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DIVERSIFICATION IN COMMODITY-DEPENDENT COUNTRIES:

THE ROLE OF GOVERNMENTS, ENTERPRISES AND INSTITUTIONS

Report by the UNCTAD secretariat

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"We have to be more shock resistant, to reduce our exposure to volatile commodity markets. Diversification remains one of our greatest challenges". Adviser to President Bedie of Côte d'Ivoire (Financial Times, 2 June 1997)

I. INTRODUCTION

1. The first session of the Commission on Trade in Goods and Services, and Commodities selected diversification in commodity-dependent countries as a topic to be addressed at its second session.[1] The present report has been prepared to provide a background to the Commission's discussions. It incorporates the relevant findings of the report prepared for the Expert Meeting on Vertical Diversification in the Food Processing Sector in Developing Countries (1-3 September 1997).

2. Many commodity-dependent countries are too small or poor for their domestic markets to stimulate - and absorb - diversified production based on their raw material resources. They are therefore obliged to seek export outlets for such production. Moreover, even those commodity-dependent countries with a large domestic market, which could absorb domestic production and therefore have a comparative advantage in diversifying vertically or competing effectively in the whole value chain, in general also rely heavily on external markets. For non-food commodities in particular, which are basically inputs to other products, most countries seek broader markets and have to rely on external opportunities. Policies related to diversification accordingly need to be anchored in the commercial reality that globalized production has become very sophisticated in tapping local inputs, exploiting skill and wage differentials, or jumping trade barriers. Production is increasingly undertaken in slices, with intermediate products moving from one location or country to another at different stages of commodity chains which cover a product from its planning, production and distribution through to its disposal (such as with packaging material).

3. In such a context, the short-term advantages of attaining a diversified production and export structure in commodity-dependent economies are undisputed. The longer-term benefits accrue from a more efficient exploitation of the country's dynamic comparative advantages. Experience shows that in this area success breeds success.

4. At the same time, it should be borne in mind that diversification is not an end in itself but rather a means towards development. Given that in most of the commodity-dependent countries the majority of the labour force is engaged in commodity-related economic activities, ensuring that diversification goes in tandem with poverty alleviation is the ultimate measure of the success of the diversification process. In some cases, conflicts may arise among different objectives, for example upgrading skills and enhancing efficiency on the one hand, and generating employment and improving income distribution on the other. If basic conditions are appropriate, however, this conflict may be essentially one of timing. To resolve it, a careful prioritization and sequencing of policies is required.

5. Despite the difficulties, the past few years are replete with examples of diversification success stories. Malaysia diversified successfully into palm oil and cocoa; Colombia did the same with fresh-cut flowers and Kenya with horticultural products. Many further examples are given below. In each case, the countries have given diversification-related policies particular attention. The present report considers such policies but focuses on their practical aspects as they relate to the operational roles of government, enterprises and social institutions in the diversification process. Particular focus is placed on

policies and conditions which can activate positive responses from decision-makers in both large and small enterprises in the commodity sector.

II. GLOBAL TRENDS

6. With globalization and liberalization, the world market for commodities is being reshaped and becoming more complex. The current setting is characterized by the need for (i) larger capital resources, (ii)sophisticated technology, including information technology which can improve management practices and assure instantaneous access to information, and (iii) human skills for access to global markets. This can reinforce trends towards greater concentration. The report on vertical diversification in the food sector (TD/B/COM.1/EM.2/2) underlines the special need to focus on these elements for promoting diversification.

7. As globalization proceeds, however,dynamic exporters have been taking over the market shares of weaker commodity exporters in world markets. Market imperfections and increasing returns to scale favour large producers and well established traders. Weaker exporters find it increasingly difficult to compete in world markets which are becoming ever more sophisticated and demanding. The gap between the more advanced developing economies and the weaker ones is widening. Deliberate policies and measures are needed at both the national and the international levels to reverse the trend towards divergence.

8. With respect to Uruguay Round reforms, tariffication and the binding of tariffs have led to greater transparency and predictability. Nevertheless, considerable barriers still exist in the main export markets, and notably for agricultural, fisheries and meat products (UNCTAD, 1997b). Moreover, tariff escalation remains for many products such as processed food items, limiting vertical diversification into this area, and several tariffs have been bound at prohibitively high levels, much above the applied tariffs. This could impose severe constraints on initiatives towards diversification.[2] Additional barriers that exporters of commodities, such as processed food products, have to overcome include levies, minimum import prices, and other regulations pertaining to packaging, labelling, health and quality standards (UNCTAD, 1997b).

9. In the context of the “built-in agenda” of the Uruguay Round, the further liberalization of agricultural trade, in particular the elimination of agricultural subsidies in developed countries, and the integration of the textiles and clothing sectors into the Uruguay Round Agreements are especially important for the diversification efforts of commodity-dependent developing countries.

10. Currently, the market mechanism, deregulation and liberalization measures agreed in the context of Uruguay Round Agreements provide the framework within which diversification strategies have to operate, be they at the government or at the corporate level. This setting differs substantially from the environment in which earlier generations of developing countries had embarked upon, and succeeded in, diversifying their economies. The Uruguay Round obligations, however, do not seem to be a determining constraint on the choice of policy, because a large number of commodity-dependent developing countries are exempt from various obligations which would limit their choice of diversification policies.[3] One might, therefore, argue that it is the prevalent approach to development, rather than internationally agreed trade rules, which constrains the choice of diversification- and development-related interventions. As an example, Box 1 gives a brief account of Sri Lanka’s diversification programme.

Box 1

Privatization, government policies, crop diversification and export growth in Sri Lanka

Since 1987, the Sri Lankan Government has been implementing a vigorous, private-sector-led programme of diversification, export growth, and raising of peasant incomes. This has included (i) the privatization of management on state-owned tea and rubber plantations, and (ii) emphasis on contract farming. The latter is a system in which peasant smallholders supply produce under contract to a central processing or marketing firm, either supplementing or substituting for company production. The terms of purchase are agreed in advance in a contract which specifies how much will be bought, the price that will be paid and how risks are allocated. The firm also agrees to provide inputs and technical advice to the producer, and it retains the right to reject substandard produce.

Thus, the formula by which diversification and export growth were to be achieved was through the creation of a relationship between a corporate sector firm with capital and know-how and a smallholder with land and labour. The peasant production base was profitable to agribusiness because it enabled the latter to off-load many of the risks involved in the cultivation of vegetables and fruits. Moreover, the sector could not be easily mechanized and peasant production is basically cheaper.

Some success has been registered, but investors have been hesitant. This is partly because the open economy offers other more attractive opportunities, and going into vegetables and fruits is considered a risky venture. In successful cases, particularly in the irrigated settlement areas, state involvement has been crucial. A wide range of R&D and technical assistance has been provided by specialist units with the support of the Department of Agriculture and with considerable donor assistance.

Source: Dunham, 1993.

11. In order to integrate effectively into, and benefit fully from, a liberalized world trading system, commodity-dependent countries which are on the verge of marginalization need to look beyond the elimination of trade barriers in their export markets. They have to close the “connectivity gap” and improve their supply capacities, as well as the timeliness and flexibility of their response to new and emerging market opportunities. These are crucial aspects of a trade liberalization agenda from the point of view of these countries. The emphasis may differ somewhat from that adopted by the more advanced and diversified developing countries. The commodity-dependent countries might consider integrating into their positive agenda for further multilateral trade liberalization a commitment from more advanced countries concerning support in the areas of technology upgrading, training and infrastructure. Such support is already included, for example, in bilateral agreements on access to fishery resources and in some multilateral environmental agreements. At the multilateral level concerning trade, however, such assistance has so far been mentioned only for the least developed countries in the context of the Ministerial Decision on Measures in Favour of the Least Developed Countries.

III. RELEVANT AGENTS AND ACTORS IN DIVERSIFICATION

A. The role of government

1. An environment supportive of business

12. The economic, political and legal decisions of Governments define the framework for the diversification process, which is in practice carried out by the enterprise sector in response to market conditions and signals. Although, generally, diversification is not an explicit objective of these decisions, the achievement of economic stability and a favourable business environment through such decisions can unleash the entrepreneurial forces needed for diversification

and encourage investment. For diversification into areas where investments have long lead times before they bear fruit, stability and predictability of policies is particularly important. Box 2 gives an overview of risk factors in diversification.[4]

Box 2
Risk factors in diversification

Risk is a key factor in the socio-economic realities of diversification. At one end of the enterprise spectrum, small farmers in developing countries grow a wide range of traditional crops and undertake a number of off-farm activities, so as not to be overly dependent on one market, a single source of income, and particular weather and other external conditions. They thus forego the benefits of either specializing in profitable crops or diversifying into non-traditional areas. At the other end of the spectrum, for larger firms presence in a variety of industries and markets reduces their exposure to particular risks. Large investors diversify their asset portfolio in order to optimize their risk/return ratio. Commodity buyers, faced with a choice of potential suppliers, are likely to opt for those with a reliable delivery record. Diversification can serve as a risk management strategy, but risk can also hamper diversification.

The global playing field is far from level. The poorer and less diversified the country, the riskier it is for a local producer to diversify, and the riskier it is for a foreign buyer to support these diversification efforts. Production risks increase when the supply of inputs (seeds and agricultural inputs, intermediate products and machinery) is not reliable. Risks related to timing, crucial for just-in-time delivery systems that drive many global commodity chains, are larger where transport and communications infrastructure is deficient. Considerable credit risks hamper trade finance and financial risk management in countries with high sovereign risks, an issue closely related to a country’s economic development and economic policies. Moreover, the traditional international financing mechanisms, based either on a company’s track record or on the proceeds of its sales to known buyers, are difficult to use for non-traditional exports. Higher risks mean that the return on an investment needs to be higher in order to make the venture worthwhile, and thus, many potential diversification activities never take place because the high profit benchmark cannot be reached.

Unfortunately, those countries in which diversification is the most risky also tend to have the weakest institutional framework for managing risks, while instability in their government policies may add risks rather than mitigating them. Sound, transparent government policies are thus one part of the solution. However, in the provision of efficient economic infrastructure (ports and airports, communications systems, etc.) and of the supporting institutional framework (insurance companies, information collectors and providers, well-functioning banks, brokers enabling the use of foreign price risk management markets, etc.), developing countries continue to require international assistance, for instance in the area of training and in the development of new operating modalities (guidelines on documentation and transaction controls, etc). At the enterprise level, managers need to learn how to evaluate and manage risk - how to account for risk in their business plans, how to reduce cash flow volatility by forward contracting and price risk management, and how to reduce marketing risks by, among other things, better logistics. If this is done, diversification opportunities that initially appear too dangerous could thus become feasible.

13. In many developing countries, clear property rights are very important for the development and diversification of the agricultural and mineral sectors. Diversification, particularly when land is scarce, needs investment, and farmers without secure property rights are reluctant to undertake such investments (Pingali and Rosegrant, 1995, p.181f). Moreover, households without land generally face major constraints in gaining access to credit. They rely on informal channels, rotating funds, local money lenders and landlords. The latter in particular tend to be much costlier than other sources but are often the only source of uncollateralized loans.

14. Formal sector loans are far less accessible. Agricultural banks, rural offices of postal savings institutions, and various development and NGO projects have provided credit, often at subsidized rates, to the rural sector, SMEs and micro enterprises. They have proven helpful in funding developmental and diversification expenditures of poor households. However, recent trends towards

deregulation threaten to reduce such sources of cheap finance, and access has become more time-consuming as banks have been closing branches in areas with low turnover. Hence, the provision of micro credit in various forms can be a crucial factor in cushioning the risks associated with diversification.

15. With increasing privatization and liberalization, Governments are often unable or unwilling to resort to regulatory measures and direct support for enterprises. In this context, improving the physical infrastructure and providing support in the form of training, upgrading skills and technology levels, and facilitating access to information may become the main conduit of assistance to diversifying enterprises.

16. A sufficiently developed physical infrastructure, including irrigation systems, transport networks, and port, airfreight and storage facilities, has been critically important in successful diversification experiences. Even one missing link may be detrimental to success.[5] In the case of mining, major investments in infrastructure are often necessary to allow the development of mineral deposits in remote areas. These investments can also benefit producers of other commodities by reducing their transportation costs and bringing them closer to markets, thus making possible the establishment of new forestry or agricultural production. The private sector can be an important source of funds for such infrastructure projects; creating conditions for mobilizing private sector funds, for example through deregulation, could thus be an important policy initiative for commodity-dependent countries.

2. Trade policies

17. Tariffs and non-tariff measures, as well as direct financial support for exporters, are being dismantled in the new trading system and economic policy framework.[6] One of the expected positive effects of trade liberalization on diversification, and particularly vertical diversification, will be to give processors access to complementary inputs at world prices, thus providing a better basis for competition.

18. Export taxes or prohibition of certain exports are normally associated negatively with trade-driven development. They have been used, however, as effective instruments for promoting domestic processing activities which are, sometimes, controversial. Their abolition may increase export earnings but harm domestic processing. Box 3 describes such a situation in Mozambique.

Box 3
Export taxes and processing cashew nuts in Mozambique

Cashew export liberalization was one the seven “necessary conditions” for loans that were set out by the World Bank in its ‘Country Assistance Strategy’ for Mozambique in 1995. The export tax on unprocessed cashews has been cut from 26 per cent in 1994/95 to 14 per cent this year. Eventually, the aim is to phase out taxes completely by 2000.

Whilst this will allow the export of raw nuts, particularly to India, which can bring in valuable foreign exchange, indigenous entrepreneurs insist that it will cause the demise of one of the few sectors currently attracting local investment and which has created over 2,000 new jobs since privatization. Local processing of cashews may become unprofitable if raw cashews fetch higher prices abroad at a time when private local processing is in its infancy.

Source: African Business, May 1997, p.27.

19. An indirectly negative impact of trade liberalization on diversification may be felt in developing countries where trade taxes are a significant source of government revenue. If liberalization of international trade leads to an abrupt reduction in government revenues, such shortfalls need to be compensated from other sources so as to avoid a decline in the provision of public services

and not jeopardize the economic environment for development and diversification. Boxes 4 and 5 give examples of successful generation of resources for supporting diversification.

Box 4
Financing of diversification in Colombia

Diversification out of coffee has been a long-term goal in Colombia and generating the necessary funds for this purpose was an important aspect of policy implementation. The association of coffee producers drew up its first five-year diversification plan in 1960, funneling resources from the coffee sector into the development of other products. Some of the revenues from a tax on major exports as well as import taxes were used to finance research and development on alternative production and export possibilities; to support the adaptation of existing production facilities to the requirements of the world market; to finance processing factories; to make subsidized credits available to non-traditional export sectors; to identify potential markets and fund promotion campaigns; and to create export marketing companies. Financial rebates, in the form of import tax exemptions and domestic tax rebates, were also available to non-traditional export sectors. The fuel sector was also taxed to finance the development of other mineral exports. A number of export industries created during the 1980s, such as silk production, shrimp farming and passion fruit production, were the direct result of this government support. The Government adapted its support to the needs of each sector. For example, when anti-dumping actions taken by the United States became the main obstacle for flower exports, lawsuits to counter these anti-dumping actions were financed out of the government-administered Diversification Fund.

Source: UNCTAD, 1994.

20. Diversification has often been an explicit objective of trade and investment promotion actions by government, parastatals, or industrial associations.[7] Such actions have included provision of services of marketing boards, the provision of market information, support for marketing offices, services provided by commercial sections in embassies in foreign countries, publicity which promotes the country as a reputable supplier and attractive investment location, and quality control measures to ensure that the reputation of a producer country or sector is not undermined. In many countries, government-sponsored promotion drives have been successful in positioning products with brand names and identified origins.[8]

21. With the reduction in direct support for enterprises in the new policy environment, such services are gaining even more significance as an ingredient of success in diversifying exports and in positioning enterprises more favourably in global commodity chains.

3. Technology policy and information technology

22. Moving towards higher technological sophistication in the diversification process is a crucial ingredient of development. Improved methods for producing and processing traditional commodities can be at least as important as moving into new areas. And moving into new areas, if it contributes to the upgrading of the overall technological capacity of the country, would provide much wider benefits for development through spin-off effects. Government policy regarding access to, and procurement of foreign-patented technology and/or protection of locally generated technology, as well as institutional support for R&D, are key components in determining a country’s diversification capacity.[9]

23. Quantum leaps in information technology are a major vector in the globalization of world production and trade. Benefits of information technology include improved management practices and strategic planning at the enterprise level, enhanced assessment of market opportunities, easier market entry and improved adaptation to change. Electronic mail, the Internet and other forms of telecommunications, as well as and the equipment through which they are linked, are burgeoning as a result of technological advances and declining costs. They have radically transformed the patterns and speed of information exchange. It

is estimated that the number of Internet users has doubled annually in recent years (UNCTAD 1997e).

24. Such modernization can be instrumental in opening up trading opportunities for developing countries, since much trade information becomes universally accessible. Any supplier electronically connected to the information network can make instantaneous offers in international markets, and thus participate in the global commodity chains. In recent years, large firms, including commodity firms, have increasingly used information technology to achieve two prime objectives. The first is to give business enterprises a competitive edge, and the second is to develop organization-wide communications to facilitate sound management. Thus, firms have utilized information technology in strategic planning and in the implementation of goals and objectives, in assessing the strength and innovativeness of markets and products, and in assisting enterprises to adapt swiftly to changes in the market place and in the overall international environment.

25. Large commodity-based firms have thus globalized and strengthened their activities and gained an advantage over their competitors, with rapid access to new products and innovataive processes. In this manner, they are able to meet new competition. Information technology has also helped to reduce costs and create new and closer relationships between producers and purchasers in the global market. However, the incremental benefits from such advances in information technology are likely to be bigger for SMEs than for the larger firms, which already have relatively better access to information. For example, small enterprises in Asia are emerging as new suppliers to South American and Central and Eastern European markets, thanks to links established electronically. They are benefiting, among other things, from the fact that electronic mail is far cheaper and easier than international telephone or fax communication (*Economist,* 1997, p. 59).

26. At the moment, however, there is considerable geographical unevenness in the distribution of telecommunications lines. On average there is one telephone line for two people in high-income countries, but in South Asia or sub-Saharan Africa one telephone line serves 100 inhabitants (World Bank, 1997, pp. 273f). Problems are even more acute in rural and provincial areas. The investment necessary in telecommunications alone is estimated at US$ 50 billion for Africa (UNCTAD, 1997e, p. 10). At the enterprise level, investment in hardware and software and training are required to enable especially smaller firms to upgrade their information technology capacity and to ensure that they are visible in new databases. International and public support is needed in commodity-dependent developing countries, coupled with investment by the private sector in communications infrastructure, to ensure that they are not left behind in this crucial area.

4. Agricultural policies

27. Unfavourable terms of trade for agriculture have often been mentioned as one of the main impediments to agricultural development and diversification. Recently, many developing countries have abandoned the policy of supporting industrialization by maintaining agricultural prices low across the board and left prices to be determined on the market, expecting that resources would thus be allocated efficiently and market opportunities would be exploited.

28. Research has shown that the responsiveness of aggregate agricultural output to prices is rather low and the supply elasticity with respect to non-price factors (public goods and services) high, particularly in countries with inadequate infrastructure facilities, lack of capital and lack of private research organizations (Chhibber, 1988, p.45). As most commodity-dependent, structurally weak countries fall into this category, diversification policies need to utilize a multitude of measures and not depend only on prices.

29. A pro-active agricultural diversification policy would need to combine market and production-related interventions. The former relate to the physical and information technology infrastructure necessary to tap, and deliver competitively to, markets. Production-related measures address the productivity and skills level of the sector through research and extension programmes (Delgado, 1995, p.228). Research, training and extension services in agriculture are particularly important for the diversification process, as illustrated in box 5, and diversification is frequently an important objective of such services.

Box 5
Malaysia's diversification:
The importance of research and development

In Malaysia, land development policies were combined with measures to raise productivity of land and agricultural labour. This was facilitated by Malaysia's relatively small population and the availability of relatively ample new land. Furthermore, the inflow of immigrant workers providing cheap labour to estate plantations was tolerated. Diversification was encouraged, for example, through flexible management of replanting grants. Sliding export taxes and other tax incentives, for both local and foreign investors, played an important role in vertical diversification.

As a result of land development, the area covered by oil palm plantations increased substantially in the 1970s. Diversification into cocoa during the early 1980s was initiated mainly by the price responsiveness of farmers and sustained by government-sponsored research on high-yielding hybrids. For both crops, research and development activities allowed a steep increase in productivity, the expansion of processing activities, and in the case of palm-oil, development of new end-uses. A strong expansion of world demand for palm oil contributed to the success of this product, while enhanced productivity kept cocoa production profitable despite declining world market prices. A partial ban on the export of logs contributed to vertical diversification in the forestry industry.

Effective institutional partnership between the Government and the business community and sound macroeconomic policies encouraged investment. Innovative export-related financial incentives helped in penetrating new markets, particularly in other developing countries.

Research and development activities were crucial in improving Malaysia's competitiveness. This was generally financed from within the respective commodity sector, through a levy on production (palm oil) or production and exports (rubber). The application of agricultural research helped keep within manageable limits the divergence between agricultural and industrial productivity and stemmed the marginalization of rural areas. Moreover, the expansion of domestic processing activities with relatively high technological sophistication contributed to raising the overall skill level of the labour force. This served as an attraction for foreign investors not only to commodity processing but other areas as well, facilitated the transfer of technology, and led to a trickling down of higher productivity to a wider portion of the Malaysian economy.

Source: UNCTAD, 1995b.

30. However, success in research, training and extension requires, apart from a solid scientific foundation, factors such as sufficiently high ratios of extension workers per farmer, the availability of means of transport for extension workers, and a socially sensitive focus that takes into account the fact that many agricultural production activities are the responsibility of women. Box 6 provides some suggestions by NGOs working in this area. It is often observed that export-oriented agricultural production gets much of the attention in research and extension work, which may be good for export diversification but less so for food security and possibly for poverty alleviation. Training and extension programmes that make a significant positive contribution to diversification have been reported in many countries, including commodity-dependent African countries (UNCTAD, 1997d, p.10ff).

Box 6
Some advice from NGOs about diversification

A survey by UNCTAD among NGOs active in rural areas highlights the following approaches:

(i) Contact farmers' groups, not individuals;
(ii) Go to the farmers and learn about their real needs. First listen, then act;
(iii) Fit your knowledge to farmers' practical experience;
(iv) Promote crops and practices that are suited to local conditions;
(v) Don't propose farming systems that depend on high-cost inputs;
(vi) Introduce not only new varieties, but also the cultivation practices they require;
(vii) If you recommend a new practice, make sure the necessary inputs are available;
(viii) Help farmers to find markets for their produce;
(ix) Since chemical fertilizer is expensive, give training in the use of organic alternatives.

31. Some successful agricultural diversification schemes and extension work have focused on individual farmers willing and able to take risks rather than promoting a particular crop among a wide spectrum of farmers. In principle, middle-sized farms are more likely to diversify. They can finance this either from their own, albeit small, savings or from loans extended using their land or crops as collateral. They are also relatively easily reached by training and extension services. Poorer farmers and landless peasants are, in general, not able to take the risks entailed in diversifying their crop.[10] They are too vulnerable economically, usually shut out from credit, and possibly not able to afford the time to involve themselves in training schemes, even when these are aimed at them.[11]

32. Hence, a policy dilemma is posed by the structure of agriculture in low-income developing countries, where the majority of farm households are smallholders or landless. If diversification is the primary objective, measures will indeed focus on the more competitive farms, supporting them via advisory services and training and exposing them to market opportunities in upgraded traditional crops or new ones. If, however, diversification is to serve broader social goals, removal of the barriers that hinder the participation in this process of vulnerable groups - smallholders and landless peasants, women farmers and women-headed households, farms on ecologically fragile land - needs to be made an integral part of diversification programmes. Otherwise, existing rural income divides will remain and perhaps intensify.

33. Another crucial dilemma of diversification is the “adding up problem” which occurs when demand does not increase commensurately with supply. Programmes which copy a successful diversification endeavour launched, for example, by a neighbouring country, or respond to sudden surges in world prices which can be temporary, may easily backfire because markets can easily be saturated or products substituted. In such cases, specialization in a traditional cash crop for which the global demand is much larger and marginal additions to output may not affect prices may be the better choice.

34. The crucial point is to foresee the supply-demand balance. This requires good access to continually updated information and the utilization of sophisticated analytical techniques. Moreover, particularly in a privatizing world, the findings of such analysis need to reach the actual producers instantaneously, and this calls for efficient cooperation and clear communication channels between the Governments or other organizations carrying out the research or accessing the information and the entrepreneurs making production decisions. Information technology can considerably facilitate such communication.

35. One of the principal factors causing the “adding-up” problem is the inertia of higher-cost producers or their sheer inability to switch into alternative products. This may be caused by a lack of information and skills, fixed investments specific to the production of the current product, or physical and climatic factors. Alleviation of such “exit barriers” through technical assistance and bridging finance might allow market forces to allocate resources more efficiently, to the benefit of both producers and consumers. In fact, new low-cost entrants may reap higher profits if they enter into cooperation agreements with higher-cost producers who would like to diversify out of the particular product and assist them financially and technically in this respect. This could well be a worthwhile investment, as it may also lead to higher and more stable prices for the new entrants.

5. Mineral policies

36. Policies which address the exploration for and exploitation of mineral resources are of particular relevance to diversification endeavours by the private sector in mineral-rich countries. These policies include formulation of legislation on mineral rights and investment, taxation and land use. They also cover the provision of training and infrastructure necessary for mining operations.

37. Mineral resource development may provide a boost to developing economies otherwise poor in natural and human resources and allow rapid economic growth, provided that the problems of macro-economic stability associated with mineral dependence, in particular the influence of mineral revenues on the real exchange rate and the effect of mining wage rates on overall wage levels, can be mastered. The income arising from mineral exports, of which a large portion usually accrues to the Government in the form of taxes or royalties, can be channelled to investment in human and physical capital in other sectors through the use of mechanisms such as stabilization funds, thus supporting diversification of the economy more broadly.

38. The channelling of some part of mineral revenue into other sectors is particularly important, since mineral resources are exhaustible and proceeds from mineral sales will not continue indefinitely. The depletion of a large mineral deposit can have serious detrimental effects both on the national economy and on regions dependent on mining. The avoidance of these effects requires pro-active policies with a long-term perspective on the part of the Government. Box 7 provides an example of a mining project that aims to contribute to the diversification of the local economy in Papua New Guinea.

B. Enterprise sector strategies in diversification

39. Whilst progress in a country's diversification is conventionally measured at the aggregate macroeconomic level, it is firms and enterprises that are the actual agents implementing and determining the speed and direction of diversification.

40. In many countries privatization of public enterprises is taking place and marketing boards are being abolished. The need for a greater link between the private sector and governments to achieve diversification is more important now than ever before. It is, therefore, relevant to see what kind of strategies are followed by enterprises that contribute to the diversification of the economy, the factors that affect their decisions, and the importance of inter-firm relations, including the place of such firms in the global commodity chains and industrial clusters.

Box 7
Mining-led diversification and local communities -
the Misima mine in Papua New Guinea

Diversification will inevitably change production patterns and impact on life styles, particularly when new production activities are introduced in remote or isolated areas, as is often the case with mining projects. The Misima mine provides an example of how the exigencies posed by a mining project which diversifies the economy can be reconciled with the interests of local communities and at the same time promote further diversification.

Misima Island is part of the southern islands of the Papua New Guinea archipelago. The population is 9,000. Misima islanders depend mainly on subsistence farming. Cash crops on the island are copra, cocoa and coffee. It was in this largely subsistence agriculture environment that the Misima mine was opened in 1989. The mine is a conventional open-pit gold mine with a planned mine life of 10 years.

Before construction, the mining company, Placer Pacific, consulted extensively with the local communities. The Misimians requested that significant benefits flow to the community at large as a result of the project but not at the expense of changing their way of life, culture or values. To achieve this objective, the mining company undertook a number of initiatives. The company recruits only Misimians for the national component of the workforce and the expatriate staff is kept to a minimum. It constructed and/or upgraded island roads in order to allow all employees to continue to live in their home villages and within their customary society. The company developed long-term infrastructure, including an air strip and air terminal, upgraded the hospital, built a new police station, developed two ports, linked telecommunications to the national system, created housing subdivisions and built classrooms. Finally, it developed and supported an active business development programme intended to facilitate production and exports of cash crops with a view, in particular, to diversifying the production structure and alleviate the effects on employment and the local economy of the eventual closure of the mine.

Two points are worth noting: first, priority was given to employment of the traditional landowners most affected by the mining project, while also ensuring that employment was spread across the island and partially into the surrounding archipelago. Second, a social monitoring committee, composed of representatives from the mine, police, church, landowners, Misimian women’s groups, district and provincial governments and the national Government, was created. Through this group the evolution of social impacts was monitored through project construction and operations. Changes were identified and remedial action taken as required.

The situation following the eventual closure of the Misima mine will be the true test of the success in achieving the objectives of the people of Misima Island when they agreed to have the mine, namely to reap the profits while the mine operates and, upon its closure, to return to their traditional way of life with a more diversified economy and significant improvement in living standards.

Source: Clark and Cook Clark, 1997.

1. ***Corporate-level decision-making***

41. Diversification within a firm appears easier in formal-sector processing industries which have easier access to information and finance. Although smaller firms with lower sunk costs can display more flexibility, in cases where increasing returns to scale prevail, larger firms will tend to enjoy better preconditions for diversifying.

42. Enterprise diversification is often a result of organic growth through internal investment and loans. More recently, the emergence of stock markets and broad-scale privatization of public enterprises have led to new forms of enterprise growth through equity and acquisitions.

43. Firms in developing countries tend to diversify more broadly than those in developed countries, principally because their skills are often of a general nature and not product-specific. This allows easier applicability to diverse

activities and relatively easy entry into new areas at comparable skill levels. On the other hand, a lack of proprietary technology on the part of developing country firms and the specific demand characteristics of their domestic markets which accept lower-quality products do not augur well for growth into higher-quality niches. Instead such firms tend to compete on the basis of price and reliability at the lower or middle layers of varied, and sometimes unrelated, product markets (Amsden and Hikino 1994; Nachum, 1997).

44. The findings of a recent survey undertaken by UNCTAD (Nachum, 1997) covering large firms in developing countries which have diversified from a commodity base show that these firms which have diversified away from a commodity base display certain common characteristics in their diversification process. Firms which have diversified vertically tend to be the largest in terms of their turnover, but are among the less profitable and achieve the lowest rates of growth. The best growth performance is achieved by firms diversifying into related areas, while diversification into unrelated areas yields the highest profits but slow growth.

45. The surveyed firms sell most of the output of the new activities into which they diversify, principally on domestic markets, suggesting that diversification decisions are undertaken mainly in response to domestic demand. Firms generally diversify into areas which are either related to those in which they are already dominant or into areas where their established brand names are expected to ensure success. It is likely that this reflects a perception that domestic markets are more secure. This perception is also reflected in the finding that securing markets before actual diversification is common among those firms which do sell their new products abroad. The most common methods of achieving this are to obtain sales agreements with companies in destination markets or to establish joint ventures with foreign companies with an established brand name.

Box 8

Government policies and firms’ diversification decisions

A recent UNCTAD survey (Nachum, 1997)of large firms in developing countries indicated that an overwhelming majority of them perceive government policies as having little impact, if any, on their diversification decisions. When there is an impact, financial incentives are considered to have been the most effective.

In spite of this negative view, African firms consider the policies of their Governments, especially financial incentives and assistance in identifying diversification opportunities, as having exerted a favourable impact on diversification. In Asia, the total incentive package which created an overall environment conducive to expansion of business activities was considered vital. By contrast, Latin American firms consider the policies of their governments to have had the least influence on their diversification activities. Moreover, firms in this region, far more than those in other regions, are of the view that government policies were actually a critical obstacle to the implementation of their diversification plans. Political uncertainty - lack of stable and rational rules of the game, and high inflation - were considered most disturbing. Political interference in the regulatory and legal framework implied high uncertainty which made investments very risky. Creating an overall favourable environment through price stability, reliable economic growth and development prospects, and access to international capital markets were key demands they made on government policy.

Firms’ views of the impact of government policies on their diversification have changed over the last two decades. Many countries have gone through substantial liberalization of their economies during this period and firms find that this has modified policies favourably. Firms increasingly appreciate the assistance provided by Governments in the acquisition of new technology and in training for upgrading skills.

The fact that the UNCTAD survey focused on large firms may have led to a biased view regarding the significance of government policies on diversification decisions. The smaller firms are more likely to be in need, and under the influence, of such policies.

2. *Foreign investment*

46. Foreign capital is another means for diversification. It has been instrumental in the restructuring, upgrading and diversification processes of many developing countries. (UNCTAD, 1995a, pp. 125-224). Over the past several decades, FDI and strategic alliances and joint ventures have begun contributing to vertical diversification through the establishment of processing plants in developing countries.

47. In Africa, FDI has been concentrated mainly in the mining sector. The increase in such investment in the 1990s which followed a lull of two decades is mainly a result of the liberalization of FDI regimes. This has prompted diversification in those instances where government policy pursued a deliberate strategy of funneling proceeds from such investment into other developmental activities.[12]

48. FDI from developing countries is emerging as a new source of capital inflows. Developing country investment tends to be oriented towards subregional and regional markets; regional trade arrangements, in particular in South-East Asia and in Latin America, appear to have been a major factor shaping these South-South FDI flows. A fair share of commodity-relevant FDI is directed into agrobusiness and foods, mining, metals and construction materials. As with intra-firm growth patterns, developing country FDI typically enhances diversification into products or processes that are related to the core business, making use of product-specific knowledge or familiarity with markets and regulations (UNCTAD 1995a, pp. 26-36).

3. *Inter-firm relations*

(a) Commodity chains

49. Globalization may reinforce traditional relations of dominance between firms. Nevertheless, with the increasing availability of skills and information, firms in developing countries are able to find more ample and potentially profitable points of entry to, and opportunities for, effective participation in commodity chains. Understanding the dynamics of these commodity chains and the ability of management to position the firm at the appropriate link in the chain are major requirements for diversifying successfully in the context of the globalized economy.[13]

50. The relative strengths of producers, different processors and traders in the chain depend on the characteristics of the product, technical requirements, market structures, and the organization of trade. In the case of low-price or low-quality commodities which are often traded in bulk, the commodity chain is typically dominated by large international buyers, with the result that producers play an essentially reactive role, especially if the production process can easily be moved to another area, as has been observed for many mass-produced, low-end products, including the low-price segment of garments and footwear. In the case of rare, sophisticated, or niche commodities which are often produced and traded in small batches or rely on freshness or novelty, as well as for income-elastic products, the demand for which exhibits rapid growth, producers potentially have more influence, even where large buyers dominate the chain. The capacity to produce according to specific requirements relating to quality, health and the environment or consumer tastes is a determining factor in this respect.

51. Developing country enterprises can also reach a better bargaining position when they have access to an especially competitive supply and when they enjoy economies of scale, as well as capacity for product and process innovation. This transition into specialized, brand name or niche products and vertical diversification could therefore allow producers to have a bigger say in the commodity chain and attain higher revenues, as well as price and revenue

stability. Box 9 provides one illustration in this respect.

52. In addition to production for high-value market niches, diversification into expanding product markets and into commodities in demand in dynamic regions offers a potential to upgrade the producing economy's position in the commodity chain. The challenge is to identify those market opportunities. Business associations can assist by undertaking market research to help identify such trends. Governments and international organizations can also help in this regard.

Box 9
From buyer-driven to producer-driven production through product specialization in Thailand

During the 1970s, Thailand's smallholder-dominated natural rubber sector was linked to international markets by a group of Thai rubber exporters five companies handling around 75 per cent of exports) working with Japanese trading companies which, in turn, supplied the four major international tyre producers. Eventually, to eliminate unevenness in the quality of the raw material, Bridgestone introduced quality control by placing technicians in the rubber- producing areas and purchasing directly from the smallholders. Subsequently, the Japanese trading houses also adopted this strategy. Bridgestone remained active in encouraging producers to upgrade initial processing stages and the Bridgestone standard was applied by other buyers as well. The outcome was considerable improvement in the quality of the rubber. Eventually, producers began by-passing the Thai trading houses. Given the smallness of most producers, however, this resulted in a stronger bargaining position for the buyers.

With the improved quality, by the end of the 1970s Thailand was benefiting from competition among the major tyre producers to obtain high-quality Thai rubber and succeeded in diversifying its export destinations and expanding output. In the course of the 1980s, technological upgrading, process innovation and high capital investment led to a strengthening of Thailand's position in the world natural rubber economy.

(Source: Shigetomi, 1995).

(b) Clusters and networks

53. Clustering and networking of economic activities takes place in industrial districts - geographical concentrations of individual enterprises in related activities - or networks of enterprises connected through business arrangements. Such groupings provide a crucial service by facilitating access to, and promotion of, information regarding markets and technology. They can also reduce overhead costs by mutual implementation of contracts, joint purchase of inputs, jointly funded ancillary services or joint marketing initiatives(Nadvi and Schmitz, 1994). Thus, they may represent a modality for successful participation in global commodity chains. Commodity-based clusters may emerge, for example, from a simple mining or cultivation operation which, in due course, proceeds into processing, branches out into producing the equipment or inputs required for harvesting, mining or processing, develops technologies and, eventually, exports these along with the initial commodity.[14] Box 10 gives some details about commodity-based and clustered activities in Brazil. This process often generates an environment where managerial and technical skills are enhanced not only in the firms involved but also in other enterprises. Clusters have sometimes been nurtured by buyers' requirements for quick delivery to fashion or niche markets. Exporters are able to enter into subcontracting arrangements with local SMEs and micro businesses. This spawns clusters which in turn reinforce this ability through communication networks and technology sharing.

54. Clusters of small and medium-sized enterprises can facilitate efforts by Governments or business associations to foster diversification. At the same time, the clustering of enterprises can facilitate the provision by Governments or business organizations of energy and transportation, technology or support for trade promotion (Humphrey and Schmitz, 1996).

Box 10
Commodity-based clusters in Brazil

There are over 40,000 production enterprises in the Santa Catarina State of Brazil. The agro-industrial sector, comprising 1,300 enterprises, contributes around one-third of the state's export revenues and employs roughly 10 per cent of the labour force. Its largest segment, in terms of turnover, is the cluster around **pork and poultry production and processing**. Contract farms raise the animals, with the processing companies providing animal stock and feed, technological advice, and quality control. The area has several large meat processing enterprises - such as Sadia - one of the largest meat processing complexes in the world, and Perdigao Agroindustrial. Interestingly, the region is also emerging as a producer and exporter of refrigeration equipment. While pork production is mainly processed for consumption in Brazil, roughly 70 per cent of the processed poultry is exported. The Santa Catarina area has achieved a world market share in chicken of over 10 per cent. Know-how which evolved from pig raising, the original focus of livestock farming, was successfully transferred to poultry raising. To cater to niche markets, poultry processing has been fine-tuned to be able to deliver 2,500 different types of poultry cuts. The larger firms in the meat cluster have diversified into other foods such as refined vegetable oil and fruit juices.

Local clays are the basis of the **ceramic tiles** industries which generate 25 per cent of the state's export revenues (US$100 million (1996)), exporting to 60 countries and accounting for about 100,000 of the state's 365,000 workplaces.

Another cluster is the **forestry** industry which includes cellulose, paper, wood and furniture factories. The latter have made inroads notably into European markets; furniture exports have increased by 150 per cent since the early 1990s.

Several factors appear to have played an important role in this case of clustered development. First, the businesses are situated in a dynamic environment which appears supportive of diversification into new products, adaptation of new technologies, and opening up of new markets. Secondly, several industrial support associations, such as an International Trade Center (FIESC) and the Secretaria de Estado do Desenvolvimento Economico e Integracao ao Mercosul actively promote the economic development of the region. Thirdly, the state government has taken responsibility for social and economic infrastructure. For example, it provides vocational training and skills upgrading. It promotes port and other infrastructure development and supports institutions such as an export processing zone and warehouse cooperatives.

However, the efficiency of these clusters is paired with the displacement cost suffered by small agricultural producers. Within the food segment, for example, rationalization, standardization and concentration have reduced the number of farms delivering to the large processing firms from 80,000 during the 1970s to 25,000 in the mid-1990s. While the middle-sized, more efficient farms have benefited from the agro-industrial development path, the smaller farmers have been marginalized, pushing many into migrating to urban slums.

(Based on information provided by Secretaria de Estado do Desenvolvimento Economico e Integracao ao Mercosul, and FIESC Florianopolis, Brazil.)

C. The socio-institutional framework

55. A discussion of diversification in commodity-dependent countries would be incomplete without examining the role played by societal institutions. This "soft" dimension of development frequently escapes analysis by the conventional tools of economics, although it shapes the decisions and processes underlying the diversification process.

56. Societal rules and traditions together create the framework in which economic activities take place. This framework is often as important as the market and government actions in determining production and trading decisions.[15] Understanding how it works can provide guidance on how to design more effective policies and organize the provision of public services more efficiently. Moreover, the inclusion of a wide range of societal groups in decision-making

and implementation processes may help ensure that diversification incentives are not diverted as rents for privileged groups, but funneled into productive diversification (North, 1995, p.23; Toye, 1995, p.59).

57. In their commercial operations, producers and traders tend to develop “personalized” and repetitive relationships founded on gender, kinship, ethnic, caste or other personal, i.e. non-market, ties. These serve to reduce risks and transaction costs by guaranteeing delivery, ensuring quality control, procuring reliable information, reducing tedious bargaining processes, and providing access to finance (Jaffee and Gordon, 1993, p.21 f; Nadvi and Schmitz, 1994, pp.23, 31; Boserup, 1986;). Traders’ networks among women, for example, function well in many West African and South-East Asian low-income economies, where they predominate in cross-border trade, especially in foods, agricultural inputs, and basic consumer goods. Similarly, financing is often handled by informal groups reliant on personal or gender links (Gayi et al, 1995; Ghate, 1992). Socially based relations also regulate the entry into particular productive or trade activities and provide informal types of training and market development support.

58. The relationships prevailing among the constituents of clusters described above often rely to a considerable degree on family, tribe, clan, caste or ethnic ties, as well as regional affinity. Such relationships have been significant in underpinning the trust necessary to undertake joint purchasing or marketing activities or in sharing market or technology information (Nadvi and Schmitz, 1994). With respect to international trade or investment flows, expatriate communities have proven a useful conduit for economic interaction between the origin and host countries. One example of this is provided by the “ethnic marketing chains” observed in the fresh and processed foods business.[16]

59. Conversely, to the extent that such networks systematically exclude social groups outside their own, there is a risk that they act as cartels or pressure groups and may create impediments to entry or exit of other producers or traders. In such cases, socially based networks might deter or hinder diversification.

60. The multifaceted nature of relations among producers and traders, in both the formal and the informal segments of productive activities, and the socio-institutional framework which shapes them, could serve as a significant element in the design and implementation of diversification policies and measures. The positive and negative factors characterizing social networks need to be weighed carefully. By revealing ingredients of workable diversification strategies, the analysis of the socio-institutional framework could serve to "expand the menu of policy alternatives, offering positive guidelines for policy interventions overlooked by orthodox economists" (Harriss et al, 1995, p.7; Rasmussen et al, 1992).

IV. CONCLUSIONS AND RECOMMENDATIONS: A PROACTIVE AGENDA FOR DIVERSIFICATION

61. **On the multilateral trading system:**

(a) Commodity-dependent developing countries need a clear understanding of the Uruguay Round obligations and commitments so as to recognize the full range of options available to them in support of diversification.

(b) Commodity-dependent countries need to formulate a proactive and positive agenda for forthcoming multilateral trade negotiations reflecting their requirements for diversification. Modalities should be sought to include financial and technical support for expanding the supply capacity of these countries as an integral part of future trade negotiations.

62. **On an enabling domestic environment for diversification:**

(a) Governments need to ensure that property rights are clearly defined and secure. Land reform would be an important consideration in this respect.

(b) Measures conducive to diversification appear to be more successful when they focus on middle-income farms and enterprises. In situations of limited resources, this may result in neglecting poverty alleviation. The risk of polarization which, in the long term, could undermine diversification efforts, calls for further policy research and remedial action so as to reconcile conflicting policy objectives.

(c) Responsibilities of central and local-level governments need to be delineated clearly. Local-level governments are crucial in the implementation of diversification programmes. In many cases, their capacity needs to be upgraded, and measures taken to ensure that the diversification process is participatory and that all stakeholders are heard.

(d) Governments need to attach priority to the provision of infrastructure necessary for diversification, especially with respect to the development of exports.

(e) In commodity-dependent countries, domestic funds for diversification need to be generated from within the commodities sector itself. There is,therefore, a need for elaborating mechanisms to earmark and transfer funds which could function as venture capital to stimulate diversification into non-traditional commodities and processed products.

(f) Training of human resources is a crucial factor in diversification and should include the following:

(i) Training and research on sophisticated technology which is conducive to diversification into new and more profitable processes and products beyond the current rung on the technology ladder;

(ii) Enhancement of skills at the intermediate level which serves to improve productive flexibility and facilitates continual diversification;

(iii) Basic extension services which are required to enable SMEs and small agricultural producers to upgrade their activities above the subsistence level and diversify.

(g) Networking of training and research institutions with production entreprises has significant benefits in terms of external economies, cost-sharing, and the development of centres of excellence. Such networks could be co-sponsored by central or local governments, business associations, or parastatals.

63. **On the enterprise sector**:

(a) The basic essentials for the identification of market opportunities are often lacking in many commodity-dependent countries. Training in this area would be highly beneficial for enterprises which are seeking to expand their trade horizons, as well as for government officials assisting them.

(b) With a view to expanding investment in horizontal and vertical diversification, the business community needs to identify specific impediments, to formulate realistic modalities to overcome them, and to enlist the assistance of Governments as appropriate.

(c) There may be a case for low-cost new market entrants to assist high-cost producers facing exit barriers to move out of their established activities, thus alleviating the adding-up problem.

(d) Information exchange, joint marketing and trade promotion improve the bargaining position of producers and traders. The cost of such measures may need to be shared between the benefiting firms, the developing country Government and, in the case of low-income economies, the international donor community. In this connection, the establishment, structure and functions of a new generation of business-oriented marketing boards might be a subject for further exploration.

(e) Enterprises may need to review the strategies they use to position themselves in the commodity chain and to identify market opportunities based on product characteristics (such as niches, small batches, quick reaction, freshness, novelty, high unit value, process-based, etc.). Organic products may merit particular attention in this respect.

(f) Clustering of enterprises lowers transaction costs and can be conducive to diversification. Further action-oriented research could explore natural-resource-based cluster experiences in commodity-dependent economies, distill from them those factors that led to horizontal or vertical diversification, and formulate proposals with a view to enhancing the contribution of clusters to diversification.

64. **On socio-economic dimensions of diversification:**

(a) Socio-cultural ties are often crucial in production and trade. Understanding how they work can give insight(s) into the diversification process. Further research at the microlevel might reveal significant social factors influencing diversification decisions, and lead to better policy design.

(b) Small producers and SMEs have difficulties in accessing finance because they lack collateral. Micro credit schemes are therefore required to enable them to handle the transaction costs and economic risks associated with diversification. This entails strengthening the social institutions which are instrumental in providing such finance. The international community has an important role to play in supporting these efforts.

65. **On follow-up:**

The conclusions and recommendations summarized above may assist Governments in deciding on those areas in which they would like to pursue further work in the UNCTAD framework, including in terms of expert meetings and technical cooperation activities.

NOTES

1. See "Report of the Commission on Trade in Goods and Services, and Commodities on its first session" (TD/B/COM.1/6, Annex.IV).

2. However, as described in some detail for food products in UNCTAD 1997b, the impact of tariffs levied in importing markets on the trade performance of developing country exporters is inconclusive.

3.For example, the Uruguay Round Agreements exempt the Annex VII group- the 48 least developed countries plus 20 other countries with a per capita GNP below US$1,000 - from many of the provisions or grants then a longer implementation period. Special and differential treatment under Article 6 (Paragraph 2) of the Uruguay Round Agreement on Agriculture allows a special category of production support policies for developing countries. These are agricultural input subsidies, investment subsidies, and support for producers to encourage diversification from the growing of illicit narcotic crops. These exemptions present opportunities for facilitating horizontal diversification. For a detailed discussion of the implications of commodity-related agreements under the Uruguay Round Agreements, see UNCTAD, 1995c, pp.5-11 and UNCTAD, 1996 especially pp.156ff. Also see TD/B/COM.1/13 under agenda item 4 of the Commission's session.

4. For a discussion on risk factors at the macro and farm levels, see Quiroz and Valdés, 1995.

5. For example, the development of fruit production and exports in the north-east of Brazil and of maize and tapioca in inland areas of Thailand were only possible when means of transport became available. In Kenya, fresh product exports have been constrained by a lack of adequate common-use cold storage facilities at Nairobi airport. Some large production and exporting companies have their own cold storage facilities but those available for small exporters are said to be inadequate. This has two adverse effects: (i) it limits the possibility of pre-cooling the produce, a process that is favoured by EU importers, and (ii) it makes small exporters especially vulnerable if cargo space is not available as planned (Stevens, 1991).

6. The merits and demerits of protectionist measures in respect of economic development and diversification have been studied extensively, and no attempt is made in this report to re-open the discussions, apart from referring to some aspects which seem to be directly relevant to the diversification process.

7. In Thailand, for example, successive five-year development plans launched by the National Economic and Social Development Board have favoured export orientation and diversification through measures such as tiered wage rates, duty rebates on imported capital goods inputs, and promotional measures benefiting agro-industries. The Government opened tracts of land, invited foreign investment into dairy and cattle farming, introduced resilient strains of maize and tapioca and subsidized loans for the cultivation of crops crucial in agro-processing. Local processing was encouraged, for instance, via an export tax on unprocessed cane sugar and preferential loans to sugar processing factories. (Phongpaichit and Baker, 1995, pp. 51-55). Similarly, the Government of the Dominician Republic granted income tax and duty exonerations, tax credits and inexpensive access to land rededicated from the traditional crops (coffee, cocoa, sugar, tobacco) to non-traditional ones. In response, more than 120 firms were established or expanded, and exports of non-traditional agricultural commodities and agro-processing products roughly doubled in value terms between 1979 and 1989 (Raynolds, 1994, p.147).

8. For instance, in Sri Lanka and China, government-sponsored promotion drives were successful in positioning brand tea in world markets; in Colombia, Kenya and Jamaica, government-driven generic advertising supported the respective countries' coffee exports (LMC, 1997, p.35). In Israel, the Citrus Marketing

Board functioned as a single exporter and thus ensured a strong bargaining position for Israeli exports well into the early 1990s (Jaffee and Gordon, 1993, p.78f). In Uganda, the Government adopted an Export Diversification Plan 1992/3-2002 bringing together a variety of earlier trade-promotion measures: export-oriented sectoral policy decisions, an Export Credit Guarantee Scheme, strengthening of the Bureau of Standards and the Export Policy Analysis and Development Unit (Van der Geest, 1997, p.193f). The latter commissioned studies on new floricultural and horticultural products, as well as on crops that were traditionally traded in the informal sector. In Kenya, the Horticultural Cooperative Union was instrumental in promoting the off-season vegetable trade in Europe from as early as the 1950s (Jaffee and Gordon, 1993, p.75).

9. For the role of a key Chilean research centre in this connection, see Jaffee and Gordon, 1993; Agosin, 1997).

10. For example, in several coffee-producing economies, coffee, the more remunerative crop, is cultivated by the better-off farmers, while the weakest households that cannot afford to wait out the growth period of coffee plants, and cannot risk a failed crop, fail to diversify into the more remunerative production line. They grow food, often for subsistence only. See, for example, Wyeth, 1989, for the Honduras experience.

11. For a contradictory view, see Nerlove et al, 1996.

12. A case in point is Botswana, a country reliant on rich mineral resources, which has succeeded in tapping FDI inflows to expand its mining sector and to develop diamond cutting and polishing. The latter has benefited from a combination of foreign direct and government investment. Mineral taxes and royalties finance roughly 50 per cent of the government budget, which is devoting an increasing share of its expenditure to social infrastructure (UNCTAD, 1995d, pp. 37-42).

13. For a thorough discussion on global commodity chains, see Gereffi et al, 1994; von Kirchbach and Delachenal, 1996; Raynolds, 1994; Griffon and Hugon, 1996.

14. For instance, the cluster around the soya bean industry in Argentina has gone through all these stages. In Colombia, in order to make fruit exports cheaper, local packaging firms emerged - which in turn stimulated the development of local design agencies. The packaging needs stimulated the use of sugar bagasse for production of paper which subsequently was used in other products. As a result, Colombia is now the world's largest exporter of 'pop-up' childrens' books.

15. For example, a study on the historical experience of two coffee marketing boards found that, despite identical organizational structures, their results varied because they were embedded in two different institutional environments. One was highly efficient, paying competitive prices to farmers and organizing research in agronomy; the other exceeded its authority and undermined the performance of the country's coffee producing sector. See Bates, 1995, pp.42ff.

16. Asian-owned export firms in the Dominican Republic, for instance, succeeded in establishing oriental vegetables in the US market by targeting relationships with Asian immigrants' import businesses, ethnic groceries, and speciality restaurants. Family or business ties between South Asian immigrant communities in Kenya and in the UK were instrumental in launching Kenyan fresh vegetable exports in the UK market (Raynolds, 1994, pp.75f, 154f). Ethnic marketing chains have also played a role in international poultry marketing. Cases in point are the Sadia firm in Brazil, whose European-origin owners have made forays into European markets, and Charoen Pokphand, Thailand, where its Chinese origin helped the company to establish poultry farms and processing plants in China and other regional countries.

REFERENCES

African Business, May 1997.

Agosin, M.(1997). “Export performance in Chile”, paper prepared for the UNU/WIDER Workshop on Growth, External Sector and the Role of Non-traditional Exports in Sub-Saharan Africa, mimeo, Kampala.

Amsden, A.(1997). “Bringing production back in - Understanding Government’s economic role in late industrialization”, *World Development*, Vol.25, No.4, pp. 469-480.

Amsden, A. and T. Hikino (1994). “Project execution capability, organizational know-how and conglomerate corporate growth in late industrialization”, *Industrial and Corporate Change*, Vol.3, pp. 111-147.

Bangladesh, (1996). “Export policy 1995-1997", mimeo, Dhaka, Ministry of Commerce.

Bates, R. (1995). “Social dilemmas and rational individuals. An assessment of the new institutionalism”, in J. Harriss, J. Hunter and C. Lewis (eds.), *The New Institutional Economics and Third World Development*, London/New York, Routledge, pp. 27-48.

Boserup, E.(1986). *Women’s Role in Economic Development*, 2nd edition, Aldershot (England), Gower Publishing.

Chhibber, A.(1988). “Raising agricultural output: Price and nonprice factors”, *Finance and Development*, June.

Clark, A. L. and J. Cook Clark (1997). “The Misima mine: An assessment of social and cultural issues and programmes”, in UNCTAD (1997c).

Delgado, C. (1995). “Agricultural diversification and export promotion in sub-Saharan Africa”, *Food Policy*, Vol. 20, No. 3, pp. 225-243.

Dunham, D. (1993). “Crop diversification and export growth: dynamics of change in the Sri Lankan peasant sector”, *Development and Change*, Vol. 24, pp. 787-813.

Economist (1997), “Rubber ducks in the Net”, 26 July, p.59.

Gayi,S., W.Van der Geest, G. Koehler, K. Rahman (1995). “Trade Diversification in LDCs: An Overview”, in UNCTAD, *Trade Diversification in the Least Developed Countries*, UNCTAD/LDC/GE.3/Misc.1, pp.1-44.

Gereffi, G., M. Korzeniewicz and R. Korzeniewicz (1994). “Introduction: Global commodity chains”, in G. Gereffi and M. Korzeniewicz (eds.), *Commodity Chains and Global Capitalism*, Westport, Conn./London, Praeger, pp. 1-14.

Ghate, P.(1992). *Informal Finance. Some Findings from Asia*, Asian Development Bank, Manila/Oxford, Oxford University Press.

Griffon,M.and P.Hugon (1996). “Meso-economic analysis filière and competitiveness in Africa”, in M. Benoit-Cattin, M. Griffon, P. Guillaumont (1996). *Economics of agricultural policies in developing countries,* Paris, Editions de la Révue Française d`Economie, pp. 55-80.

Harriss, J., J.Hunter and C. Lewis (1995). “Introduction: Development and Significance of NIE”, in J. Harriss, J. Hunter and C. Lewis (eds.). *The New Institutional Economics and Third World Development*, London/New York, Routledge, pp. 1-13.

Humphrey, J. and H. Schmitz (1996). “The Triple C Approach to Local Industrial Policy”, *World Development,* Vol. 24, No. 12. pp. 1859-1878.

Jaffee, S. with P. Gordon (1993). *Exporting High-Value Food Commodities. Success Stories from Developing Countries*, Washington, World Bank Discussion Papers No. 198.

LMC, International (1997). “Trade opportunities in the world beverage sector”, UNCTAD, Geneva. UNCTAD/ITCD/COM/Misc.

Mayer, J. (1997). “Is having a rich natural-resource endowment detrimental to export diversification?”, UNCTAD Discussion Paper No. 124, Geneva.

Nachum, L. (1997), “The role of firms in commodity diversification of developing countries”, draft, mimeo, UNCTAD, Geneva.

Nadvi, K. and H. Schmitz (1994). “Industrial clusters in less developed countries: Review of experiences and research agenda”*, IDS Discussion* Paper No.339, Brighton.

Nerlove, M., S. Vosti, W. Basel (1996). *Role of Farm-level Diversification in the Adoption of Modern Technology in Brazil*, IFPRI Research Report No.104, Washington, International Food Policy Research Institute.

North, D. C. (1995), “The New Institutional Economics and Third World Development”, in J. Harriss, J. Hunter and C. Lewis (eds.). *The New Institutional economics and Third world Development,* London, New York, Routledge, pp. 133-154.

OECD (1997). “Vertical coordination in the fruit and vegetables sector: Implications for existing market institutions and policy instruments”, OECD Working Papers No.32, Paris.

Phongpaichit, P., C. Baker (1995). *Thailand. Economy and Politics,* Oxford, Singapore, New York, Oxford University Press.

Pingali, P. And M. Rosegrant (1995). “Agricultural commercialization and diversification: Processes and policies”, *Food Policy*, Vol.20, No.3, pp.171-185.

J.Quiroz and A.Valdés (1995). “Agricultural diversification and policy reform”, *Food Policy*, Vol.20, No.3. pp. 245-255.

Rama, R. (1992). *Investing in Food,* Paris, OECD Development Center.

Rasmussen, J.H.Schmitz, H.and M.P. van Dijk, (1992). “Introduction: Exploring a new approach to small-scale industry”, *IDS Bulletin*, Flexible specialisation. A view on small industry, Vol. 23, No.3. pp.2-7.

Raynolds, L. (1994). “Institutionalizing flexibility: A comparative analysis of fordist and post-fordist models of third world agro-export production”, in G. Gereffi and M. Korzeniewicz (eds.). *Commodity Chains and Global Capitalism*, Westport, Conn./London, Praeger, pp.143-161.

Riddell, R. (1991). “The expansion of non-traditional exports: general explanation”, Courier No. 127, May/June.

Shigetomi, S.I. (1995). “The transmission of information in the transacting of primary products: The case of quality improvements in Thailand’s natural rubber production”, *The Developing Economies,* vol. XXXIII-2, pp. 203-221.

Singh, A. (1996). “Savings, Investment and the Corporation in the East Asian miracle”, in UNCTAD, *East Asian Development: Lessons for a New Global Environment,* Study No. 9, Geneva.

Stevens, C. (1991). “Kenya. Broadening the range of agricultural exports”, in Dossier on new ACP products, *Courrier*, No. 127, May-June.

Toye, J. (1995). “The new institutional economics and its implications for development theory”, in J. Harriss, J. Hunter and C. Lewis (eds.). *The New Institutional Economics and Third World Development*, London/New York, Routledge, pp 49-68.

UNCTAD (1994). “Analysis of national experiences in horizontal and vertical diversification, including the possibilities for crop substitution. Colombia”, UNCTAD/COM/30.

UNCTAD (1995a). *World Investment Report 1995. Transnational Corporations and Competitiveness*, New York/Geneva, United Nations.

UNCTAD (1995b). “Analysis of national experiences in horizontal and vertical diversification, including the possibilities for crop substitution - Malaysia”, UNCTAD/COM/73.

UNCTAD (1995c). “The Uruguay Round and international commodity trade and prices”, TD/B/CN.1/30.

UNCTAD (1995d). *Investing in Africa*, New York, Geneva, United Nations.

UNCTAD (1996). *Trade and Development Report*, New York/Geneva, United Nations.

UNCTAD (1997a). “Report of the ad hoc expert meeting on development policies in resource-based economies”, UNCTAD/ITCB/Misc. 3.

UNCTAD (1997b). “Opportunities for vertical diversification in the food processing sector in developing countries”, report by the UNCTAD secretariat, TD/B/COM.1/EM.2/2.

UNCTAD (1997c). “Management of commodity resources in the context of sustainable development: Social impacts of mining”, papers presented to the Asian-Pacific Workshop on Managing the Social Impacts of Mining, Bandung, Indonesia, 14-15 October 1996, UNCTAD/ITCD/COM/5, August.

UNCTAD (1997d). Draft chapter on agriculture for the *Least Developed Countries Report 1997*, [Geneva], mimeo.

UNCTAD (1997e). “Telecommunications, business facilitation and trade efficiency. Some major implications of the Global Information Infrastructure (GII) for trade and development”, issue paper prepared by the UNCTAD secretariat, TD/B/COM.3/EM.3/2.

UNCTAD (1997f). “Ways and means for improving the opportunities of the exports of goods and services from developing countries”, report by the UNCTAD secretariat, Commission on Trade in Goods and Services and Commodities Second Session. TD/B/COM.1/13.

Van der Geest, W. (1997). “Trade diversification in Uganda. Prospects and constraints”, in C. Patel and S. Gayi (eds.). *Trade Diversification in the Least Developed Countries*, Cheltenham, Elgar.

Ventura, A. (1997). “An information technology agenda to benefit the developing countries”, *South Letter*, Vol.1 and 2, Geneva, The South Centre, pp.22f.

Von Kirchbach, F. and C. Delachenal(1996). “International Trade and Employment: An Analysis of International Trade Patterns in Selected Industries Characterized by Different Types of Commodity Chains”, Joint Research Programme of the International Institute for Labour Studies, ILO, and the Research and Analysis Unit, International Trade Center - UNCTAD/WTO, draft, mimeo, Geneva.

World Bank (1997). *World Development Indicators 1997.* Washington, International Bank for Reconstruction and Development.

Wyeth, J. (1989). “Diversification: Eight lessons from Honduran experience in the coffee sector”, IDS Discussion Paper No.259, Brighton.