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BACKGROUND NOTES PREPARED FOR
MEETING OF EMINENT PERSONS ON
“COMMODITY ISSUES, INCLUDING THE VOLATILITY IN
COMMODITY PRICES AND DECLINING TERMS OF TRADE AND THE IMPACT THESE
HAVE ON THE DEVELOPMENT EFFORTS OF COMMODITY-DEPENDENT DEVELOPING
COUNTRIES”

Background note 1: Prices Issues
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1. Long term price trends and instability

As seen from the graph below, real prices for all commodity groups have declined steadily since 1960, particularly since the 1970s. Price trends for individual commodities show the same trend.

![Commodity price indices in constant US$ (1995=100)](image)

Source: UNCTAD secretariat calculations, based on the UNCTAD Commodity Price Bulletin

At the same time, price fluctuations have continued to be a characteristic common to almost all commodity markets, and if anything, the amplitude of the fluctuations appear to have increased. The commodity price instability index as calculated by the UNCTAD secretariat (average monthly deviation from exponential trend) for commodities as a whole in current US dollars was 2.8 per cent during the period 1999 to 2002, compared to 1.8 per cent ten years earlier, from 1989 to 1992. The amplitude of price fluctuations varies considerably from one group of commodities to another, or among individual commodities, with vegetable oilseeds and oils and minerals, ores and metals having, on average, higher fluctuations than agricultural raw materials and food and beverages. Individual commodities with a very high degree of price instability (more than 10 per cent on average) in recent years include bananas, cocoa, cotton, hides and skins, nickel, petroleum, sugar, tea, and most vegetable oils.

However, this measure does not capture longer-term movements, and particularly not the kind of dramatic and prolonged price falls that took place in recent years for some commodities, including coffee and cotton. During the 45 months from February 1998 to September 2001, coffee prices (average of the International Coffee Organization indicator prices) fell by 68.5 per cent. During roughly the same period, from January 1998 to November 2001, cotton prices (cotton index A, published by the International Cotton Advisory Committee) fell by 47 per cent. In both cases, prices have since increased somewhat, although they are still far from recovering the lost ground.
2. Commodity export dependence

Most developing countries are heavily dependent on commodity export earnings and the dependence has decreased slightly over the past decade. Of 141 developing countries for which data were available, 68 depended on non-fuel commodities for more than half of their export earnings in 1990-92. By 1998-2000, the number had fallen to 62. If fuels are included, the numbers rise to 96 and 95, respectively. For many of these countries, export earnings are derived from only a very small number of commodities; 69 countries received more than half of their export earnings from three commodities (including fuels, and counting different processing stages as individual commodities) in 1990-1992, and 70 in 1998-2000. Thus, commodity export dependence and export concentration have not decreased significantly.

The dependence on export earnings from a small number of commodities with declining and sharply fluctuating prices obviously has direct implications for the development of export income in general and terms of trade. Problems of data availability make it difficult to arrive at a general assessment, but individual country experiences may be illustrative. For example, the fall in cotton prices is reflected in a decline in the net barter terms of trade for Burkina Faso by 24 per cent from 1995 to 2000 (before the cotton price fall had run its course) and for Mali by 12.5 per cent (UNCTAD Handbook of Statistics, 2002). During the same period, countries dependent on coffee suffered similar declines in their terms of trade, Guatemala by 15 per cent, Uganda by 29 per cent. The graph below illustrates the high degree of variability in export earnings from commodities faced by some countries – caused principally by price fluctuations, although volume variations have also played a role.

According to a rough calculation made by the UNCTAD secretariat, if the prices of coffee, sugar and cotton had remained at the level at which they were in 1998 (when they were, historically speaking, “average”), over the 1999-2002 period, coffee producing countries, sugar producing countries exporting to the free market and West African cotton producing countries would have earned respectively 19, 1.4 and 1 billion US dollars more than they actually did.

Many commodity dependent countries are economically vulnerable and have to deal with the risk of falls in foreign exchange earnings from commodity exports - which influence their capacity to import – while at the same time being affected by rapid increases in prices of imported commodities such as oil. For instance, Ghana mainly exports cocoa and gold and imports oil. Between 1998 and 2000, prices of cocoa and gold fell by respectively 47 and 5 per cent, while oil prices increased by 116 per cent. The situation reversed itself in 2001-2002 with an increase of 76 per cent in cocoa prices and a fall of 15 per cent in oil prices. Managing such cycles is a major macroeconomic task.
3. Impact on poverty, employment and production choices

In several commodity dependent developing countries, particularly LDCs, the commodity sector, which carries the burden for the generation of savings and foreign exchange necessary for development, has not functioned as an engine of growth and industrialization. These countries are characterized by a low-productivity, low-value-added and weakly competitive commodity sector, generally concentrated on a narrow range of products with weak demand growth and declining real prices. Their dependence on commodities is associated with slow export growth, which, together with terms of trade shocks such as those experienced by coffee and cotton producing countries, may lead to foreign exchange shortages, causing continued low productivity, investment and savings. Import volumes are low, and low levels of technology imports and lack of complementary imports result in reduced levels of investment, reduced efficiency in resource use and inefficient production processes. Accordingly, they become caught in a “poverty trap”, from which they lack the resources to extract themselves.

The impact of price falls on poverty and employment is exacerbated by the fact that the burden of declining prices is often borne by the earliest stages of the supply chain where producers have little ability to exercise bargaining power, while market participants at later stages are often in a position to protect themselves or even profit from the price falls. The effects, however, vary from one commodity to another depending on the characteristics of production.

Price falls for commodities where production is capital intensive and export oriented, such as fuels and non-fuel minerals, often have severe macroeconomic consequences, through their effect on foreign exchange flows, and may pose severe constraints on government budgets, since taxes on companies producing these commodities often constitutes a significant income source for governments. Their effects on employment is usually more limited, although it should be noted that labour multiplier effects are often very high in developing countries and that, therefore, a fall in mining employment can result in major localized job losses. Moreover, about 13 million people, almost all in developing countries (ILO: Social and labour issues in small-scale mines, 1999), are engaged in small-scale mining. The overwhelming majority of these are wholly dependent on mining for cash income, and fluctuations in the prices of commodities such as gold and gemstones determine whether they live in poverty or total destitution.

For commodities where production is labour intensive and where small producers predominate, the direct impact of price falls on employment and poverty can be very severe. The case of coffee is illustrative. Smallholders supply about 70 per cent of the world’s coffee supply. For instance, coffee growing supports more than 40 per cent of the rural labour force in countries such as Nicaragua. According to calculations made by Oxfam (The Coffee Market – a background study, 2000), farmers in the Dominican Republic growing coffee on two hectares earn only 260 US dollars a year from coffee production. The collapse of the world price for coffee affects directly 125 million people who depend on it for their livelihoods and has had catastrophic consequences in terms of increased poverty.
Background note 2 “Macroeconomic issues and commodities”

The terms of trade for commodities and fluctuating prices have an impact on macroeconomic variables, such as economic growth and capital accumulation, balance of payments, exchange rates, government budgets and debt management. On the other hand, a sound macroeconomic environment is a pre-requisite for a successful and steady export growth in the commodity sector and for turning the commodity sector into an engine of development.

A. The impact of developments in the commodity sector on macroeconomic conditions.

When commodity prices fall the lower purchasing power of exports negatively affects the capacity to import capital goods and intermediate products necessary for the industrialization process, as well as fuel and food. Adverse commodity terms of trade constitute a menace to private capital accumulation as falling earnings of commodity producers make it difficult to finance investments domestically. A commodity price shock is typically followed by a depreciation of the currency with the consequent impact on inflation. In heavily commodity dependent countries the value of local currencies is heavily influenced by the commodity sector. Hence, there is a strong causality relationship between movements in real commodity prices and the evolution of the real exchange rate.

A commodity price boom entails the danger of economic agents assuming that the boom is permanent. For instance, the government may increase expenditure on long-term commitments based in a boom that may turn to be only a short-term price increase. A commodity boom may also lead to an appreciation of the real exchange rate. The management of such boom and slump situations in the commodity sector is a major macroeconomic task for developing countries. Evidence suggests that booms have not resulted in sustained income increases of a commodity exporting country, while slumps have significant and long-lasting negative impacts on the economy. Besides, slumps usually tend to last longer than booms.

Commodity price instability and the uncertainty that it generates also impede development and reduce economic growth. For instance, it has been estimated that in the case of refined copper, if the price per pound goes up or down by 10 US$ cents, for Chile and Peru, export income loses or gains would amount 317 and 59 million US$ respectively. These amounts represent 2% of export income for Chile and 1.2% for Peru. As refined copper prices can go up and down by around 40 cents, the importance of this price variation may become four times the mentioned figures. Fluctuating export earnings result in variations in domestic income, as well as in domestic savings and in government revenue and adversely affect the level of investment, both private and public. They may also act as a disincentive for foreign investment because of their destabilizing impact on the economy.

An illustration based on information from the World Bank has been provided in UNCTAD, Economic Development in Africa 2001: "Between 1970 and 1997, cumulative terms of trade losses for non-oil-exporting countries in SSA amounted to 119 per cent of the regional GDP in 1997 and 51 and 68 per cent of the cumulative net resource flows and net resource transfers to the region respectively. ... Resource losses due to terms of trade declines have certainly been a major factor in the poor economic performance of the region in the past two decades. If such resources had been

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1 Kouzmine, V., América Latina: las exportaciones de productos básicos durante los años noventa, ECLAC, December 2001
available for domestic uses and invested productively, African growth during the past two decades could have been much faster and its current level of income much greater. A simple simulation on ‘unchanged terms of trade’ counterfactual carried out by the UNCTAD secretariat suggests that the addition of such resources would have raised the investment ratio by nearly 6 percentage points per annum in non-oil-exporting countries in Africa and added to annual growth by 1.4 per cent per annum. This would give a per capita GDP of $478 for 1997 instead of the actual level of $323. In other words, if non-oil exporters in Africa had not suffered from continued terms of trade losses in the past two decades, the current level of per capita income would have been higher by as much as 50 per cent”.

According to the IMF, the usual adjustment to a negative terms of trade shock requires a reduction in domestic absorption, accompanied by a real exchange rate depreciation particularly when access to international capital is limited. For example, in the case of Uganda, with a coffee terms of trade loss equivalent to 3.5% of domestic demand in 1998-99, the government, on the basis of IMF recommendations, reduced public expenditures drastically, and devalued the currency to offset the initial effect on the external balance.

As adverse commodity price movements create large deficits in the current account and entail increased borrowing for their financing, they aggravate the foreign exchange constraint and have a negative effect on the external debt burden of developing countries, contributing in many countries, to the building up of unsustainable debt positions. In fact, commodity price declines were a prominent factor in the emergence of the debt and development crisis of the 1980s and in the continued debt overhang in recent years. The depressed levels of commodity prices, have resulted in significant squeezes in the external payment positions, undermining repayments of debts. Indeed, most of the heavily indebted developing countries are highly dependent on a few commodity exports.

A simulation has shown that in the case of Burkina Faso, if production growth follows historical pattern and cotton prices do not recover from current levels, the debt-to-export ratio will reach 257% by 2010, whereas 150% is considered to be a sustainable level. Similarly, for Zambia, the repetition of last decade’s trend in volume and price for copper exports would lead to the ratio to be over 270% by 2010. Increased external indebtedness also reduces access to additional foreign private finance and adversely affects effectiveness of aid in promoting growth, as most of the aid must be used for debt repayments.

Instability in commodity prices also affects government budgets. For example, a commodity price decline may reduce fiscal revenues, not only through the reduction in taxes from export income but also because some countries impose taxes on their commodity exports, particularly on mineral products. In some cases, governments are directly involved in the commodity export sector through public companies. However, this budgetary impact of commodity crises may not be so negative if appropriate measures are implemented. This was the case recently in Argentina, when following the devaluation an oil export tax was imposed, and in Venezuela, that exports oil through the public company PDVSA. Government revenues may also be reduced as a consequence of the lower level of imports, thus import taxes. The decline in government revenues, in turn, reduces the availability of government resources for public investment in physical and human capital.

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2 IMF, World Economic Outlook, October 2000.
A boom in the commodity sector can also contribute to economic instability through the
government budgets as governments usually tend to inject the extra revenue to the economy when
commodity prices go up, as it is exemplified by the case of most African countries after the
commodity booms of the 1970s. However, government expenditures cannot be sustained when
public revenues decline again due to a fall in commodity prices.

The relationship between commodity export growth and overall economic growth has been
particularly disappointing in mineral and oil exporting economies, as explained by the "Dutch
disease". The discovery of a mineral resource or oil in a country may lead to an appreciation of the
real exchange rate as a result of the increase in mineral or oil export revenues, thus reducing the
competitiveness of other tradable goods in the economy. The policy followed by the Government
of Botswana, which is a mineral exporter, notably of diamonds, and the only country ever
graduated from the LDCs status, is an example of a successful attempt to optimize mineral income
contribution to development while avoiding macroeconomic imbalances, through the limitations on
the growth of government spending and the linking the exchange rate to the South African Rand, as
well as by sterilizing mineral income by building-up very large foreign exchange reserves,
preventing large wage differentials between the mineral sector and other sectors of the economy,
investing heavily in human capital and attracting foreign investment.

The commodity sector is a major provider of employment in many developing countries. Its
contribution to employment and development will be higher the more linkages are established with
the rest of the economy and the higher are learning effects and technological upgrading. Although
these are mostly associated with the manufacturing sector, many areas of the commodity economy,
in particular the production and export of high value products and increased processing also
generate significant positive externalities. Moreover, a higher proportion of rural incomes are likely
to be spent on domestically produced items that is the case with urban incomes.

The persistent deterioration of commodity prices is a major cause for unemployment in
commodity exporting countries. Commodity producers, particularly the most marginal ones, such
as smallholders may go out of business. In the above-mentioned example of coffee in Central
America, where the coffee sector represents around 28% of the rural labor force, the loss of
permanent employment due to the recent crisis in the international coffee market is estimated to be
54% and 21% for seasonal employment.

B. The impact of the macroeconomic situation on the commodity sector

Macroeconomic conditions, both at the national and the international level have a
significant effect on the development of the commodity sector. The commodity trade of developing
countries is highly sensitive to the pace of global economic activity and particularly to the
economic situation in developed market economies because they are the major market for their
commodity exports. Recently, reduced global demand due to the sluggish economic recovery has
contributed to the declining commodity prices and export earnings of commodity exporting
developing countries. Restrictive monetary policies applied in developed countries in the 1980s in
order to keep inflation rates down contributed to the slowdown in global economic activity, and
consequently in global demand for commodities. At the same time, available evidence indicates
that the resulting fall in commodity prices in turn has substantially contributed to the process of
reducing inflation in developed countries.

Workshop on Growth and Diversification in Mineral Economies, Cape Town, South Africa, 7–9 November 2000.
Prices of agricultural raw materials and minerals and metals are the most vulnerable to business cycles in developed countries. Demand for these products depends on the growth of industrial production as raw materials are used mainly as inputs in the production of manufactured goods. This means that economic fluctuations in the industrial sector of the world economy are transmitted to the economies of developing countries through the commodity sector.

During the financial crisis in Asia in the late nineties, world commodity markets were affected in both the supply and the demand sides. The decline in world economic activity that followed the crisis reduced the demand for commodity imports, particularly in Asian countries, which had been substantially increasing their demand for commodities in the previous two decades. Currency devaluations in Asian countries aggravated the situation, as exports of commodities from these countries increased. The result was a worsening of the declining commodity price trends in the second half of the nineties. However, the commodity sector acted as the “saviour” in several Asian countries reducing the negative impact of the crisis on these countries. The strength of the agricultural sector in Brazil during this country’s recent economic problems provides a similar example.

The debt crisis of the 1980s was also a major macroeconomic factor that had an influence on the depressed level of commodity prices during the last two decades. As a result of the foreign exchange squeeze, the high interest rates on foreign debt and the virtual ending of commercial loans, commodity-exporting developing countries were pushed to increase their commodity exports in order to obtain the foreign exchange needed to repay the debt. As a consequence, the volume of commodity exports from developing countries rose rapidly in the 1980s. The resulting fall in commodity prices required further volume expansion, reinforcing a vicious cycle of falling prices.

The inflation rate and the evolution of the exchange rate have an impact on the revenues of commodity exporting countries. An appreciation of the US dollar vis-à-vis the commodity exporting country would be reflected in a reduction in its revenues in local currency. Thus, exchange rate fluctuations may result in commodity income terms of trade changes and increase in their volatility. The choice of exchange rate regime can therefore have an impact on the variability in commodity export earnings.

At a national level, a currency devaluation by the exporting country can have a perverse effect on the international market for commodities by increasing the profitability (in terms of domestic currency) of production of such commodities and thereby stimulating increased supplies for export, while maintaining domestic output and employment. If this occurs, the original market imbalance may be intensified depending on the trade share of the devaluing country. This is the case only if the country is a large producer or a number of countries devalue their currencies. On the contrary, under certain circumstances, an overvalued currency could have a negative effect for the commodity exporting country as it may undermine its competitive position in relation to other exporting countries.

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6 Emerging markets are increasingly important for global commodities markets, particularly China, due to the rapid increases in consumption and production of some metals and minerals, becoming a price maker for examples such as iron ore, aluminum and copper.
7 Most East Asian countries devalued their currency during this period. For instance, a 45 per cent devaluation of the bath in Thailand in 1997 led to 18 per cent decline in the US$ price of rice.
Indeed, the circumstances just described are also at the roots of the adding-up or fallacy of composition problem in international commodity supply. Most developing countries supplying commodities to the world account only for a very small part of global supply, thus they do not have the capacity to influence world prices by modifying their own quantities produced and exported. As such, any developing country may have an incentive to expand exports in order to increase export earnings. However, a simultaneous expansion of commodity exports by many commodity producing countries, as it happened after the debt crisis, is to result in a reduction in commodity prices and therefore in export earnings for all these countries.

C. Economic policy implications

The interrelation between international trade and finance mentioned above indicates that many developing countries are embedded in a low income or poverty trap due to their dependence on commodity exports. These relationships tend to reinforce each other in a vicious circle of low commodity prices, current account balance problems and increasing external debts. In this situation it is very difficult to establish the export-investment nexus that would be necessary for achieving sustained economic growth.

The international community must pay special attention to the persistent problems faced by many developing countries as a result of the depressed and unstable levels of commodity prices and look for the appropriate measures to correct these trends. When doing so it will be important to distinguish if the commodity price decline is due to transitory causes that could be dissipated in the short-term or it is the result of structural deficiencies in developing countries that require measures to have an effect in the long-term.

Another structural feature that deserves attention in a context of declining commodity prices for developing countries is their external debt position. As commodity price developments have a clear impact on external debt and repayment capacity, any attempt to negotiate debt must take them into account. New approaches to dealing with the outstanding debt are urgently needed. Enhanced debt relief and increases in development assistance would help in these respects.

The use of innovative market-based commodity risk management instruments, such as futures and options, may provide for an alternative solution to traditional stabilization systems to deal with commodity price volatility by hedging risks. Nevertheless, it has its own limitations as far as coverage of commodities and income of small producers are concerned. Compensatory finance mechanisms should be revisited to make them more accessible and relevant in the present circumstances, as developing countries need financial support to face commodity price shocks. Proposals for contingent aid schemes in which the debt reimbursement could be suspended when commodity prices fall sharply could also provide for temporary softening against falling export earnings.

The financial and exchange rate instabilities of the late nineties have significantly contributed to the declining trends and high volatility of commodity prices as commodity markets and financial markets are closely linked. The recent experience of repeated financial crisis in developing countries suggests that existing global arrangements are not capable of providing the

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8 The relationship between dependence on primary commodity exports and the incidence of poverty, particularly in LDCs, is explored in detail in UNCTAD, The Least Developed Countries Report 2002. According to this report the incidence of extreme poverty increased in non-oil exporting LDCs between the early 1980s and late 1990s, and this increase was particularly marked in mineral-exporting LDCs.
financial and monetary stability to sustain the expansion of employment and output that is necessary for the success of the international trading system. The multilateral financial system should therefore complement the international trading system in such a way that exchange rates changes do not distort international trade relations, which means preserving competitiveness of developing countries and stabilizing commodity revenues.

The existing international arrangements do not adequately address the systemic problems associated with insufficient development finance or secular declines in commodity prices and export earnings of developing countries. A major concern at present is the instability and deflationary feedbacks among various spheres of economic activity, particularly trade, debt and finance. Thus, there is a need for a reformulation of global economic policy making to create a stable and beneficial macroeconomic environment both at the national and international levels, including the restoration of order in the world monetary and exchange rate system. Main policy measures would include:

- Stabilization of real exchange rates.
- Better management and control of capital flows.
- Debt reduction (including debt write offs) for HIPC's.
- Financing for diversification, particularly in LDCs and Africa.
- More effective and wider coverage of compensatory finance.
- Use of risk management instruments.
- Consideration in the structural adjustment and stabilization programmes of the implications of competitive devaluation for international commodity prices, due to the potential of fallacy of composition.
Executive Summary

Many of the benefits of global trade and its liberalization depend on the ability of developing country producers to respond to new opportunities for production and trade. But this ability is held back by protectionist market access conditions in importing countries, and difficulties to meet market entry conditions such as product characteristics, including (i) quality, appearance, cleanliness, or taste, (ii) food safety, (iii) authenticity (guarantee of geographical origin or use of a traditional process). Other parameters may relate to the nature of the production process (e.g. with respect to worker health and safety, or to environmental impact); and (iv) prices and speed of delivery. This results in high and variable transaction costs, which increase uncertainty and act implicitly as a tax on trade that can exceed the cost of market access barriers. In many of these areas, developing countries, especially LDCs, require technical assistance to build local capacities for designing solutions and implementing them.

For commodity dependent developing countries effective integration into global markets is a prerequisite for more rapid growth and poverty reduction. This, however, is curtailed by various barriers. Some of these are imposed by government and they affect conditions of access to markets. Others emanate from the oligopolistic nature of international markets or from a variety of requirements set by importing firms, creating barriers to market entry even when market access is potentially available. Especially owing to the latter, many commodity dependent countries, particularly least developed countries (LDCs) have found it difficult to take full advantage of the opportunities in the global markets for the products in which they have comparative advantage.

Market access covers a broad range of issues that are the subject of multilateral trade negotiations. These include (i) price-based measures such as import duties, tariff quotas, levies, charges and other border duties, (ii) non-tariff border measures such as quantitative restrictions, contingency measures (antidumping, countervailing and safeguard measures), technical barriers to trade (standards, packaging testing and certification procedures) and sanitary and phytosanitary measures, and (iii) domestic policies, including subsidies.

Market entry conditions imposed by large traders and distribution networks such as supermarkets comprise the other set of parameters that exporters have to meet in order to offer their products to the consumers in international markets, in particular those in developed countries. Such parameters may relate to product characteristics, including (i) quality, appearance, cleanliness, or taste; (ii) safety (e.g. pesticide or artificial hormone residue, microbial presence); (iii) authenticity (guarantee of geographical origin or use of a traditional process). Other parameters may relate to the nature of the production process (e.g. with respect to worker health and safety, or to environmental impact), prices, and speed of delivery.

An important factor that has constrained the commodity exporting developing countries’ ability to benefit from opportunities in world markets has been weak supply response owing to a variety of structural reasons, including weak institutional, organizational and technical capacities.
1. Market Access Barriers

(i) Tariff Barriers

Developing country exports comprise items that face higher barriers than industrial country products, both in the markets of developed countries and in those of other developing countries. Applied simple average tariffs for imports into industrial countries are approximately 3 percent, but for agricultural products, which represent a relatively large share of developing country exports, average tariffs are 8 and 27 percent, respectively. Tariffs on imports into other developing countries are substantially higher, except for agriculture.9

The situation is more disquieting with tariff peaks. They often exceed 50 percent or, in agriculture, 100 percent, are concentrated in labor-intensive products of significant export interest to developing countries, and particularly least developed countries (LDCs). In the United States and Canada, tariff peaks are concentrated in textiles and clothing, in the European Union (EU) and Japan in agriculture and food products.

Tariff escalation, in which tariffs on processed goods exceed those on primary products (see Box 1), accord producers in the importing country a significant competitive advantage over others. This can substantially reduce the returns to developing country entrepreneurs from engaging in processing activities with higher value added10. This hampers the diversification of exports, limits the accumulation of skills and capital, and thus helps to perpetuate dependence on a small number of unprocessed goods whose demand grows little and whose prices are volatile. The tariff structure of developing country importers differs little in this regard from that of the "Quad" (Canada, EU, Japan, and the United States).

Box 1: Tariff escalation on cocoa products

The European Union applies a zero tariff on imports of cocoa beans (raw material), but cocoa paste (semi-processed) is subject to a 9.6 percent duty, and processed chocolate is taxed under a mixed set of tariffs that can add up to as high as 25 percent. Partly as a result, while 90 percent of the world's cocoa beans are grown in developing countries, only 44 percent of cocoa liquor is produced in these countries, and 29 percent of cocoa powder. As for the final product, chocolate, developing countries account for a mere 4 percent of global production. While tariffs facing the LDCs have been eliminated under the EU's Everything But Arms initiative, they remain for large producers such as Ghana and Ivory Coast.

Source: International Cocoa Organization; IMF estimates from tariff schedules.

(ii) Non-Tariff Barriers

Non-tariff measures aggravate market access difficulties and reduce the transparency of market access conditions. Under the Uruguay Round agreements quotas have been significantly curtailed and converted into their tariff equivalent. But a complex use of quotas continues to affect products originating from developing countries. Principal products, which are at stake, even if they

10 Tariff escalation is most prevalent in textiles and clothing, leather and leather products, rubber products, wood, pulp, paper, furniture and metals.
are not the focus of this report, are textiles and clothing. They are under a transition regime set to end in 2005. Industrial countries have exploited the considerable leeway they have under this regime by backloading liberalization, and it is estimated that, by 2004, the 11 principal developing country exporters will still face quota restrictions on 80 percent of their exports of these products.

Protection has shown a tendency to reappear under new guises such as "trade remedies", and in particular antidumping measures. Almost half of the 4999 antidumping investigations initiated by developed in 1995-2000 targeted developing countries, with another quarter targeting transition economies. Antidumping measures have also become increasingly popular with developing countries themselves, with one-third of measures directed at other developing countries. Technical, sanitary and phytosanitary standards are increasingly complex. They are generally developed with little involvement by developing countries, and have strained the capacity of developing countries to meet them. Furthermore, there are concerns about the scope for the discriminatory use of these measures (see Box 2).

Even when the products affected are not commodities, protectionist measures on products of export interest to developing countries affect negatively the diversification alternatives available to commodity dependent countries.

### Box 2: Safeguards on Shiitake mushrooms

In the early 1990s, high prices of shiitake mushrooms in Japan encouraged Japanese firms to invest in China, introducing new cultivation techniques to raise the quality of Chinese mushroom to Japan standards. Chinese mushrooms exports to Japan rose to US$120 million per year, gaining a market share of almost 40 percent. However, faced with this threat to its shiitake growers, in April 2001 Japan introduced temporary safeguard tariffs on 266 percent and other import curbs on imported shiitake mushrooms, restricting Chinese exports significantly. China retaliated with tariffs on Japanese cars, mobile phones and air conditioners. An understanding was reached in December 2001 under which Japan agreed not to extend the measures and the governments announced the creation of cooperative mechanism aimed at ensuring "steady" bilateral trade in the affected farm products.

*Source:* World Bank, Global Economic Prospects 2002; and www.chinadaily.com

### (iii) Preference Schemes

An argument often used to allay concerns regarding market access for developing country products is that there are preferential schemes especially designed to help these countries sell their products in industrial country markets. The margins under many of these schemes are often smaller than they at first appear, and "sensitive products", which tend to be of most interest to developing countries, are often not covered.

Comprehensive preferences for LDCs have been granted under the EU's Everything But Arms (EBA) initiative, which allows duty-free and quota-free access for virtually all products, and similar schemes by New Zealand, Norway and Switzerland. Another prominent scheme is the

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11 Developing countries themselves continue to make use of restrictive licensing of imports.
12 Under certain conditions, trade remedies such as safeguards and anti-dumping are consistent with WTO Agreements.
13 However, exports of LDCs have been little affected.
14 Under the EU scheme, certain restrictions will be kept on banana imports until 2006, and on sugar and rice imports until 2009.
United States' African Growth and Opportunity Act, under which 35 African LDCs and non-LDCs can export freely to the US market, with certain restrictions for apparel and other "sensitive products".

The adoption by all Quad countries of schemes that provide unrestricted market access for LDCs can have significant benefits without imposing undue costs on other suppliers, given the very small share of LDCs in world trade (around 0.5 percent). There is, however, a danger of complacency, with LDC preferences, which carry only limited political cost for industrial countries – coming to be seen as substitute for broader liberalization. In fact, such preferences risk creating vested interests, with rich-country protectionists coalescing with the poorest countries to maintain market barriers aimed at the "middle", perceived by both as a competitive threat. Preferences should therefore be set firmly within a context of rapid multilateral liberalization, while providing LDCs with enough time and assistance to adjust.

2. Agricultural Support

(i) Output and Price Support

Despite reforms in recent years aimed at delinking subsidies from production, more than 70 percent of assistance to producers continues to be provided through market price supports and payments per unit of output, partly associated with export subsidies. Within developed countries, this assistance is costly and regressive since much of the benefit accrues to large farms, and price supports hurt low-income consumers most, because they spend a larger share of household expenditure on food. In other countries, especially the poorer ones unable to compensate for losses through measures of their own, the over-production stimulated by the measures reduces prices and incomes from the affected products and subjects them to greater volatility.

Box 3: United States cotton subsidies and African producers

World cotton prices have been on the decline since the mid-1990s. Since 1997, U.S. farmers have received "emergency assistance". Total support in 2001 was estimated to have been in the range of US$1.7-2.0 billion. Apart from enhanced support schemes that benefited a variety of sectors, cotton farmers were protected from imports by quotas, and received export support as well as price-based subsidies. These additional benefits have helped to shield cotton production decisions from relative price movements. Occasionally, cotton has had higher relative returns than substitute crops. As a result, while total area harvested in the world has been falling since 1995, in the United States it has increased by around 10 percent between 1998 and 2001. In the 2001/02 season, U.S. cotton exports are expected to reach their highest level since 1926/27, or 35 percent of world trade, non-US exports their lowest since 1984/85. This contributed significantly to downward pressure on prices, hurting some of the world's poorest countries. For example, the loss of export receipts caused by the fall in world prices over the past two years is over 3 percent of GDP in Mali and Benin, and 1-2 percent of GDP in Burkina Faso and Chad. For comparison, the value of annual HIPC initiative debt service relief to these countries has been in the range of 0.81 percent to 1.58 percent of GDP in 2001.

Source: Cotton Advisory Committee; USDA Cotton and IMF estimates, 2002.

15 When industrial country production is insulated from world market conditions through support measures, the full burden of adjustments to changes in supply and demand falls on other producers, thus causing greater swings in prices.
(ii) Level of Support and Trends

Total OECD support to agriculture, through border measures and budgetary transfers, amounted to US$311 billion or 1.3 percent of GDP in 2001. As a result, gross farm receipts were 52 percent higher than they would otherwise have been. There is, however, a wide distribution across countries and commodities. Support levels are very low in Australia and New Zealand, and far above the average in Iceland, Japan, Norway, Switzerland and Korea. They are higher in the EU, with subsidies raising producer incomes by 62 percent on average in 2000, than the United States (28 percent). Much of this support increases with the level of output, contributing to excess production that competes with developing country farmers for markets. The need for reforms has been broadly recognized. The outcome of the Cancun meeting and, eventually, the implementation of the Doha work programme will determine the extent of liberalization in this area, as well as in many others.

The Uruguay Round Agreement on Agriculture (URAA) extended multilateral disciplines to domestic agricultural support policies and direct export subsidies. Its benefits are judged to have been modest, however, because in most cases the ceiling of support under these commitments were well above actual levels, and because of the aggregate, non product-specific nature of commitments, which allowed support of some products to increase substantially. Moreover, countries subsidizing their agriculture have been declaring that some of their support falls under the kind allowed by the URAA (green or blue boxes) rather than those that should be reduced (amber box).

3. Increasing Exigencies of Markets

Commodity markets are undergoing rapid change, with closed commodity chains rapidly replacing wholesale or spot markets. Highly concentrated agro-food processing, supermarkets, retailers and food service industries at the end of these chains are reducing their supply base and demanding increasingly stringent levels of quality and compliance with safety standards. With the increasing dominance of international distribution networks even in developing countries, these exigencies must be met even when supplying domestic markets.

Only a small group of producers and exporters in developing countries has the capitalization, infrastructure, technical expertise and market information to meet the requirements of shippers, processors and retailers. And even for this highly capitalized group, it is very difficult to prevent bargaining power from being eroded as downstream agribusiness becomes ever more concentrated. Small producers without the financial and technical means to undertake adjustments for meeting these standards have been increasingly marginalized.

The restructuring of the agri-food chain into a vertically co-ordinated demand driven chain with private standards, and the rise of contracts and specialized intermediaries, is proving to be a powerful driver of divergence and marginalisation within farm communities. Under these closed contract production systems, market access has little to do with production efficiency, and everything to do with meeting the demands of large distribution networks such as supermarkets for consistency of supply and compliance with standards. These emerging factors of global markets are market entry conditions, which tend to generate substantial costs for developing country exporters.

17 UNCTAD’s forthcoming Expert Meeting will address market entry conditions affecting the competitiveness of developing country exporters. See TD/B/COM.1/EM.23/2, 2003, Geneva.
II. Way forward

Many of the benefits of global trade and its liberalization depend on the ability of developing country producers to respond to new opportunities for production and trade. But this entrepreneurial drive is often hampered by weaknesses in the international and market infrastructure for trade, and the concerns of developing country producers are not always reflected in international agreements. In this regard, large distribution networks such as supermarkets and their power have increased market entry barriers to many developing country exporters. The latter find it difficult to meet quality requirements such as agrifood quality and safety standards, including brand names and various private labels imposed, in general, by these distribution channels. This results in high and variable transaction costs, which increase uncertainty and act implicitly as a tax on trade that can exceed the cost of market access barriers. In this light, the following issues may be addressed by the Eminent Persons in their deliberations on policy proposals regarding market access and market entry problems:

In the light of developments in the Doha work programme of WTO, commodity dependent developing countries might review the steps that they should take in this connection for pursuing their specific interests on market access, including all the elements of the Agreement on Agriculture. The contents of a Development Box, the ways in which the impact of subsidies as well as dealing with the problems raised by SPS, TBT, TRIPS and other relevant agreements, and a clear appreciation of the opportunities and leeway offered by the current international trading rules, in particular for supporting poor farmers, could be part of this review.

An assessment of the nature and significance as well as advantages and disadvantages of regional trading arrangements and preferential trading schemes for commodity trade and its developmental implications could provide valuable insights regarding the priorities to be pursued by developing countries in the international trade.

Given that even with much enlarged market access possibilities, success in international markets is not assured owing to market entry problems, these countries could also reassess their approach to pursuing their specific interest as regards international commodity policy. This could include an identification of the most appropriate fora where this should be done in respect of the various objectives pursued such as better integration into the international value chains.

The solution to many of the problems related to satisfying the stringent market entry conditions such as agro-food quality and safety standards, as well as establishing mutually beneficial links with large international companies, including distribution chains, calls for considerable investments in physical and human capacities at the national, local and firm levels, as well as institutional, organizational and legal reforms. Undertaking the requisite investments at the firm level is particularly difficult for small producers and traders. It is important to identify the best approach to generating the necessary funds both domestically and internationally, and to devise structures so that governments, businesses and NGOs in developing and developed countries as well as international organizations can undertake mutually supportive and consistent activities in support of the commodity sector of developing countries, in particular small producers, processors and exporters. Ways could be identified to promote and build upon the corporate social responsibility of large firms as a positive factor in this respect.

The identification, and an assessment of the potential, of niche markets and alternative trading channels such as fair trade or ethnic networks could help in improving market entry prospects.
Background Note 4: Multilateral cooperation

I. The Setting

International cooperation in commodities has been taking place either in the form of international commodity agreements (ICAs) and arrangements comprising both producing and consuming countries or in form of various cooperation schemes among producers only.

In cases of coffee and cocoa, international prices had been maintained at "an adequate level" through retention schemes with cooperation from consumers under corresponding ICAs. In 1989, consuming countries ended funding within those schemes. The stated reason for this was to prevent countries becoming dependent on raw material production based on artificially high prices. ICAs are still often associated with price regulation using export quotas or buffer stocks. However, ICAs today work to foster international cooperation in commodities in ways which do not intervene directly in the market. In October 1999, the sole price-regulating ICA (on natural rubber) existing at that time which operated on the basis of buffer stock management, terminated its activities. Since that time none of the ICAs (on cocoa, coffee, cotton, grains, olive oil and table olives, sugar, and tropical timber) contains economic provisions to regulate markets by supply or price managements.

The Common Fund for Commodities is a unique organization of producer consumer cooperation in the area of commodities. As the only international financial body that is concerned exclusively with the commodity sector and covering all aspects from production to the sale of the final product, it has a very important role in putting into operation, and facilitating the implementation of, a wide range of policies and measures for resolving commodity problems.

There have been several attempts to introduce market regulation mechanisms by agreement among producers. In 1993 the Association of Coffee Producing Countries (ACPC) resurrected a retention scheme (this time without the participation of consuming countries). The scheme collapsed in the early 2001 for lack of funds and failure to attract all producers as members. On natural rubber market the Association of Natural Rubber Producing Countries (ANRPC) is operational for a long time. In 2002 three major producing countries (Malaysia, Indonesia and Thailand), established the International Tripartite Rubber Organization (ITRO) and have met several times, both at official and ministerial levels. According to informal reports, the ITRO have accumulated a considerable amount of stocks, but there are market indications that the rise in prices in 2002 was largely due to defaults in deliveries.

The best known successful examples of producers' regulation of the market are OPEC controlling oil, the world's most important raw commodity, at the intergovernmental level, and De Beers, controlling gem diamonds, at company level. Another example was Memorandum of Understanding (MOU) on Aluminium which, in the mid 1990s, was an informal agreement among major producing countries to cut their production and exports in order to cut excess supply. The important feature of the MOU was that though it had anticipated cutbacks in production and set production targets there were no formal obligations between the parties and the industry made the cuts voluntarily. Currently discussions are being held on steel within the OECD with participation of other major producers. The major goal is to manage oversupply by closing obsolete or excessive production capacities.
II. New approaches

A. Producer-consumer cooperation

All currently operational ICAs are of "administrative" nature serving as fora for producer-consumer discussion and are dealing predominantly with statistics, market development and promotion. In a certain sense they became similar to existing international study groups (ISGs) (on rubber, lead and zinc, nickel, copper, and jute). Indeed, upon the termination of the International Natural Rubber Agreement its statistical and technical functions were transferred to the International Rubber Study Group. The International Jute Agreement was transformed into International Jute Study Group, which started its activities in April 2002.

In most of ICAs the possibility of market regulation is not stipulated at all and is not discussed at meetings as an option for action for inclusion in successor agreements. In others, attempts of this discussion are usually cut short by major consumers who are generally referring to the principle of a free market and to unsuccessful previous experiences of market regulation schemes. However, as the basic problem of most commodity markets is imbalance between supply and demand and low market prices, some of ICAs have been looking for the ways and means for producer-consumer cooperation without regulating the market itself. For instance, International Coffee Organization have identified in 2002 a number of ways both on the supply and the demand sides in which the coffee crisis can be addressed through international cooperation to create a healthier balance between supply and demand. On the supply side these are quality improvement, diversification, and production monitoring, while on the demand side they are promotion and elimination of barriers to trade.

B. Producer-producer cooperation – supply management

The case for reinforcing international management of supply of commodities by producing countries alone is now gaining ground. Its major aim is to install proper market control over the commodities produced by developing countries. In April 2002, the idea was put forward at the informal Geneva meeting of Ambassadors from Commonwealth African developing countries "for exchange of views on the action that could be taken at national and international level to deal with problems posed by declining commodity prices to countries which are heavily dependent on exports of primary commodities". More recently, the proposal made a part of the WTO non-paper, communicated from Kenya, Uganda and Tanzania (WT/COMTD/W/113 of 19 May 2003).

As the non-paper says, the medium to long-term purpose of any supply management programme should be not to regulate the price of a commodity at a specific level for the foreseeable future, but rather to limit the duration of a programme to a point when the necessary investment from the revenue generated by higher prices could be undertaken to establish domestic processing industries and marketing services for added value products. The long-term purpose, therefore, would be to relieve countries from dependence on primary commodities.

The major components of the proposal are: the agreement should be on a company/producers and not on intergovernmental level and should be led by the private sector; the system should be based on agreed export capacity, and not on agreed export quotas, the linkage with investment of extra revenue obtained in added-value products should be included, some proportion of production capacity should be destructed; the scheme is to begin with a single commodity, and the support of developed countries governments, UN agencies, other governmental
and non-governmental organizations, civil society and the Common Fund for Commodities would be important.

1. Legal issues

The exception provided by GATT applies to commodity agreements of which both exporting and importing countries are members (i.e. to ICAs). Countries which are members of such agreements are permitted under "general exceptions" to the provisions of GATT 1994, Article XX to impose restriction on production, imports and exports, even though they may be inconsistent with its rules, if they are imposed in pursuance the obligations which such agreements impose. Articles XI and XXXVI of GATT also contain wording that could allow such restrictions.

There may be an argument against the possibility of creating an effective retention scheme by private sector only, as the WTO rules, such as those allowing market intervention, apply only to measures taken by governments and not to agreements among private sector producing firms. Agreements among the private sector may be challenged under the national competition laws which, inter alia, prohibit arrangements for "price fixing". In the case of diamonds, it was alleged in an anti-trust suit in USA, that De Beers and General Electric (which account for 80-90 per cent of the world's production of industrial diamonds), have been conspiring to maintain prices at artificially high level. There is increasing trend on the part of competition law authorities in the EU, USA and other developed countries, as well as in some developing countries with relatively strong competition policy law, to exercise vigilance over prices charged by companies and to impose fines when they are found to have entered into arrangements for price fixing or for market sharing.

2. Other constraints

Opponents of the producer-producer schemes to regulate the market (mostly developed countries) consider them as contravening free market forces. However, this reasoning is countered by the argument that developed countries themselves interfere with the laws of market place by agricultural subsidies which deprive the developing world's commodity exports of the right to compete for markets and are essentially "commodity agreements" to stabilize and guarantee incomes of developed world farmers. A factor which may influence the future attitudes of governments of industrialized countries regarding the agreements among producing countries for maintaining prices at remunerative levels is, that they are increasingly facing problems, similar to those which are faced by commodity exporting developing countries, as, in some cases (such as production of aluminium, steel and a number of basic chemicals and fertilizers) the structural excess capacity has developed on a global basis.

It is arguable, whether supply management, which leads to a price increase, is in the interest of consuming countries. However, "while the opposition of the industrialized countries could be understood in terms of their short-term interests, it was less clear that it was rational in the longer run perspective, since rising real income in the developing countries was clearly in harmony with interests of developed countries from many points of view, including the larger markets for their exports that a prosperous Third World would imply" (Sydney Dell).

The difficulties of reaching agreement between all (or most of) developing country producers of a particular commodity should not be under-estimated. One of the reasons for the
failure of both ICAs with economic mechanisms and supply management schemes is related to the difficulties faced by producing countries in agreeing among themselves on the extent to which each of them should reduce exports in the situation of global oversupply.

For many non-tropical commodities, developed countries are also acting as major producers. The question of the success of the proposed scheme would therefore be what will be their attitude to the scheme in general and whether they will be invited to participate at all.

It is certain that greater involvement of producers' associations in policy making at national and international level would be a positive factor. There are however, doubts as to whether producers associations would without support from their governments, be able to administer objectively and equitably, agreements which call on their members to take measures to reduce production temporarily, with a view to stabilizing prices, in situations when the global demand is declining. Firstly, the producers' associations are often dominated by farmers with large land tenures or by farmers with social or political clout. As a result, associations often tend to promote the interests of big farmers, at the cost of small farmers. It is therefore very likely that if the implementation of policies to reduce production is left almost entirely to the producers associations, the main burden for this reduction would fall on small producers. Secondly, in countries where production of a commodity (such as coffee or cocoa) is undertaken predominantly by small farmers, it would be difficult for them to agree to reduce production, without some sort of subsidy from the government.

III. Way forward

International Commodity Organizations are the principal multilateral fora for producer consumer cooperation in the area of commodities. They have been adapted to current political and economic realities and their activities appear as a cost effective approach to dealing with some of the problems encountered by the commodity sector. Apart from providing information and acting as a conduit for technical assistance, some innovative schemes consistent with the current political and economic realities have been developed for dealing with the problems of low prices and diversification. The newly introduced programme of the International Coffee Organization is an example in this regard. Nevertheless, ways to improve the effectiveness of ICOs and their attractiveness so as to increase their membership could be devised. Similarly, identifying ways for expanding the operations of the Common Fund for Commodities, which is suffering from financial constraints, would be an important contribution to dealing with problems facing the commodity sector in developing countries.

Regarding action by producers alone, one possibility could be to propose a supply management scheme by subsidising producers of certain commodities produced exclusively by developing countries. This may be designed so as to be WTO compatible, even under a strict interpretation of the current rules. According to the current WTO Agreement on Agriculture a direct payment paid by governments under production limiting "Blue Box" is possible. Under WTO rules, those developing countries that do not have AMS commitments can use de minimis provisions, which means that they can use up to 10 per cent of their export revenues to subsidise their producers. These subsidies could be used as a reimbursement for cutting the production of a commodity and as a means for diversification (both to other commodities and out of commodities). Given the meagre economic and financial means of most commodity dependent developing countries, it appears necessary that the funding for these subsidies be provided by developed countries. Similar commodity specific schemes can also envisaged where low cost producers of a particular commodity finance the diversification of high cost producers who continue production
even when making losses owing to the existence of exit barriers. This could be feasible if the low cost producers were convinced that the rise in prices as a result of the reduced supplies would more than compensate the financing they would provide.

It would be important to gauge the practical and political feasibility of supply management schemes. This would cover the principal issues of the current state of readiness by producers to agree on such schemes and by consumers to support it, the scale of funding needed, to investigate the possibilities of raising the necessary funds from various sources, and naturally, the expected impact. The funds are necessary so as to provide a compensation to farmers who would be ceasing their production. If and when the programme functions it might be assumed that it would become self-funding through increased revenues from higher prices.
Background note 5: Diversification and Competitiveness

One of the natural responses by Commodity Dependent Developing Countries (CDDCs), to the combined effects of fluctuations and a decreasing trend in prices of their traditional exports is to embark upon a diversification path. Dissatisfaction with the developmental performance of an economy based on exports of traditional low valued commodities also favours this path. Improved competitiveness, in turn, is a prerequisite for diversification efforts as well as increasing the benefits obtained from existing activities. The key concern is how to break the vicious circle generated by the inability to find lucrative products and markets or losing such markets if and when they are found.

**Product Diversification**

Export diversification can be understood as a process by which a country’s enterprises (i) expand the scope of their products to new commodities (horizontal diversification) (ii) expand destination markets of their products to countries and regions of the world other than traditional trading partners or (iii) venture into exporting processed forms of commodities traditionally exported in a raw state (vertical diversification). Diversification of the commodity sector should not be construed as an attempt to produce and export a diversified set of products and services at any cost, but rather as a continuous process and a positive factor in generating a virtuous circle of development. Diversification can be seen as viable long-term response aimed at avoiding the declining price trends and volatility of earnings from commodities exported by developing countries in international markets.

Diversification in the commodity sector, aimed at increasing domestic value added is a worthwhile process as a first step to industrialisation. Such a path has been followed, with success, by developed countries such as the United States, Canada and Australia, and more recently by the so-called second-tier Newly Industrializing Countries (NIC) of South East Asia, namely Malaysia, Thailand and Indonesia as well as a number of Latin American countries. These natural resources-rich countries have been able to make the transition from commodity dependence to import-substitution and export-led industrialisation. Staged state intervention targeting agricultural markets, agro-industries and firms has been instrumental in this process.

One of the problems posed by horizontal diversification strategies is that countries tend to specialize in products in which they have static comparative advantages, according to their natural endowments and current production technologies. Some trade analysts argue that if commodity dependent developing countries were to venture into “a generalised export drive”, they might face significant constraints on the demand side, the so-called fallacy of composition. If several developing countries were to expand their exports simultaneously, they would experience such a decline in their terms of trade that their export revenues and their real income might fall. While such a view may be justified for such commodities as cocoa, coffee, tea, vanilla or copper and oil, there are products for which demand could outpace supply in the near future. These products include basic foodstuffs, the demand for which is expected to rise in the developing countries as their incomes increase, and high value products such as fresh fruit and vegetables as well as processed foods for which demand is dynamic also in developed markets. Therefore, the existence of a market potential for new products must be the primary motive of CDDCs enterprises diversification. In view of the current development characteristics of most CDDCs, and their very low share in world agricultural trade, it is worth recognizing these countries have not fully exploited their potential to capture more market shares in the non-traditional agricultural
commodities. For example, UNCTAD statistics indicate that Africa’s share in world agricultural trade is less than 2%, against a 10% share in world population.

In the face of price uncertainty in world agro-food markets, analysing the degree of risk against investment yields is of particular importance as those commodities with potentially high returns could prove prone to high price risks that would scare away entrepreneurs from investing in commodity sectors with potential. Therefore, CDDC governments need to develop specific policies and measures that would help to enable entrepreneurs in identifying appropriate combinations of commodities that could bring a sustained rise in export revenues and increase domestic income and savings. Most CDDC governments have had at some point organised institutional frameworks to manage tropical commodities from production, through post-harvest marketing and financing. Such capacities could be capitalised on in order to develop know-how of international markets, including price trends and competitiveness. This would be a much needed government response to assist local entrepreneurs make well informed strategic decisions. In order to determine which commodity investment portfolio to promote, policy makers and investors would have to make a trade-off between risk – including risks associated with commodity price variability - and investment returns.

In practical terms, the monitoring of international prices and the assessment of the yield patterns of candidate commodities seems to be a useful but difficult starting point for determining export strategies at the country and enterprise levels. It must be said, however, that since most investment decisions are taken by private agents, the way they “adjust to volatility in exports” matters. An investor’s decision to diversify may depend on profitability, that is, whether the associated reduction in risk will compensate for the reduction in expected returns. Entrepreneurs’ diversification strategies may not be optimal from a social point of view and their perceptions about returns and risks may differ from those of the society. Inadequate facilities such as standards agencies, physical infrastructure, human and financial capital, and industry organisations, international business networks and professional networks and inadequate information may discourage further risk-averse investors. In Africa for instance this has lead to small producers choosing to hedge uncertainty – especially of food prices - by engaging in diversified subsistence agricultural production. Such behaviour has contributed to the perpetuation of low productivity in agriculture.

There are, however, reasons why large investors may not be too concerned about instability. They are usually able to offload their perceived risk to other, normally weaker parts of the supply chain. The cost of instability may be borne by workers, in terms of wage income and employment. In the case of transnational corporations, they usually take a global view making investment decisions so as to include considerations that would reduce the total risk, leaving individual countries with a higher risk factor than there is for the firm.

In this vein, in order to encourage diversification, and depending on the particular circumstances in each country, measures such as taxes and subsidies, various types of guarantees, insurance, and direct controls over investment have been useful. Market-based schemes to replace some of the services provided by former marketing boards either to stabilize returns to producers in such a way to induce them to reallocate resources from subsistence to productive agriculture, or from unpromising commodities to new ones may also be envisaged. However, WTO rules may currently exclude some of the measures that have been useful in the past.

Special institutions are likely to be needed for reaching out rural farmers. Financial intermediaries such as agricultural banks, credit unions have an important role to play as service providers.
The most important action governments need to undertake in order to encourage horizontal diversification is to design and implement a long-term export-led development policy which includes providing a sound regulatory and macro economic framework, increased investment in R&D and agricultural extension, and geological surveys for mineral exploration in resource-rich developing countries.

Processing commodities before exporting them is an attractive option for commodity dependent countries. However, apart from the constraints emanating from market access conditions (processed commodities face high tariffs) access to appropriate technology and sometimes the lack of skills for applying this technology create important problems. In certain cases, there are problems with importing key inputs and even the availability of energy. In order to add value to commodities through processing, CDDCs need to fill the productivity gap through measures supporting agro-industrial R&D and human resource development. Using the skills and experience obtained in sectors where they have been active for decades need to be taken into account as well.

Diversification in commodity-dependent countries calls for improved competitiveness and supply capacities. It entails the addition of value to raw materials through processing (for both foreign and home markets) better positioning in global product chains, increased participation in marketing and distribution networks, and the ability to produce and export higher-value commodities. Entering new markets and exporting high-value commodities requires production and management skills more similar to those required for manufactured goods than those needed for exporting traditional bulk commodities. These skills prepare entrepreneurs for competition in other sophisticated markets and generate a demonstration effect in other sectors.

Government intervention to support a process aimed at improving competitiveness could include the following measures: (i) A skill-intensive human resources development strategy targeting commodity processing sectors of promise; (ii) Stepping-up and coordinating public R&D with the needs of commodity chains to insure creation of knowledge on product development and a framework for rapid diffusion to all relevant sectors; (iii) Providing an enabling environment for linkages between local firms with foreign corporations. The cluster-based approach may be given due consideration because “it recognises the reality of what determines productivity, that is the interdependence of and joint activity and synergies among related fields”18. Also, the use of low-cost or traditional technology to transform products into processed items is another option worthy of further research.

The chances for the success of vertical diversification will depend on a gradual approach to product development and differentiation starting from technically accessible commodity chains. Since high value-added agro-processing is both skill-intensive and capital intensive, countries will need to look at the optimal use of their endowments and decide over the appropriateness of such a development route. If vertical diversification for export is the chosen path, the overarching aim for government measures would be to enable export enterprises to compete in international markets. Financial resources necessary to undertake the requisite public investments, however, are in very short supply in most CDDCs.

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18 Michael Porter. Building competitive advantage, lessons from other countries.
Geographical diversification

Historical and linguistic ties have led some developing countries to have special links with few markets and to depend on them. Preferential market access conditions, such as those between the countries of the European Union and the African, Caribbean and Pacific Groups of Countries (ACP), have reinforced this dependence. On a regional basis, during the last three decades since 1970, the proportional importance of developed regions as export destinations for commodities has generally declined in favour of developing regions. The development of regional infrastructure and other regional integration measures are expected to intensify that trend. Africa, the share of whose exports going to Europe has increased, however, has been an exception in this regard. Nevertheless, since CFA franc devaluation in 1994, Burkina Faso and Mali have been able to export more cattle and bovine meat to the coastal countries in spite of competition with subsidized European meat.

Initiatives in favour of LDCs and African countries by the United States and Japan are new opportunities these countries could exploit. Most tropical countries could also take advantage of their seasonal differences with temperate developed countries to develop off-season products. Another possibility may be to pay more attention to markets where quality considerations are less stringent than those in developed countries. For instance, it is reported that the Chinese beef market comprises “mass market for beef which is a low-priced and low-value market 19.

Competitiveness

Competitiveness is by definition a relative concept. It depends on the conditions in a given country and what is done by a given enterprise, but also on what the competitors do. It depends on the ability to consistently supply a product of a given quality more cheaply than the competition or providing a better-quality product than others can at a given price. Price competitiveness is relatively more important for homogeneous commodities that are traded in bulk than those entering as inputs into manufactured goods.

For commodities, there may be two levels of price competitiveness. At the macro-level, there may be competition between natural and synthetic items such as for cotton, or between different natural products, such as sugar and corn, and cocoa and other fats used in chocolate. For instance the fall in the share of cotton in world fibre markets from 50 percent 1970 to 40 percent recently can be explained by the proliferation of cheap synthetic fibres. Macro-level competitiveness is therefore, an area where the suppliers of a product have a common interest and would benefit from cooperation on generic promotion. At the micro-level, there is competition among different grades of commodities used in blending of instant coffee for instance. Advances in the processing technology of coffee and cocoa that compensate for poor bean quality now allow low-quality raw materials to be included in prestigious blends.

Health and environmental considerations also affect the competitiveness in addition to price factors. The preference of white over red meat and the recent changes in the material composition of cars are cases in point. Also, the “alternative uses” of sugar due to expanded utilisation of ethanol as a fuel have a significant impact on the demand for sugar. Perceptions and publicity thereto may influence the relative competitiveness of one product. For example, the up-market image of cotton fabrics is a positive factor for cotton to keep its market. For commodities used as inputs for final products, the quantity demanded depends not only on the competitiveness of the

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19 C. Brown, J. W. Longworth and S. Waldron
Food safety and Development of the Beef Industry in China.
raw material but also on the demand for, and the competitiveness of, the final product. Besides price and consumer preferences, market access and market entry conditions for the final product affect the quantity demanded of it and thus, of the raw material.

Margins between farm-gate and FOB prices are often high in developing countries, leading to a loss of competitiveness. Poor physical infrastructure and management problems increase the costs of transforming products through space, form and time. The principal problems that small producers face – access to finance and information- stem from the inability of the private sector to fill the void created by the disappearance of marketing boards. Improving farmers’ competitiveness and bargaining power necessitates reducing both the transformation costs -through physical investments and learning-, and the transaction costs - through institution building. Apparent cost competitiveness at the farm/factory or port of exit level, may also be lost when international transport cost are high. This is particularly the case for landlocked and small island countries.

While most investment decisions are taken by the private sector, the history of world development indicates that there has to be sufficient space for policy implementation, in particular for solving market failures and providing an enabling environment for export development. Individual characteristics and dynamic comparative advantage considerations of countries will play a key role in determining which course should be taken.

**Way forward**

As decisions by the private sector ultimately determine the production structure of the economy, the crucial requirement for embarking upon a viable path is to enable entrepreneurs to identify opportunities and invest in these areas. Identification of these opportunities in commodity related sectors that correspond to the dynamic comparative advantage of the country concerned could be much facilitated by a concerted effort on the part of governments, local private sector organizations, international firms and international organizations. Determining the elements of such a programme and the roles of the various actors could be an important step facilitating diversification efforts of CDDCs. Partnerships with large international firms and foreign direct investment can present considerable potential for diversification and improved competitiveness. While policies and the economic environment in the CDDCs are crucial determinants in this respect, the corporate social responsibility of large international firms could also play a role. Moreover, governments of the home countries of these firms could also implement measures to encourage them to engage in activities that promote a diversification path that will be economically viable and sustainable in the long term. It would be useful if modalities for such concerted efforts could be identified.

Diversification normally generates considerable linkages with the rest of the economy. This is one of the key avenues through which the benefits of diversification get disseminated throughout the country. In fact, such linkages are often a necessary condition for diversification. It would be important to identify the respective roles of governments and business organizations at the national and local levels in supporting the establishment of such linkages and the development of convenient clusters.

Preferential trade arrangements such as EBA and AGOA are of considerable help in expanding exports. However, ways could be found, such as “binding” the preferences, so that both domestic and foreign investors find it secure to invest in processing activities.
It is important to identify the key areas where assistance to support efforts for diversification and improving competitiveness will be effective, both in terms of impact and costs. For example, one of the problems with diversification and entering new markets is to place the products on the shelves of distribution networks. Apart from quality and other considerations, and even when these are satisfied, there are costs involved with this last step in the presentation to the consumer. Financing these costs might be an inexpensive mode of assistance for diversification efforts.
Background note 6 “Capturing and Creating Value Added”

**Executive Summary**

Market forces have led to greater opportunities for adding value to raw commodities because of increased consumer demands regarding health, nutrition and convenience as well as technological advances that enable producers and processors to produce what consumers desire.

Producers involved with adding value are striving for a large share of the “food dollar” by transforming a product from its original state to a more valuable state that is preferred in the market place, instead of producing only raw commodities. Although, value-added products might provide a greater profit margin, it is important to underline that market development for new products, combined with food safety and packaging regulations require considerable time and investment.

Understanding how value is added is important for evaluating production and marketing risks along with capital needs. Capturing value added often emphasizes attention to market competition and controlling production costs. Creating value added may require new techniques, product and service development, as well as market analysis and selling skills.

Producers of food commodities can become involved in adding value to their raw commodities through (i) entering into available distribution channels; (ii) investing in food companies; (iii) establishing long term production and marketing contracts; and (iv) forming producer-owned business. Although capital requirements for such methods vary for both captured and created value added production, returns relative to risk along with adequate capital and resources are often keys to success.

A vast majority of developing countries depend on commodities as a main source of revenue, and many of these countries continue to rely heavily on one or two primary commodities exported in unprocessed forms for the bulk of their export earnings. While many countries have embarked upon a diversification process, it is important to recognize that only a small group of these countries obtain a significant part of the large proportion of value created at the post-production stages of commodity chains. For instance, the latest U.S. Department of Agriculture statistics indicate that only 20 cents of every dollar consumers spend for food reaches the farm gate. The remaining 80 cents goes for adding value in processing, marketing, distribution and retailing\(^{20}\). The corresponding share accruing to farmers in developing countries is probably much lower.

It is not that farmers are in the wrong business. The problem is that they are positioned at the wrong end of the business, and not where the profits are made (e.g. processing, packaging branding products). This background note discusses (i) what value added means; (ii) why adding value is important; and (iii) how commodity producers might become involved in adding value to their products.

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\(^{20}\) See Thomas L. Sporleder et al. “Enhancing Farm Income Through Value Added Agriculture”, The Ohio State University Extension, Columbus, Ohio, 2002.
I. What is value added?

Value is added to a product by changing its place and form so that it gains attributes more preferred on the market. Examples of value adding in agriculture include processing, drying, canning, juicing, handcrafting, packaging, labeling and marketing. All of these are driven by customer needs, preferences and perceptions. For food items, adding value also makes a product more desirable to consumers in terms of shelf stability, improved functionality, better color, texture, flavor and more convenience. Producers involved with value added become more than commodity producers. Value addition is a relatively new activity for many businesses, especially those in developing countries, and involves significant capital, teamwork, and vertical and/or horizontal integration.\(^{21}\)

1.1. Approaches to adding value

The way in which value is added to raw commodities can affect the potential for risk and reward. In this respect, there is a difference between capturing value and creating value.

Capturing value occurs through changes in distribution of value in the commodity chain so that more of the consumer dollar accrues to a particular stage of the chain. Direct marketing, vertical integration, producer alliances and cooperative efforts are often directed toward capturing more of the end-use value of commodity production. In “capturing value”, production skills required and risks faced may be lower than “creating value” because the required activities are linked to traditional ones.\(^{22}\)

Creating value occurs with generating a higher actual or perceived value to the customer by providing a superior product or service. New products and services, enhanced product characteristics, brand names or unique customer experiences may create additional value. This may involve entirely new production practices or require new skills to produce unique goods or services, resulting in considerable added production risk.

If demand for a newly created product or service can be established, stable and potentially higher prices with limited direct competition may result. In other words, for some time, monopoly rents may be obtained. Contractual agreements for products with unique identities can limit competition from other producers who might be willing to sell for lower prices or try to produce and sell lower quality products.

Marketing risk may also be influenced by whether value is captured or created. Capturing value added is often highly competitive, as new, more competitive businesses must replace existing businesses. Competition from others seeking to participate in the value chain or previous participants seeking to "recapture" their position can lead to enhanced price competition and greater market risk. A unique or branded product that differentiates itself from other products can create its own demand. Unique location and geographic features that generate value usually cannot be duplicated exactly by competition. However, the actual marketing and selling of newly created products may be more difficult if market channels and product identity are not established. This

\(^{21}\) For further information on the definition of "Value Added", see David Coltrain, David Barton, Michael Boland, "Value Added: Opportunities and Strategies", Arthur Capper Cooperative Center, Department of Agricultural Economics, Cooperative Extension Service, Kansas State University, 2002.

\(^{22}\) These concepts are developed by Melvin Brees, Joe Parcell and Nancy Giddens in "Capturing vs. creating Value", in MU Guide, Department of Agricultural Economics, University of Missouri-Columbia, September 2002.
requires market feasibility studies, marketing plans and (for most producers) new marketing skills in addition to the new production skills for the product or services.

Different types of capital investments, both in financial and human terms would be required for activities aimed at capturing and creating value-added

1.2. Activities associated with value addition

(i) Innovation

Innovation focuses on improving existing processes, procedures, products, and services or creating new ones. While it is through the entrepreneurial skills of farmers and other businesses that innovation takes place, innovative value added activities developed on farms or at agricultural experiment stations or by the training activities of the state are sources of change in the kind of product or in the technology. Innovation also can come from research about alternative crops that can be grown successfully by producers to replace traditional crops. Value is added if producers are able to profit economically by growing these alternative crops instead of traditional ones.

Industrial innovation involves processing traditional crops into new end-uses. These may be new foods, such as vinegar from mango, alternative uses such as biodiesel from soybeans and ethanol from corn, or new uses such as sisal in car parts replacing asbestos, or jute products used as geotextiles for controlling soil erosion. In most cases technology exists (although it can be improved to upgrade scientific attributes or reduce costs) but acceptance by consumers or the industry may not be easy.

(iii) Coordination

Coordination focuses on arrangements among those that produce and market commodities. Horizontal coordination involves pooling or consolidation among individuals or companies at the same level of the agro-food chain. An example would be fresh fruit and vegetable producers combining their supplies to attain a sufficient volume or to benefit from more favourable transport costs. Vertical coordination involves contracting, strategic alliances, licensing agreements, and single ownership of multiple market stages in different levels of the value chain. Vertical coordination, either through ownership integration or contractual arrangements, facilitates linking production processes and product characteristics to the preferences of consumers and processors.

Fundamental changes such as the rise of supermarkets are altering traditional marketing relationships that link consumers, food retailers and wholesalers, food processors, and producers. Many producers and traders, particularly in developing countries, do not have sufficient levels of production or quality assurance capacities to effectively produce, process, and market their products and meet the new market exigencies. A coordinated effort among those interested in improving their participation in value chains would help in many of these areas. Many observers believe that upstream and downstream linkages with processors will continue to increase in the 21st century and call for increased coordination among producers.

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23 See Kraybill, D et al. (1989) "Value Added Activities as a rural Development Strategy", in Southern Journal of Agricultural Economics.


25 See Royer, J. 81995), "Potential for Cooperative Involvement in Vertical Coordination and Value added Activities, in Agribusiness 11(5).
(iv) Vertical integration

Vertical integration aligns and controls the different segments of a production and marketing system under single ownership. The factors aligned and controlled are price, quantity, quality and transactional terms of exchange. Producers who invest in value added projects beyond the farm gate, or trading or processing concerns that invest in upstream activities cause the market to become more vertically integrated. An integrated system can provide consistent quality from the field to the shelf, eliminating middlemen and even saving money for consumers. Integration downstream towards consumers would involve an equity investment for processing. Given the considerable financial, organizational and managerial requirements for vertical integration, cooperatives are well positioned in this respect.

(v) Cost reduction

The most fundamental avenue for increasing the captured value added remains cost reduction. This includes increasing yields in agriculture, and improving efficiency and quality in processing. Only low cost and efficient producers will be able to survive and compete in agricultural markets. Activities aimed at value addition cannot take the place of production efficiency attainable through the adoption of improved technologies and, in some cases, economies of scale. An important point to consider in connection with cost reduction is the significance of transaction costs, which are considerably higher in many developing countries as a result of shortcomings in physical infrastructure, such as transport, as well as in the institutional framework, such as deficiencies in the legal system for the enforcement of the contractual obligations.

II. Importance of value addition

Changes in the commodity economy, with greater emphasis on the supply of large quantities meeting very high quality and other standards do not augur well for small producers. The preconditions for meeting increasingly stringent market exigencies and the multiple requirements of dominant trading concerns such as supermarkets has generated a trend towards fewer, larger, and increasingly corporate farms in both developed and developing countries. This has created a concern that many small and mid-sized family-owned farms will disappear. Already less than 2 percent of all farms account for nearly 40 percent of the value of U.S. output. Many rural areas that are faced with a declining number of farm jobs consider the food processing sector as a source of potential income and employment growth.

2.1. Farm value versus marketing bill

The spread between the farm value of products and the retail value, often called the marketing bill, comprising principally the services included in the final value of the product, has increased steadily over the past 40 years. Most of these services included in the final value of the products coming from developing countries are provided by developed country firms. In fact the cost of transport and physical transformation of commodities has not increased substantially while

27 See Sporleder, T (1992), "Managerial Economics of Vertically Coordinated Agricultural firms", in American Journal of Agricultural Economics 74(5).
activities such as packaging, advertising and retailing comprise an increasing proportion of the value added. Thus, producers have become more interested in capturing at least some of the revenues, margins, and related profits that are generated between the farm gate and consumers with investments in value-adding activities.

2.2. Turbulent times for agricultural trade

Several circumstances are contributing to an increasingly turbulent time in agro-food trade. They include some fundamental changes in the way trade is conducted, such as the disciplines imposed by multilateral trade rules and the rising importance of international supermarket chains. In addition, changes in consumer desires, use of biotechnology and information technology, as well as greater integration in world markets. While it can be expected that commodity prices will not significantly increase in the future and periods of excess supply and low prices will continue, value adding activities for escaping from the impact of low prices and new risk management tools for dealing with fluctuations will provide opportunities.

Producers' greatest opportunities may lie in activities that add value to their products and move their point of first sale downstream toward consumers. Differentiation, through quality attributes or geographic specifications, can provide significant prospects in some cases. Producers must respond to market developments, determine what factors will drive the future of their industry, and adapt to change. This is a formidable task, especially for the commodity sector of developing countries, from the point of view of both human and financial requirements.

(i) Increased focus on consumers

Consumers, particularly in developed markets, tend to buy a wider variety of unique food products, which are either very fresh and appealing from a health point of view, or highly processed and highly advertised and are less price elastic than the traditional foods they replace. Consumers also increasingly rely on brand or company reputations as quality guides. Developing country exporters who want to enter into the dynamic markets have to insert themselves into this very sophisticated trading network. Six significant trends in consumer demand are (1) more convenience; (2) ethnic-identify; (3) aging population; (4) low-calorie foods; (5) fresh foods instead of frozen or canned; and (6) healthy natural foods and ethical products. Boxes 1 and 2 illustrate these trends for fairtrade and organic products.

To increase the value added retained by producers, and in the producing countries, emphasis needs to be put on products that fill these consumer desires or market niches. By utilizing value added precepts for business development, producers can identify the desires of consumers and target markets, rather than taking the commodity to the market and hoping that consumers will like it and use it. Target markets are tightening as retailers and consumers pay more for a specific range of products. Success in these target markets requires knowing consumers' desires. For producers located in countries far away from major markets, close links with the distribution networks has become inevitable. These links also call for a degree of sophistication that is often lacking in individual small producers, and even in larger ones in developing countries.

30 See Connor, J. et al. op. cit.
Thus, producers should stay attuned to the needs of the marketplace, instead of concentrating only on production and ignoring the final marketed product. They should see themselves producing consumer products and services instead of undifferentiated homogeneous commodities.

Box 1: Fairtrade products and distribution networks

Fairtrade aims to alleviate poverty in the South by providing disadvantaged producers who accept to produce according to certain sustainability criteria, with opportunities to access Northern markets at advantageous terms. It aims to build sustainable direct relationships between these producers in the South and consumers in the markets of developed countries. The goals of fairtrade are: (i) improving the livelihoods and well being of producers by improving market access, strengthening producer organizations, paying a better price and providing continuity in the trading relationship; (ii) promoting development opportunities for disadvantaged producers, especially women and indigenous people, and to protect children from exploitation in the production process; (iii) raising awareness among consumers of the negative effects on producers of international trade so that they can exercise their purchasing power positively; and (iv) protecting human rights by promoting social justice, sound environmental practice and economic security. In this light, fairtrade is not just about trade, but also about development both at the producer and consumer ends of international trade.

Fairtrade products have a label (e.g. Max Havelaar) that clearly distinguishes them from other products. Broad coalitions of concerned organizations (developmental or environmental NGOs) who commit themselves to actively promote the label, and thus to generate enough consumer demand bring labeled products into supermarket shelves and other sales channels such as commercial stores and specialty food shops. Marketable products are food products such as banana, cocoa, coffee, mango, spices and tea as well as variety of handicrafts including basketry, glassware, jewelry and musical instruments.

Recent developments show that fairtrade is developing and expanding worldwide, especially in Europe. Fairtrade products are now available in more than 43000 supermarkets throughout Europe. Although still small compared to the total size of the market, the annual aggregate net retail value of fairtrade products (labeled and non-labelled) sold in Europe through alternative channels and supermarkets exceeds 260 millions EURO.


Box 2: Demand for organic products is increasing

The major organic markets are expected to grow with growth rates between 10 to 30 percent per year in the next 5 to 10 years. In Europe and the USA, production of organic products has increased tremendously within the last 20 years but there is considerable scope for imports of certified organic products. It has been reported that in the United Kingdom, demand for organic products is currently increasing by 40 percent annually, whereas supply is expanding by only 25 percent. 80 percent of organic fruits and vegetables sold in the United Kingdom are imported.
Accordingly, organically grown and certified fruits and vegetables from subtropical and tropical areas are facing good market perspectives. At the export level, organic price premiums of about 10 to 15 percent are reported. The international market for organic foods was worth a total of approximately $20 billion in 2000. Europe leads with sales of about $9 billion, followed by the USA with around $8 billion and Japan with $1.5 billion.

Therefore, there is every indication that the new markets for high value added crops and especially high quality organic food remain to be conquered and may provide a significant growth opportunity, especially if certification costs that are often difficult to meet by developing country producers do not act as a deterrent.


(ii) Biotechnology

If the concerns regarding the health and environmental effects of genetically modified products are satisfactorily resolved, life science companies will redefine the role of creating and capturing value through genetics and processing\(^\text{31}\). More value-added crops with specific traits for nutrition, industrial uses, and possibly even medicinal traits will be forthcoming. In cases where the value of such products is truly evident, for the producers through improved yields and lower costs, and for the consumers through the provision of new attributes, producers in both developed and developing countries may find new avenues for improving their earnings.

(iii) World trade

Access to foreign markets is essential for a profitable and growing agricultural sector, especially with value added processing and marketing. An important characteristic of modern food trade is the increasing integration of markets, with consumer demand becoming more and more uniform across countries. While, it is still possible to differentiate between markets on the basis of local tastes, quality standards are becoming higher everywhere. Opportunities will continue to appear, however, as poorer countries become richer and switch to a higher protein diet. Thus, demand for basic foodstuffs, such as cereals, sugar and vegetable oils will continue to grow in much of the developing world while in the developed countries demand will continue to shift to higher valued fresh and processed products and convenience foods.

III. Getting involved in value addition

Producers today are looking for opportunities to add value to their products, but they are finding that those opportunities may not fit traditional molds. Value added agriculture takes research, innovation, and drive. In fact, when a value added venture becomes operational, members are transformed from commodity producers into processors and marketers of a finished, value added, food product, more like a manufactured product than a commodity. Different avenues can be identified for adding value to raw commodities. These include:

(i) Transfer of technology and research and development

Currently, the development and transfer of technologies for application in agro-industry are in the domain of multinationals and large corporations. However, there is a recent trend for smaller companies to be more actively involved in research, development and transfer of technologies, particularly biotechnology. Thus, research results and technological advances are not public goods available to all who may need them. Although acquiring technology and know-how from abroad may be the most straightforward way for upgrading value adding activities or differentiating products, this is often too costly for many firms in developing countries. Therefore, governments, particularly in developing countries must increase investments in R&D in order to respond more quickly and effectively to the changing technology needs of farmers and processors, and to serve them better.

One important issue in the above context is that of intellectual property rights - the exclusive ownership of technologies resulting from research. This is a particularly contentious issue when considering the collection of conventional wisdom and knowledge that thrives in universities as well as in villages or even among farmers.

By re-orienting selectively existing public-sector institutions, direct transfers of technology to farmers and agro-processors can be achieved. Over the past 10 to 20 years, particularly with the withdrawal of the state from agriculture, technology transfer has been undertaken by the retail salesmen of agricultural inputs. This is unlikely to be a healthy trend in the context of sustainable development, increased food safety, and a heightened level of environmental awareness among consumers, particularly those in our target developed-country markets. Thus, out of necessity, policy-makers must think carefully of the specific areas where efforts should be focused to build local R&D capabilities.

(ii) Distribution and processing channels

Food marketing channels include all the institutions and processes by which food moves from the producers to the end user. Perishable products, such as fresh produce, move through shorter channels, whereas more storable products, like frozen pizza, utilize longer distribution channels. The purpose of middlemen has been to smooth the flow of goods from manufacturers and growers who produce large quantities of a few items to consumers who desire to purchase small quantities of many items. However, as retail chains have grown larger and more concentrated, food processors have found it advantageous to negotiate with and distribute directly to large retail customers. Establishment of such links by producers in developing countries is particularly difficult and calls for cooperative arrangements to satisfy quantity and quality requirements and attaining the level of sophistication to enter into viable arrangements.

The assurance of quality, food safety and traceability, required by modern consumers as well as government regulations puts a large burden on the producers. This is difficult to be done by individual producers and calls for organizational innovations both on the part of governments and business associations.

Over the last 20 years, food processors in developed countries have provided innovative, easy-to-prepare foods with convenient packaging, because consumers desire product quality, variety, food safety, and nutrition. In addition, fulfilling consumers' desires necessitates closer

coordination and communication between agricultural producers and food processors. Some of the value generated in preparing food at home or restaurant is now contributed by food processors. Successful processors in the future will add value through greater convenience, nutritional qualities, and/or fresher taste.

(iii) Direct marketing

Producers can seek to add value to their products by marketing to the consumer through direct marketing channels. While this is difficult in international trade with a large distance between the producer and consumer, direct marketing is an important aspect of local trade. This includes individual producer processing businesses, roadside stands, farmers' markets, and community supported agriculture which involves a partnership agreement between growers and consumers to provide vegetables and fruits throughout the season, while sharing both the risks and rewards.

(iv) Niche Marketing

Niche marketing can be a successful part of creating a need for value added products. Products must be developed carefully by targeting a specific group of consumers and focusing markets to smaller targets. Niche marketing can achieve a higher market share and larger profits because market penetration can be achieved without the vast expenditures normally needed to dominate the market and without attacking established brands and the product is positioned so that exclusive identification of that product is accomplished. In niche marketing, new uses or demands for existing products are discovered, new products for current or still unknown markets or consumer desires are developed and current product lines are expanded to create more consumer use.

Niche marketing can be established in two ways: (1) analyzing the impact of trend or need among current and prospective users and then determining if the trend might create an opportunity for a new product or if a current product can be promoted in a new way; (2) continually monitoring product users to find out ways to subdivide them into niches. These divided groups can provide a market in which an existing or new product can be promoted. The main problem concerning developing country firms is difficulties with access to timely and accurate information, and the lack of sophisticated market analysis skills.

(v) Portfolio approach

An alternative solution to becoming involved in adding value to commodities is a portfolio approach to off-farm investment. This approach involves the purchase of publicly traded stock in farm already purchasing, processing, and marketing the producer's raw product. This is viable alternative for a producer or producer group that has the financial means to undertake such an investment. Only a few developing country firms have been able to do so.

The advantages of investment in publicly traded companies when compared to other value added strategies include: no purchasing of facilities or equipment, no development of new products, no hiring of new management and employees, or the acquisition of new customers. It eliminates the costs associated with vertical integration, but downstream control or influence is virtually nonexistent.33

IV. Way forward

Most producers and others involved in the commodity economy interested in value-added initiatives have two principal objectives: (i) increase the net revenue they get for their products; and (ii) benefit from the growth that the value-added business generates. Based on the review above, policies and measures to embark upon ways forward for the commodity sector in developing countries for value addition, in terms of both capturing and creating value added appear to include the following issues. In identifying major policy proposals, the eminent persons might wish to consider the areas mentioned below.

Identification of the principal entry points for improving the value added retained in the country of origin, that would justify the investments in terms of both financial and human resources terms is a prerequisite for a conscientious effort on the part of both governments and the private sector. This identification also calls for improving the capacities in developing countries for both policy making and implementation of business practices. International assistance would be called for in this respect, and it is crucial to determine what type of assistance would best serve the needs of these countries. Such assistance is likely to be different for activities aimed at capturing value and creating value.

Practical steps for improving and ensuring quality and satisfying the requirements set by governments and private buyers requires institutional as well as organizational reforms and necessitates financial costs. Facilitation of these steps to arrive at a better integration into global supply chains would require both domestic and international action.

Although small producers are particularly in need of assistance, action aimed at both smallholders and large concerns may be necessary for capturing and creating added value in developing countries. Such action, however, would be different in each case. Identification of ways to give priority to smallholders to engage in high value-added crop production and benefit from new post-harvest and agro-industry technologies in ways that enhance incomes and protect both human health and the environment appears as a crucial issue.

It appears important to make sure that the benefits of value adding activities spill over into rural communities to create a stable and productive environment that offers all the economic and social needs of rural communities.

In providing the supportive environment and necessary assistance to the commodity sector for increasing the value added retained in the producing country, the roles of governments, private sector, NGOs and international organizations are distinct but complementary. Ensuring that all actors are engaged fully and that the complementarities are exploited appears as a crucial factor in the success of commodity policies.
Background note 7 “Improving the institutions for commodity trade”

The problem

Weak institutions are a major reason for the inability of many, if not most developing countries to capitalize on the strengths of their commodities sector. Western countries that have relatively recently shown a strong, commodity-led growth of their economies, such as Australia, Canada and Iceland, did have healthy private sector institutions and governments willing and able to play a strong supportive role. The same holds true for those developing countries that have been successful in valorizing their commodity trade and developing new exports (e.g., Colombia, Malaysia).

Weak institutions in areas such as quality control, trade logistics, marketing and finance, are hindrances in many ways. They lead to higher transaction costs, reducing the prices which farmers receive to a mere fraction of what consumers pay. They prevent developing country entrepreneurs from making use of preferential market access conditions, where available. They make it difficult to obtain finance, reducing the competitiveness of developing country producers, processors and traders and preventing them from expanding their operations. They lead to discounts for developing country products, as importers cannot rely on quality or timeliness of supply.

Institutional weakness is an old problem. In many developing countries, newly independent governments made it a priority to tackle the problem by setting up or strengthening government bodies such as marketing boards. Most of these institutional supports were abandoned in the 1990s. The withdrawal of governments withdrew from commodity production, trade, processing and finance left a large and sudden void, leaving the private sector with many new responsibilities. Not helped by a lack of support from international donors agencies, efforts to establish the necessary infrastructure for exports still fall far short of what is needed.

The missing pieces

While tariffs have become less of an obstacle to trade, many of the barriers to trade are now institutional. Phytosanitary issues have become more important, requiring good support services at the producer country level to ensure exports meet the ever stricter quality requirements of developed country importers. Certification services have become a key issue in certain commodities, e.g., to demonstrate sustainable production. Importers try to reduce their stock levels, which requires timely and reliable delivery; for this, exporters need to have access to good transport and logistics services. And the list goes on… From proper packaging, to the ability to deal speedily with delivery problems, to the ability to handle legal challenges (e.g., anti-dumping suits), an exporter needs to be able to meet many requirements, for most of which he requires support from specialized local institutions.

When such institutions are absent or weak, it can be prohibitively difficult for a prospective exporter to break into the international market. Strengthening such institutions should thus be part of any serious programme to integrate developing countries in the world economy. While in the long run, most of such institutions should become self-financing, they do need public funds (from governments and the donor community) for their set-up and initial years. Institution- and capacity-building efforts should take into account that most agricultural production is in the hands of women, and if they are to be better serviced, efforts should be made to strengthen the participation of women in trade-supporting institutions.
Particular attention should be given to the development of institutions that can enhance the participation of farmers in the trading system: commercial farmers’ associations can play a role not just in marketing but also in obtaining extension support and input credits, and their creation and strengthening deserves continuing support.

Quite a few donor agencies support the creation and strengthening of the “traditional” trade-supporting institutions such as quality control and certification agencies, although there is room for a greater effort. But there is a second layer of institutions that is also of crucial importance, and receives much less attention from governments and the international community. This second layer consists of what one might describe as financial services to the commodity sector: the provision of investment and working capital finance; and the provision of risk mitigation tools, such as crop insurance, export credit insurance, forfaiting or price risk management – such risk mitigation tools facilitate both marketing and finance. There have been new developments in the areas of commodity finance and of commodity exchanges (which provide a range of risk mitigation tools); these can provide room for new donor policies, and are discussed in greater detail below.

The traditional approaches of development agencies for the provision of investment and working capital finance to the commodity sector have proven rather unsuccessful. Many specialized rural development banks and similar financial institutions have fallen bankrupt, and those that have not been liquidated are often kept floating through continuing subsidies. Credit allocation policies are often ignored: in countries where banks are forced to allocate part of their loans to the agricultural sector, it is not uncommon to see them depositing part of their capital with the Central Bank at zero interest rates instead. Credit subsidies have proven to be of benefit mostly to the relatively rich and powerful, while poorer farmers tended to remain without access to any formal credit. Credit guarantee schemes (often victim of diversion by well-embedded groups) have mostly turned out to be bottomless pits.

Thus, the responsibility to provide finance to the commodity sector has moved to commercial banks. But most have been slow to take up the slack, as they fear to repeat the experiences of the government and donor initiatives. The commodity sector in most developing countries is thus seriously underfunded. These difficulties are not insurmountable. They are in effect little different from those experienced in the United States a century ago. The improvement of the legal and regulatory framework (particularly, strengthening the warehouse receipts system) and the development of new financing mechanisms (warehouse receipt finance, leasing and other forms of structured finance) then allowed commercial bank finance to flow into the agricultural and agri-processing sector. A similar development is necessary in developing countries. This has been recognized by policy makers. For example, according to Uganda’s President, H.E. Yoweri Museveni, “in order to positively respond to the challenge for our economies, the new approach of structured finance must seriously be considered, evaluated, and modalities worked out for its utilization. With the goodwill and participation of international and regional financial institutions, structured commodity finance will become a vehicle to enhance our development process.”

In his submission to the Monterrey Finance for Development Summit, UN Secretary-General Kofi Annan similarly urged the international community “to facilitate developing-country access to commodity price risk management and structured commodity finance mechanisms and to assist in the development of regional and national commodity exchanges”. The Group of 77 and China have stressed the need to develop structured finance skills as a prerequisite for strengthening South-South trade. Unfortunately, there has not been much “goodwill” in this domain as far as donor

34 Statement to UNCTAD’s Partners for Development Summit, Lyon, France, November 1998.
assistance to developing countries is concerned. Donor agency support has been minimal. In contrast, the European Bank for Reconstruction and Development and USAID have actively provided such assistance in Eastern Europe and the former Soviet Union. The international community may wish to reconsider the low importance it currently gives to the improvement of commodity finance mechanisms in developing countries.

Another area where new institutional arrangements became necessary after liberalization of domestic trade was marketing and risk management. In addition to creating new specialized export firms dealing with the complications of international trade logistics, to facilitate trade in a liberalized, risky environment, the private sector in many countries set up new national commodity exchanges. These exchanges have started trading in a mix of domestic and export commodities. Such exchanges make it easier for buyer and seller to meet, provide price discovery functions, enable risk transfer, and facilitate commodity finance. Dozens of exchanges have been created in the past decade in Eastern Europe and the former Soviet Union, Asia and Latin America. Only in Africa (with the exception of South Africa) there has been little progress in this regard. There has been some donor support in this area – notably, Inter-American Development Bank support to Central American commodity exchanges, and aid from a number of agencies to initiatives in Eastern Europe and the former Soviet Union. But particularly in Africa, the interest of the donor community has been minimal. The African Union has recently revived ideas for a pan-African commodity exchange, which would both support African economic integration and the competitiveness of Africa’s commodities sector; initiatives of this nature merit donor support.35

Action points

The need for institution- and capacity-building to prepare developing country producers, processors, traders and exporters for the requirements of a liberalized trading system has been recognized at the highest political levels. But the gap between words and action has been large. Donor agencies dealing with developing countries have so far largely failed to adjust their aid policies in the rural and trade development areas, and have provided only little support to the development of the necessary, private-sector-based skills and services. On the side of developing country governments, there is often no central entity dealing with commodity issues, and with it, few countries have a commodity strategy. It is time for this to change. Donors should enhance their support to the development and strengthening of crucial trade-supporting institutions, in particular inspection and certification agencies, export promotion bodies, insurance firms, agricultural finance institutions and commodity exchanges. And governments should create central coordinating offices, e.g. as part of the President’s office, to develop and coordinate national commodity policies. At the very least, a systematic review of the trade-supporting institutions necessary to enable developing countries to make full use of the possibilities of the international market should be part of the Integrated Framework for Trade-Related Technical Assistance for the Least Developed Countries, as well as of the Poverty Reduction Strategies.

In this light, donors may pay particular attention to the strengthening of financial support services. In furtherance of public-private partnerships, they should respond favourably to requests to help enhance the capacity of banks and others to finance the commodity sector through innovative financing schemes; and they should support the development of infrastructure for the transfer of risks, in particular, new local and regional commodity exchanges and contracts.

35 There have been many smaller private initiatives for the creation of commodity exchanges in Africa, but except for South Africa, they have failed to reach the necessary critical mass. A pan-African exchange would overcome this obstacle.
Background note 8 “Dealing with instability – ex-post and ex-ante approaches"

The problem of commodity price instability requires a policy approach different from, and complementary to, policies to deal with the trend of declining commodity prices. Instability has a high economic cost for governments, producers, traders, processors and end-users, and for the financiers of the commodity sector. Its effects include economic behaviour driven by irrational price expectations, difficulties in managing external debt, budgetary problems for governments, increased risk premiums in all phases of the commodity chain, reduced investments and input use by risk-averse producers, painful consumer price adjustments, etc. In the past, many mechanisms have been tried to either reduce the instability of commodity prices (at an international or a local level), or to soften the impact of such instability (e.g., through diversification, or compensatory finance schemes).

The past two decades have seen the demise of most of the traditional national and international arrangements (buffer stocks, export quota, stabilisation funds, marketing boards, the European Union’s STABEX scheme). But the problems related to commodity price instability have not gone away. Admittedly, except in Africa, most developing country governments have been able to reduce their dependence on individual commodity exports for their budget revenue, and the impact of commodity prices on world economic growth has lessened. But exposure to commodity price shocks remains a major problem for many countries (e.g., wiping out the benefits of HIPC debt relief for countries such as Uganda), while the liberalization of commodity trade has exposed a vast number of farmers to world market price volatility from which they were previously sheltered.

International action in this area has been unsatisfactory – non-functioning arrangements have been abolished, but no serious efforts have been made to replace them by more effective ones. Furthermore, at a national level, most governments have not yet made much effort to stimulate the emergence of new risk transfer mechanisms for their producers, processors and traders.

With the fast development of financial markets over the past decade, new tools are available which could enable the achievement of the goals of the past (particularly, reducing the impact of price instability) in a much more effective manner. In this light, the international community may wish to exploit these new tools in order to devise new policies to deal with commodity price volatility, incorporating both macro-level and micro-level approaches.

Macro-level approaches

In the past, international policies at the macro-level focussed on reducing the instability of international commodity prices, and at compensating countries for export earning shortfalls or import cost increases. In many cases, exposure to price risks was identified as a threat for the success of structural adjustment or debt restructuring efforts, but nothing was done to pro-actively manage this exposure.

Efforts to reduce price volatility with buffer stocks and export quota have not been politically sustainable, in part because the policy objective of stabilizing prices was often mixed up with that of raising them. At the international level, except for OPEC, there are no ongoing efforts to control international price instability through such schemes. At the national level, most developing countries have abolished their commodity marketing boards and price stabilization arrangements. The weaknesses of these efforts at the international and national levels were such that reviving them would not seem a viable policy option. So, commodity price volatility is here to stay, and countries will have to find a way to live with it.
Compensatory finance, provided by the International Monetary Fund (for exports and imports) and the European Union (STABEX, for exports from ACP countries) has also been ineffective. The IMF’s schemes have hardly been used in the past decade; cumbersome policy conditionalities were a major reason. Various reviews of the operational modalities of the IMF’s lending schemes have not led to much improvement. Thus, in the past, the major source of compensatory finance for export earnings shortfalls was the European Union, which provided grant resources to ACP countries through its STABEX vehicle. STABEX, which had proved unsatisfactory in many regards, was replaced by a new vehicle, called FLEX, in the ACP-EU Partnership Agreement signed in Cotonou in June 2000. This Agreement recognized that instability of export earnings may adversely affect development, and therefore set up system of additional support to provide financing in mitigation of short-term fluctuations. Unfortunately, the new mechanisms to trigger such financing are little better than those of STABEX; so far, despite disastrously low prices for a number of commodities, no use has been made of it. The problem does clearly not lie with a lack of need for compensatory finance; rather, it has to do with structural deficiencies in the way that the FLEX mechanism has been conceived; further small improvements within the existing framework are unlikely to make much of a difference.

Given the large practical difficulties with traditional compensatory finance, it may be worthwhile for the IMF and the European Commission to consider radically different but much more efficient arrangements. Traditionally, compensatory finance is triggered by export shortfalls (or import cost increases – but the remainder of this section will focus on exports) compared to a moving historic average. But disbursement was often slow because of delays in establishing whether there was a shortfall and discussing to what extent a government was itself responsible for its problems. Furthermore, in the case of the European Union, the funds allocated to STABEX at times fell far short of the shortfalls. It would be much easier if compensatory finance were allocated separately for the two components of earnings shortfalls: declines in export volumes, and declines in export prices. Compensatory finance for volume falls can take a form similar to disaster insurance – that is, granted only when volume falls are large. It would be relatively easy to determine whether such large shortfalls are the result of government policies or not. If not, unconditional support should be made available. In the case of earnings shortfalls due to price falls, the cause would normally be external to the country; so again, compensatory finance should be made available without policy conditionalities. Such a new approach would make it possible to convert compensatory finance from an ex-post transfer to an ex-ante insurance; ex ante, not in the sense that funds will actually be disbursed before the problem occurs, but in the sense that at any moment in time, those eligible to draw on compensatory finance schemes know what “drawing rights” are created by which external events.

Revising compensatory finance schemes along these lines has a number of advantages. First, the use of independent triggers such as world market prices or catastrophic events eliminates the need for conditionalities. Second, partly as a result of this, and also because there is no need to wait for customs statistics, the finance can be provided promptly, within a few months. Thirdly, the compensatory finance schemes can be structured as an insurance scheme: the beneficiary country knows when it will receive funds, and how much for, say, each dollar of price decline on the international market. Fourth, the provider of the compensatory finance can ensure that its budget is sufficient by laying off part of its risks on the international commodity price derivatives, insurance and capital markets. The IMF may be unwilling to give up its policy conditionality, however much this goes against the spirit of compensatory finance. But in the case of the European Union scheme, it would be worthwhile if the ACP countries were to pursue with the European
Commission the possibilities to restructure its compensatory finance facilities into something closer to an insurance scheme, with the premiums (mostly) covered by the international community.

If such a scheme can indeed be agreed upon and if it is shown to be effective, then the international community should consider expanding its coverage to all international commodity trade and all developing countries.

Several cotton-producing countries (Benin, Burkina Faso, Chad and Mali) have recently made a proposal in the context of the World Trade Organization discussions to set up a compensation scheme under which countries that heavily subsidize their cotton sector would indemnify them for the economic damages done by these subsidies. Subsidies in these countries indeed reduce world cotton prices to a considerable extent, cutting into the profitability of cotton production in West Africa (which is among the world’s most efficient producers) and pushing hundreds of thousands of farmers into poverty. The idea to identify the monetary cost of subsidies for West African producers (volumes exported by these West African countries, multiplied by the reduction in world cotton prices which is the result of subsidies) and request to be compensated for this amount is quite innovative. The concept developed by these four West African countries may be worthy of generalization.

Micro-level approaches

With most countries outside of the OECD having strongly curtailed or abolished their policies to fix the prices of key commodities, much of the burden of commodity price volatility is borne by producers, processors, traders, end-users and consumers. Compensating governments for world market price falls or for catastrophic export volume shortfalls may not be of much use for those actually suffering the effects of price shocks.

If the international community were to provide compensatory finance along the “insurance” lines described above, governments could pass on such insurance to producers (and in the case of imported foods and fuels, consumers), in the form of minimum price guarantees for farm crops, or subsidy payments for crucial consumption goods. Failing this, producers, processors and others should be enabled to manage their price risks themselves. Without access to efficient, market-based mechanisms to lay off risks, they are now forced to resort to traditional, costly means to mitigate risks – e.g., uneconomic diversification, or avoidance and “risky” investments.

Good price risk management markets exist for many key commodities; and efforts are underway to develop new ones, e.g., through the creation of new national or regional commodity exchanges. But many of those most exposed to price risk do not have access to these markets. “Local Transmission Mechanisms” which enable the grouping of the risk management needs of small operators, which can then be laid off in the market, are largely absent (notable exceptions include a number of large cooperatives in Latin America, an innovative government scheme in Mexico, and pilot efforts by a few local banks in East African to intermediate risk management transactions for cooperatives\(^\text{36}\)).

The international community has so far made too little effort to strengthen such Local Transmission Mechanisms, let alone explore the possibilities created by new technologies. Given the large economic cost of price risk exposure (for example, one study in India found that the inefficient risk

\(^{36}\) To quote one of the beneficiaries of the East African pilots, the manager of a large cooperative: “When we can manage our coffee price risk there are a lot of worries off our backs. We are now sure of fulfilling the promises we have made to the farmers, when previously we couldn’t.”
management strategies into which farmers were forced reduced the average income of poor farmers by 20 per cent), efforts to create the capacity to manage commodity price instability should be a part of all rural development schemes, as well as the various efforts to plan and prioritise development assistance (in particular, the Poverty Reduction Strategies as formulated under the aegis of UNDP and World Bank, and the Integrated Framework for Trade-Related Technical Assistance for the Least Developed Countries set up in the context of WTO). The financial institutions now involved in this area (the World Bank and Common Fund for Commodities) should continue and improve their efforts; in this light, the Common Fund should consider ways to reform its First Account operations into commodity banking operations, including through the kind of mezzanine financing operations that most of the current, risk-averse lenders tend to avoid.

**Action points**

When international agencies engage with national governments in discussing macro-economic policy approaches, commodity-related risks should on the agenda. The exposure of the country, in terms of its balance of payments, government revenue and debt servicing capacity, to the prices of key commodities and to potential disasters reducing export volumes should be identified, and policies should be designed to manage these exposures. Compensatory finance could be one of these policies; in particular the European Union should consider how it can benefit of financial market innovations to make its compensatory finance scheme effective. If the European Union can indeed develop an effective compensatory finance scheme for its ACP partners, the international community should consider how to turn this into a more universal scheme.

In certain cases, the prices that developing country producers receive for their crops are low because of subsidies that other countries give to their producers. The principle that these subsidy-granting countries should take financial responsibility for the effects of their actions should be recognized by the international communities, and governments of these countries should examine how they can set up a scheme that would compensate developing countries for the direct damages caused by subsidy policies.

The international community should also pay closer attention to the effects of price risk exposure on the poor, and help them gain access to price risk mitigation tools – this should be part of the Poverty Reduction Strategies formulated for developing countries. Similarly, crop insurance schemes, e.g., rainfall insurance, should be made more readily available in developing countries; improvements in remote sensing technologies are making this feasible. Furthermore, actors such as commodity traders and processors can become more efficient if they can lay off their price risks, which would improve the competitiveness of a country’s commodity sector and allow producers to capture a greater share of the final price of their commodities. Donor agencies should expand their support in this area.
Background note 9: Mining and mineral commodities

1. Introduction

The issues concerning mining and mineral commodities differ considerably from those that are important for agricultural commodities. While problems of declining price trends and price fluctuations, commodity export dependence and lack of diversification are just as relevant to countries exporting minerals as to those that export agricultural products, their implications for development are different and require different policy approaches.

2. Trade issues

In contrast to the situation for agricultural commodities, tariffs on minerals and metals that have undergone limited processing are low or nonexistent, although they are higher for semifabricated metal products. Several developing countries, particularly larger countries in Asia and Latin America with significant domestic markets, have nevertheless succeeded in establishing internationally competitive industries producing such value-added products.

Attention in the WTO as far as metals are concerned has focused on safeguard and anti-dumping actions, particularly concerning steel. In some of the anti-dumping cases, developing countries have been the complainants. The issue of subsidies has obviously been important in this context, and work is under-way within the OECD on an agreement that would limit government subsidies to domestic steel companies. Also in OECD, negotiations are proceeding on ways to eliminate the perennial over supply of steel through actions aimed at closing obsolete and uneconomic plants. In this context, it deserves to be mentioned that when the aluminium market faced a situation of large oversupply in the 1990s, a Memorandum Of Understanding was signed by the countries concerned, anticipating export reductions without specifying the mechanisms. The industry then carried out the cuts.

A multilateral agreement that has significantly affected metals trade is the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal. The Convention is intended to reduce risks to the environment arising from the transportation of hazardous wastes. It has had the unintended consequence of limiting imports of nonferrous metal scrap by developing countries, thereby placing metals fabricators in these countries at a competitive disadvantage.

3. Macroeconomic and governance issues

Over the past several decades, mineral dependent developing countries have consistently experienced slower economic growth than other countries at similar levels of income and development. Diversification efforts in these countries have often been unsuccessful since it has proved difficult to channel economic rents into productive investment in other sectors. As a result, growth in the agricultural sector, particularly, has been disappointing. There are several reasons for this, including that mineral dependent countries appear to have been subject to more incidences of civil unrest and war than others. In some cases, at least, control over mineral rents has been at the source of armed conflict.

Among the economic reasons for slow growth are “Dutch disease” type problems (the term Dutch disease refers to the negative impact of a boom in mineral revenues on other
tradeables sectors through appreciation of the real exchange rate and real wage increases brought on by competition for skilled labour with the booming sector). While the term refers to singular events, several countries have suffered cycles of rising export income followed by macroeconomic instability and stagnation. Although the recipes for dealing with the condition are widely recognized (sterilization of export income flows, active exchange rate policy, control of government expenditure), they are not always applied in practice. Institutional factors are important in this regard, and recently, attention has been focused on transparency with respect to government receipts from mineral exports, with foreign investors being exhorted to “publish what you pay”, in order to encourage good governance and reduce corruption. For the economic benefits of mineral production to be maximized, the capability of developing country governments to deal with the macroeconomic effects of variations in export income resulting from volume or price movements and to transfer rents to other sectors in need of investment funds needs to be enhanced. Capacity building programmes targeting central government officials are crucial in this respect.

4. Local and regional development impacts

Large-scale mining projects usually have a major impact on the economies of the regions where they are located. This is particularly evident in developing countries. Mining projects generally have few links with the economy in the surrounding region since few of the necessary inputs can be obtained locally and since the entire output is almost always exported. Nevertheless, mining usually provides a considerable stimulus to the regional economy. Local employment increases as the mine is constructed and enters into operation, both in mining and in other sectors that provide inputs to the mine and, most importantly, consumer products and services to mine workers, especially since wages of mine workers tend to be well above the average in developing countries. Consequently, the demand for consumer goods and services in the regions concerned often increases dramatically, leading to higher output and employment in food production, retail trade and construction. Infrastructure is usually improved, facilitating the establishment of new business ventures and reducing the costs of existing businesses. Thus, the size of the additional income flows from mining may be considerable relative to the local and regional economy before mining and can lead to a complete transformation of the region’s economy.

This development, while generally beneficial, is not without problems. Local wage rates for skilled and semi-skilled labour are likely to increase as a result of competition with mining for manpower, rendering other sectors less competitive both nationally and internationally. The distribution of wealth and income may become more uneven, particularly if low-skilled migrant labour is drawn into the region. Public facilities for the provision of health services and education may come under pressure as a result of demographic changes and changes in life styles brought about by mining, and may not be able to meet the increased demand. Social problems may increase and conflicts may occur between the original inhabitants of the region and those attracted to it because of increased economic opportunities. When the mine is eventually closed down, the process is reversed, with employment, wage rates and land prices falling and even businesses with tenuous links to mining finding it difficult to survive.

While these impacts can generally be dealt with over a period of time, they may be destabilizing in the short to medium term and may lead to the loss of economic development opportunities. Moreover, unless attention is paid to the need for a balanced regional development, the regional economy may not realize its potential for diversification and it may prove more difficult to establish a sustainable economical structure. The capacity of regional and local level
governments to deal with these problems is often quite limited and needs to be improved through technical assistance and a positive engagement on the part of mining companies.

5. Small-scale mining

It was estimated by the ILO in 1999 that 13 million people in developing countries are engaged in artisanal and small-scale mining (ASM), usually in the informal sector, using simple equipment. Later information with respect to China makes it likely that this figure underestimates the number of people earning their livelihood this way. ASM is typically a rural activity, engaged in by people who have very few alternative sources of cash income. Since the activity is often illegal and associated with a range of social and environmental problems, including child labour, social disruption, public health problems, land erosion and pollution caused by the use of mercury in gold mining, governments have often tried to discourage it. Usually, they have failed to do so, and accordingly, many governments are now attempting to reduce the problems by regulating and integrating ASM activities, at least to a minimal extent, into the formal economy. Efforts to organize small-scale miners are important in this respect, particularly since they have little individual bargaining power and often have to accept prices below the world market price from buyers.