liberalization, US\$287 billion, is more than three times Hertel and Keeney's estimate. However, Anderson et al. provide reconciliation for the two

studies. The biggest difference is the world economy will be presumable much larger in 2015 than in 2001. If the Anderson forecast was expressed as a percentage of GDP and applied to 2001 data, it would amount to US\$156 billion, a little less than twice the GTAP estimate for that year. The remaining difference is due, in about equal measure, to the new dynamic assumptions added to the LINKAGE model and to a recent revision of the model's elasticities.

Although the absolute numbers are different, the distribution of benefits is broadly similar in the two studies as shown in table 5. For both models, about two thirds of the global benefits of complete liberalization are due to freer trade in agriculture; most of those benefits, almost half of the total for all sectors, are enjoyed by the high-income countries. In per capita terms, Anderson et al. find that the benefit to developing countries is more than US\$ 17 per person per year, compared to nearly US\$200 per person per year in the high-income countries.

As a percent of GDP, benefits are slightly greater to the developing countries, 8 percent of GDP compared to 6 percent of GDP in high-income countries. Even among developing countries, benefits are concentrated in the hands of a few countries. The five countries that receive more than half of Hertel and Keeney's benefits to the developing world, Argentina, Brazil, China, India and Vietnam, gets only about one third of Anderson's comparable figure.

**Table 5.4 Benefits of complete liberalization (LINKAGE)**

Liberalizing sector	High-income	Developing	World
<b>Total amounts, billions of dollar</b>			
Agriculture	126	56	182
Textiles	14	24	38
Other	57	10	67
Total	197	90	287
<b>Per capita, dollars per person</b>			
Agriculture	124	11	30
Textiles	14	5	6
Other	56	2	11
Total	195	18	47
<b>Percentage of GDP in 2015</b>			
Agriculture	38	50	44
Textiles	4	21	9
Other	17	9	16
Total	60	80	70

*Source Ackerman: 2005*

The discussions discussed in previous sections are based on elimination of all remaining barriers to merchandise trade, a proposal that is not currently in the table and does not seem likely to occur in the near term. In this regard, Anderson et al. explore various scenarios for possible agreements under the Doha round of negotiations. The scenario they analyze at length calls for agricultural tariff rate reductions in developed countries of 45, 70 and 75 percent within three bands of existing tariff, and reductions in developing countries of 35, 40, 50 and 60 percent

within four bands of tariff; the LDCs are not required to make any reduction in agricultural tariffs. For non-agricultural tariff bindings, the scenario calls for 50 percent cuts in developed countries, 33 percent in developing countries and zero in the case of LDCs. The projected benefits in 2015 amounts to US\$96 billion, or about one third of the estimated value of full liberalization.

**Table 5.5 Benefits of Likely Doha Round Scenario**

	Beneficiary Region		
	High-income	Developing	World
<b>LINKAGE</b>			
Total amounts, billions of dollars	80	16	96
Per capita, dollars per person	79	3	16
Percentage of GDP	24	14	23
<b>GTAP – Extrapolated</b>			
Total amounts, billions of dollars	24	4	28
Per capita, dollars per person	23	1	5
Percentage of GDP	10	8	9

*Source Ackerman: 2005*

The partial liberalization results using the LINKAGE model tilt the benefits even more towards high-income countries. This is because the scenario calls for faster tariff reduction and hence greater price cuts, in high-income countries. As may be seen in table 6 under partial liberalization, developing countries get 18 percent of their potential gains or about US\$16 billion. Doha or partial liberalization is worth about US\$3 per year or less than a penny a day for each person in the developing world. In contrast, high-income countries gain about US\$80 billion from partial liberalization under Doha. Expressed differently it means US\$79 per year or more than US\$0.20 per day for each person living in high-income countries. Once again, the benefits are distributed unevenly with losses resulting in Mexico, Bangladesh, the Middle East and much of Africa.

Extrapolating the LINKAGE results in the GTAP model, shows that the benefits to the developing world as a whole will be no more than US\$ 4 billion. This is less than US\$ 1 per person per year, less than a quarter of a penny per person per day. On the other hand, developed countries will receive US\$23 per person per year. Ackerman (2005) notes that if this extrapolation is even approximately correct, the Hertel and Keeny forecast implies that the likely outcome of the Doha Round as analyzed by Anderson et al. is of virtual no value to developing countries as a group.

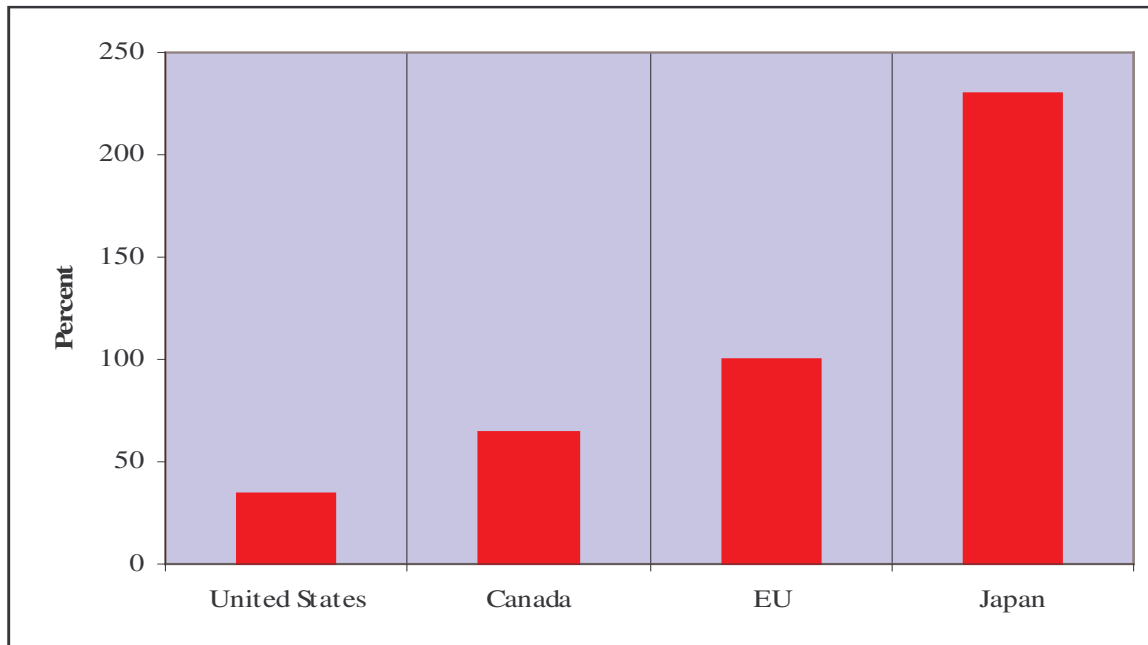
## **5.2 Cline Estimates**

### **5.2.1 The Effect on Agriculture**

One of the key findings of the Cline study (2004) is that liberalization of agricultural markets is the single most important way in which Doha could reduce poverty. Three-fourths of the world's poor live in rural areas. They would benefit from increased export opportunities in world markets. Cline shows that the present

combination of high agricultural tariff and major subsidies in industrial countries has the effect of reducing agricultural prices on the world market by artificially limiting demand and boosting supply.

**Chart 5.1 Aggregate Measure of Agricultural Protection in Developed Countries**



*Source Cline: 2004*

Clines estimates that complete liberalization would raise world agricultural prices about 10 percent. In total, he estimates that free trade in agriculture would reduce global poverty by 200 million or about 7 percent. Cline estimate that when tariff, tariff-rate quotas and subsidies are all consolidated into a single tariff equivalent, agricultural protection against developing countries amounts to 34 percent in the United States, 100 percent in the EU, 230 percent in Japan, and 65 percent in Canada. Free trade and higher world prices in world agriculture would have an adverse impact on poor countries that are large net importers of food, and this effect should be taken into account in the design of official assistance policies. Cline argues that the negative impact of agricultural liberalization could be limited, because only about one-sixth of the world's poor live in countries or regions that are net importers of food. Furthermore, even within net food-importing countries, higher agricultural prices will tend to shift income from the urban to the rural sector, where the poor tend to be concentrated.

**Table 5.6 The Impact of Global Agricultural Liberalization on Poverty in Selected Countries**

Country	% of poor in rural areas	% of GDP from Agriculture	Change in poverty	
			Percent	Millions of People
Argentina	13.5	5.0	5.4	0.3
Bangladesh	94.0	25.0	-11.8	-12.0
China	88.9	16.0	-10.6	-72.1
Colombia	74.9	14.0	-9.0	-1.1
Guatemala	73.6	23.0	-9.9	-0.7
India	70.5	25.0	-6.8	-59.2
Indonesia	72.3	17.0	-7.1	-9.9
Kenya	83.8	2.0	-14.8	-2.8
Malawi	95.0	42.0	-15.2	-1.3
Mexico	31.9	4.0	2.0	0.8
Pakistan	72.5	26.0	-8.9	-10.4
Tanzania	88.3	45.0	-12.0	-2.4
Turkey	30.7	16.0	2.2	0.3
Venezuela	15.9	5.0	5.5	0.5
Vietnam	90.1	24.0	-15.1	-6.3

Source Cline: 2004

### 5.2.2 Welfare and employment effects

Evaluating the effect of multilateral trade liberalization on global poverty is complex, in view of the numerous direct and indirect effects that must be taken into account. For example, reducing the tariff on textile fabric will affect the cost of the input used by producers of apparel. Similarly, production profiles after liberalization have to take into account how factor prices (wages, land prices, interest rates) will have changed. That notwithstanding, Cline divided trade into 22 product groups and the into 30 countries or regions. He then applied a leading model to 1997-98 (GTAP5) date and estimate that global free trade would boost world economic welfare by about US\$230 billion annual, with about US\$140 billion in gains for industrial countries and US\$90 billion for developing countries. For developing countries, he estimates that the median real wages of unskilled workers would rise by 5 percent. After applying each country's responsiveness of poverty to changes in income for the poor, he then estimates that the result would be a reduction in global poverty by about 115 million. In a long-run steady state version of the model, allowing for increased capital investment in response to new trade opportunities, the reduction in the number of poor could be as high as about 750 million.

The Cline model confirms that agriculture is the most important sector to liberalize, accounting for nearly 60 percent of welfare gains for industrial countries and over 50 percent for developing countries. Textile and apparel are also crucial, accounting for another 12-8 percent of gains, respectively. Alternative test also show that developing countries do better to participate in global trade liberalization than to keep their own protection unchanged, while industrial countries dismantle theirs.

One reason is that developing countries are major customers of each other, and they tend to face higher tariffs on manufactured good in each other's markets than they do in industrial-country markets. In the Cline model database, developing countries currently carry out 36 percent of their trade with each other.

### **5.2.3 Productivity and investment gains**

Cline shows that the dynamic gains from global free trade and corresponding poverty reduction could even be larger. The underlying argument is that greater economic integration boost productivity growth, which in turn raises income and reduces poverty. From the literature on the statistical relationship between trade and growth, Cline synthesized the following central parameter: a 1 percent rise in the ratio of trade to GDP has been associated with a rise of about 0.5 percent in the long-term per capita GDP of which the bulk comes in the form of increased overall (total factor) productivity rather than higher capital per worker.

## **5.3 Trade Liberalization and Poverty Reduction**

The CGE models used to analyze trade liberalization do not normally produce forecasts of income distribution or poverty reduction. Estimates of gains that might be received by developing countries include incomes that will be received by both the poor and by other income groups and business interest in the same countries. For instance, the billions of dollars that will flow say to the agricultural sector of one of the countries that will benefit from trade liberalization include gains for both that countries' poorest rural workers and for the wealthier producers. Additional hypotheses and analyzes are therefore required to translate gains for a nation into impacts on poverty. Some models forecast the impact of trade gains or losses on the returns to capital and labor, and often distinguish between skilled and unskilled labor (Ackerman 2005). These projections of factor incomes are based on hypotheses about perfectly functioning markets within countries, which are not always realistic in practice.

The LINKAGE model discussed in section 5.2 has been extended to estimate the change in the real wage of unskilled workers. This allows the calculation of the number of people who would be moved past the poverty line, relying on World Bank "poverty elasticities" – the percent change in the number of people in poverty for each 1 percent growth in average income – for each region of the world (see table 5.7).

**Table 5.7 Estimates of Poverty Reduction – LINKAGE Model (millions of people)**

	South Asia	Sub-Saharan Africa	World
<b>\$2 per day poverty line</b>			
Partial Liberalization (Doha)	2.3	0.5	6.2
Full liberalization	9.6	20.4	65.6
<b>\$1 per day poverty line</b>			
Partial Liberalization (Doha)	1.4	0.5	2.5
Full liberalization	5.6	21.1	31.9

As may be seen using the US\$2 per day poverty line, full merchandise trade liberalization would lift an estimated 66 million people out of poverty by 2015, of which about 20 million are in Sub-Saharan Africa. Using the US\$1 per day poverty line results in poverty reduction of only 6 million people worldwide by 2015, of which only 0.5 million in Sub-Saharan Africa.

Using a different methodology, William Cline produced a much larger estimate of the impact of trade liberalization on poverty (Cline 2004). According to his estimates, almost 438 million people would be lifted out of poverty by 2015, mainly in South Asia.

**Table 5.8 Cline’s Estimates of Poverty Reduction (millions of people)**

	South Asia	Sub-Saharan Africa	World
Main model forecast	30	19	98
Productivity effect	98	1	156
Capital growth effect	122	26	184
Total	250	46	438

Cline’s results depend on the GTAP 5 database, reflecting the world as of 1997-98. Thus, future opportunities for liberalization in his model include the completion of the Uruguay Round, as well as China’s accession to the WTO, the expansion of the European Union and the elimination of textile tariffs and quotas. This explains why his estimates of the benefits of liberalization are much higher than those of the World Bank.

A number of criticisms have been raised against the Cline and World Bank estimates of poverty reduction as a result of trade liberalization. One by Weisbrot et al that merits attention is the fact that the headcount measure of poverty used by both Cline and the World Bank, simply counts the number of people moved from anything under the poverty line to anything above the line. While the phrase “poverty reduction” may suggest a qualitative transformation in economic circumstances, the model results often imply a change in the pennies per day, moving people from just below to just above US\$2. For example, Weisbrot et al calculate that in India, people moved out of poverty go from US\$1.93 to US\$2.08 per day, and in Bangladesh from only US\$1.97 to US\$2.03 per day. While moving tens of millions of people just

across the poverty line, is preferable to leaving people just below the line, it is only a pale shadow of the original claims of lifting hundred of millions of people out of poverty.

## 6. LESSONS FOR NAMIBIA

The World Bank and Cline studies assess the implications of alternative Doha scenarios for world markets. These are done by using state-of-the-art global monitoring framework that incorporates the most recent econometric evidence on supply and demand elasticities, with particular attention paid to food and agriculture markets that prove crucial in assessing the poverty impact of the DDA. These world impacts will form the basis for drawing lessons on the poverty impacts of the DDA in Namibia in the current section. There are two issues that pose a challenge for poverty reduction for Namibia under the Doha round: (1) the fact that most of the poor are in rural areas making their living from subsistence agriculture and that the contribution of agriculture to total GDP is very small; (2) the high Gini-coefficient, poses an additional challenge for poverty reduction. On the positive side, Namibia's budget might be classified as one of the most pro-poor in the world; more than fifty percent of the budget goes to pro-poor expenditure, education and health. Even if trade liberalization might have a negative effect on government revenue, it is likely that government will continue to prioritize pro-poor expenditure.

The 2004 Millennium Development Goals report, released in 2004 provides an update on progress made with respect to the achievement of these goals. Table 1 below provides a quick overview of progress on main selected targets for each of the eight MDGs.

**Table 6.1 Progress towards achieving the MDGs**

Goal	1992	2003	2006 Target	Progress Towards target
<b>1. Eradicate extreme poverty and hunger</b>				
Proportion of households living in relative poverty	38%	-	28%	Lack of data
Proportion of households living in extreme poverty	9%	-	4%	Lack of data
<b>2. Achieve universal primary education</b>				
Net primary school enrolment	89%	92%	95%	Good
Survival rate for grade 5	75%	94%	95%	Good
Literacy rate, 15-24 years	89%	89%	94%	Slow
<b>3. Promote gender equality and empower women</b>				
Primary education (girls per 100 boys)	102	100	100	Good
Secondary education (girls per 100 boys)	124	113	100	Good
Tertiary education (girls per 100 boys)	162	111	100	Good
Proportion of seats held by women in National Assembly	9%	19%	30%	Slow
<b>4. Reduce child mortality</b>				
Infant mortality (per 1000 live births)	67	52	36	Slow
Under-five mortality rate (per 1000 births)	87	71	54	Slow
Proportion of one-year-old children immunized against measles	63%	72%	80%	Good
Underweight among children under five	26%	24%	17%	Slow
<b>5. Improve maternal health</b>				
Proportion of births attended by trained health personnel	68%	75%	88%	Good
Contraceptive prevalence rate	21%	37%	88%	Good
<b>6. Combat HIV/AIDS, malaria and other diseases</b>				
HIV prevalence among 13-19 year old women	6%	11%	9%	Worsening
HIV prevalence among 20-24 year old women	11%	22%	15%	Worsening
TB treatment success rate	58%	69%	75%	Good

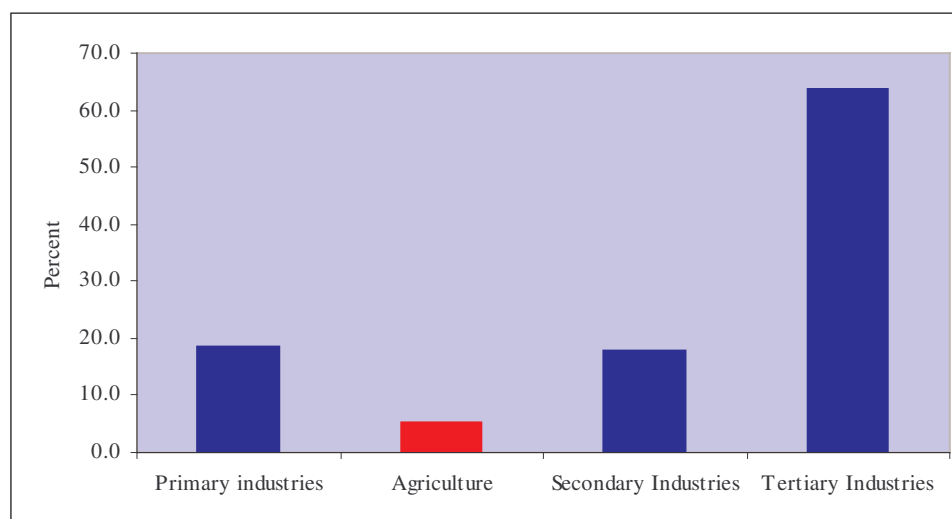
<b>7. Ensure environment sustainability</b>				
Proportion of rural households with access to safe drinking water	45%	80%	80%	Good
Proportion of rural household with access to basic sanitation	15%	21%	50%	Slow
Freehold land	5%	6.1%	8.5%	Slow
Registered conservancies	0%	4.9%	10.9%	Slow
<b>8. Develop global partnership for development</b>				
Per capita overseas development assistance to Namibia (in US\$)	130	60	90	worsening

Source NPC 2005

When we consider the income poverty goal, it may be seen that 38 percent of the country's households in 1993/94 were found to live in relative poverty, and 9 percent to live in extreme poverty. Preliminary results of the latest Household Income and Expenditure Survey that was conducted on 2003/04, indicates that significant progress was made with respect to achieving the income goal target. The survey also shows that progress was made with respect to income inequality as the Gini-coefficient declined from 0.7 to 0.6. Nevertheless, Namibia remains one of the most unequal societies in the world. It is also important to note that the majority of Namibia's poor are located in the rural areas, making their living from subsistence agriculture. The gap between average rural and urban incomes, and the perception of better job opportunities in urban areas, fuels emigration from rural areas to the major cities. This in turn leads to increases in the urban poverty as well.

Although the majority of the poor in Namibia live in rural areas making their living from subsistence agriculture, the contribution of agriculture to GDP is very small at about 5 percent. Most of the Namibian GDP is derived from the tertiary sector, which is not a major issue in the Doha agenda. As shown in the previous section, most of the benefits of trade liberalization under Doha are estimated to come from the agricultural sector. It is however; also shown that for some countries in North Africa, the Middle East, as well as in Sub-Saharan Africa, there would be more losses than gains.

**Chart 6. Gross Domestic Product by Activity**



Source NPC 2005

Table 6.2 summarizes the poverty results of a number of national studies by the World Bank for both the Doha round (partial liberalization) and full-liberalization. The analyzes were conducted for both the short-term and the long run, although here we focus on the short-term only. The table shows that the largest poverty reductions in both absolute and relative terms are in countries with agricultural export potential to the markets that liberalize most. The strong poverty reduction in Brazil is driven by increased agricultural production, which tends to be concentrated in regions with relatively higher poverty incidence. In China, the poverty reduction is fueled by increased agricultural exports to the highly protected agricultural markets of East Asia. However, poverty increases tend to be ion countries that are net importers of agricultural products (for example Bangladesh) and that may eventually benefit from preferential market access (for example Mozambique).

**Table 6.2 Poverty Impacts of Prospective DDA** (Near Term: Fixed Capital)

Country	Change in poverty headcount			
	Doha		Full liberalization	
	1,000 (People)	%	1,000 (People)	%
Bangladesh	38	0.3	1,354	1.1
Brazil	-236	-0.4	-482	-0.8
Cameroon	-22	-0.4	303	4.8
China	-4,590	-1.1	-8,271	-2.0
Indonesia	-48	-0.1	-1,384	-3.5
Mexico	4	0.0	127	1.0
Mozambique	27	0.3	60	0.6
Philippines	12	0.0	-7	0.0
Russia	209	0.9	-122	-0.5

*Source World Bank: 2005*

For some of those countries, this is because the prices of their imports would rise (for example, importers of temperate foods no longer to be dumped on international markets), but for other it would be because the prices of their agricultural exports fall. This is because their tariff preference margin disappears as developed countries move to zero tariffs, and because exports might expand so much for some of their products to depress their price in international markets. Namibia could be affected adversely from both sides, resulting into it be a net loser of agricultural trade liberalization under Doha, and hence an increase in the incidence of poverty.

There is relatively widespread agreement that sustained economic growth is essential for poverty reduction. The World Bank (2001) has synthesized numerous household survey studies to arrive at the following general relationship. A 1 percent increase in real per capita income reduces the incidence of poverty by 2 percent. This “growth elasticity of poverty” is higher (in absolute terms) where the degree of income equality is greater, and lower where it is lower (with the central elasticity reaching about 2, where the Gini coefficient of concentration is as low as 0.2, and only about 1.5 percent where the Gini is as high as 0.6. Hence, with a Gini-coefficient of 0.6, the challenge of poverty reduction becomes even more

challenging in Namibia, and it would be necessary to look beyond trade-liberalization to increase growth and reduce poverty.

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Apart from its impact on Agricultural prices and growth, we have seen that trade liberalization might also affect poverty through other channels. One of the most direct channels is through the budget, especially where trade taxes is the biggest component of total revenue. If because of trade liberalization, the revenue base shrinks governments' ability to finance pro-poor expenditure. However, as argued before how much government spends on poverty, reduction is largely a political decision, and since independence, Namibia has demonstrated itself as one of the countries in the world with a strong commitment towards poverty reduction. The Namibian government also ought to be commended in that they have already identified loss of revenue as one of the key challenges of trade liberalization and has started to attuned tax policies accordingly, by for instance introducing value added tax.

## CONCLUSIONS

The identification of the poverty consequences of trade liberalization or trade shocks is a complex and detailed task. However, one should not assume that it is hopeless. The indirect, growth effects are most likely benign and for households whose livelihoods are not directly impacted by trade barriers are likely to be the major effects. Households directly affected by trade may, however, either positively or negatively by direct static effects. It is also important to understand that even if the overall welfare effect of trade liberalization could be positive, there could be a considerable number of households and regions that are adversely affected by tariff reduction. In other words, despite the overall welfare improvement to the country, trade liberalization at least in the short-run might aggravate poverty among some segments of the society, while causing some others to fall into poverty.

Therefore, it is crucial that the government takes necessary actions or adopts policies/programs to mitigate the adverse affects of trade liberalization, particularly any negative effects on low-income groups. One of the most important policies to look after the poor and the vulnerable groups is having a sound and efficient social safety net program. It is argued that social safety net programs can generally be better targeted than many other policies and that they are less distortionary of the market forces. There are various social safety net programs in Namibia, including elderly pension, and social grant to orphans and other vulnerable groups. However, it is important that the government takes necessary actions to improve these existing schemes for better targeting and better function and to improve their coverage (where necessary) to include those who might be adversely affected by trade liberalization.

Safety net program are not the only response to the negative impacts of trade liberalization, although they are an important part of the response package. In addition, there are a number of complementary policies that the government needs to follow to increase productivity and reduce inefficiency at the firm level, as well as improve market conditions, infrastructure facilities and institutions. These policies would help producers to reduce their costs and improve the quality of their products, which would in turn help them better cope with the various shocks and policy reforms.

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