# What do liberalized agricultural markets mean for food-importing developing countries?

*World agricultural prices are forecasted to increase by an average of 10 percent as a result of the WTO's complete liberalization of international agricultural trade. This is bad news for food-importing developing countries. However, the 86 low-income countries with food deficits are a heterogeneous group. Thus, to make targeted policy recommendations, countries need to be classified in line with their degree of vulnerability.*

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In November 2001, the WTO Ministerial Conference in Doha established a new set of parameters for international agricultural trade. The aim is to correct the distortions in the international agricultural markets and ensure that the developing countries benefit from «special and differential treatment» which takes account of their specific development needs, including food security and rural development (von Braun et al., 2001). However, the implementation of the WTO Agreement on Agriculture so far confirms that in most countries, liberalization of key agricultural products is still relatively weak. There has been little sign of liberalization in heavily protected agricultural sectors (such as meat, milk and sugar); far more market opening has occurred in low-tariff sectors such as fruits, vegetables and oilseeds (Hathaway and Ingco, 1996; von Braun et al., 2001). Many industrialized countries, notably the European Union member states and the US, are still subsidizing their own agricultural sectors, thus exacerbating the problems of surpluses and substantial distortions in the international agricultural markets. Farm subsidies paid by the OECD countries currently total EUR 349 billion – 1.19 percent of the OECD's gross national product (GNP).

## The impacts of complete liberalization

Further dismantling of subsidies and hence a reduction of surpluses in the industrialized countries' heavily protected agricultural markets could impact on developing countries in various ways:

- The industrialized countries which heavily subsidize their agricultural sectors reduce their exports of subsidized farm products, which are partly supplied as food aid to developing countries. Reducing these cheap exports may impact positively on the developing countries, since at present, these surpluses often have a strongly destabilizing effect on local markets (Maxwell, 1999). They drive down local food prices, adversely affect local production, and impede investment in agriculture. Although consumers in developing countries benefit from these low prices, local producers often are forced to accept substantial income losses.
- The WTO's liberalization process could ease developing countries' access to the industrialized countries' markets and therefore increase export opportunities and foreign exchange earnings. In some developing countries, this could create incentives for investment and production in the agricultural sector. This is particularly important in view of the problems experienced in rural regions where poverty affects up to 70 percent of the population and most poor people are engaged in agriculture.
- The abolition of tariff escalation enables the developing countries to focus on processing their own primary commodities. However, high quality, hygiene and environmental standards have to be ensured during processing if the products are to be marketed successfully in industrialized countries.
- On the one hand, higher world market prices may increase the incentives for some developing countries to expand their agricultural production and thus boost their export revenue. On the other hand, however, imported foods – which some developing countries depend on – are also likely to become more expensive.

**In most countries, liberalization of key agricultural products is still relatively weak. Especially in heavily protected sectors – such as meat, milk and sugar – there has been little sign of liberalization.**

Photo: Grote

**Rice is an important import product for many African countries, especially in West Africa.**

Diao et al. (2002) demonstrated that complete liberalization of farm trade is likely to result in an 8-10 percent increase in world market prices. The authors also warn that higher world market prices may have a negative impact on local prices and therefore also on food security. Other authors, however, predict an increase in local food production as a result of higher world market prices. A study by the United States Department of Agriculture's Economic Research Service ERS (2001) estimates that world agricultural prices could increase by as much as 12 percent following a complete liberalization of farm trade. The authors of this study also predict that the demand for food aid in low-income countries would fall by around 6 percent as local food production picks up in response to higher prices.

Despite the numerous benefits that can be expected from the liberalization of agricultural markets, many net food-importing countries and also the European Union were already voicing their concerns during the agricultural negotiations held during the Uruguay Round. In their view, the benefits of agricultural market liberalization could well be outweighed, in the short to medium term, by the disadvantages resulting from the diminished availability of relatively cheap surpluses. Their concern is that besides higher world market prices, liberalization could result in greater price fluctuations by reducing the global supply of these products. Furthermore, many food-importing countries simply cannot afford to import foods at higher prices.

## The diversity of food-importing countries

According to the FAO's definition, there are currently 86 low-income food-deficit countries (LIFDCs). The classification is based on three criteria:

1. per capita income levels below US$ 1 450 at the end of the 1990s (historical cut off);
2. net trade deficit in foods for the three preceding years;
3. self-exclusion principle: countries which formally object to being included in the LIFDC category are not included in the list, even though they fall into this category on the basis of the two statistical criteria.

This highly diverse group of 86 countries is taken as the starting point for a more comprehensive analysis and classification of net food-importing countries. The aim

### Analysis of net food-importing countries

To classify net food-importing developing countries, four trade-related and two income-related criteria were applied:

| | Degree of vulnerability | | |
|---|---|---|---|
| Indicators | High | Medium | Low |
| Food imports as a percentage of total imports | > 25 % | 15–25 % | < 15 % |
| Trade openness (imports + exports / GNP) | > 0.8 % | 0.6–0.8 % | < 0.6 % |
| Ratio of food imports to agricultural exports | > 3.0 % | 1.0–3.0 % | < 1.0 % |
| Trade deficit (imports / exports) | > 2.0 % | 1.3–2.0 % | < 1.3 % |
| Per capita GNP, PPP | > 750 | 750–1 550 | > 1 550 |
| Per capita GNP growth rate | < 0 | 0–2,0 % | > 2.0 % |

is to categorize these countries in terms of their degree of vulnerability and identify the neediest food-importing countries. Various criteria are applied in this context, e.g. food as a proportion of total imports, trade openness, ratio of food imports to agricultural exports, trade deficit, per capita income, and GNP growth rate. For each of these criteria, countries are assigned to one of three vulnerability categories and marked with the appropriate colour in Tables 1 and 2. Orange denotes a relatively high degree of vulnerability.

Food import as a proportion of total imports is one of the key classification criteria (see box, p. 19). In 13 countries, food products account for more than 25 percent of total imports. For most countries, the figure is 15-25 percent. On its own, however, a high percentage of food imports does not reflect a country's degree of vulnerability; a country may have a low volume of imports as a proportion of GNP (low trade openness) or may be able to afford to spend substantial sums on food imports due to its higher per capita income or high level of exports of other agricultural produce or industrial goods. Indeed, there are many LIFDCs whose ratio of food imports to agricultural exports is less than 1, i.e. their agricultural exports exceed their food imports. Overall, these countries are likely to benefit from a rise in world market prices following the liberalization of agricultural trade, assuming that all world agricultural prices increase equally. Consequently, these countries can be regarded as less vulnerable.

In Tables 1 and 2, these trade indicators are also compared with average per capita income and GNP growth rates during the first eight years of the World Trade Organization's existence, i.e. 1995-2002.

Countries with high additional net costs for food imports (final column) would be especially hard hit by the liberalization of farm trade. In the case of Gambia, for example, a 10 percent increase in world

**Table 1: Food importing countries with low vulnerability**

| Country | Food imports as a percentage of total imports | Trade openness | Food imports/ agricultural exports | Imports/ exports of goods and services (baseline 1995)* | Per capita GNP, PPP (baseline 1995)* | Per capita GNP growth, PPP (% per annum) | Additional net costs of food imports as % of GNP |
|---|---|---|---|---|---|---|---|
| Cape Verde (CPV) | 31.88 | 0.84 | 247.94 | 2.40 | 4 002 | 3.41 | 1.9 |
| Armenia (ARM) | 25.80 | 0.81 | 7.10 | 2.29 | 2 081 | 7.72 | 1.2 |
| Albania (ALB) | 25.30 | 0.48 | 9.60 | 3.06 | 3 284 | 7.97 | 0.8 |
| Egypt (EGP) | 25.88 | 0.45 | 4.92 | 1.22 | 3 083 | 2.70 | 0.5 |
| Kiribati (KIR) | 38.14 | .. | 3.32 | .. | .. | 2.28[1)] | .. |
| Maldives (MDV) | 23.67 | 1.73 | 1240.94 | 0.84 | .. | 4.72[1)] | 1.9 |
| Georgia (GEO) | 21.41 | 0.88 | 4.73 | 1.61 | 1 669 | 5.47 | 0.9 |
| Mauritania (MRT) | 24.92 | 0.90 | 4.54 | 1.39 | 1 627 | 3.63 | 1.0 |
| Azerbaijan (AZE) | 20.93 | 1.62 | 3.04 | 2.14 | 2 104 | 5.46 | 1.6 |
| Turkmenistan (TKM) | 15.77 | 0.62 | 0,51 | 1.10 | 2 821 | 3.90 | 0 |
| Bhutan (BTN) | 18.31 | .. | 1.12 | .. | .. | 3.93[1)] | .. |
| Cuba (CUB) | 17.59 | .. | 0.74 | .. | .. | 3.34[1)] | .. |
| Guinea (GIN) | 25.84 | 0.48 | 3.60 | 1.18 | 1 773 | 1.73 | 0.5 |
| Macedonia (MKD) | 15.75 | 0.86 | 0.96 | 1.32 | 5 625 | 0.60 | 0 |
| Syria (SYR) | 18.46 | 0.90 | 0.73 | 0.93 | 3 090 | 1.56 | 0 |
| Morocco (APR) | 15.58 | 0.63 | 1.53 | 1.29 | 3 218 | 0.73 | 0.2 |
| Pakistan (PAK) | 16.04 | 0.33 | 1.30 | 1.17 | 1 708 | 0.79 | 0.1 |
| Honduras (HND) | 16.88 | 0.90 | 0.52 | 1.14 | 2 337 | -0.07 | 0 |
| Swaziland (SWZ) | 19.51 | 1.77 | 0.41 | 1.21 | 3 957 | -0.22 | 0 |
| Nicaragua (NIC) | 16.88 | 1.00 | 0.61 | 2.03 | 2 161 | -0.71 | 0 |
| Vanuatu (VUT) | 21.86 | .. | 0.83 | 1.20 | 2 872 | -3.23 | .. |
| Papua New Guinea (PNG) | 18.62 | .. | 0.48 | 0.87 | 2 233 | -2.68 | .. |
| Solomon Islands (SLB) | 16.27 | .. | 0.36 | .. | 1 944 | -4.97 | .. |
| Republic of Congo (COG) | 20.81 | 1.44 | 7.45 | 1.02 | 936 | 3.46 | 1.3 |
| Bangladesh (BGD) | 16.57 | 0.31 | 9.45 | 1.34 | 1 359 | 3.09 | 0.3 |
| Mozambique (MOZ) | 20.54 | 0.57 | 3.57 | 1.77 | 770 | 5.25 | 0.5 |
| Rwanda (RWA) | 20.10 | 0.32 | 1.69 | 3.00 | 982 | 6.68 | 0.2 |
| Sudan (SUD) | 18.85 | .. | 0.61 | .. | 1 419 | 2.78 | .. |
| Mongolia (MNG) | 15.54 | .. | 0.60 | .. | 1 428 | 2.27 | .. |
| Source of data | WDI | WDI | FAO | WDI | WDI | WDI | |

High degree of vulnerability; Medium degree of vulnerability

Trade and GNP indicators are average values for 1995-2002; *in US-dollars; [1)]per capita GNP growth, non PPP

market prices would mean additional net costs for food imports amounting to around 2 percent of GNP. Besides Gambia, other countries severely affected by an increase in world farm prices include Cape Verde, the Maldives, Azerbaijan, Yemen, Congo, the Comoros and Armenia.

Table 1 shows a very diverse group of countries which, overall, can be classified as giving less cause for concern. The countries in the top three-quarters of the table can be regarded as relatively vulnerable because of their trade indicators and high percentage of food imports, but their higher per capita income or relatively high GNP growth rates per annum gives them the capacity to compensate for these additional trade deficits in the event of agricultural liberalization. For example, Cape Verde imports more than 30 percent of its food and exports very little. However, with a per capita income of around US$ 4 000 and a GNP growth rate of almost 3.5 percent, Cape Verde should be able to finance a rising trade deficit. For other island states such as Vanuatu, Papua New Guinea or the Solomon Islands average per capita GNP has decreased substantially over the last eight years, with the result that their degree of vulnerability has increased in relative terms. The lower quarter of the table shows countries with a relatively low per capita income but positive GNP growth rates, so that, overall, they can be seen as having improved their level of development and thus can be classified as countries which give less cause for concern.

Table 2 gives the corresponding figures for countries classified as giving cause for concern. This group is dominated by West African and other sub-Saharan African countries. Here, the trade-related indicators not only reveal a high level of dependence; per capita income and average GNP growth rates are also relatively low. Indeed, in some cases, these latter rates are actually negative. For Gambia, the Comoros and Yemen, a 10 percent rise in all world agricultural prices, with import and export quantities remaining unchanged, could result in additional costs amounting to 1-2 percent of GNP. These countries do not have the financial capacity to absorb this increase.

A further group of countries with relatively low per capita income and negative or low GNP growth rates does also cause concern. However, due to a lack of data, especially on their percentage of food imports, it is impossible to draw any firm conclusions. These countries include Eritrea, Congo, São Tomé und Principe, Sierra Leone, Haiti, Uzbekistan, Djibouti and Laos.

Photo: Grote

**Higher world market prices may increase the incentives for some developing countries to expand their agricultural production and thus boost their export revenue.**

## Country-specific policy recommendations required

Targeted policy recommendations can be developed for each group. The countries listed in Table 1 are most likely to have the capacity to cover their high food imports, either by developing other sectors, such as tourism or industry, or by improving market access for their own agricultural exports. The latter primarily applies to a handful of countries which, despite having a substantial agricultural sector, are running a high deficit in agricultural trade. These are often countries whose export structures are under-developed due to many years of political instability. Liberalization of regional trade can also help to improve a region's food security – firstly, by reducing reliance on imports from industrialized countries and, secondly, because it is easier to draw on surpluses from neighbouring countries when a crisis occurs. However, this does not apply to the many island states among the most vulnerable countries. For the countries listed in Table 2, it can be assumed that they will continue to rely on food aid and greater technical and financial assistance.

**Table 2: Food importing countries with high vulnerability**

| Country | Food imports as a percentage of total imports | Trade openness | Food imports/ farm exports | Imports/ ex-exports of goods and services (baseline 1995)* | Per capita GNP, PPP (baseline 1995)* | Per capita GNP growth, PPP (% per annum) | Additional net costs of food imports as %of GNP |
|---|---|---|---|---|---|---|---|
| Gambia (GAM) | 37.69 | 1.16 | 4.59 | 1.34 | 1 491 | 0.33 | 2.0 |
| Senegal (SEN) | 27.42 | 0.74 | 3.57 | 0.95 | 1 313 | 1.96 | 0.7 |
| Chad (TCD) | 24.01 | 0.66 | 0.25 | 3.10 | 821 | 1.93 | 0 |
| Burkina Faso (BFA) | 18.00 | 0.39 | 1.29 | 2.20 | 919 | 1.87 | 0.1 |
| Comoros (COM) | 37.15 | 0.60 | 3.76 | 2.43 | 1 541 | -0.78 | 1.2 |
| Guinea-Bissau (GNB) | 43.61 | 0.67 | 0.66 | 1.98 | 774 | -2.71 | 0 |
| Ivory Coast (CIV) | 19.77 | 0.71 | 0.16 | 0.71 | 1 464 | -0.37 | 0 |
| Togo (TGO) | 18.72 | 0.79 | 0.46 | 1.49 | 1 380 | -0.36 | 0 |
| Nigeria (NGA) | 20.53 | 0.93 | 2.69 | 1.18 | 781 | -0.68 | 0.6 |
| Yemen (YEM) | 31.86 | 0.82 | 12.45 | 1.11 | 726 | 2.30 | 1.3 |
| Mali (MLI) | 19.48 | 0.70 | 0.38 | 1.40 | 711 | 3.80 | 0 |
| Niger (NER) | 39.40 | .. | 1.27 | 1.22 | 714 | -0.18 | .. |
| Source of data | WDI | WDI | FAO | WDI | WDI | WDI | |

high degree of vulnerability; medium degree of vulnerability
Trade and GNP indicators are average values for 1995-2002; * in US-dollars