Chapter 6

Commodities and the Istanbul Programme of Action: The First Two Years

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6.1 Introduction

Many least developed countries (LDCs) depend heavily on commodity production and trade for the generation of employment, income, savings and foreign exchange. This implies that a 'successful' commodity sector is a prerequisite for graduation from the LDC category. However, the characteristics of the commodity sector, including unstable markets and prices, intense competition among suppliers, difficulties concerning effective participation in value chains and, particularly in the case of natural resource-based commodities, the necessity for sustainable exploitation and good management of resource rents, limit the potential of this sector as an engine of growth and development. The Istanbul Programme of Action (IPoA) identifies two areas of particular importance for action regarding commodities. These are dependence and vulnerability to external shocks.

Overcoming dependence on a small number of low-value commodities, often exported in an unprocessed form to a small number of destinations, is the overarching theme. Even if one cannot remedy the negative characteristics of commodities, reducing this dependence reduces, for a country, the problems associated with the sector. IPoA emphasises that 'efforts to reduce commodity dependence' include 'diversification of their export base' – they are not confined to that. Therefore, a variety of measures related to the commodity sector, including value addition and diligent use of resource rents, and not just diversification per se, address the problem of dependence.

Concerning vulnerability to external shocks, the aim is to 'mitigate and reduce the adverse effects of commodity price volatility'. While this vulnerability would be mitigated, to some extent, by reducing commodity dependence, further action is also called for. Reducing price volatility itself is not an objective of the IPoA. The focus is on the incidence of volatility in LDCs. The purpose is to create a wedge between international price volatility and the impact felt inside the LDC itself; more precisely, it is to shield the domestic producers (and consumers) from international price volatility.

There has been much written over the years on commodity policies. These include both domestic and international measures. This chapter refrains from trying to formulate a blueprint for successful commodity sector development. It takes IPoA – in particular, paragraphs 67–69 – as its starting point, classifies the relevant proposals according to their principal objectives and identifies what is actually being implemented. The need

for a supportive macroeconomic environment is taken as given, and the important issue of good governance is covered only as far as it concerns the commodities sector directly.

In line with the overall tone of paragraphs 67–69, policies and actions addressing export-oriented commodity production and export trade dominate the discussion. Apart from these paragraphs, situated under the title 'commodities', guidance has been sought from discernible links to the commodities sector in other parts of IPoA, particularly in the 'productive capacities' part. Two closely related areas, namely improving agricultural productivity and aid for trade, are not covered here despite their direct impacts on the commodity sector. They are the subjects of other studies of LDC IV Monitor.

The recommendations of IPoA on commodities are rather general. There are no benchmarks, no quantitative goals. The implementation, in particular, of exhortative statements such as LDCs should 'establish and strengthen, as appropriate, national commodity management strategies to maximise the benefits derived from their resource base' (IPoA paragraph 69.1.A) are very difficult to monitor. There is, however, an extremely concrete reference to the Extractive Industries Transparency Initiative (EITI), which is a global standard that promotes revenue transparency and accountability in the extractive sector.[2]

The structure of this study is as follows. After this introduction, Section 6.2 defines the coverage in terms of 'commodities', presents the state of commodity dependence of LDCs in 2011 (the latest year for which reliable and fairly complete data are available) and compares it with the situation in 2005. Section 6.3 examines commodity-related policies that are not of a commodity-specific nature. It presents, in Section 6.3.1, the pursuit of diversification as an overall objective of IPoA. In Section 6.3.2, the chapter discusses the emphasis put on the supply chain. Section 6.3.3 focuses on a topic much emphasised in IPoA, namely governance in natural resource exploitation. Section 6.3.4 discusses the crucial issue of financing, which was not directly mentioned in the commodities part of IPoA. Finally, Section 6.3.5 covers the mitigation of risks associated with price volatility. Section 6.4 deals with 'sector and commodity-specific policies, measures and strategies to enhance productivity and vertical diversification, ensure value addition and increase value retention' as mentioned in paragraph 69.1.b of IPoA. In Section 6.4.1, the chapter discusses actions that target individual supply chains; in Section 6.4.2, it covers product differentiation, which is an important way to increase the value of products. Section 6.4.3 examines the crucial issue of satisfying quality exigencies and standards. To conclude, Section 6.5 summarises the findings.

6.2 Commodities and LDCs' dependence on commodities

In this chapter, the term 'commodities' covers products of agriculture, mining, fisheries and forestry in their raw and simply processed forms. In the statistical tables taken from the United Nations Conference on Trade and Development (UNCTAD), 'commodities' are defined by three-digit level codes of the Standard International

Trade Classification (SITC) Revision 3 as the sum of the following items designated by the respective codes: 0+1+22+4, all food items; 2–(22+27+28), agricultural raw materials; 27+28+68+667+971, ores, metals, precious stones; and 3, fuels. Particularly when vertical diversification and processing are discussed, processed products such as leather (SITC 611), processed rubber (SITC 621) and textile yarn (SITC 651) should also be taken into account. A minor processed product for LDCs, ferroalloys (SITC 671), is also missing. three-digit SITC information is not very useful for differentiating some stages of processing. For example, the same three-digit code covers green coffee (071.1), roasted coffee (071.2) or extracts, essences and concentrates of coffee (071.3).

Commodities are generally thought to face stagnant demand, and this is one of the reasons for promoting diversification towards products thought to have a dynamic demand, particularly manufactured products. The concern about stagnant demand and falling terms of trade for commodities has receded over the last decade, however, owing to rising demand from emerging countries, particularly China, especially for raw materials. The recent slowing down of these economies and the likelihood that in China the basis of growth will shift from investment to consumption has curbed the optimism.

A simple analysis of 255 articles at three-digit SITC level[3] reveals the following. Compared with 2005, the biggest increase in world trade values of 2011 has occurred in six commodities, most of which are of export interest to LDCs, namely 971, 'Gold, non-monetary (excluding gold ores and concentrates)'; 281, 'Iron ore and concentrates'; 289, 'Ores and concentrates of precious metals; waste, scrap'; 231, 'Natural rubber, balata, gutta percha, guayule, chicle and similar natural gums, in primary forms'; 322, 'Briquettes, lignites and peat'; and 422, 'Fixed vegetable fats and oils, crude, refined, fractionated'. The set of the next five fastest growing items also includes two commodities of interest to LDCs, namely 075, 'Spices' and 222, 'Oil seeds and oleaginous fruits (excluding flour) of a kind'. Some commodities of actual or potential export interest to LDCs, however – namely 248, 'Wood, simply worked, and railway sleepers of wood'; 61, 'Leather, leather manufactures, n.e.s. and dressed furskins'; and 652, 'Cotton fabrics, woven (excluded narrow or special fabrics)– appear among the slowest growing items in world trade over the last six-year period. Naturally, the rapid (or slow) growth rates of trade values are much influenced by rising (or falling) prices. The danger exists of falling into the 'Dutch disease' when prices rise considerably, hence the particular importance of good macropolicies at times of rising commodity prices.

An advantage of diversifying from commodities to manufactured goods is the generation of positive externalities such as the adoption of relatively advanced technologies and modern business techniques, including international trade practices. This has significant dynamic implications. These products also secure a better place in global value chains and generate higher value added. However, similar characteristics can also be found in seemingly unsophisticated commodities. This is the case of high quality and differentiated commodities, attributes that can be gained in both production and marketing stages. Moreover, the value added generated domestically is often higher for commodities than for manufactured products. The Organisation

for Economic Co-operation and Development (OECD) World Trade Organization (WTO) Trade in Value Added database (which does not include data for any LDCs) reveals that the domestic value added share of exports is almost invariably higher in agriculture and mining and quarrying than in other material-producing sectors, but not in services.[4]

What is important from the point of view of diversification is not only to produce items that were not produced and exported before but also to produce 'better' products, those that create a higher proportion of value added in the country and generate forward and backward linkages and positive externalities. Improving the quality, differentiating the product so that it earns a premium and supplying more of the associated services domestically are all different aspects of reducing the negative aspects of dependency on commodities. Data presented in Annex 6.1 show the commodity dependence of LDCs. Nineteen LDCs generate more than 90 per cent of their merchandise export earnings from commodities (defined according to the UNCTAD criteria given above). For only nine of them this is less than 50 per cent. The part of gross domestic product (GDP) coming from commodity exports is more than 20 per cent for more than half of the LDCs. This means that a 25 per cent drop (or rise) in the price index of the top three export commodities, which is not exceptional, leads to a change of at least 5 per cent in the GDP of more than half of the LDCs. In either direction, this is a major macroeconomic problem and a constraint on the producers' and consumers' decision-making process. The variations in growth rates of LDCs reflect, above all, relative price movements of their major commodity exports. Commodity dependence, or the degree of diversification expressed as the share of commodities in exports or GDP, may be misleading as it is very much influenced by relative prices. An interesting and probably more robust alternative indicator of diversification could be the number of products exported by the country. Annex 6.1 includes these data, but they do not seem to be sufficiently meaningful as in many cases there are implausibly big variations between two years. These probably reflect either a statistical discrepancy or some marginal changes that should not be generalised (such as the export of a tiny amount of some item). A similar indicator which uses six-digit HS6 sub-heads, given in Annex 6.2, may suffer from the same deficiency but seems to be more meaningful as certain trends can be discerned. Based on any indicator, LDCs are highly commodity dependent.

6.3 The general framework[5]

6.3.1 Diversification as a general goal

Even a cursory reading of IPoA indicates that horizontal, vertical and geographic diversification is perceived as the principal avenue for increasing retained value added, reducing risks and generating dynamic linkages so that the contribution of commodities to development can be enhanced. Diversification of the economies of LDCs is mentioned as an objective not only in the part on commodities but also in many other parts of IPoA, notably 'productive capacities'. Given the commodity-dependent economic structure of LDCs, all references to diversification necessarily relate to the commodity sector.

Diversification within the commodity sector, be it horizontal or vertical, may increase the apparent importance of commodities in the economy, but if it means getting out of low-value items with declining demand, it cannot be construed as perpetuating commodity dependence. The more positive aspects of diversification would appear to be the benefits attributable to better stability, stronger linkages, spillover effects and positive externalities from higher skill content in sophisticated commodity production or manufacturing.[6] These are supportive factors for structural change pursued in LDCs. Moreover, some low-skilled manufacturing activities (like basic garment making) are low value added and less productive than some high-value agriculture and are shown to be subject to serious deterioration in terms of trade, largely because of massive competition.

The objective of diversification appears regularly in the stated policy objectives of LDCs, both before and after IPoA. In this context, in Burkina Faso 'the focus will be on the development of growth poles … to attract investors, in a bid to expand and diversify production and exports. … Each of these sectors has already been substantially studied, with action plans whose findings and recommendations remain valid. The work involved here will be to make use of the results of these studies to determine the sectors that are promising and likely to enhance export potential and contribute to the acceleration of economic growth. The task is to make them efficient and competitive (IMF 2012a)'.

Donors have often mentioned diversification as an objective of their assistance programmes. At times, however, 'diversification' seems to remain a concept to which lip service is paid, without the requisite targeted actions. For example, the Japan International Cooperation Agency (JICA) mentions the 'urgent needs for diversification of industrial structure as well as improvement of agricultural productivity' in Sudan.[7] But 'JICA's support to Sudan is focused on: (1) Assistance for Conflict-affected People and their Reintegration to Communities, (2) Assistance for Basic Human Needs, and (3) Development for Infrastructure of Food Production System', all of which are very important but only indirectly linked to the stated 'urgent need'. As another example, one can mention that the title of the first chapter of OECD's 2012 *Mutual Review of Development Effectiveness* is 'Trade and diversification'. But in the chapter itself the word 'diversification' is nowhere to be found.[8]

Diversification is not an easy feat. It not only requires information about business opportunities and management skills but also necessitates funds to invest. Moreover, undertaking new activities or entering new markets comes with considerable risks and search costs. These are particularly difficult to bear for the firms of LDCs with meagre resources. Regional markets may provide opportunities if production is in complementary products. Diversification thus requires assistance that provides guidance and reduces the risks involved. This assistance generates significant positive externalities by reducing search costs for the followers. Thus, assistance to diversification can be counted as the provision of a public good even when it is directed at specific sectors or even firms. Targeted public research that reduces risks, coupled with the requisite training, can be very valuable in bringing about diversification. A recent example in this regard concerns the mushroom sector in Tanzania, where

a Swedish-funded research programme has recently led to a successful new line of production by many small producers. 'Ten years ago there was not a single mushroom farmer in Tanzania. Now there are over 4,000'.[9]

While horizontal and vertical diversification necessarily requires action on the part of the producing countries, geographic diversification can come about as a result of changes in the world economy. The increasing role of the emerging economies, in particular China, as an important destination for LDCs' commodity exports has occurred without any effort from the LDCs themselves. Naturally, the supply capacity must be there in order to benefit from such opportunities. Geographic advantages may also be a factor facilitating diversification. For example, the World Bank's emphasis on diversification in Benin recognises both the importance of supply capacity and the potential advantage of the country's 'geographic position in serving the Nigerian market and its role as a gateway to land-locked countries to its North'.[10]

In general, diversification policies are associated with the agriculture sector as it is there that conscious decisions to go into new activities can be made. Endowment of mineral resources is given and, unless new ones are discovered, diversification in this field is not possible. Discovering new mineral resources requires costly prospecting and exploration activities, often beyond the financial means of LDCs. Nevertheless, there are strong reasons for the government to commission the generation of good geological information which it then makes publicly available prior to selling the rights to prospecting (Collier 2011). Geological surveys are crucial for correctly evaluating the resource base and fully exploiting its potential. Diversification can also take place in the mineral sector when known resources are insufficiently exploited. This is the case in Solomon Islands where the World Bank places emphasis on 'diversifying the economy (notably through new mining operations)', and in Madagascar where 'beyond the existing industry of precious stones, the potential to develop the mining and petroleum sector is large'. Increasing prices of metals, minerals and fuels can turn previously unprofitable activities into viable operations.

Diversification in other natural resource-based sectors, namely fisheries and forestry, can take place through the commercial exploitation of hitherto neglected marine species or forest products, as well as the cultivation of marine organisms. In these sectors, further processing also presents the potential for vertical diversification. For example, in Mauritania, a project implemented by the German Federal Ministry for Economic Cooperation and Development (BMZ) has the objective of diversifying the use of marine resources, and supports the private sector with regard to mariculture through public–private partnerships. Considering diversification in the forestry sector, the government of Burkina Faso has focused on non-wood forest products in general, and on gum harvested from acacia trees in particular. This gum is exported to Europe for processing (UNDP, Burkina Faso 2009). Vertical diversification through local processing would probably lead to greater value being retained in the country. However, the critical concern is the optimal use of society's resources, which may not always be the case with vertical diversification. Further processing of mineral resources is also a possibility, but it requires extensive funding and complementary inputs such as energy, which are often the determining factors in the choice of

location. A possibly more important reason, particularly when semi-fabricated metal products are concerned, is logistics and the ability to ship a wide range of products to different locations.

In agriculture, production decisions are based on price signals and policy-generated incentives. Therefore, within the confines of climatic as well as other physical conditions and limited by know-how, diversification opportunities are much wider and the production of alternatives is more feasible in agriculture. Diversification is more costly for tree crops because the gestation period must be financed until results are obtained. The processing of agricultural products requires, in general, lower investments than do minerals.

Thus, policies and targeted assistance can play a major role in bringing about diversification in agriculture, and good intentions abound in this context. Sometimes, these take the form of simply expressing the desire to diversify without many specifics, mentioning only a few products that seem to have potential. For Samoa, the 2012–16 Strategy for the Development of Samoa says that 'opportunities to transform viable agricultural products to higher value added processing for the export market will be given attention', illustrated to some extent by naming a few niche exports of Samoa (particularly the export of nonu juice to China and virgin coconut oil). Intended investments will also assist small farmers to 'take greater advantage of market opportunities, particularly by accessing supply chains for tourism operators in Samoa'.[11] These are very laudable intentions but there is no indication of how this will be brought about. The current United Nations Development Assistance Framework (UNDAF) for Ethiopia has an important diversification element which calls for investing in medicinal and aromatic plants. Although such proposals, without commensurate funding, are bound to remain as exhortations, the fact that these are signalled in credible sources may attract the attention of investors and help to generate some funding.

Just as fortuitous events such as the rise of China create opportunities, events outside the control of a country can endanger existing patterns of trade and necessitate diversification. In Malawi, for example, diversification of export-oriented agriculture has been prompted particularly by the worldwide movement against tobacco use. In this case, a multidonor project is underway 'with a clear objective of diversification' and integration into agricultural value chains.

6.3.2 Supply chains as the framework for action

Most commodities pass through a complicated processing phase before reaching the final consumer. Even fresh fruit and vegetables require a cold chain and appropriate handling before being shipped out of the exporting country. The design and implementation of commodity development policies need to have full consciousness of the complexities, intricacies and inter-relationships within that supply chain, both inside the exporting country and beyond. Successful participation in global value chains cannot be secured by good performance at a single point along the chain. This requires not only production, per se, but also production that meets many exigencies. The provision of a wide variety of services ranging from information to quality

control and financing is indispensable. For example, good-quality products produced efficiently on the farm will remain uncompetitive if handling and preservation are unsatisfactory or if the necessary trade finance is unavailable. Therefore, commodity policies and related assistance frequently mention supply chains as the overall centre of attention. The strategy should be to unblock bottlenecks, to look beyond the skills of the individual and think of the supply chain as a whole. The chain can only be as good as its weakest link.

While the targeting of specific activities within a supply chain will be discussed below, some examples of more general statements, expressing a consciousness of supply chains for defining a framework, are given here. For example, Burkina Faso's Agricultural Development Programme (2004–15) follows the value chain approach, 'based on the assumption that an overall increase in value creation can be achieved by analyzing and eliminating bottlenecks at every stage in the agricultural production chain, to increase incomes for actors at all levels of the value chain'. The Ministry of Agriculture of Burkina Faso has adopted an action plan to promote value chains and has set up a department for rural economic development to implement the plan. Similarly, the UN Development Assistance Framework Republic of Yemen (2012–15) mentions the development of value chains in agriculture and fisheries as the avenue for creating sustainable and diversified employment opportunities. Rwanda's Third Rural Sector Support Project with the World Bank uses value chains as a fundamental perspective and contains a specific sub-component on 'Capacity building for value chain development'. The concept of value chains is explicitly used as an intended framework for commodity policy in Nepal also, for 'cereal seeds, dairy products, ginger and coffee' for 'identifying the major bottlenecks and preparing commodity specific value chain development plans for the promotion of high value commodities'.

On the part of development partners, G20 had adopted an integrated 'value chain' approach to assisting agriculture, after the Seoul Summit and particularly at the Cannes Summit and at the Fourth United Nations Conference on the Least Developed Countries (UN LDC IV). 'We stress the need to support public–private partnership on investments, based on a value-chain approach, for services (such as access to financial services, agricultural education and extension services), and for infrastructure and equipment for production (such as irrigation), for agroprocessing, for access to markets (such as transport, storage, communication) and for reducing pre- and post-harvest losses (G20 2012)'. This strong commitment to the value chain approach is also reflected in the Agriculture Vice Ministers and Deputies Report of the Los Cobos meeting (G20 2012).

6.3.3 Good governance and transparency, basically for natural resources

Governance and transparency permeate throughout the IPoA. Their importance has been acknowledged by all parties. Elements of good governance appear as explicit conditions for some assistance programmes such as the African Growth and Opportunity Act. In the context of the commodities part of IPoA it is specifically associated with the exploitation of natural resources and the use of resource rents.

Minerals sector, particularly the Extractive Industries Transparency Initiative

As seen in Annex 6.1, the importance of the mineral sector and of rents in GDP is quite high for many LDCs. IPoA explicitly calls for 'taking note of Extractive Industries Transparency Initiative', and this seems to be one of the areas that attract most attention from development partners. They provide considerable assistance for securing compliance by LDCs with EITI. For example, in Togo, Solomon Islands and Guinea, specific projects are being implemented. The emphasis on EITI compliance is partly to stimulate foreign direct investment (FDI). Many LDCs are not capable of garnering the required funds for the development of the mining sector, and FDI and funds from international financial institutions are often contingent upon an adequate institutional infrastructure. Table 6.1 shows EITI compliance as of 15 August 2013.

Given the overwhelming dominance of the mining sector in some countries, the whole economic performance is determined by what happens in this sector. Therefore it becomes crucially important to manage mining revenues, both as taxes and as foreign exchange earnings. While oil is not treated as a commodity that merits special attention, most of what is said below for other metals and minerals is true for oil as well. In particular, the management of oil wealth (and other wealth accumulated rapidly from exhaustible resources), possibly through sovereign wealth funds, is worth considering. As a result, policies to improve the governance of the mining sector and co-operation in this area are widespread. In most co-operation programmes, administrative and institutional improvements, good governance and transparency retain the top spot. For example, in Mozambique aluminium smelting dominates the economy (only 14 other products register exports in excess of USD 1 million) and recent discoveries of gas deposits indicate another gigantic activity. A specific Mining and Gas Technical Assistance Project is designed to support reforms, initiatives and capacity building to enhance the efficiency and accountability of institutions involved in the management and planning of the mining and hydrocarbon sectors (World Bank 2012a). In Democratic Republic of the Congo, reviving the mining sector is crucial for the revival of the whole economy and for poverty reduction. Related activities include improving institutional and administrative capacities, geological surveys, improving social and environmental aspects, small-scale mining and transparency.[12]

Often, mineral exploitation takes place in remote parts of a country and requires considerable investment in infrastructure. Guinea's experience is an example of a comprehensive and co-ordinated approach to the development of the mining sector. The World Bank's Extractive Industries Technical Advisory Facility (EI-TAF) and

Table 6.1 EITI compliance as of 15 August 2013

EITI compliant LDCs	EITI candidate LDCs	Suspended
Mauritania, Mozambique, Timor-Leste, Zambia, Liberia, Mali, Niger, Tanzania, Yemen, Burkina Faso, Togo	Afghanistan, Chad, Guinea, São Tomé and Príncipe, Solomon Islands	Central African Republic, Democratic Republic of the Congo, Madagascar, Sierra Leone

Public–Private Infrastructure Advisory Facility (PPIAF) trust funds were mobilised to support the 'development of a due process for the review of mineral agreements and to design a mining ancillary infrastructure master plan for railroad and ports'. France is supporting the drafting of the mining code, while the African Development Bank is supporting the Ministry of Mines on EITI and some capacity building. The European Union (EU) is supporting the development of a master plan for roads, and this is being co-ordinated with the PPIAF-funded mining ancillary infrastructure development master plan. The United Nations Development Programme (UNDP) African Center for Economic Transformation and Revenue Watch support Guinea in the renegotiations of mining agreements (World Bank 2012b).

In Sierra Leone and Liberia, and even in Ethiopia and Malawi where mining is not the dominant sector, assistance is provided for improving regulation of the minerals sector and institutional strengthening, particularly to ensure good sector governance, emphasising the establishment of a transparent non-discretionary and efficient minerals administration. In some cases, strategies to stop illegal exploitation are also required, as is the case in Democratic Republic of the Congo where the Department for International Development, United Kingdom (DFID) provides assistance in this context. Artisanal mining, which can be considered on the same basis as any activity in the informal sector, has received almost no support from donors in respect of marketing, organisation, environmental management and prevention of health hazards. The Communities and Small Scale and Artisanal Mining (CASM) programme, established in 2001 by the World Bank and DFID, has failed to attract sufficient support.

The importance of the mining sector is going to continue and may even become bigger. Harnessing the opportunity requires a capacity to resist pressures of both corruption and populism, calling for even more attention to be paid to governance and transparency. There is thus a strong case for LDC governments to adopt voluntary norms that are pertinent for developing countries and are independent of interest groups (Collier 2011: 6). Negotiations with investors on well-evaluated and realistic bases, and making sure of the quality of advice received in this respect, are crucial for successful agreements. Current African resource reserves, an important part of which are in LDCs, may be underestimated given the fact that less investment in exploration has taken place on the continent compared with other regions (Africa's Pulse 2012). A call for more exploration and for funds to be used in exploration and capacity building for the analysis of survey results is one of the areas neglected in IPoA.

Fishery and forestry resources

Securing full benefits from fishery and forestry resources also requires transparency. As LDCs do not have the capacity to reap full benefits from exploiting these resources, foreign concerns are allowed, in fact encouraged, as in the case of mining, to operate in the waters and forests of LDCs. In many cases this is done under the terms of long-term agreements between governments and private companies. The terms and conditions of these agreements can often be much improved for the benefit of the LDCs. Although economic and legal aspects are complicated, transparency alone could

help in some cases: 'the individual agreements made between West African countries and foreign companies are mostly secret' and 'Governments have become dependent on the income received by selling fishing rights to foreign corporations and countries (Vidal 2012)'. With this concern, the World Bank's 'Economic Reform Development Policy Grant – 2012' to Comoros made the 'availability of public information on fishing licenses and agreements issued by the government, with annual disclosure to the public' one of the principal points of that grant (World Bank 2012c).

For fisheries, the strategy for improved governance and development must be regional in many cases. The project 'Governance, marine resources management policies and poverty reduction in West African Marine Eco region' was launched in 2012. Co-financed by the EU and UNDP, involving also the World Wildlife Fund (WWF), it will be implemented in six LDCs, namely Mauritania, Senegal, Gambia, Guinea, Guinea-Bissau, Sierra Leone, and also in Cape-Verde. This project and Norway's assistance to Mozambique include measures and a surveying vessel for policing illegal fishing that deprives the coastal states of significant revenues from fishing. Civil society also becomes an important actor to help in transparency. Greenpeace, for example, monitors some of the fishing activity in West African waters and reports on the losses.[13]

Illegality is a significant concern in the forestry sector as well. Organised crime and smuggling are reported to be behind up to 90 per cent of tropical deforestation (UNEP 2012), accounting for 15 to 30 per cent of the overall timber trade. Possibly with traders from developed countries benefiting from this activity and much of the illegal timber imported into developed countries, this particular area of weak governance does not seem to attract as much attention as do other areas. Inability to control illegality may lead to banning of exports, such as in Madagascar's case with illegal rosewood logging, and cause significant losses of export earnings.

As a concept, good governance should include making clear the objectives of each action. From the point of view of IPoA, the principal objective of every action should include poverty reduction. Recently, a significant debate has been launched based on a report by the World Bank's Independent Evaluation Group (IEG). It is argued that orientation of activities towards large operations and industrial logging in officially managed forests may have helped to develop a sustainable export-oriented forestry but has not helped to alleviate poverty for the rural poor (Vidal 2013).

6.3.4 Financing commodities

Financing of the commodities sector has important links with governance. Better governance will generate higher financial resources. The commodities part of IPoA does not talk about financing, except obliquely by mentioning transfer of technology. Calls are abundant in other parts of IPoA, however, for mobilising financial resource flows to LDCs and for increasing FDI in LDCs. Paragraph 121 calls for FDI to diversify LDCs' economies.

A very important piece of news after UN LDC IV regarding financing the commodity sector is a reform package that includes changes in the objectives, functions and activities of the Common Fund for Commodities (CFC). This institution has been

unique as a source of financing dedicated to the commodities sector. The maintenance of the specificities of CFC funding, which was very significant for LDCs, would be a significant demonstration of interest in LDC development. Failure to do that will leave a significant void.

Individual LDCs find it difficult to generate support for commodity sector development even when the objective is diversification. Burundi, for example, was not successful at an international conference convened specially to generate concrete support for the development of its agriculture, with diversification and promotion of non-agricultural rural activities. The conclusion of the meeting says only that the Cadre Stratégique de Croissance et de Lutte contre la Pauvreté CSLP II would be used as the framework for co-operation with Burundi, and has no action that could be considered a concrete implementation of IPoA (Conférence des partenaires au développement du Burundi à Genève 2012).

A discussion of FDI is beyond the scope of this study, and FDI data are not up to date (FAO 2013). The latest data for FDI in LDCs are for 2011 – the year that IPoA was adopted. In 2011, LDCs as a group were further marginalised in terms of FDI inflows which remained small, particularly 'with the continuous fall of FDI to Angola – by far the largest recipient among 48 LDCs for a decade'. Most FDI that went to LDCs was for power generation, be it from fossil fuels (Mozambique and Tanzania) or from renewable energy (Lao People's Democratic Republic, Rwanda). Nevertheless, between 2010 and 2011 there was a clear shift in FDI flows away from fuels to other commodities (UNCTAD 2012a).

The impact of FDI in the commodity sector sometimes goes beyond the commodity sector itself. Some FDI in the mining sector is so large that it overwhelms the macroeconomic balances of an LDC, requiring special attention to secure positive impacts for long-term development, diversifying the economy, securing benefits for poverty reduction and breaking the predicament of path dependency. For example, in Sierra Leone, the 'commencement of iron ore mining in 2012 is expected to increase total GDP in the space of one year from USD 2.2 billion to USD 3.6 billion', with new challenges for economic management and governance (World Bank 2012d) which are addressed in the World Bank's Fifth Governance Reform and Growth Credit Programme. Similar concerns are valid for Guinea, where expected new investment in the mining sector could average 40 per cent of GDP or more per year. 'A large new iron ore mine—with a total investment of about three times GDP—is expected to start production by the middle of the decade (IMF 2012b)'.

Negotiating the financing of mega projects so that the country obtains significant benefits is a complicated matter. There are many fiscal and legal intricacies as well as uncertainties about the future. Moreover, the 'benefits' themselves are not easy to define as they concern a variety of areas from foreign exchange to fiscal revenues, and positive externalities such as the construction of roads to far-away projects. There is also the issue of divergent time preference rates among the stakeholders that can generate serious disagreements. Incentive systems to attract foreign investment may be overly generous. For example, aluminium smelting in Mozambique is said to 'have had limited fiscal benefits – a legacy of the Government's tax incentives to lure foreign investors'.

On the other hand, in Afghanistan 'a proposed mining law vital to attract foreign investment … was rejected by the Cabinet' as it was found to be 'too generous to Western interests (Bowley 2012)'. This underlines the importance of the call in paragraph 122 of IPoA for assistance to negotiate 'mutually beneficial investment agreements'.

Financing of activities in the agricultural supply chain is naturally a different matter from financing large projects in the mining sector. One difference is that because of the relatively smaller size of investments, local sources of financing gain importance. In this case innovative schemes can be devised to stimulate domestic sources. Recent innovations such as mobile phone banking have been largely neglected by the donor community. The use of warehouse receipts as collateral for financing, which has had some successful applications in emerging economies such as India and an LDC, Ethiopia, is among innovative schemes that can also be associated with the operation of commodity exchanges. Its implementation, however, requires much careful preparation. The Ethiopian experience mentioned in the next section is attractive to replicate and worthy of study. Nevertheless, 'the requirements for warehouse receipts are quite demanding even if the concept is simple and appealing (World Bank 2012e)'.

External sources of funding will remain crucial for LDCs, including for the development of the commodity sector. In this context, diaspora communities have recently become an important source. They can channel substantial amounts of funds for development and at times they can prompt official development agencies to match their efforts (UNCTAD 2012b: 108). The Regroupement des organismes canado-haïtiens pour le développement (ROCADH) has supported commodity processing in Haiti by channeling funds through the Canadian International Development Agency. Civil society's financing of the commodity sector is not confined to diaspora communities. IPoA has been instrumental, on at least one occasion, for the mobilisation of commodity-oriented financing from civil society. In Turkey, SenDeGEL was established in 2012, partly inspired by IPoA, to provide assistance for sustainable development with a special emphasis on LDCs. So far it has been focusing its activities in The Gambia and on the fishing and animal husbandry value chains, but intends to expand into other LDCs with the considerable experience gained in The Gambia.

6.3.5 Impact of price fluctuations

Commodity prices fluctuate more than those of other products. Over the years, there have been several attempts to implement measures to reduce their extreme volatility. International buffer stocks in international commodity agreements encouraged in UNCTAD's Integrated Programme for Commodities, and supply management schemes implemented from time to time, have temporarily reduced the volatility of international prices but generated different problems, such as oversupply. The idea of market intervention was revived recently, particularly in the context of G20 around the Cannes meeting. This time the issue was not low or declining prices but the high prices of foodstuffs, and the interest has subsided.

There are no calls in IPoA for international measures to reduce volatility, neither through price stabilisation measures nor through regulation of financialisation

of commodity markets. This is claimed by a considerable number of commodity market analysts to have an important aggravating effect on price volatility. The risks are not just loss of export revenue and of purchasing power for consumers of imported products, including food. Aggravated human suffering is the biggest risk. Decision making at both micro and macro levels becomes very difficult. The call is for assistance to mitigate the risks associated with price volatility, not volatility itself. Domestic price guarantees for suppliers or buyers come to mind in this context, but they require financial resources that are often non-existent in LDCs and may at times send wrong signals to producers. Various types of crop insurance schemes (such as the one based on a weather index in Bangladesh) are also innovative schemes that would help mitigate the negative impact of price volatility.

The risks of price volatility may be reduced to some extent by market transparency and correct anticipation of price movements. In this respect, and as a result of the G20 Cannes summit which took place a short time after UN LDC IV, the 'Global Agricultural Geo-monitoring Initiative' and the 'Agricultural Market Information System' (AMIS) were launched in 2011. Although the focus is only on wheat, maize, rice and soybeans, it may provide a good example for market transparency in other commodity markets.

Price risk management mechanisms such as commodity exchanges provide a tool to cushion the impact of price fluctuations. Based on the success of the Ethiopia Commodity Exchange, there seems to be a strong interest in the creation of commodity exchanges in LDCs. Although IPoA does not explicitly name commodity exchanges or call for their establishment, 'strengthening and expanding existing facilities' can be understood to refer to such exchanges. Satisfying the regulatory preconditions of establishing a successful commodity exchange or attaining the necessary financial depth are not easy, however, and have prevented the example of Ethiopia from being replicated. In Nepal, for instance, where the intention exists to expand the functioning of the existing exchange, as stipulated in IPoA, 'a regulatory regime … is yet to be instituted (Kharel 2012)'.

6.4 Commodity-specific measures for diversification and value addition

Within the general framework set above, the key to diversification, enhancing productivity, ensuring value addition and increasing value retention rests in sector- and especially commodity-specific policies, measures and strategies as mentioned in paragraph 69.1(b) of IPoA. Given the prevalence of supply chains as the centre of attention, this part starts with a review of policies that treat the supply chain as a whole. UN Economic Commission for Africa's 2013 Economic Report on Africa places a very strong emphasis on value addition in Africa (UNECA 2013).

6.4.1 Focus on organisational aspects of supply chains

A general characteristic of commodity markets, apart from mineral products, is the small, if not atomistic, nature of suppliers/exporters and the large, if not

monopsonistic, nature of buyers/importers. Producers are, in general, price takers. A good organisation of suppliers along the supply chain is vital for producing goods that satisfy buyers' exigencies as well as reducing the imbalance of power among the parties involved. Organising producers in co-operatives or similar arrangements and providing information about market exigencies to all participants in the chain fall into this group of actions. Although 'co-operatives' have negative implications in some countries due to past experiences, group action rather than an individualistic approach is better for successful participation in modern value chains.

An interesting example of organisational assistance on a sectoral supply chain basis is the African Cashew Initiative (ACi) of the BMZ and the Bill and Melinda Gates Foundation, implemented in Benin, Burkina Faso and Mozambique (as well as in two non-LDCs, Côte d'Ivoire and Ghana). This is based on the observation that 'Cashew farmers in Africa rarely organize themselves into associations, which weakens their bargaining position with dealers. Furthermore, because of the poor quality of their produce they are not sufficiently integrated into international markets. Another weak point is the fact that less than two per cent of Africa's raw cashews are actually processed in Africa'. ACi advises companies that process cashew nuts on economic and technical matters, and is working on data systems to supply market information to farmers and processing companies. 'Moreover, it will use additional advertising of the African brands to improve the worldwide marketing of African cashews, and it is trying to persuade decision makers in the project countries to improve the business climate for cashew production'. Co-operation is also underway with 'the African Cashew Alliance, an international platform of public and private partners involved in the cashew value chain, FairMatchSupport, a Dutch non-profit organisation, and the US-based NGO for rural business TechnoServe'.[14]

Other recent examples of organisational approach to value chains in LDCs include UNDP's Private Sector Development Initiative for Somalia's livestock and meat sector and an Agence Française de Développement (AFD) project on coffee in Haiti, in co-operation with Agronomes et Vétérinaires Sans Frontières, Inter-American Development Bank, Government of Colombia and Nestlé.

The Centre for Promotion of Imports from Developing Countries (CBI), which helps developing country enterprises enter European markets in specific sectors, also employs a supply-chain approach in its assistance. Apart from promoting traditional products and their organic varieties, recently an emphasis on diversification has been added. In Afghanistan, Benin, Burkina Faso, Ethiopia, Mali, Madagascar, Mozambique, Myanmar, Nepal, Rwanda, Senegal, Tanzania, Uganda and Zambia, natural food ingredients, home decoration/home textiles, fresh fruit and vegetables supply chains are supported as a means for diversification.[15]

A supply chain approach can be observed in forestry as well. Forest Connect's programmes cover 12 countries, of which seven are LDCs (Burkina Faso, Ethiopia, Laos, Liberia, Mali, Mozambique and Nepal), and aim to link 'small and medium forest enterprises to each other, to markets, to service providers and to policy processes such as national forest programmes' (IIED online).

Ignoring one link in the supply chain can lead to undesirable consequences. In Ethiopia, UNDP support led to (i) considerable capacity to be accumulated at the Leather Industry Development Institute for providing consultancy and technical services to private sector operators, and (ii) increased capacity of the Ethiopian Leather Industry Association to promote Ethiopian leather products in the local and international markets. These were remarkable achievements. But full benefits are not being realised because raw material supply is negatively affected by inadequate animal husbandry practices and the artisanal nature of slaughterhouses, where the hide is often damaged. The poor standards at slaughterhouses also generate incentives for exporting live animals, thus reducing further the supply of hides and skins. There has been much investment in the tannery segment of the value chain. But they generally operate at 40 per cent of capacity for lack of hides and skins, which need to be imported (UNDP Evaluation Resource Centre 2011).

An agricultural value chain extends backwards from the farm as well, and the supply of good inputs such as seeds is crucial for upgrading the local value chain. In this context, seed-producing companies participating in the Program on Africa's Seed System (PASS) and agro-dealer networks, for example in Tanzania, receive assistance that will improve the availability of good quality local seeds and reduce dependence on imports. 'By 2017, PASS will add 40 new private, independent seed companies to the 60 already established under the first phase of the program (Wa Simbeye 2012)'.

6.4.2 Product differentiation – organic and fair trade certified products

One of the most obvious but difficult ways to add value to commodities is to differentiate one's product from the competitor's and display a (real or perceived) superiority. This is difficult, but possible, on a firm basis, through trademarks. Differentiation can also be envisaged by origin. Particularly the former requires considerable sophistication, advertisement and financial and organisational acumen, normally unavailable for LDC firms. Assistance to Tanzanian firms to improve the perceived quality of their coffee, and support by UNDP to the Ethiopian Fine Coffee Trade Marking and Licensing Initiative, have been recent examples of co-operation in this vein (World Bank 2012f).[16]

Differentiation through fair trade or organic certification may be potentially more promising as it requires less marketing skills – certification largely takes care of that. Assistance comes from both non-governmental organisations (NGOs) active in the field and governmental organisations to help LDC producers and supply chains abide by the rules and requirements of organic certification and fair trade.

The large potential for organic agricultural products covers almost all commodities, ranging from cotton to vanilla. AFD, for example, is assisting l'Association des Producteurs de Coton Africains (AproCA) to develop a regional strategy in four LDCs (Benin, Burkina Faso, Mali, Senegal) and in Cameroon in this domain.[17] Governments are becoming cognizant of the potential of trade in organic products. In this connection (although it is not an exclusively LDC affair) the Lusaka Declaration, adopted in May 2012 at the 2nd African Organic Conference, calls on UNCTAD

and other development partners to support the mainstreaming of organic agriculture practices on the continent.[18] In this regard, a declaration adopted at the conference welcomed the institutionalisation of African Organic Network (AfroNet) and called upon the African Union to mainstream organic agriculture into all areas of its work, and to take the lead in the implementation of the African Organic Action Plan. LDCs with lower chemical use than most other countries may find it easier to convert to certifiable organic production.

'Fair trade' certification is another means for differentiation and the retention of a higher value added. Seventeen agricultural products and gold, all of which are among the commodities produced and exported by LDCs, are subject to fair trade certification, but LDCs are not as active in fair trade markets as the producers from relatively more advanced developing countries in Latin America.[19] Organic supply capacity of LDCs appears to attract considerably more assistance than fair trade. As fair trade is basically a civil society initiative, presumably the organisations involved are continuously working with the suppliers. Nevertheless, this may be an area where governments, aid agencies and NGOs may co-operate to alert the LDCs (and the fair trade community) to the potential that exists in the LDCs.

At times differentiation may become a necessity to avoid negative occurrences outside the control of a government. For example, in order to avoid being associated with 'conflict minerals' coming from Democratic Republic of the Congo, Rwanda has set up a mineral tagging and sealing scheme, internationally recognised as the International Tin Standard Certification (iTSCi) with World Bank support. Similar technology also exists for other products such as timber and could be a useful method for differentiation.

Competition with synthetics and substitutes has long been a concern for commodities, although it is not among the current concerns. Commodity producers must not only defend themselves against onslaught from synthetics but also develop new uses for their products. One recent example in this regard from an LDC has been the development of an innovative building material based on jute. It has won the top award of USD 50,000 at the Global Innovation through Science and Technology (GIST) 'I Dare' business plan competition. Co-operation in the field of technology between LDCs and development partners is a promising avenue for multiplying such innovations.[20]

6.4.3 Quality and standard issues

Meeting the quality standards and other exigencies of buyers has become, arguably, the most important barrier to entering markets, especially for LDCs. Even when market 'access' is assured in terms of overcoming governmental trade barriers and exigencies, such as those implemented within the sanitary and phytosanitary standards agreement, private standards may prevent successful market 'entry'. Moreover, there is no instance of a body such as the Dispute Settlement Body of WTO disputing the latter when standards appear unjustified. These can be purchasing firms' own standards or have very wide coverage such as for good agricultural practices (GAP or GlobalGAP) or Hazard Analysis Critical Control Point (HACCP) standards. The

multiplicity of these standards generates increased transaction costs for suppliers. Furthermore, demanding leniency on standards is not a viable option because that would be tantamount to admitting inferiority even when this is not the case, and accepting a low value, if demand is not totally cut. Therefore, all efforts must be oriented towards improving quality and meeting standards.

Recent examples in this regard include Uganda's Sida-financed Quality Infrastructure and Standards Programme (QUISP), where standards, metrology and accreditation are emphasised in particular for food safety and animal health. This is an area that is stressed by LDC governments and attracts considerable assistance from development partners, particularly regarding the establishment of laboratories and testing infrastructure. The appropriate functioning of a cold chain is necessary for meeting most HACCP standards, and Norway's assistance to the fisheries sector in Mozambique involves laboratory tests, control of contagious diseases in fish farming and availability of ice for cooling of the catch. The United Nations Development Assistance Framework for Mozambique, 2012–15, is also focusing on supporting 'fisheries communities to adopt improved and more productive techniques concerning handling, storage and conservation of fishery products (UNDP, Mozambique online)'. The World Bank's Private Sector Development Project in South Sudan includes significant activities related to producing products meeting normal standards in agriculture, livestock (grazing, slaughterhouses, veterinary clinics) and fisheries (including disposal of bactericides used in fish processing activities). It is, naturally, important to reach the minimum standards but going beyond is important for improving the image of quality. An example in this regard is the putting in place of 'a world-class centre of excellence for agricultural commodities, medicinal and aromatic plants research', namely the Ethiopian Institute for Agricultural Research (EIAR) Crop Quality Testing Laboratory, through UNDP's assistance (UNDP, Ethiopia online).

It is not only scientific interventions that improve or ensure quality. Price policies may also have a significant impact by differentiating among different grades of the same commodity. While this is routinely done by the market, government intervention that assigns the same price without differentiation among quality grades disrupts this function. In such cases inferior products chase the good products off the market. A reform by the Rwandan Government in the pricing of greenleaf tea aims at motivating farmers to produce more quality volumes.

6.5 Conclusion

In this study on monitoring the implementation of IPoA, an attempt was made to identify actions that are being carried out, which can be considered to fall within the realm of IPoA, whether or not this is explicitly stated. In fact, such an explicit statement that is related to commodities is imperceptible.[21] Another complicating factor is the fact that many actions are undertaken in the context of multi-year projects and are continuing. Few are reported to have started since the Istanbul conference. This holds true for the various strategic documents such as the Poverty Reduction

Strategy Paper (PRSP) and Diagnostic Trade Integration Studies (DTIS), which already contain much that is in the IPoA. Much is also included in the relatively more recent Millennium Acceleration Framework (MAF) documents. Therefore, it has been necessary to confine this study to a survey of actions, trying to focus on recent ones since the Istanbul conference, necessarily including many projects or policies started earlier, but continuing.

At this stage, it is impossible to identify any discernible impact due to the implementation of IPoA. Not only does data availability preclude any such assessment, but also in many cases the impact of actions will be felt with a considerable time lag. A clear message obtained from projects and policies implemented in the commodities sector, which can be related to IPoA, is the strong emphasis on governance and transparency. This manifests itself in declared intentions and actions of development partners and LDC governments. This is a development in line with IPoA but one can neither evaluate the impact of this on LDCs' progress towards graduation, nor profess that the emphasis is the result of IPoA – in fact it is probably the other way around. The impression from the observed actions is that rather than diversification out of the commodity sector, there is an emphasis on diversification within the commodity sectors, towards higher value added items, and towards unrealised resource potential.

It is also noteworthy that most of the actions by development partners are not specifically aimed at LDCs. A regional focus is prevalent, generally on Africa, and links to IPoA are considered as incidental (this may have no operational significance for the LDCs concerned, as far as actions are implemented). Although the priority work areas of most aid agencies include at least some aspects of commodity development, the declared priority countries are often non-LDCs. For example, among Canada's 22 'focus countries' there are no more than 10 LDCs. Denmark's list of 26 priority countries includes 17 LDCs. The Swiss Agency for Development has activities in about one-third of LDCs, but the focus is not on the issues that concern us in this chapter. For DFID, 19 out of 28 focus countries are LDCs, and its assistance is mostly directed at basic services, health and education, but also at governance issues which are relevant to the commodity sector.

It has been difficult to identify policies and actions by LDCs themselves. Concerning the strengthening of national commodity management strategies, it is possible to identify various actions that could be considered elements of such a strategy, rather than an explicit commodity strategy itself.[22] Moreover, in most cases these were identified through the publications of the donor community. Nevertheless, it can be assumed that whatever is being done carries at least the stamp of approval by the LDC governments. It would have been interesting to assess how much of the assistance is donor driven and how much is actually demand driven, but it is impossible to do so. This, of course, is a matter to be dealt with in the context of the 'aid efficiency' debate. It is acknowledged that in spite of all the care on the part of the author, a heavy reliance on literature from the donor side probably created an overly optimistic perception of their activities.

Annex 6.1 Indicators of commodity dependence in least developed countries

Country	Commodity exports, % of merchandise exports (2009–10)	Commodity exports, % of GDP (2009–10)	Three leading commodity exports (SITC) as % of total exports (2009–10), total of the three and individual	Resource rents: oil, natural gas, coal, minerals, forests as % of GDP (2011)	Number of products exported, 2005 and 2011	Export diversification index, 2005 and 2011	Export concentration index, 2005 and 2011
Afghanistan	53	2	Three-product total 61 057 fruits nuts 42 292 veg. materials 10 263 cotton 9	2.1	229 234	0.710 0.618	0.260 0.176
Angola	100	nr	Three-product total 99 333 petroleum 97 667 prec. stones 1 334 petr. oils bitumn min. 1	46.6	71 72	0.833 0.816	0.944 0.971
Bangladesh	8	2	Three-product total 71 03 fishery 48 264 jute 15 334 petr. oils bitumn min. 8	3.4	166 221	0.828 0.876	0.381 0.364
Benin	91	18	Three-product total 63 263 cotton 38 334 petr. oils bitumn min. 17 057 fruits nuts 8	1.7	90 147	0.778 0.767	0.435 0.276
Bhutan	51	21	Three-product total 76 351 electricity 56 075 spices 11 682 copper 9	8.4	55 82	0.761 0.807	0.278 0.322

(continued)

Annex 6.1 Indicators of commodity dependence in least developed countries (continued)

Country	Commodity exports, % of merchandise exports (2009–10)	Commodity exports, % of GDP (2009–10)	Three leading commodity exports (SITC) as % of total exports (2009–10), total of the three and individual	Resource rents: oil, natural gas, coal, minerals, forests as % of GDP (2011)	Number of products exported, 2005 and 2011	Export diversification index, 2005 and 2011	Export concentration index, 2005 and 2011
Burkina Faso	94	12	Three-product total 88 263 cotton 44 971 gold 35 222 oilseeds 9	11.8	96 143	0.812 0.808	0.743 0.525
Burundi	91	6	Three-product total 83 071 coffee 61 074 tea 12 971 gold 10	10.3	17 50	0.789 0.740	0.608 0.537
Cambodia	10	5	Three-product total 55 231 nat. rubber 21 971 gold 18 273 stone sand 16	1.3	98 165	0.829 0.803	0.354 0.348
Central African Republic	90	6	Three-product total 83 24+25 forestry 41 667 prec. stones 27 277 nat. abrasives 15	5.1	32 50	0.798 0.758	0.440 0.339
Chad	96	40	Three-product total 99 333 petroleum 89 334 petr. oils bitumn min. 8 263 cotton 2	38.4	162 53	0.774 0.793	0.720 0.927

(continued)

Annex 6.1 Indicators of commodity dependence in least developed countries (continued)

Country	Commodity exports, % of merchandise exports (2009–10)	Commodity exports, % of GDP (2009–10)	Three leading commodity exports (SITC) as % of total exports (2009–10), total of the three and individual	Resource rents: oil, natural gas, coal, minerals, forests as % of GDP (2011)	Number of products exported, 2005 and 2011	Export diversification index, 2005 and 2011	Export concentration index, 2005 and 2011
Comoros	29	1	Three-product total 96 075 spices 92 971 gold 2 03 fishery 2	1.1	9 7	0.679 0.747	0.543 0.514
Democratic Republic of the Congo	99	63	Three-product total 88 333 petroleum 79 334 petr. oils bitumn min. 5 24+25 forestry 4	35.2	193 214	0.778 0.784	0.415 0.430
Djibouti	85	6	Three-product total 55 022 milk 24 001 animals 23 971 gold 8	..	217 214	0.650 0.815	0.168 0.947
Equatorial Guinea	98	72	Three-product total 99 333 petroleum 81 343 nat. gas 15 342 liq. prop. but. 3	41.4	32 131	0.787 0.749	0.922 0.705
Eritrea	46	0.2	Three-product total 43 001 animals 19 03 fishery 14 211 hides 10	0.6	178 30	0.658 0.815	0.168 0.947

(continued)

Annex 6.1 Indicators of commodity dependence in least developed countries (continued)

Country	Commodity exports, % of merchandise exports (2009–10)	Commodity exports, % of GDP (2009–10)	Three leading commodity exports (SITC) as % of total exports (2009–10), total of the three and individual	Resource rents: oil, natural gas, coal, minerals, forests as % of GDP (2011)	Number of products exported, 2005 and 2011	Export diversification index, 2005 and 2011	Export concentration index, 2005 and 2011
Ethiopia	90	7	Three-product total 67 071 coffee 30 054 vegetables 19 222 oilseeds 18	6.0	119 115	0.643 0.796	0.379 0.361
Gambia	82	1	Three-product total 63 057 fruits nuts 42 421 veg oils 13 03 fishery 8	2.3	177 50	0.692 0.751	0.340 0.271
Guinea	85	24	Three-product total 78 285 alum. ores 51 333 petroleum 17 971 gold 10	20.1	51 151	0.845 0.755	0.643 0.456
Guinea-Bissau	99	14	Three-product total 98 057 fruits nuts 91 333 petroleum 6 282 ferrous waste 1	4.6	11 21	0.722 0.753	0.926 0.894
Haiti	12	1	Three-product total 49 071 coffee 18 057 fruits nut 16 072 cocoa 15	0.7	59 64	0.771 0.749	0.552 0.449

(continued)

Annex 6.1 Indicators of commodity dependence in least developed countries (continued)

Country	Commodity exports, % of merchandise exports (2009–10)	Commodity exports, % of GDP (2009–10)	Three leading commodity exports (SITC) as % of total exports (2009–10), total of the three and individual	Resource rents: oil, natural gas, coal, minerals, forests as % of GDP (2011)	Number of products exported, 2005 and 2011	Export diversification index, 2005 and 2011	Export concentration index, 2005 and 2011
Kiribati	85	10	Three-product total 98 03 fishery 94 422 vegetable oils 3 334 petr. oils bitumn min. 1	0.0			
Lao People's Democratic Republic	81	19	Three-product total 71 682 copper 30 283 copper ore 25 351 electricity 16	16.8	189 103	0.767 0.785	0.266 0.341
Lesotho	31	13	Three-product total 99 667 prec. stones 99	1.3	43 63	0.852 0.834	0.414 0.326
Liberia	62	12	Three-product total 77 231 nat. rubber 54 971 gold 13 333 petroleum 10	11.0	8 171		
Madagascar	50	6	Three-product total 57 03 fishery 26 075 spices 20 287 ores 11	5.7	231 162	0.732 0.760	0.228 0.211
Malawi	90	20	Three-product total 80 121 tobacco 65 074 tea 8 061 sugar 7	3.9	215 115	0.825 0.809	0.565 0.449

(continued)

Annex 6.1 Indicators of commodity dependence in least developed countries (continued)

Country	Commodity exports, % of merchandise exports (2009–10)	Commodity exports, % of GDP (2009–10)	Three leading commodity exports (SITC) as % of total exports (2009–10), total of the three and individual	Resource rents: oil, natural gas, coal, minerals, forests as % of GDP (2011)	Number of products exported, 2005 and 2011	Export diversification index, 2005 and 2011	Export concentration index, 2005 and 2011
Mali	88	18	Three-product total 93 971 gold 59 263 cotton 30 001 animals 4	14.2	215 186	0.812 0.804	0.576 0.602
Mauritania	100	50	Three-product total 84 281 iron ore 45 03 fishery 26 333 petroleum 13	58.5	156 187	0.858 0.820	0.540 0.482
Mozambique	93	20	Three-product total 63 684 aluminium 46 351 electricity 11 121 tobacco 6	8.7	101 229	0.812 0.739	0.633 0.368
Myanmar	78	31	Three-product total 74 343 nat. gas 40 24+25 forestry 22 054 vegetables 12	..	149 168	0.827 0.817	0.337 0.381
Nepal	31	2	Three-product total 44 054 vegetables 25 292 veg. materials 10 075 spices 9	3.0	100 136	0.520 0.648	0.136 0.142

(continued)

Annex 6.1 Indicators of commodity dependence in least developed countries (continued)

Country	Commodity exports, % of merchandise exports (2009–10)	Commodity exports, % of GDP (2009–10)	Three leading commodity exports (SITC) as % of total exports (2009–10), total of the three and individual	Resource rents: oil, natural gas, coal, minerals, forests as % of GDP (2011)	Number of products exported, 2005 and 2011	Export diversification index, 2005 and 2011	Export concentration index, 2005 and 2011
Niger	68	13	Three-product total 65 286 uranium 28 001 animals 26 334 petr. oils bitumn min 11	2.4	228 98	0.776 0.843	0.314 0.388
Rwanda	88	4	Three-product total 83 074 tea 30 287 ores 28 071 coffee 25	3.3	186 77	0.756 0.849	0.444 0.422
Samoa	23	2	Three-product total 77 03 fishery 55 422 veg. oils 15 112 alcoholic bev. 7	0.3	139 143	0.707 0.731	0.717 0.579
São Tomé and Príncipe	47	2	Three-product total 92 072 cocoa 86 334 petr. oils bitumn min. 4 057 fruits nuts 2	0.9	136 15	0.675 0.611	0.614 0.586
Senegal	66	11	Three-product total 65 334 petr. oils bitumn min 37 03 fishery 21 971 gold 7	3.4	182 206	0.679 0.728	0.208 0.227

(continued)

Annex 6.1 Indicators of commodity dependence in least developed countries (continued)

Country	Commodity exports, % of merchandise exports (2009–10)	Commodity exports, % of GDP (2009–10)	Three leading commodity exports (SITC) as % of total exports (2009–10), total of the three and individual	Resource rents: oil, natural gas, coal, minerals, forests as % of GDP (2011)	Number of products exported, 2005 and 2011	Export diversification index, 2005 and 2011	Export concentration index, 2005 and 2011
Sierra Leone	69	8	Three-product total 66 667 prec. stones 35 285 alum. ores18 287 ores 13	3.6	211 127	0.677 0.676	0.498 0.276
Solomon Islands	99	25	Three-product total 92 24+25 forestry 75 03 fishery 11 422 veg. oils 6	14.1	16 33	0.824 0.842	0.705 0.615
Somalia	99	18	Three-product total 85 001 animals 35 971 gold 32 24+25 forestry 18	..	153 32	0.777 0.734	0.567 0.497
South Sudan				..			
Sudan	99	15	Three-product total 94 333 petroleum 80 334 petr. oils bitumn min 8 971 gold 6	15.1	75 136	0.804 0.786	0.607 0.772
Timor-Leste	91	2	Three-product total 98 342 liq. prop. but. 77 333 petroleum 13 071 coffee 8	0.2	178 187	0.789 0.746	0.825 0.419

(continued)

Annex 6.1 Indicators of commodity dependence in least developed countries (continued)

Country	Commodity exports, % of merchandise exports (2009–10)	Commodity exports, % of GDP (2009–10)	Three leading commodity exports (SITC) as % of total exports (2009–10), total of the three and individual	Resource rents: oil, natural gas, coal, minerals, forests as % of GDP (2011)	Number of products exported, 2005 and 2011	Export diversification index, 2005 and 2011	Export concentration index, 2005 and 2011
Togo	61	17	Three-product total 55 072 cocoa 19 272 crude fert. 18 334 petr. oils bitumn min 18	4.8			
Tuvalu	33	0.3	Three-product total 80 03 fishery 59 684 aluminium 13 24+25 forestry 8	0.0	84 1	0.588 0.652	0.254 0.682
Uganda	70	9	Three-product total 50 071 coffee 30 03 fishery 13 121 tobacco 7	5.4	239 213	0.749 0.730	0.259 0.211
United Republic of Tanzania	83	12	Three-product total 43 971 gold 22 289 ores prec. met. 14 03 fishery 7	8.4	174 254	0.760 0.762	0.235 0.198

(continued)

Annex 6.1 Indicators of commodity dependence in least developed countries (continued)

Country	Commodity exports, % of merchandise exports (2009–10)	Commodity exports, % of GDP (2009–10)	Three leading commodity exports (SITC) as % of total exports (2009–10), total of the three and individual	Resource rents: oil, natural gas, coal, minerals, forests as % of GDP (2011)	Number of products exported, 2005 and 2011	Export diversification index, 2005 and 2011	Export concentration index, 2005 and 2011
Vanuatu	85	7	Three-product total 91 03 fishery 86 223 oilseeds oil fruits 3 422 veg. oils 2	0.5	140 16	0.781 0.826	0.563 0.632
Yemen	97	24	Three-product total 95 333 petroleum 8 334 petr. oils bitumn min 8 03 fishery 3	23.1	135 177	0.814 0.744	0.817 0.587
Zambia	89	35	Three-product total 87 682 copper 80 283 copper ore 5 287 ores 2	27.0	245 211	0.876 0.850	0.519 0.646

Source: First three columns: UNCTAD (2012), The State of Commodity Dependence 2012, UNCTAD/SUC/2012/8, Geneva, April. Resource Rents in GDP: World Bank Development indicators, available at: http://data.worldbank.org/indicator/NY.GDP.TOTL.RT.ZS. Last three columns: UNCTAD (2012), Handbook of Statistics 2012, TD/STAT. 37, Table 4.1.1

Annex 6.2 Index of number of exported products at six-digit HS6 subheads (earliest year=100)

Country	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Bangladesh	100	107	121	154	186	192	200	198				
Tanzania	100	115	117	134	141	154	168	180	220	218	216	
Uganda	100	171	176	220	222	240	349	369	388	335	367	
Burundi	100	90	81	264	263	323	125	432	282	303	311	
Cambodia	100	98	101	121	106	103	108	118	94	104	114	
Ethiopia	100	261	304	328	315	242	291	736	765	711	877	
Gambia, The	100	68	61	80	70	65	69	89	104	129	109	
Madagascar	100	108	96	102	112	117	121	117	128	121	122	
Malawi	100	100	84	89	120	128	131	121	128	139	147	
Mozambique	100	124	155	188	150	142	186	157	170	160	99	
Niger	100	75	85	75	65	71	93	61	57	59	55	
Rwanda		100	116	135	239	301	315	471	499	591	589	
Samoa		100	70	62	60	62	60	58	44	44	56	
São Tomé and Príncipe	100	56	137	190	124	165	119	163	192	140	190	
Senegal	100	105	73	121	136	145	110	145	144	134	137	
Zambia	100	90	100	106	120	126	149	172	186	187	172	
Benin	100	112	117	87	81	94	103		132	166	119	
Burkina Faso	100	74	74	66	74	74		80	64	72	70	
CAR	100	104	31	29	51	65	28	41	37	35		
Mali	100	181	151	190	194	158	188	210	237		184	
Mauritania	100	91	82	82	136	136		118	291	291	600	

(continued)

Annex 6.2 Index of number of exported products at six-digit HS6 subheads (earliest year=100) (continued)

Country	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Togo	100	102	96	106	100	99		82	64	68	58	66
Afghanistan									100	91	97	
Bhutan						100	89	86	45	75	71	
Comoros	100	85	88	60	49	59	56	4				
Djibouti										100		
Guinea	100	147	63		83	87	82	101	109			
Guinea-Bissau				100	121	66						
Kiribati						100						
Lesotho	100	285	480	393	458				444	369		
Myanmar											100	
Nepal	100			331						355	347	
Sudan	100	27	86	26	24	17	19		34	79		
Sierra Leone	100		181									
East Timor					100	110						
Tuvalu			100	55	145	106						
Vanuatu							100	82				
Yemen					100	114	108	116	123	126		

Source: Table 3 of Commonwealth Secretariat, Preliminary draft of The Istanbul Programme of Action for LDCs: A Benchmarking Exercise, August 2012 (derived from data from UN COMTRADE database)

Notes

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2 See: http://eiti.org/eiti
3 Based on UNCTAD (2012c), Table 4.1.1.
4 See: 'TIVA indicators by industry with partner world', available at: http://stats.oecd.org/Index.aspx?DataSetCode=TIVA_OECD_WTO#
5 In this report many examples are cited. In order not to clutter the text with footnotes, when just the name of a programme or project is mentioned as an example, the bibliographic reference is not given. The internet addresses were accessed on 30 August 2013.
6 For a discussion, see Lederman and Maloney (2012).
7 See: www.jica.go.jp/sudan/english/index.html
8 See: www.oecd.org/site/africapartnershipforum/mrde/50362685.pdf
9 See: www.sida.se/English/Countries-and-regions/Africa/Tanzania/Programmes-and-projects1/Research-on-mushrooms-provides-nourishment/
10 See: www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2013/03/20/000356161_20130320114416/Rendered/INDEX/748660PGD0P1270Official0Use0Only090.txt
11 See: www.mof.gov.ws/Portals/195/Services/Economy/SDS%202012%20-%202016%20ENGLISH%20VERSION.pdf
12 Document de la Stratégie de Croissance et de Réduction de la Pauvreté, 2ème génération: 2011–2015, October 2011, Ministère du Plan, available at: www.cd.undp.org/mediafile/DSCRP%202.pdf
13 See: www.greenpeace.org/africa/en/News/news/Greenpeace-protests-against-EU-subsidised-plunder-of-West-African-Waters-/
14 See: www.giz.de/en/worldwide/19011.html (accessed 1 April 2014).
15 From: www.cbi.eu/ for supply chain emphasis, especially www.cbi.eu/CBI%20Services.
16 For a critical view of the Ethiopian Initiative, see Mezlekia (2012).
17 No information could be found on the AproCA website.
18 See: http://unctad.org/en/pages/newsdetails.aspx?OriginalVersionID=98
19 For a good survey and most of the information here, see Elliott (2012).
20 See: http://gist.crdfglobal.org/Feeds/news
21 Specific references to IPoA have been made by ESCAP and WTO in their recent work relevant to the subject of this study, but in both cases, the work is prescriptive and does not cover implemented actions and projects.
22 Ministries of Agriculture or of Mining are traditionally responsible; in Rwanda a Ministry of Natural Resources was established in May 2011.

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