
URBANIZATION IN THE CARIBBEAN:

PROSPECTS AND MANAGEMENT PRIORITIES

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Dear Reader:

This document has been prepared at the request of the Agency for International Development, Office of Housing and Urban Programs. Its purpose is to highlight a major development trend in the Caribbean, urbanization. It is a result of the economic shift to service, manufacturing and tourism activities in most of the countries in the region. People are moving to towns and cities where these activities are located.

This economic and demographic transformation is occurring rapidly. In the next twenty years 14 million of the 16 million people projected to live in the region will reside in urban places. These trends will raise a number of issues related to squatter settlements, urban services, environmental degradation, land management and local autonomy.

A key development issue that should be placed on most national agenda is land and how it is used. It represents the most significant national asset in just about every country along with the people that live on it. It should be managed as carefully as the Saudi Arabians manage their petroleum.

Also, urban services such as water, sanitation, and solid waste disposal are rather important questions for nations with limited land masses, scarce water resources and fragile coastal zones.

Finally, decentralization of authority in many of the islands should be viewed as a way to improve service delivery. Local communities probably will, over the long run, be more attentive to their problems and solutions.

We hope this document provides you with useful information and helps stimulate debate and solutions to address the urbanization process beginning to unfold in the region.

Most sincerely,

A handwritten signature in black ink, appearing to read "W. Gelman", is written over a vertical line that extends from the "Most sincerely," text.

William Gelman
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TABLE OF CONTENTS

EXECUTIVE SUMMARY		i
The Region		ii
Urban Growth and Structure		ii
Economic Transformation		ii
Trends in the 1980s		iii
Future Prospects		iv
Implications for Urbanization		v
Employment and Spatial Patterns		v
Expected Future Growth		vi
Urban Impacts: Environmental Degradation		vii
Urban Impacts: Constraints on Residential and Economic Development		ix
Guidelines for Policy		xi
1	THE REGION AND ITS DEMOGRAPHIC CONTEXT	1
	Defining the Region	1
	Contrasts	1
	Demographic Structure and Trends	5
	Birth Rates	5
	Death Rates	5
	Net Migration	6
	Population Projections	6
	Growth of the Labor Force	8
2	ECONOMIC TRENDS, POLICIES, AND PROSPECTS	10
	Introduction	10
	Economic Growth	11
	Economic Structure, Employment, and Prices	14
	Exports and External Balance	18
	Performance and Prospects in Key Sectors	22
	Agriculture	22
	Manufacturing	23
	Tourism	26
3	URBAN PROSPECTS AND POLICY IMPLICATIONS	31
	Urban Trends Since 1960	31
	Level and Growth	31
	Urban Structure	33

Probable Effects: Economic Change and Urbanization	35
Manufacturing	35
Tourism	36
Agriculture	36
Other Sectors	37
Future Urban Growth	37
Regional Totals	37
Country Variations	38
Policy Implications	38
Reasons for a More Positive View of Urbanization	38
Implications for the Caribbean	40

EXECUTIVE SUMMARY

This is the report of a study of Urbanization in the Caribbean region; analyzing its recent history, its prospects and both the problems and opportunities it creates. Chapter 1 opens with a definition of the region and then reviews projections of the growth of its population and labor force. Chapter 2 analyzes economic forces and policies: the factors that will have the greatest impact on the region's welfare, as well as its future urban patterns. Chapter 3 focuses directly on urbanization, examining projections of future urban growth in Caribbean countries and reviewing some of their most important implications.

This summary reviews the main findings and conclusions of these chapters and of five country case studies, prepared as part of the overall study but published separately (for the Dominican Republic, Haiti, Jamaica, St. Lucia, and St. Vincent and the Grenadines). It also offers a number of guidelines for policy that are suggested by the findings.

We have found that, to a surprising extent, cities and towns are dominating both the population and economic growth of all Caribbean nations. And, they are likely to continue to do so. Even with forceful and effective rural development, enough jobs are not likely to be produced in the countryside to markedly alter the trend. Also, there is a greater recognition now that urban growth is a natural accompaniment of the structural change needed to produce significant economic advancement, and that it can offer important societal opportunities, if it is properly managed.

The evidence to date, however, suggests that the public institutions of the region have been caught off guard by the acceleration of urban growth. Generally, they do not appear to be managing it effectively, and this is leading to environmental degradation, as well as constraints on expanding economic opportunity. Yet, there are some changes in attitudes and innovations in urban policies and management techniques in the region that offer hope of a more effective urban development process in the near term.

THE REGION

The Caribbean region, as defined in this analysis, includes all of the 14 independent nations of the Caribbean Group of Economic Development (CGED)—five larger island nations (Barbados, the Dominican Republic, Haiti, Jamaica, and Trinidad and Tobago), six smaller independent countries in the OECS (Antigua and Barbuda, Dominica, Grenada, St. Kitts and Nevis, St. Lucia, and St. Vincent and the Grenadines), and three non-island countries (Belize, Guyana, and Suriname).

It is a region of great contrasts. Haiti is the poorest country in the western hemisphere. In 1988, its GDP per capita (US\$211) was only 7 percent of that of the region's richest countries (Barbados and Trinidad and Tobago). The 1990 populations range from 50,000 (St. Kitts) to 7.5 million (Haiti). Land areas range from 269 square kilometers (St. Kitts) to 214,970 (Guyana).

URBAN GROWTH AND STRUCTURE

The level of urbanization. The United Nations estimates that in 1990, 9.9 million people (47 percent of the Caribbean's 20.7 million population) live in urban areas. The urban share is highest in Trinidad and Tobago (69 percent) and exceeds 50 percent in 3 other countries (Belize, the Dominican Republic, and Jamaica). It is lowest in Haiti (30 percent) and falls in the 30-40 percent range in 2 other countries (Antigua and Barbuda and Guyana).

In almost all countries, the urban pattern has been dominated by one large city with other settlements much smaller in size. By far the largest cities in the Caribbean (with rough estimates of their populations in the early to mid-1980s) are Port-au-Prince, Haiti (1.5 million), Santo Domingo, Dominican Republic (1.3 million), and Kingston, Jamaica (680,000). Only ten other cities in the region had populations in excess of 50,000 (five of these are in the Dominican Republic).

Urban growth. Most startling is the importance of urbanization in total growth. The region's population almost doubled from 1960 to 1990. Of the total 9.7 million increase, 7.0 million (72 percent) occurred in urban areas. The average urban growth rate was 4.2 percent per annum compared with only 1.0 percent for rural areas. Annual urban growth rates were higher in some countries than others (exceeding 4.5 percent in the Dominican Republic, Haiti, and Trinidad), but urban settlements have been growing much more rapidly than rural areas virtually everywhere.

With this growth, there are indications that the dominance of the primate cities is slipping somewhat, at least in those countries large enough to have secondary cities. In Jamaica, for example, metropolitan Kingston's annual population growth rate from 1970 to 1982 was only 2.3 percent compared with an average of 5.3 percent for the next five largest cities.

ECONOMIC TRANSFORMATION

What accounts for the focus of so much of all growth in the urban areas and is it likely to continue? Since the location of income earning opportunities is the

most basic determinant of where people live, the answers must be sought by examining the changing structure and performance of the region's economies.

Trends in the 1980s

Past economic policies and problems. From the 1950s to the late 1970s, Caribbean economic policies can generally be characterized as: (1) reliance on growth in traditional sectors (sugar, other agricultural products, and some minerals) for most income generation and labor absorption; (2) focusing industrial development on import substitution with substantial protection against competition and the targeting of outputs to domestic and regional markets; (3) active public sector intervention in the economy through regulation and the use of state enterprises in productive sectors; and (4) regional economic integration through common external tariffs and the removal of intra-regional trade barriers.

At the end of this period, this approach was already being questioned. There had been substantial declines in prices and markets for the region's basic export commodities, serious inefficiencies were evident in many industries, and the regional market had not emerged as hoped. The international recession of the early 1980s made matters much worse (regional real per capita GDP declined on average by 2.4 percent annually from 1980 to 1985).

Adjustment programs. In response, many countries (Belize, Dominica, Dominican Republic, Jamaica, St. Kitts, St. Lucia, St. Vincent) initiated adjustment programs which have entailed all or some of the following: (1) tight monetary policy; (2) the reduction of public sector deficits and government's direct role in the economy; (3) financial sector reforms including the maintenance of positive real interest rates on bank deposits; and (4) outward-oriented trade policies, including lower tariffs and the maintenance of competitive exchange rates, in order to boost non-traditional exports in the world market.

Recovery in the late 1980s. After 1985, conditions improved notably in most Caribbean economies. Annual real growth in per capita GDP exceeded 2.5 percent between 1985 and 1988 in Barbados, Belize, Dominican Republic, and all OECS countries except St. Vincent. The only countries that suffered continuing declines had special problems: Trinidad and Tobago (reliance on weakening international oil and petrochemical markets), Haiti (continuing civil unrest), Suriname (troubled bauxite market and the suspension of Dutch aid), and Guyana (failure to tackle persistent internal and external imbalances).

For the region as a whole, tourism was the strongest sector in the recovery. From 1980 to 1987, its GDP share more than doubled in the Dominican Republic, Jamaica, Antigua, and St. Kitts and every other country except Suriname, Grenada, and St. Vincent saw tourism export earnings increase over that period. Manufacturing was also a leader, particularly garment production stimulated by the preferential status granted under Section 107 of the U.S. Tariff Schedule and the CBI Textile Program. Manufactured exports from the Caribbean to the U.S. doubled from 1983 to 1988. The Dominican Republic and Jamaica experienced the strongest growth in manufactured exports (the only countries to undertake real devaluations since 1985). Banana production was the primary source of growth for those few Eastern Caribbean

countries that have preferential trade agreements with the U.K., but in all other countries agriculture declined as a share of GPD.

Changes in employment composition generally reflected those in GPD. In some cases, the shifts were dramatic. In Jamaica, for example, agriculture, mining, and public administration together lost 6,400 jobs annually over 1982-1988, compared with gains of 11,100 jobs per year over 1972-1982. In contrast, all other sectors combined (including, prominently, manufacturing and tourism-related services) added 27,400 jobs per year over the latter period, compared with gains of only 4,800 per year over the former.

Future Prospects

Islands with limited natural resources and small domestic markets face a difficult challenge in development. They must rely on trade to survive and are thus more open, feeling external shocks more severely. Even positive shocks that expand exports may well increase demand for imports rather than stimulate domestic production. Balance of payments problems are a typical hazard. One evidence of this vulnerability is unemployment, which remains high in the Caribbean by international standards (above 20 percent in several countries).

Still, the advances of the late 1980s have been impressive and most observers seem to agree that, with continued adjustment, much of the Caribbean is now on a much sounder path to economic growth. While each has imperfections, the most promising sources of growth appear to be the sectors that led the way over the past five years.

Tourism was once criticized because of its high import content, the domination of foreign management, and a small share of earnings flowing into the local economy. Attitudes are changing, however, as tourism has become the leading foreign exchange earner for several Caribbean countries and it has been found that leakage from tourism spending is declining (more hotels, restaurants, and car-rental firms are locally owned—it is now estimated that 42 percent of tourist spending is retained in the local economy). Demand for Caribbean vacations continues to expand as the sources of tourist arrivals in the region have become more diversified. With this and efforts to further reduce import content and increase local retention of earnings, the sector's prospects still appear attractive.

Manufacturing is more fragile. The growth in garments production is already faltering somewhat, and the preferential treatment that supported its boom in the late 1980s is sure to diminish over this decade. Some growth has occurred in other manufacturing subsectors, but performance in the largest traditionally (agro-processing, furniture, footwear) has not yet been impressive. Studies have identified the need to replace obsolete equipment, substantially improve product quality and reliability, market more aggressively, and generally improve efficiency, before Caribbean products can be competitive in international export markets. However, where serious adjustment programs have been implemented, the incentives for export-oriented manufacturing are considerably stronger than they were a decade ago. While the response to these incentives has been slow to date, it is beginning to occur, and the sector as a whole appears likely to experience additional growth over the coming decade.

Agriculture is unlikely to regain its status as leading sector region-wide, but it should offer some growth opportunities. Market prospects for traditional exports such as sugar still appear bleak. Even the banana market, which fueled much of the growth in the east Caribbean in the 1980s, is vulnerable as countries reach their limits of present quotas with the U.K. and face the possibility of lowered preferences given conflicts between the Lome convention and policies of the EEC single market project to be initiated in 1992. The outlook for Caribbean coffee, however, is promising if producers expand efficiently. Governments in the region are also looking to other non-traditional crops (mangoes, papaya, other tropical fruits, cut flowers, spices, vegetables) that could diversify exports and achieve higher value added per acre of land. These crops have potential, but must overcome difficulties in terms of technical support, production standards, and marketing.

IMPLICATIONS FOR URBANIZATION

Employment and Spatial Patterns

Migration to cities occurs because of "push factors" (when employment opportunities in the countryside are insufficient to support labor force growth) and "pull factors" (when employment growth at higher wages in the cities attracts migrants even when the rural job base may be expanding). From the review above, it seems that factors of both types interacted to cause the rapid urban growth that occurred in the Caribbean through 1990. In the future, it appears that employment opportunities will be even more heavily weighted toward cities and towns.

Jobs in manufacturing. Today, more than ever before, manufacturers must reduce costs to be competitive. Except for some agro- and mineral-processing activities, manufacturers normally locate in cities or towns because those locations offer significant "agglomeration economies" (e.g., better infrastructure and easier communications with suppliers, customers, and business services) that lower their operating costs. Governments have sometimes pushed manufacturers to remote areas. A number of the free zones in the Dominican Republic, for example, have been located at substantial distances from urban centers. Tensions are evident there, however, as producers face higher expenses and workers face extraordinarily difficult commuting problems. In St. Lucia, further development of the industrial estate at Vieux Fort has been halted because of the difficulty in attracting additional investors and workers away from the capital city and the high cost of bringing additional workers in from surrounding towns. With an increased awareness of the importance of cost-competitive production, national economic planners in many countries are dropping extreme decentralization programs. This does not mean that all manufacturing will go to the metropolitan areas. Secondary cities with adequate services are often as attractive, (as evidenced, for example, by the sector's recent accelerating growth in Montego Bay, Jamaica, with a 1982 population of 70,000).

Jobs in tourism are another story. While some of the region's most successful tourist locations are urban (again, Montego Bay, is an example—the town and the urban activities it offers are an important part of the attraction), many promising areas for tourism development are in presently more isolated locations. It seems likely, however, that even these facilities are likely to stimulate the creation or expansion of urban settlements, although some may be fairly small. The policy will be to maximize

linkage to the local economy, generating more jobs for local workers and more interaction with local shops and service establishments. The economics are likely to favor clustering in many instances. This has been the case, for example, at Rodney Bay and Gros Islet in St. Lucia, where residential and commercial growth have followed initial tourist developments.

Jobs in agriculture. In most countries, a policy emphasis on rural development will still be warranted. Yet there are market limitations and substantial difficulties in adapting to new and more diverse crops. Even with a successful strategy, it is most probable that agriculture's share of regional GDP will continue to decline. Moreover, agricultural successes will depend on more competitiveness, which will in turn imply fewer jobs per unit of output. While there are important opportunities for growth in agriculture, it seems quite unlikely that they will yield enough new jobs to have much effect on slowing the growth of cities and towns.

Jobs in other sectors. Regardless of the exact urban-rural balance of new job opportunities in the leading sectors, the growth of the other sectors that serve them (e.g., commerce, business and personal services, financial institutions) has always occurred primarily in urban areas, and there is no reason to expect a change in this pattern.

Expected Future Growth

The only consistent projections of urban growth for all Caribbean countries are those prepared by the United Nations. While not developed on the basis of explicit economic assumptions, their methods have proven reasonably accurate in the past and their results do seem broadly in line with the economic scenario considered above.

Region-wide, the projections indicate that the Caribbean's total population will increase from 20.7 million in 1990 to 36.8 million in 2020. The implied annual growth rate is 1.9 percent which, because of continued improvements in both birth and death rates, represents a notable drop from the 2.1 percent rate registered over the 1960-1990 period. The projections indicate further that *urban areas will capture 88 percent of all growth* (well above the 72 percent of 1960-1990).

The urban growth rate will not be as high as in past (3.0 percent per year compared to 4.2 percent over 1960-1990), but the absolute size of the growth increment will be much larger. The region's total urban population will more than double, increasing from 9.9 million in 1990 to 24.0 million in 2020. Cities and towns will have to accommodate an average of 470,600 new inhabitants annually over the next 30 years (compared to 233,300 per year over the past 30).

Country variations. Because of particularly rapid growth rates and/or large base populations, a very large share of the region's new urban growth is expected to occur in Haiti (45 percent) and the Dominican Republic (another 33 percent). But this does not mean that the urban growth pressures in the smaller countries will not be formidable. Together they will have to absorb an average of 100,000 new urban dwellers annually over 1990-2020, 43 percent greater than the 1960-1990 average.

URBAN IMPACTS: ENVIRONMENTAL DEGRADATION

Among all of the impacts of rapid urban growth even now being felt throughout the Caribbean, those on the environment are most apparent. To be sure, urbanization is not the primary cause of the region's environmental problems. On several islands, probably the most serious is the expansion of subsistence farming on hillsides and other marginal lands. The slash and burn approach is rapidly destroying major watersheds (Jamaica, for example, is now losing 3 percent of its natural forests each year). In the Eastern Caribbean, the banana boom has caused landless rural dwellers to invade the national forest to clear land for banana cultivation. Where this has occurred, the impacts include a reduction of dry season surface water flows and additional siltation and debris down stream that damage crops on the coastal plains as well as marine life in the river deltas. Ironically, this is a problem that would be diminished by more (not less) urbanization (i.e., if the expansion of income earning opportunities in the cities could provide yet more options that would reduce the numbers forced into slash and burn to survive).

Nonetheless urban growth is now also contributing to environmental degradation. Most effects fall into two categories: (1) inappropriate land development patterns and (2) increased pollution.

Inappropriate land development patterns. The effective expansion of urban areas requires: (a) some general public sector agreement about where best to accommodate new growth on the urban fringe (e.g., minimizing incursion into prime agricultural areas and environmentally sensitive lands to the extent feasible); (b) the construction of trunk infrastructure (most importantly, roads) to open up the corridors selected for development; and (c) a well functioning private land market governed by a regulatory system that facilitates affordable development in the right locations but mitigates against structural, health, and environmental hazards. In most Caribbean countries, there are serious deficiencies at each of these levels.

Three different models are in evidence. At one extreme, Haiti's public sector has had very little capacity to influence land development. Although there is suitable land for expansion on the fringes of Port-au-Prince, new infrastructure to open it up has not been provided and government's role in controlling or servicing private development elsewhere has been negligible. At the other extreme, the government of the Dominican Republic has dominated the urban development process, building a series of monumental, high cost projects. However, even though these projects have been a centerpiece of government's policy, they have satisfied only a small portion of total demand for urban expansion. After paying for the government projects, there has been little funding left over to provide even basic infrastructure in private development areas and public sector control over materials and other resources has created scarcities that constrain private sector investment.

In the other countries, there is a more reasonable balance between public and private sector responsibilities, but public institutions generally have not been playing their roles effectively. In no country did we find coordinated efforts by infrastructure agencies to use infrastructure to shift development away from environmentally sensitive areas by purposefully extending networks into more suitable lands. This is true even though underutilized government-owned land suitable for urban expansion is in abundance on several islands. Almost all Caribbean countries have agencies that build

housing for low-income groups, but none provides for more than a small fraction of the total need. In addition, there is evidence that such programs have entailed high costs and that middle-income groups have been the beneficiaries of a very large share of the units produced instead of the poor for whom they were intended.

In some countries, regulatory controls contain unrealistically high standards that significantly increase development costs (it has been estimated that only the top 15 percent of the income distribution in metropolitan Kingston could afford modest housing that meets standards now in force). In most, administrative procedures for reviewing subdivision and development applications and processing transfers of land titles are slow and inefficient. Yet, almost everywhere, enforcement capacity is weak and penalties for illegal development are insignificant.

All of this provides strong incentives for households and small businesses to avoid the formal approval process altogether. Squalid "informal settlements" are proliferating throughout the Caribbean. Sometimes they occur through unauthorized "squatting" (usually on government owned land), but in many cases occupancy is authorized through either legal or informal arrangements with private landowners. It has been estimated, for example, that at least half of all the housing built in Jamaica is built illegally and that squatter growth in the Vieux Fort area of St. Lucia averaged 70 percent per year in the mid-1980s.

Illegal development is located so as to minimize both development costs and the risk of later sanctions for the households and businesses involved. The areas they select are often the least desirable locations from the standpoint of the environment. Almost all Caribbean cities are located on the coast and uncontrolled urban expansion is contributing to beach erosion and the destruction of mangrove swamps. (Beach erosion occurs not only because of direct construction too near the high water mark but also because of extensive hauling of beach sand for urban construction farther inland.) Informal urban settlement has also pushed up the hillsides. The expansion of extremely dense squatter settlements in the hills above central Port-au-Prince, for example, has already destroyed virtually all of the watershed around that city. The tragedy in this case is that there was an alternative available had government built even limited land and infrastructure networks to open it up (1,500 to 2,500 hectares of land suitable for residential development northwest of Delmas road).

Outcomes like these would be problematic in any country but they are particularly serious for those with severely limited land resources. Not only are many of the islands small, but rough topography often further limits the amount of land suitable for development. On some islands (e.g., St. Lucia, St. Vincent), the terrain over a majority of the land area is too steep to be developable at feasible costs.

Increased pollution. Except for a few areas where exhausts from industrial plants and trash burning are concentrated (e.g., around Spanish Town in Jamaica), air pollution is not yet a serious problem in the Caribbean. Urban areas are not large enough to suffer from undue concentrations of auto emissions and all are benefitted by wind currents along the coasts in this regard.

Pollution from residential and industrial wastes, however, may well be the region's most severe urban environmental dilemma. Caribbean cities have not been

able to afford piped sewerage systems with adequate centralized treatment for very many of their new inhabitants. Only one third of Jamaica's urban households have connections to piped systems—47 percent in the larger urban areas rely solely on pit latrines. Only 16 percent of the Dominican Republic's localities that have public water systems have piped sewerage even for a fraction of their inhabitants. Only about 1,000 households in St. Vincent and 1,200 in St. Lucia have access to piped sewerage and those systems have no treatment whatsoever—effluent is simply dumped into the ocean by an outfall. Conditions are yet worse in Haiti. The rapid growth of on-lot sanitation (pit latrines and, more importantly, septic tanks) is already polluting ground water in many locations on many Caribbean islands.

Inadequate treatment of sewage from the piped systems that do exist has broader implications. Existing plants have insufficient capacity and many are undermaintained. Only 38 of Jamaica's 97 treatment facilities are considered to be working properly. The Montego Bay plant with a 0.75 MGD rated capacity is now experiencing flows of 2.0 MGD and there is obvious concern about the effects on coral reefs in the bay. Similar problems exist in Kingston, where the high nutrient effluent from its treatment plants has destroyed almost all benthic life in its sizeable harbor.

The collection and disposal of solid wastes seems to be handled reasonably well in some urban areas, but systems for this purpose are either nonexistent or woefully inadequate in others. Dump-sites near watercourses are a particular problem. Until recently, the official dump-site for Soufriere, St. Lucia, was a cliff overlooking the bay.

URBAN IMPACTS: CONSTRAINTS ON RESIDENTIAL AND ECONOMIC DEVELOPMENT

Environmental degradation like that discussed above is not the inevitable result of urban growth. Rather it occurs only with the *inadequate management* of urban growth, in particular: (1) inadequate land delivery mechanisms; and (2) inadequate provision of infrastructure and other public services. These same two problems also appear to be important constraints on satisfactory residential and economic development in Caribbean cities.

Residential constraints. The typical land development process described earlier creates barriers for most households seeking a decent home and living environment, particularly those with low and moderate incomes. The constraints we have mentioned prevent the formal suppliers from delivering enough suitable land to respond to rapidly growing effective demand. This inevitably leads to inflation in the price of land and existing housing. Rigid standards also inflate development costs.

As noted, because formal sector housing is unaffordable, many are forced to build illegally. In that status, they are generally denied access to water and other services and cannot use their property as collateral for improvement loans. While the lack of services in these informal settlements has environmental consequences for society as a whole, the most painful and immediate impacts are felt by the families who live there. The aggregate level of services is declining in some countries. In the Dominican Republic, for example, the share of all urban households with piped water supply declined from 91 percent in 1970 to 70 percent in 1980. Conditions are harshest in Haiti where women and children typically must spend two to three hours

each day carrying water. Densities in the St. Martin settlement in Port-au-Prince exceed 600 persons per net acre. But living conditions are sorely deficient in informal settlements throughout the region.

Business constraints. Limits on formal sector residential development themselves dampen economic growth (obviously, more construction jobs would be available if land and housing markets were functioning properly). But the region's urban land and infrastructure problems also directly constrain the potential of leading sectors like manufacturing and tourism.

Manufacturers, like would be home builders, face inflated land and construction costs when they establish a new plant. Since most cannot afford the risks of illegal development, they are more likely to go through the formal government approval process and this raises costs further because of high standards and/or slow and uncertain reviews of development applications.

Also, infrastructure services are extremely important to them. Most investors in Dominican Republic free zones, for example, now report that, because the public power supply is so unreliable, they feel they have to install two or more back-up power generators themselves and that they rely on their own units for 40-60 percent of their total electricity requirements. No studies have been done to estimate the added costs to firms because of inadequate infrastructure in the Caribbean, but research elsewhere suggests they can be quite high. A study in Nigeria indicates that self-provided electric power generators alone account for one-quarter of all plant and equipment investment by small manufacturers. The analysis shows further that the amounts all firms are spending to produce electricity themselves are, on average, three times what they would have to pay if there was an efficient common utility.

For entrepreneurs who have inadequate access to sufficient capital, steep costs for land and infrastructure may actually prevent the formation of new businesses. Studies have shown that over the past decade, the lack of suitable space has been cited as an important factor holding back the growth of manufacturing in Kingston, Jamaica, and in St. Vincent. Although not yet documented as such, we suspect this constraint is also important on other islands. For those who can afford the initial investment, the businesses they start have to pass on the excess costs in the price of the goods and services they produce, making them less competitive. Both cases imply slower economic growth.

Clearly, these same factors also exert a negative influence on investment in tourism. For example, 18 of Jamaica's 97 sewage treatment plants were built by tourist-hotels because public systems were either unavailable or inadequate. Moreover, interviews with industry leaders in Montego Bay suggest more fundamental links between urban problems and tourism development. The outcomes (e.g., physical deterioration in the city center, vistas of squalid informal settlements, the frustrations of those who have to live in those settlements and commute long distances to their jobs) are significantly reducing the area's attractiveness to tourists. The same views were underscored by tourism developers in the Dominican Republic in discussion about the future of Puerto Plata and other promising tourist centers.

GUIDELINES FOR POLICY

In all Caribbean countries, substantial further urban growth appears inevitable and recent experience suggests that it must be much more effectively managed if deterioration—physical, social, and economic—is to be avoided. Below we offer seven guidelines for policy that should help the region respond to this challenge. While they were drawn from ideas emerging in other developing countries as well as the Caribbean, all were suggested or endorsed by a number of the public officials and business leaders in the region interviewed in the course of this study. To be sure, they do not yet represent the conventional wisdom, but our interviews suggest that attitudes are swinging in these directions.

1. Endorse a general policy stance of spatial neutrality but recognize this implies the positive "acceptance" of urbanization. From the 1950s through the 1970s, most national governments in the developing world (and most international donors) were openly "anti-urban." That position has changed rapidly over the past decade as evidence has mounted that: (1) rural economies have not been able to absorb a large share of the growing labor force (urbanization rates have accelerated even where the green revolution has been most successful); (2) urban labor markets have been much more vibrant than anticipated (the high urban unemployment rates predicted by 1970s models have not emerged and informal sector activities have often led to higher incomes and more economic dynamism than those of the formal sector); (3) with reasonable technical standards and cost recovery programs, decent basic urban infrastructure is not a fiscal impossibility for most countries; and (4) there are strong positive linkages between urban and rural development (e.g., rural growth rates are typically higher in regions with rapid urban growth since the latter provides a significant boost to demand for rural output).

However, none of this argues for policies to "promote" urbanization. The trend is toward macro-policy environments that are spatially neutral—providing solid incentives for all promising subsectors (in agriculture as well as manufacturing) in whatever locations help them to be most competitive and diminishing constraints that inhibit their expansion in those locations. But since many of the most promising opportunities for job creation in the future are likely to be urban based, this does require the "acceptance" of more urbanization and positive action to reduce urban constraints.

The general policies of most Caribbean governments are already moving in these directions. Although vestiges of anti-urban sentiment remain, the prevention or even reduction of urban growth is nowhere a notable political issue. On the other hand, it is clear from the review above that positive actions to manage urbanization effectively are, at best, not yet well orchestrated and, in many cases, nonexistent. Most of the key problems could be addressed by improved management in two areas, land and infrastructure.

2. Recognize that relieving urban land and infrastructure constraints is critical to national economic development and environmental preservation—not just social policy. In preparing their budgets, most of the region's governments classify investments in urban land, infrastructure, and housing as social programs. It is true that international market forces and national macro-economic policies are the primary determinants of economic growth and that many of the key

environmental problems of the Caribbean occur in the countryside. Nonetheless, the review above indicates that the very same land and infrastructure problems that are inhibiting the improvement of urban residential environments are also severe constraints on employment generation and environmental preservation. In this light, and given the magnitudes of likely future urbanization, these issues would seem to merit much higher priority in public policy than they are receiving at present.

3. Build environmental concerns into real development decisions and make choices based on serious analysis of tradeoffs—the environment vs. development debate is a dead end. In recent months, environmental concerns have been much more prominent in policy discussions in the Caribbean. At a general level, it is difficult to find opposition to the concept of *sustainable development*: i.e., enhancing the incomes of this generation in a manner that does not diminish the resource base needed to do the same for those to follow. But few would argue that environmental sensitivity has yet been built into physical planning decisions in the region—either public or private.

One barrier has been the image that environmental preservation means curtailing development. To the extent this is true, the environmental cause will never be taken seriously. While thousands remain unemployed, political leaders simply cannot accept solutions that do not address poverty in the near term. As long as the issue remains at the level of the polemic it is difficult to foresee its resolution.

A more promising approach would emphasize solid analysis of economic-environmental tradeoffs in the development planning process. Persuasive alternatives will be those that demonstrably improve environmental conditions over the long run without substantial reductions in employment generation or increases in development costs in the short run. To be politically compelling, both the costs and the benefits have to be made explicit and quantified. There will have to be compromises, but some environmental changes have much more severe consequences than others and a range of priorities could be established. The emphasis should be on the search for a middle ground.

Setting up separate environmental ministries gives more prominence to the issue but represents no more than lip service unless other steps are taken. The key is building environmental sensitivity into the project design process itself: i.e., so that public and private architects and engineers, and the people who finance them, give more weight to environmental factors as they evaluate alternatives initially.

4. Streamline and focus land development regulations but do not rely on them as a mainstay of policy. Early planning theory in a number of countries put much emphasis on regulation as the key instrument in guiding physical development. This emphasis has worked no better in most of the rest of the developing world than it has in the Caribbean. Although elaborate land development regulations exist in many nations, the number that enforce them seriously is negligible. And, given real public sector constraints, few believe that it will ever be possible to enforce them in full.

A response suggested with increasing frequency today is to: (1) simplify the standards to reduce the time required for reviews; (2) revise unrealistically high standards to make them economically affordable; (3) streamline the review process

(in particular eliminate redundant reviews by a multiplicity of agencies; and (4) focus regulations on the priorities (e.g., maintain a high level of scrutiny over development in environmentally sensitive areas but cut back requirements dramatically for simpler cases like single family houses elsewhere). If these steps are taken it should be possible to seriously enforce those regulations that remain on the books. Jamaica is now considering regulatory reforms with several of these features.

Even if regulatory reforms were implemented, however, it would have little influence if land markets remain tightly constrained. Where enough decent land is not being made available for urban expansion through formal processes, development is likely to find its way around the regulations and locate wherever it can get away with it.

5. Develop proactive programs to open up urban land markets. In these circumstances, the highest priority may be for more effective public action to open up new lands for development on the fringes of growing cities, choosing locations for this growth that minimize environmental conflicts as well as development costs. Normally, all it takes to do this is: (1) a basic road network; (2) minimal water supply; and (3) the relaxation of restrictions that might prevent private firms and households from taking it from there.

The case is particularly strong where government is already hoarding idle land in its ownership in relevant locations. The first step here is for government to prepare an inventory of its land holdings indicating the current use of each parcel—a step that has not yet been completed in any of the countries examined in this study.

As to developing such lands, there are several options. Jamaica's 1987 Shelter Strategy calls for its Ministry of Construction (Housing) to withdraw from its earlier program of house construction (which was replete with cost and equity problems) and concentrate on the provision of serviced sites. The theory was that land development is a simpler and less costly task and, given both management and budgetary constraints, this approach would provide basic accommodations for many more households at lower-income levels for a given amount of funding (the evidence has been that once the land is made available, even low-income households find ways to build, and later improve, their own shelter). A second approach is for government to enter into contracts with private developers: (1) to develop sites under a turnkey arrangement on behalf of government; or (2) to develop the land with their own financing with the proviso that they set aside a fixed share for lower-income groups. (Both of these approaches are being experimented with in Jamaica).

Most of the land in the new zones, however, will not require direct public action other than the provision of infrastructure. Private firms are likely to find development profitable enough to take the next steps. But even in these cases, some form of public-private partnership may be called for to induce the developers to prepare at least some of their holdings in a manner that will be affordable to lower-income groups. This will require an acceptance of "incremental improvement" as a means of achieving higher standards; i.e., permitting initial development at quite low standards but with the prospect of improvements in both dwelling quality and infrastructure levels as resident incomes are enhanced over time. If high initial standards prevent such development in these zones, not much will have been achieved. Unserviced informal settlements will again spring up on lands that the program hoped to conserve.

If properly planned, infrastructure placement in the new zones can also work toward a more compact urban form than is typical of the more haphazard urban extension now taking place. Metropolitan Kingston, for example, now uses 48 acres of developed urban land per 1,000 inhabitants—a much higher standard of land provision than found even in many higher-income countries. A reduction in per capita urban land use can offer substantial savings in infrastructure costs (since lengths of roads, water mains, etc. can be cut back), and it can also reduce the extent of any potential urban incursions into primary agricultural lands and environmentally sensitive areas.

All such conflicts, however, cannot be avoided. In a number of Caribbean countries at present there are strongly worded prohibitions against any urban incursions in agricultural areas (although these often break down in practice). Preserving agricultural land is a worthy objective, but urban areas have to grow somewhere and in some cases urban development may be a higher and better use. In Jamaica, for example, it is estimated that the value added from the average acre of urban land is approximately 200 times that of the average acre of developed crop and pasture land. Again, there is a need for analysis that examines the costs and benefits of alternatives and tries to channel urban growth to the locations where it will have the least damaging effect on potential agricultural output.

6. Infrastructure program design should emphasize reasonable standards, reducing import content, effective maintenance, local cost recovery and resource mobilization, the expansion of private involvement, and a focus on true priorities. Infrastructure represents perhaps the most difficult challenge in efforts to deal with urbanization more effectively. Even where there is a will to raise the funds locally, public outlays must remain constrained in the short term to avoid serious macro-economic imbalances. This means that available funds must be used much more efficiently if the demands of expanding urban growth are to be met.

Several principles are applicable. The first is the adoption of reasonable standards and technologies. Alternatives to high-cost traditional approaches should be seriously examined. Recent studies have shown that fashions of the past have involved sizeable safety factors that needlessly inflate the costs of many elements of infrastructure systems in most developing countries. Second, these reviews should seek alternatives that result in lowering import requirements. There are limits to what can be done here. It would make no sense for Caribbean countries to try to produce the more sophisticated components of power generation or sewage treatment systems. But opportunities may exist in expanding local content in other areas. The third principle emphasizes the need for more diligent maintenance of existing networks. Undermaintenance is a problem throughout the developing world and significantly increases costs. Cycles demanding more frequent major repairs and replacements are notably more expensive than routine maintenance programs.

Fourth, there is a need to improve cost recovery and local resource mobilization for urban infrastructure. In developing countries, infrastructure subsidies generally tend to benefit higher-income households, leading them to over-consume services while the poor often remain unserved. Most Caribbean countries take cost recovery seriously, but more progress is needed in some cases.

The fifth principle is based on the recognition that, as urban service needs continue to expand, the institutional capacity of most public sector infrastructure agencies is clearly being strained. One way to address this problem is to contract with private firms to take on selected components of the workload. Reliance on the private sector in this manner has proven effective elsewhere, for example in solid waste collection, and billing and collection for water supply. In some areas, NGOs and community groups may be able to play role in the direct provision of minor initial capital improvements.

The final principle emphasizes a tougher prioritization of infrastructure investments. In the past, capital facilities sometimes have been provided to areas where they were underutilized. In today's resource scarce environment, investments need to be focused where they will have the highest payoff. There is no fully reliable method for ranking, but a fairly straightforward assessment of the costs against the benefits (economic, environmental, and social) should provide a reasonable gauge. Projects that avert environmental disasters, for example, should stand high on the list (e.g., addressing the major gap in Montego Bay's sewage treatment capacity as noted earlier). Similarly, a high ranking would be given where it is clear that inadequate infrastructure is holding back economic growth in the face of evident effective demand. Road and other service improvements near rapidly growing tourist centers would fall into this category. Also, priority would be warranted where there are evident and sizeable social costs to be averted (e.g., where informal settlements are experiencing health problems and other serious costs because they lack decent water supply). A most important point here is that analysis that clearly identifies and measures the problem or opportunity to be addressed will be needed to fend off "fair share" claims from politicians from other areas without serious infrastructure deficits.

Among all infrastructure elements, human waste disposal probably represents the thorniest problem for the Caribbean. With the clear exception of Haiti (and to some extent the Dominican Republic) most countries in the region are keeping up reasonably well on other services. Most need to do a more effective job of extending water supply to informal settlements at least on a partially cost recoverable basis, but the costs of doing so do not appear unreasonable in relation to current resources. Conventional piped sewerage systems, however, are enormously expensive and will probably remain unaffordable as an option for all urban dwellers for some time to come. The search for alternatives is urgent since the lack of effective human waste disposal is probably the greatest threat that urban growth poses for the environment.

Studies by the World Bank indicate tremendous variations in costs for different sanitation options. The figures below are averages of the experience in 12 countries for only a few of the full range of technical alternatives. They are taken from estimates of the total annualized economic costs of each option (covering recurrent costs as well as initial investment costs). Here we show them on a relative basis with piped sewerage and conventional treatment set as 100 percent.

Piped sewerage, conventional treatment	100%
Fully developed septic tanks	92%
Vacuum-truck cartage	47%
Pit latrine	7%

Dry pit latrines actually do not represent the most serious environmental threat (since there is little contamination compared with water flush systems) but, given their aesthetic problems, they are not a very desirable solution over the long term. Septic tanks are perhaps one of the least attractive solutions since they also require high

costs, require larger lots than are consistent with land conservation goals, and can be a quite serious environmental problem where soil conditions are not appropriate. Intermediate-cost systems (vacuum cartage, for example) should be carefully examined. Also, where land is not too tightly constrained, piped systems feeding into treatment ponds (rather than conventional plants) may be promising since initial investment costs are lower and long-term operating costs are negligible by comparison (this option was not costed in the World Bank analysis). Different solutions may be best in different locations in the region depending on soil conditions, cultural preferences, and other factors. The point is that further analysis of the alternatives in each country now warrants a very high priority.

7. Mobilize community and private leadership to work in concert with government. All in all, the inadequacies of Caribbean urban management appear more due to institutional problems than financial or technical deficiencies. Under tight staffing limitations, public bureaucracies are stretched thin and many have had little access to adequate management training, technical assistance, and computer support. Even if government was better prepared, experience in many countries demonstrates that where public agencies act independently without substantial community support, urban improvement programs are quite likely to break down.

In fact, assigning more responsibility to community and private leadership may be essential to energizing the institutional framework for urban management in the region. The business and social leaders in any urban area have an important stake in its future and are likely to be willing to contribute their time and energies to help solve its problems. By maintaining a dialogue with both government and local citizens, they can serve as vital intermediaries in mobilizing local support for needed actions.

Sometimes, because of strong motivation and more flexibility, local NGOs can accomplish things that would be very difficult for government agencies. A good example in the region is the success of Jamaica's Kingston Restoration Company (KRC), a public interest-oriented NGO whose board is composed mainly of local business leaders. KRC has used USAID grants as seed money and has mobilized substantial private resources in a broad program to revitalize downtown Kingston. Its efforts have ranged from major factory rehabilitation schemes to small grants for facade improvements and community development programs implemented jointly with local church groups.

A broader program with a similar institutional base is being initiated now in Montego Bay. The Chamber of Commerce there is sponsoring a comprehensive development planning process for the city that will rely on technical support from consultants but involve a broad cross-section of community leaders in decision making. Recognizing capacity problems in its own Town Planning Department, the government has endorsed the process and will appoint its own representatives to participate. The plan will emphasize economic analysis and the scheduling of action projects more than the zoning-oriented type of land use planning prevalent in the past. When the plan is complete, it will be presented to government for formal approval and requisite commitments to action on selected infrastructure projects and other policy changes. Unlike many proposed urban plans, it is likely to have a strong base of community support by the time it reaches that stage.

THE REGION AND ITS DEMOGRAPHIC CONTEXT

DEFINING THE REGION

The "Caribbean" has a great many definitions based on varying economic and political relationships. The analysis in this report focuses on 14 independent nations that have come to be thought of as having important linkages (listed in Table 1.1 and with names underlined in Figure 1.1). This definition excludes Cuba and entities politically dependent on other nations (e.g., Puerto Rico, the American and British Virgin Islands, Martinique) but includes related countries on the land masses of Central and South America (Belize, Guyana, Suriname).

This definition is virtually equivalent with the membership of the Caribbean Group for Cooperation in Economic Development (CGCED) (the only CGCED member not included is The Bahamas). It includes the countries in the region likely to be of primary concern to international donors such as the U.S. Agency for International Development (USAID), The World Bank, and the Inter-American Development Bank (IDB).

CONTRASTS

Table 1.1 shows that the countries included in this definition are far from homogeneous. The group includes nations ranging in land mass from St. Kitts and Nevis (269 square kilometers) to Guyana (214,970 square kilometers, 800 times as large), and in population (1990 estimates) from 50,000 (St. Kitts and Nevis) to

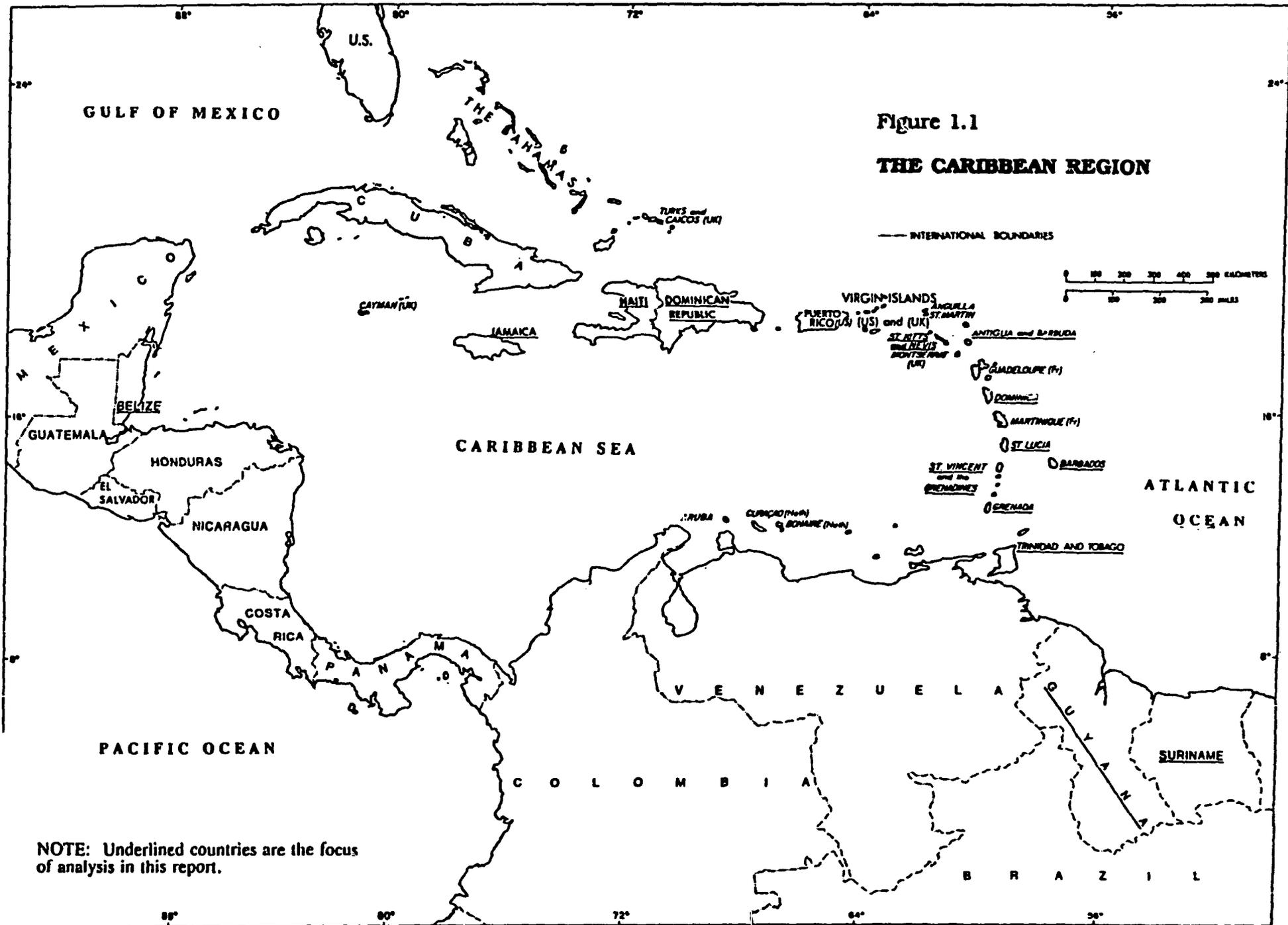
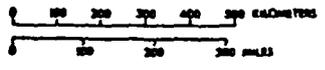


Figure 1.1
THE CARIBBEAN REGION

— INTERNATIONAL BOUNDARIES



NOTE: Underlined countries are the focus of analysis in this report.

**Table 1.1
Caribbean Region Population, Land Area, and GDP per Capita**

	Population ('000s) 1990	Area (square kilometers)	Population (per square kilometer)	GDP Per Capita 1988
Barbados	261	430	607.0	3,226
Belize	182	22,965	7.9	1,276
Dominican Republic	3,971	48,400	144.0	1,074
Guyana	1,040	214,970	4.8	589
Haiti	7,509	27,750	270.6	211
Jamaica	2,521	10,991	229.4	1,205
Suriname	403	163,820	2.5	1,679
Trinidad & Tobago	1,283	5128	250.2	3,189
Subtotal	20,170	494,454	40.8	970
<i>Independent OECS Countries</i>				
Antigua & Barbuda	86	442	194.6	1,924
Dominica	81	750	108.0	1,022
Grenada	120	344	348.8	940
St. Kitts & Nevis	50	269	185.9	1,458
St. Lucia	139	617	225.3	1,016
St. Vincent-Grenadines	111	389	285.3	761
Subtotal	587	2,811	208.8	1,124
Total	20,757	497,265	41.7	974

Source: 1990 population estimate from United Nations, 1987, GDP per Capita (in 1980 US\$) from World Bank, 1988a.

7.5 million (Haiti, 150 times as large). Population densities range from 2.5 persons per square kilometer (Suriname) to 607 per square kilometer (Barbados, 243 times as high—the highest population density among the world's major islands is that on Java, in Indonesia, with 796 persons per square kilometer in 1980).

Caribbean countries also exhibit a tremendous range in their level of development. Haiti (US\$211 per capita in 1988) is by far the poorest country in the Western Hemisphere, and according to the World Bank (1988), the 27th poorest in the world. In contrast, Barbados and Trinidad and Tobago had 1988 levels of per capita GDP, roughly 15 times that of Haiti (just under one fifth that of the United States).

Table 1.2
Caribbean Region Crude Birth Rates, Crude Death Rates,
and Net Migration
 (per year per 1,000 population)

	1950-55	1980-85	1990-95	2000-05	2020-25
CRUDE BIRTH RATES					
Barbados	32.8	17.8	18.2	15.9	14.0
Dominican Republic	49.1	33.1	28.0	23.2	18.2
Guyana	48.1	28.5	21.6	18.0	14.8
Haiti	45.5	41.3	40.1	37.3	28.8
Jamaica	34.8	28.1	22.6	18.6	14.9
Suriname	43.8	28.8	23.2	19.0	15.5
Trinidad & Tobago	36.2	25.4	21.4	17.7	15.1
Windward Islands*	40.0	29.4	23.5	19.4	15.4
Less Devel. Regions	44.4	31.0	28.1	24.4	18.6
More Devel. Regions	22.7	15.5	14.6	13.8	13.4
CRUDE DEATH RATES					
Barbados	13.2	8.7	8.3	7.3	8.1
Dominican Republic	21.8	8.0	6.5	5.9	6.5
Guyana	13.5	5.9	5.2	5.1	6.6
Haiti	26.8	14.2	11.5	9.1	6.5
Jamaica	11.5	5.6	5.2	5.0	5.7
Suriname	12.6	6.8	5.7	5.4	6.2
Trinidad & Tobago	11.3	7.0	6.1	5.8	7.2
Windward Islands*	15.1	7.7	5.9	5.0	5.7
Less Devel. Regions	24.2	10.8	9.3	8.2	7.6
More Devel. Regions	10.7	9.6	9.5	9.8	11.0
NET MIGRATION					
Barbados	n/a	-6.0	-1.9	0.0	0.0
Dominican Republic	n/a	-1.9	-1.5	0.0	0.0
Guyana	n/a	-3.1	-2.0	-0.8	0.0
Haiti	n/a	-2.1	-1.6	-1.2	-0.7
Jamaica	n/a	-8.0	-3.4	-2.4	0.0
Suriname	n/a	-11.0	-2.4	0.0	0.0
Trinidad & Tobago	n/a	-2.6	-0.8	0.0	0.0
Windward Islands*	n/a	-10.7	-4.3	0.0	0.0

SOURCE: United Nations, 1986

* Includes Dominica, Grenada, St. Lucia, and St. Vincent and the Grenadines

DEMOGRAPHIC STRUCTURE AND TRENDS

The only consistent estimates of population for all countries are those prepared by the United Nations (most recently in 1984—see United Nations 1986, and 1987). According to those estimates (Table 1.3), the 14 countries of the Caribbean Region have a population of 20.8 million in 1990 (about 0.4 percent of the world's population, 8.4 percent of that of the United States).

One island (Hispanola, composed of the Dominican Republic and Haiti) accounts for 70 percent of the Region's total population. Jamaica accounts for another 12 percent and Trinidad and Tobago for 6 percent. The remaining 10 countries are home to the remaining 12 percent.

U.N. projections of future population are based on extrapolations of trends and assumptions concerning the three components of demographic change: births, deaths, and net migration. Expectations regarding each in the Caribbean region are discussed below.

Birth Rates

As in most of the world, birth rates in the Caribbean have been declining since the middle of this century and continued declines are anticipated. There are important differences between countries, however, in both initial levels and the expected pace of change.

In the early 1950s, crude birth rates in most Caribbean countries were much closer to the average for the world's less-developed regions (44.4 births per annum per thousand population) than for its more developed regions (22.7 per thousand). The only exceptions were Barbados (32.8) and Jamaica (34.8). (See Table 1.2 and definitions in United Nations, 1986). Projections through 2025 indicate:

- The gap between birth rates of the less- and more-developed regions will narrow significantly (reaching a range of from 13.4 to 18.6 over 2020-2025).
- Among Caribbean countries, only Haiti will maintain birth rates substantially above the average for less-developed regions (decline only to 28.8 by 2020-2025). The birth rate trajectory for the Dominican Republic will remain very close to the average for the less-developed regions.
- Rates for all other Caribbean nations will drop more rapidly than the average for the less-developed regions and will reach points roughly midway between the less- and more-developed country averages by 2020-2025.

Death Rates

Widespread application of this century's achievements in medical science have reduce death rates dramatically throughout the world. As of 1950-1955, there remained a notable gap between rates for the less-developed regions (24.2 deaths

annually per thousand population) and the more-developed regions (10.7), but projections indicate that gap will be eliminated early in the next century. By 2020-2025, the more developed countries are actually expected to have higher crude death rates (11.0) than today's less-developed countries (7.6) because the elderly will make up a much larger share of their total populations.

Death rates in most Caribbean countries were fairly close to the average for the world's richer nations in 1950-1955 (only the Dominican Republic, Haiti, and the Windward Islands had rates substantially above that average). As to the future, death rates in the region are expected to continue to converge, reaching a narrow range (5.7 to 8.1) by 2020-2025.

Net Migration

Because migration is caused by country- and region-specific economic forces, as well as demographic conditions, the United Nations does not have the basis to make reliable migration forecasts over the long term. Instead, it simply makes assumptions that it considers appropriate for each region.

For many years, the Caribbean region has had among the most serious unemployment problems in the hemisphere. Espenshade (1987), for example, estimates an average 1980 unemployment rate of 14.5 percent for Caribbean countries, in contrast to 6.9 percent for Mexico and 7.4 percent for Central America (see further discussion in Chapter 2).

It is not surprising, therefore, that the Caribbean has experienced considerable outmigration (mostly to North America). Countries in the region generally hope to improve their economies so that they can absorb a larger share of their labor force growth internally and, thereby, significantly reduce external migration. Consistent with this aim, the U.N. estimates assume that net migration rates in Caribbean countries will decline, reaching zero at various times over the first quarter of the next century (see Table 1.2).

The U.N. estimates are useful reference points, but it is important to remember this assumption in interpretation. They represent a reasonable picture of the future *only if economic conditions improve*.

POPULATION PROJECTIONS

The U.N. population projections, resulting from the interactions of the components noted above, are shown in Table 1.3. If the assumptions hold, the Caribbean region's population will grow from 20.8 million in 1990 to 36.0 million by the year 2020. This represents an annual growth rate of 1.9 percent (down from the 2.1 percent registered over the 1960-1990 period). This 1.9 percent rate is below the average projected for the world's less-developed regions over 1990-2020 (2.2 percent), but well above that for the more-developed regions (1.4 percent). Even though the region's growth rate is declining, the population base is larger, and so the absolute size of the growth increment will be larger as well. The

**Table 1.3
Caribbean Region Population Growth**

	Population ('000s)			Growth (%/yr.)	
	1960	1990	2020	1960-90	1990-2020
Barbados	231	261	332	0.4	0.8
Belize	91	182	297	2.3	1.6
Dominican Republic	3,224	6,971	11,465	2.6	1.7
Guyana	568	1,040	1,499	2.0	1.2
Haiti	3,723	7,509	16,438	2.4	2.6
Jamaica	1,629	2,521	3,537	1.5	1.1
Surinam	290	403	596	1.1	1.3
Trinidad & Tobago	843	1,283	1,823	1.4	1.2
Subtotal	10,599	20,170	35,987	2.2	1.9
<i>Independent OECS Countries</i>					
Antigua & Barbuda	55	86	121	1.5	1.1
Dominica	60	81	120	1.0	1.3
Grenada	90	120	176	1.0	1.3
St. Kitts & Nevis	51	50	70	-0.1	1.1
St. Lucia	88	139	205	1.5	1.3
St. Vincent-Grenadines	80	111	163	1.1	1.3
Subtotal	424	587	855	1.1	1.3
TOTAL	11,023	20,757	36,842	2.1	1.9

Source: United Nations, 1987

Caribbean will have to accommodate a net increase of 536,200 persons per year on average over the next thirty years, compared to 324,500 over the last thirty.

Average conditions do not characterize the region well, however, because they mask notable differences in expectations between countries. The largest, Haiti, is expected to grow much more rapidly than the rest since, as noted, its birth rate is likely to remain substantially above average while its death and outmigration rates are not expected to be far out of range. Its population is expected to grow from 7.5 million in 1990 to 16.4 million in 2020, implying an annual growth rate of 2.2 percent.

The projected 1990-2020 annual rates for the other countries are much lower, averaging 1.5 percent (ranging from 0.8 percent in Barbados to 1.7 percent in the Dominican Republic). Still, population pressures will remain substantial for all Caribbean nations. Almost all will have to absorb larger absolute levels of population over the next thirty years than they did over the past thirty. Excluding

**Table 1.4
Caribbean Region Labor Force**

	Labor Force (as percent of population)			LF Growth per Year (%00s)	
	1960	1990	2020	1960-90	1990-2020
Barbados	39	52	55	1.5	1.5
Dominican Republic	29	31	39	41.8	76.1
Guyana	29	37	42	7.4	8.1
Haiti	55	42	39	35.8	107.1
Jamaica	41	49	59	19.4	27.8
Suriname	28	33	41	1.8	3.7
Trinidad & Tobago	33	39	43	7.3	9.3
Windward Islands	35	45	56	3.0	5.7
Total				118.0	239.4

Source: International Labour Office, 1986, and United Nations, 1987

Haiti, 1990-2020 population growth in the other countries on average will be 20 percent larger than it was over 1960-1990.

GROWTH OF THE LABOR FORCE

Population growth rates are now declining generally throughout the developing world, but labor force growth is accelerating. The number of children born from the 1950s through the 1970s (when death rates had dropped significantly but birth rates had not yet done so) was enormous. Providing decent employment opportunities for them as they reach working age is among the greatest challenges of this era.

Table 1.4 shows that this scenario is generally applicable to the Caribbean. In all countries, except for Haiti, the labor force is growing significantly as a share of total population. The projections were developed by the International Labour Office consistent with the population projections in Table 1.3. They indicate that the labor force in the countries shown will grow at an annual rate of 2.2 percent over 1990-2020 (up from 2.0 percent over 1969-1990). In contrast, the total populations of these countries will grow on average by only 1.9 percent per year over the latter period (down from 2.1 percent during the former).

Comparisons of absolute numbers are more striking. In total, the labor force in these countries will grow by 239,400 annually over the next three decades, more than twice the actual growth increment of the past 30 years.

The extent to which the Caribbean's economies can expand to absorb this growth will be the most important determinant of the region's welfare over the intermediate term. Chapter 2 examines economic trends and policies to assess the prospects.

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2

ECONOMIC TRENDS, POLICIES, AND PROSPECTS

INTRODUCTION

Since 1945, the Caribbean countries have faced a similar economic challenge: how to transform their economies, historically dependent on the production of raw materials (and above all, on sugar), in the face of a long-term decline in commodity prices on world markets. These economies have experienced great changes during this period, but with mixed results between countries, increasing the differences in income and development between them.

Caribbean economies share some common characteristics—they are small, open economies that often experience chronic balance of payments problems. The small size of most countries in the region imposes some natural constraints on development. Limited natural resources and small domestic markets imply that trade is required for the economy to survive. This necessary openness of the Caribbean economy reduces the scope for economic control; external shocks strongly impact on the domestic economy. The lack of linkage between export industries and the domestic economy in Caribbean countries leaves them vulnerable to balance of payments problems when export markets decline. Even positive shocks in export markets tend to push up demand for imports rather than translate into higher domestic production.

This chapter reviews the recent economic performance of the region and individual countries, looking at economic growth, economic structure and employment, and exports and external balance. It will also look at three key sectors, agriculture (which is restructuring as traditional export markets weaken), and manufacturing and tourism (which have both grown rapidly in the 1980s).

Table 2.1
GDP Growth 1980-1988

	1988 (1980 US\$ m)	Real GDP Index			Average Annual Real Growth (%)	
		1980	1985	1988 ^E	1980-85	1985-88
Barbados	823	100.0	95.8	105.8	-0.9	3.4
Belize	231	100.0	112.0	131.1	2.3	5.4
Dominican Republic	7,349	100.0	108.1	125.0	1.6	5.0
Guyana	477	100.0	83.1	81.1	-3.6	-0.8
Haiti	1,309	100.0	96.1	95.7	-0.8	-0.1
Jamaica	2,871	100.0	100.3	108.1	0.1	2.5
Suriname	736	100.0	93.2	83.9	-1.4	-3.5
Trinidad & Tobago	3,958	100.0	84.0	73.2	-3.4	-4.5
Subtotal	17,820	100.0	96.8	100.5	-0.7	1.3
<i>Independent OECS Countries</i>						
Antigua & Barbuda	102	100.0	131.8	162.2	5.7	7.2
Dominica	82	100.0	128.1	151.1	5.1	5.7
Grenada	96	100.0	111.6	129.5	2.2	5.1
St. Kitts & Nevis	68	100.0	124.9	142.3	4.6	4.4
St. Lucia	147	100.0	120.8	138.3	3.8	4.6
St. Vincent & Grenadines	106	100.0	138.3	185.3	6.7	2.8
Subtotal	641	100.0	125.3	145.8	4.6	5.2
TOTAL	18,466	100.0	97.5	101.6	-0.5	1.4

E Estimate

Sources: World Bank (1989a); World Bank (1988a); Economist Intelligence Unit (EIU) (Various).

ECONOMIC GROWTH

The aggregate economic performance of Caribbean countries presents wide variation and allows only limited generalization (see Table 2.1). The recession of 1982 had a negative impact on the Caribbean, depressing growth rates in the first half of the 1980s. Particular countries faced additional negative shocks—associated with weakened commodity markets—which pushed down growth: the collapse of bauxite markets hurt Jamaica and Suriname; a weak oil price was the major cause of a shrinking economy in Trinidad and Tobago. More expensive imports (associated with a high U.S. dollar) and high levels of inflation also slackened economic growth—especially in Guyana, Jamaica, and the Dominican Republic. Growth in the Eastern Caribbean was buoyed by recovery efforts following hurricanes in 1980-1981 and expansion of the tourism sector.

The traditional vulnerability of the Caribbean to adverse external developments—such as declines in world export markets or unfavorable weather conditions—coupled with inadequate domestic policy responses left these economies poorly placed to cope with the 1982 world downturn.

Since 1985, the growth picture has brightened. In contrast with 1980-1985, with overall growth in the region has been positive. This reflects stronger demand in world markets and the recovery of some raw material prices (although not oil, keeping Trinidad's growth rate negative).

In addition, several countries have undertaken adjustment of their economies, mainly through tighter monetary and fiscal policy. The World Bank (1988a) notes that these policies allowed these countries to:

. . . (a) maintain adequate public sector savings . . . or even to increase them (Belize, Dominica, Dominican Republic, Jamaica, St. Kitts and Nevis, and St. Vincent and the Grenadines); (b) reduce the current account deficit of the balance of payments to a level commensurate with net external flows; (c) maintain domestic inflation largely in line with that of their major trading partners (except for the Dominican Republic where a rapid expansion in aggregate demand overheated the economy); and (d) take advantage of favorable external developments to further export diversification. . . .

Trade policies emphasizing a greater outward orientation—lower tariffs and a more competitive exchange rate (Jamaica) and the promotion of export free zones (Dominican Republic, Jamaica)—have boosted non-traditional exports.

Most countries (with the exception of Jamaica) that have undertaken these adjustment programs have done so without the pressure of external crises. Such adjustments and increased economic diversification are important steps to be taken if Caribbean countries wish to escape the cycles of boom and slump that have dogged them through their previous dependence on one primary export—sugar, bananas, bauxite, or oil.

Those countries that continued to show negative growth after 1985 also continued to be faced with difficult external conditions and have shown inadequate policy responses to those negative occurrences. Trinidad has experienced weak oil and petrochemical product markets combined with deteriorating competitiveness. A soft bauxite market and suspension of Dutch aid have stopped growth in Suriname. Needed economic changes in Haiti have been set back by continued civil unrest. Guyana has failed to tackle persistent internal and external imbalances.

The improved performance of the Caribbean economies translates into a reduction in the decline in regional per capita income, but not yet enough to reverse the downward trend. Table 2.2 shows GDP per capita levels and growth for 1980-1988. Although the region as a whole shows decline, this is a result of more complex sub-regional trends and interactions:

- All of the countries outside the Organization of Eastern Caribbean States (OECS) showed negative per capita income growth in 1980-1985. In some of these countries, relatively high population growth overwhelmed weak positive economic growth (Belize, Dominican Republic). Other non-OECS countries displayed negative or near-stagnant growth in GDP.

Table 2.2
GDP Per Capita Growth 1980-1988

	1988 (1980 US\$)	GDP Per Capita Index			Average Annual Real Growth (%)	
		1980	1985	1988 ^a	1980-85	1985-88
Barbados	3,226	100.0	94.2	103.4	-1.2	3.1
Belize	1,276	100.0	98.4	105.9	-0.3	2.5
Dominican Republic	1,074	100.0	95.9	104.1	-0.8	2.8
Guyana	589	100.0	79.8	76.1	-4.4	-1.6
Haiti	211	100.0	87.6	83.5	-2.6	-1.6
Jamaica	1,205	100.0	92.5	96.8	-1.6	1.5
Suriname	1,679	100.0	84.2	68.1	-3.4	-6.8
Trinidad & Tobago	3,189	100.0	77.3	64.6	-5.0	-5.8
Subtotal	970	100.0	87.7	86.7	-2.6	-0.4
<i>Independent OECS Countries</i>						
Antigua & Barbuda	1,924	100.0	123.9	143.9	4.4	5.1
Dominica	1,022	100.0	120.2	136.7	3.7	4.4
Grenada	940	100.0	101.1	110.7	0.2	3.1
St. Kitts & Nevis	1,458	100.0	119.7	133.5	3.7	3.7
St. Lucia	1,016	100.0	109.5	118.6	1.8	2.7
St. Vincent & Grenadines	761	100.0	129.9	137.4	5.4	1.9
Subtotal	1,124	100.0	116.2	129.2	3.0	3.6
TOTAL	974	100.0	88.4	87.8	-2.4	-0.3

E Estimate

Sources: World Bank (1989c); World Bank (1988a); EIU (Various).

- In 1985-1988, non-OECS countries that recorded positive GDP growth did so at high enough levels to overcome population growth and raise GDP per capita. Four countries (Guyana, Haiti, Suriname, and Trinidad and Tobago) had GDP per capita fall by between 4 and 27 percent from 1980 to 1985.
- Consistent strong economic growth in the OECS countries allowed GDP per capita in the sub-region to rise by 29 percent between 1980 and 1988.
- Growth in GDP per capita in the region as a whole remains negative as negative performances in key countries—contraction of the Trinidadian economy (21 percent of regional output in 1988) and relatively high growth of the Haitian population (36 percent of regional population in 1990)—dominate the positive results in smaller countries.

ECONOMIC STRUCTURE, EMPLOYMENT, AND PRICES

From the 1950s to the 1980s, the Caribbean economies evolved towards greater diversity, as countries sought to exploit the potential of increased regional integration. They pursued economic development strategies broadly based on four elements (Bourne, 1988):

- Maintenance of growth in traditional sectors and export commodities for income generation and labor absorption;
- Industrial development based on import-substitution and targeted to domestic and Caribbean markets;
- Regional economic integration through common external tariffs and removal of intra-regional trade barriers;
- Active public sector intervention in economic development, both through regulation and state enterprises.

However, the past 15 years, marked by the failure of a regional market to emerge, lower prices for traditional exports and depressed international trade, created chronic imbalances—both internal and external—and led to a reassessment of the development strategy. Countries have turned back to the world market to sell the exports needed to overcome these deficits. While there has not been a return to reliance on a single export product, there has been a convergence of activity on three sectors as the Caribbean's areas of comparative advantage: agriculture, manufacturing, and tourism. These sectors are examined in more detail below.

Table 2.3 shows the changing structure of GDP in Caribbean countries between 1980 and 1988. The share of agriculture has remained broadly constant in the region. However, in every country except Haiti (where agriculture accounts for almost a third of GDP), Trinidad (where the fall in oil revenues pushed up the share in other sectors) and the OECS countries of Antigua, St. Lucia, and St. Vincent (which had increasing earnings from banana exports), the share of agriculture fell. The future focus of agricultural activity appears to be moving away from reliance traditional export crops (such as sugar and bananas). The share of industry has declined for a variety of reasons: industrial activities aimed at serving the regional market have declined; the oil industry in Trinidad and Tobago and bauxite operations in Jamaica, Guyana, and Suriname have shrunk significantly. However, unlike other industrial activities, manufacturing increased its share in regional production. The services sector, driven mainly by increased tourism growth, also increased its share in the regional economy by 8 percentage points during 1980-1988. (These sectors are examined in more detail and in the context of export performance in the final section of this chapter.)

Employment data for the Caribbean was not available in a consistent time series. As a result, the data shown in Table 2.4 give only partial coverage for varying years (ranging from 1980 to 1987). However, while the data do not permit

Table 2.3
Structure of GDP 1980-88
(Percent)

	1980			1988				
	Agriculture	Industry (Manufactures)	Services	Agriculture	Industry (Manufactures)	Services		
Barbados	10.3	22.4	11.4	67.4	7.2	19.3	9.3	73.6
Belize	32.8	17.9	9.3	49.3	22.0	18.6	12.4	59.4
Dominican Republic	17.6	30.4	16.4	52.0	15.2	31.7	16.8	53.1
Guyana	23.4	35.8	12.1	40.9	21.5	24.2	9.4	54.3
Haiti	32.2	25.5	18.2	42.3	32.5	22.6	15.2	44.9
Jamaica	8.3	38.0	16.2	53.8	7.6	29.3	15.9	63.2
Suriname	9.1	38.5	18.4	52.4	7.6	25.4	11.1	67.0
Trinidad & Tobago	2.2	60.2	8.6	37.7	4.3	43.4	10.4	52.3
Subtotal	12.2	40.3	13.8	47.4	12.1	32.3	14.2	55.6
<i>Independent OECS Countries</i>								
Antigua & Barbuda	7.3	18.9	6.0	73.8	12.0	n/a	15.0	n/a
Dominica	30.6	20.9	4.8	48.4	28.6	16.6	n/a	54.8
Grenada	24.0	14.9	5.0	61.1	20.1	16.5	4.9	63.4
St. Kitts & Nevis	12.6	21.0	12.0	66.4	11.9	23.1	13.8	65.0
St. Lucia	11.7	24.8	9.3	63.4	14.0	20.2	7.6	65.8
St. Vincent & Gren's	15.1	27.7	10.8	57.3	19.1	21.9	9.2	59.0
Subtotal	15.7	21.3	7.8	63.0	16.4	19.6	10.4	64.0
TOTAL	12.3	39.9	13.7	47.8	12.3	32.0	14.0	55.7

1 1987
2 1986
3 1984
n/a Data unavailable

Sources: World Bank (1989a), Bourne (1988), IDB (1989).

any analysis on the evolution of the structure of employment over time, some observations can still be made:

- Haiti introduces distortion in the regional employment figures because of its large population and the large share of its work force in agriculture. After excluding Haiti, the shares of various sectors in regional employment are:

Agriculture	24.0%
Mining & Industry	21.3%
Commerce	15.5%
Other Services	39.2%

**Table 2.4
Employment
(Percent)**

	Year	Labor Force ('000s)	Unemployment Rate	Share of Employed Labor Force			
				Agriculture	Mining & Industry	Commerce	Other Services
Barbados	1986	116.9	17.7	8.1	22.7	27.1	42.1
Belize	1980	47.3	16.1	36.9	13.8	19.8	29.4
Dominican Republic	1981	2,004.4	11.0	23.6	18.2	13.0	45.2
Guyana	1980	239.3	18.7	24.9	24.0	12.3	38.8
Haiti	1983	2,263.8	12.2	65.4	8.8	16.2	9.7
Jamaica	1987	1,079.2	20.8	31.5	21.3	19.9	27.3
Suriname	1985	99.2	n/a	17.2	19.9	16.7	46.3
Trinidad & Tobago	1987	372.3	n/a	11.7	36.8	16.0	35.6
Subtotal		6,222.4	13.8	39.1	16.8	15.8	28.4
<i>Independent OECS Countries</i>							
Antigua & Barbuda	1985	32.3	21.1	n/a	n/a	n/a	n/a
Dominica	1981	25.3	18.6	37.9	19.4	12.1	30.6
Grenada	n/a	n/a	n/a	n/a	n/a	n/a	n/a
St. Kitts & Nevis	1980	17.1	n/a	n/a	n/a	n/a	n/a
St. Lucia	1980	49.5	n/a	n/a	n/a	n/a	n/a
St. Vincent & Grenadines	1980	34.7	n/a	25.6	16.7	12.9	44.8
Subtotal		158.9	20.0	30.1	17.7	12.6	39.5
TOTAL		6,381.3	13.9	39.0	16.8	15.8	28.5

Source: Europa (1989).

- In all countries reporting—except Haiti, Belize, Jamaica, and Dominica—the service sector (including commerce, tourism and government) is the largest employer. In these other countries, agriculture employs the largest number of workers.
- Agriculture shows the lowest productivity in the region, with 39 percent of the work force producing only 12 percent of output. In contrast, the 17 percent of workers employed in industry account for 32 percent of regional output.

Unemployment remains an important problem in the Caribbean. Table 2.4 gives data on reported open unemployment rates. However, these rates tend to understate the true level of un-utilized labor resources in the economy as they do not include potentially employable persons who have given up looking for work or those who are under-employed in their current jobs. All countries reporting showed unemployment rates over 10 percent; two (Jamaica and Antigua) reported rates over 20 percent. A detailed look at the unemployed in Trinidad and Jamaica by Bourne (1988) shows that the unemployed tend to be concentrated in the 15-24 years age group; they make up 62 percent of the unemployed in Trinidad and 56 percent of

Table 2.5
Inflation and Interest Rates 1980-88
(Percent)

	Average Annual Inflation Rate (CPI)		Bank Lending Rate		
	1980-85	1985-88	1980	1985	1988
Barbados	7.7	3.1	11.46*	10.56	9.44
Belize	6.0	2.4	16.50	14.70	13.60
Dominican Republic	16.2	21.6	n/a	n/a	n/a
Guyana	19.6	24.8	13.50	15.00	15.10
Haiti	9.1	-1.6	n/a	n/a	n/a
Jamaica	16.6	9.9	13.00	21.90	23.00
Suriname	7.0	47.1	n/a	n/a	n/a
Trinidad & Tobago	12.3	8.7	10.00	12.69	12.58
<i>Independent OECS Countries</i>					
Antigua & Barbuda	4.5	0.6	10.00	13.00	11.50
Dominica	5.1	3.4	8.50	10.04	10.50
Grenada	8.1	2.0	9.50	11.67	10.50
St. Kitts & Nevis	n/a	0.7	n/a	n/a	n/a
St. Lucia	4.6	3.4	11.00	14.00	10.40
St. Vincent & Grenadines	6.0	2.1	10.00	12.13	12.08

* 1991

Sources: IMF (1989a), EIU (Various).

the unemployed in Jamaica. Unemployment is also unevenly distributed spatially. Urban areas, such as Port of Spain and Kingston, had unemployment rates that were less than half the nationally recorded rate. This differential in employment opportunities is a strong motivator for internal migration from rural to urban areas.

The trend of prices in the Caribbean has been upward, but most countries (with the exception of the Dominican Republic, Guyana, and Suriname) have been able to slow the rate of inflation during the second half of the 1980s (see Table 2.5). Inflation in the Dominican Republic has been fueled by an overheated economy and reliance on domestic monetary expansion (rather than increased foreign borrowing) for financing investment. In Guyana and Suriname, inflation is a symptom of overall economic deterioration which includes low growth rates and large public sector deficits.

Most of the countries reporting interest rate data have maintained positive real interest rates on bank lending. In 1988, only Guyana showed negative real interest rates. Indeed, since 1980 the differential between inflation and nominal interest rates has tended to rise, reflecting the tighter monetary policy adopted by many Caribbean countries as part of their adjustment strategies.

Table 2.6
Growth of Exports 1980-87
(US\$ millions)

	1987					Average Annual Real Growth 1980-87 (%)†				
	Total	Primary Manuf.	Travel	Services		Total	Primary Manuf.	Travel	Services	
Barbados	688.4	66.4	65.0	381.0	176.0	-1.9	-7.6	-9.7	1.4	-1.2
Belize	151.9	68.9	17.8	19.3	45.9	0.1	-5.1	4.7	28.0	4.1
Dominican Republic	1,470.9	557.0	154.2	568.0	191.7	-2.9	-9.2	-5.4	13.3	-3.5
Guyana	282.7	202.8	37.7	8.4	33.8	-9.4	-11.7	-3.8	6.6	4.8
Haiti	325.6	39.3	170.8	92.7	22.8	-3.7	-13.4	-1.4	-1.8	0.2
Jamaica	1,632.6	244.5	463.9	594.9	329.3	-2.5	-9.3	-8.1	8.8	1.3
Suriname	420.9	n/a	n/a	3.6	78.5	-10.0	n/a	n/a	-24.5	-8.4
Trinidad & Tobago	1,641.8	1,071.7	330.7	157.5	81.9	-13.8	-14.9	9.4	-4.0	-29.3
Subtotal	6,614.8	2,250.6	1,240.0	1,825.4	959.9	-7.2	-12.4	-3.8	5.4	-9.2
<i>Independent OECS Countries</i>										
Antigua & Barbuda	222.8	n/a	n/a	188.4	5.9	6.1	n/a	n/a	18.1	-2.7
Dominica	58.3	n/a	n/a	11.5	0.3	14.6	n/a	n/a	16.4	-33.5
Grenada	65.0	n/a	n/a	29.6	3.8	2.8	n/a	n/a	1.4	3.3
St. Kitts & Nevis	58.3	n/a	n/a	33.5	2.8	3.7	n/a	n/a	17.5	53.8
St. Lucia	171.8	n/a	n/a	66.4	28.1	5.2	n/a	n/a	5.7	13.0
St. Vincent & Grenadines	72.8	n/a	n/a	18.9	1.6	4.3	n/a	n/a	-2.7	-6.0
Subtotal	649.0	n/a	n/a	348.3	42.5	5.6	n/a	n/a	10.9	5.1
TOTAL*	7,263.8	2,398.2	1,350.6	2,173.7	1,002.4	-6.5	-12.1	-4.2	6.1	-8.9

† Nominal values deflated by GDP deflator for US.

* Totals for primary goods and manufactures based on partial data for OECS countries.

Sources: World Bank (1989a); IMF (1989b).

EXPORTS AND EXTERNAL BALANCE

As noted earlier, the Caribbean is highly dependent on trade to maintain its economies. Unlike other countries at similar stages of development, most Caribbean countries have seen their share of world trade fall over time. Table 2.6 shows that while the real value of world exports (in U.S. dollars) fell slightly (about 1 percent annual average rate) between 1980 and 1987, the real value of Caribbean exports was declining at an average annual rate of over 7 percent. In the major markets for Caribbean exports, growth was slow (3 percent annually to the U.S. during 1980-1986) or negative (an average annual decline of 2 percent in the European Economic Communities (EEC) during 1980-1986). In total, Caribbean exporters share of trade with U.S.-EEC-Canada fell 20 percent between 1980 and 1986.

Part of the explanation for this decline has been the decline in prices and markets of one major export commodity after another—sugar, bauxite, oil. Table 2.6

Table 2.7
Structure of Exports 1980-87
(Percent share of total by sector)

	Primary Materials		Manufactures		Travel & Tourism		Other Services	
	1980	1987	1980	1987	1980	1987	1980	1987
Barbados	14.7	9.7	16.9	9.4	44.1	55.3	24.3	25.6
Belize	66.2	45.4	8.6	11.7	2.3	12.7	23.0	30.2
Dominican Republic	60.6	37.9	12.6	10.5	13.1	38.6	13.6	13.0
Guyana	85.9	71.7	8.8	13.3	1.0	3.0	4.3	12.0
Haiti	25.3	12.1	44.6	52.4	24.8	28.5	5.3	7.0
Jamaica	24.8	15.0	42.9	28.4	16.9	36.4	15.4	20.2
Suriname	n/a	n/a	n/a	n/a	2.9	0.9	16.5	18.7
Trinidad & Tobago	71.6	65.3	3.8	20.1	4.5	9.6	20.1	5.0
Subtotal	55.8	37.3	16.0	20.6	11.3	27.6	16.9	14.5
<i>Independent OECS Countries</i>								
Antigua & Barbuda	n/a	n/a	n/a	n/a	40.0	84.6	4.9	2.6
Dominica	n/a	n/a	n/a	n/a	17.7	19.7	23.2	0.5
Grenada	n/a	n/a	n/a	n/a	49.9	45.5	5.6	5.8
St. Kitts & Nevis	n/a	n/a	n/a	n/a	23.9	57.5	0.3	4.8
St. Lucia	n/a	n/a	n/a	n/a	37.6	38.6	9.9	16.4
St. Vincent & Grenadines	n/a	n/a	n/a	n/a	42.2	26.0	4.5	2.2
Subtotal	n/a	n/a	n/a	n/a	38.0	53.7	6.8	6.5
TOTAL*	54.5	36.1	16.7	20.2	12.3	29.9	16.5	13.8

* Totals for primary materials and manufactures adjusted based on partial data for OECS countries.

Sources: World Bank (1989c), IMF (1989b).

shows that primary goods registered the largest drop in real value among exports. Sugar exports to the U.S. in 1987 were only one-fifth the five million tons recorded in 1981 (Economist, 1988). The Caribbean's share of world bauxite production has fallen from about 30 percent in 1961 to 15 percent in 1980 as output in Australia, Guinea, and Brazil increased (Fraser and Hackett, 1985). Oil and refined oil product exports have been hit by low world prices and expensive excess refining capacity in the region. Only Eastern Caribbean countries, relying preferential banana exports to the U.K., showed positive real growth in exports of primary goods. (The agricultural sector is discussed in more detail below.)

Caribbean countries have traditionally been importers of a wide range of goods, from food and raw materials to consumer durables and capital goods. Faced with the decline in traditional exports, Caribbean countries have turned to other means of earning the foreign exchange needed to support their economies. Manufacturing and tourism have emerged in the 1980s as the major growth sectors for exports.

Table 2.7 shows that manufacturing has increased its share of total exports in several countries. There are a few exceptions. In Barbados, high labor costs have reduced the competitiveness of the manufacturing sector and reduced its attractiveness to foreign operators. In the Dominican Republic and Jamaica, the manufacturing export sector has been overshadowed by phenomenal growth in the tourism sector. Manufacturing for export has been dominated by clothing exports to the U.S. under the 807 program which encourages exports using U.S. components from developing countries. (The manufacturing sector is discussed in greater detail at the end of this chapter.)

Every country but Suriname, Grenada, and St. Vincent shows a higher share of export earnings from travel and tourism in 1987 than in 1980. In some countries, such as the Dominican Republic, Jamaica, Antigua, and St. Kitts, the share of tourism has more than doubled during the period. (Tourism is also discussed in greater depth below.)

However, the switch from traditional primary exports to manufacturing and tourism and the expansion of exports has been retarded by exchange rate policy in the region. The appreciation of the U.S. dollar in the first half of the 1980s pushed up most Caribbean currencies (which are pegged to the dollar) and reduced export competitiveness. Only Jamaica and the Dominican Republic undertook real devaluations; since 1985, they have experienced the strongest growth in manufacturing exports. Other countries have had to rely on the weakening of the U.S. dollar to regain their price advantage on world markets. Most countries only act to adjust their exchange rates when they have become overvalued to unsustainable levels, either through internal or external events. Fluctuations in world exchange rates and prices which have little linkage to the island economies of the Caribbean make such a policy course increasingly costly in terms of export competitiveness.

Supply distortions in the domestic economy also play a significant role in hindering the expansion of exports. The World Bank (1988a) cites the success of export processing zones as evidence of these problems: the main attraction of the zones is their ability to free entrepreneurs from the numerous anti-export biases built into the regulatory structure.

The current account deficits associated with declining traditional exports have been reduced or reversed by adjustment programs which curbed domestic demand and the increased earnings from manufacturing and tourism (see Table 2.8). The cumulative current account deficit for the region fell by 35 percent between 1980 and 1988. Nevertheless, it is unlikely that Caribbean countries will be able to eliminate these deficits in the medium term. The World Bank (1988a) still regards external financing as an important resource required to promote the economic development of the region and work toward building self-sustaining economies.

External capital flows from both official donors and creditors and private creditors were more than sufficient to cover the current account deficits in 1980 and 1985, totaling US\$1.5 billion and US\$1.0 billion respectively. Official sources were responsible for more than 80 percent of capital flows to the region during

Table 2.8
Balance of Payments and Debt 1980-88
(US\$ millions)

	<u>Current Account Balance</u>			<u>Debt Service Ratio (%)^a</u>			<u>Total Debt Outstanding</u>	
	1980	1985	1988	1980	1985	1988	1980	1988
Barbados	-25.7	40.3	-67.0	4.4	6.5	11.0	166.0	746.0
Belize	n/a	5.0	-0.4	n/a	16.2	16.3	62.9	136.1
Dominican Republic	-719.9	-107.6	-127.5	25.3	19.1	16.1	2,002.0	3,923.0
Guyana	-128.5	-96.6	-91.0	21.6	10.3	17.9	767.0	1,647.0
Haiti	-101.1	-94.7	-53.0	6.2	10.1	17.4	302.0	823.0
Jamaica	-166.0	-304.4	54.9	19.0	44.6	39.5	1,903.0	4,304.0
Suriname	15.5	-11.6	74.89†	n/a	n/a	n/a	n/a	73.0
Trinidad & Tobago	334.7	-90.3	-186.0	6.8	10.6	13.0	828.0	1,994.0
Subtotal	-791.0	-659.9	-395.2				6,030.9	13,646.1
<i>Independent OECS Countries</i>								
Antigua & Barbuda	-18.8	-23.1	-83.3†	n/a	n/a	n/a	n/a	239.0
Dominica	-14.3	-4.8	-9.4	n/a	4.3	n/a	n/a	n/a
Grenada	0.2	-0.2	-25.7†	18.4	n/a	n/a	n/a	n/a
St. Kitts & Nevis	-2.0	-8.7	-19.6	n/a	3.6	n/a	n/a	n/a
St. Lucia	-33.3	-12.5	-13.6	n/a	2.5	n/a	n/a	n/a
St. Vincent & Grenadines	-9.3	3.7	-17.5	1.1	4.0	3.8	10.6	45.2
Subtotal	-77.5	-45.5	-169.1					
TOTAL	-868.5	-705.4	-564.3					

^a Ratio of debt service to exports (expressed as a percentage).
† 1987

Sources: IMF (1989b), World Bank (1989b).

1980-1986. The World Bank (1988a) estimates external financing requirements for 1990 will total US\$1.1 billion.

This reliance on external financing shows through in the data on total debt outstanding in Table 2.8. Most countries show significant increases (over 100 percent or a doubling of debt) between 1980 and 1988. Unfortunately, in most countries the increase in obligations has built up faster than the export earnings required to service the debt. (This does not necessarily imply that the debt has not been incurred for valid reasons. The Jamaican experience demonstrates that it may take several years of adjustment before improved performance can be expected from the economy. Indeed, Jamaica's debt service ratio has fallen since 1985.) With the exception of the Dominican Republic and Guyana, the debt service ratio is higher in 1988 than it was in 1980. However, debt service claims on exports remain at a manageable level; excluding Jamaica, no country had a debt service ratio in 1988 of more than 20 percent.

PERFORMANCE AND PROSPECTS IN KEY SECTORS

From the preceding overview of the regional economic situation, three sectors have emerged as key to the economic future of the Caribbean: agriculture, manufacturing, and tourism. This section looks at the performance and prospects in each of these sectors.

Agriculture

Agriculture in the Caribbean focuses mainly on crops for export. Indeed, Bourne (1988) cites the dependence of the region on food imports as one of its major structural weaknesses, causing insecurity of food supplies in the face of declining export markets and lower foreign exchange earnings and limiting the scope for adjustment because of the strong link between exchange rates, food prices, and inflation.

This is not to imply that promotion of food production ought to become a priority for the sector. Rather, it appears that lifting constraints on production for domestic food markets—such as price controls on food, cheap food imports (through overvalued exchange rates), and inadequate application of technological improvements—would allow the sector to respond to market opportunities. It might also motivate producers to improve their productivity; food production per capita in most Caribbean economies has either decreased or stagnated since 1960 (Bourne, 1988).

On the export side, the potential for expansion of traditional agricultural export crops is small for two reasons:

- Land resources for agricultural development are limited (except for Haiti and the Dominican Republic) and most of the good quality agricultural land is already under cultivation.
- Traditional export products have poor market prospects because of high production costs in competitive world markets, protectionist closure of other markets, and domestic markets that are too small to support expanded production.

Both the EEC and the U.S. have established quotas for sugar imports in order to support domestic sugar producers. In general, the volume of sugar exports from the Caribbean has been declining in both markets. This is partially compensated by prices that are significantly higher than the world market price. However, except for isolated instances, receipts from sugar exports have also been on a downward trend. Other structural features, such as the low-income elasticity of sugar consumption and increased use of other sweeteners, also imply continued decline or stagnation on world sugar markets.

Banana exports from the region are directed almost exclusively at the U.K., which buys bananas at preferential prices under the Lome Convention. With the exception of Jamaica, banana exports have been growing since 1980. However, as countries reach the limits of their quotas with the U.K., there appears to be little

hope for further expansion. In principle, Caribbean suppliers have access to the rest of the EEC market through the U.K. However, because Caribbean growers have production costs much higher than other suppliers in Central and South America and because the continental European banana markets are dominated by a few firms in each country, there has been trade with the rest of the EEC. In addition, per capita consumption in Europe has been falling. Research by the FAO quoted by Bourne (1988) suggests that in some countries, bananas display negative income elasticities (i.e., they are inferior goods). With the expiration of the current Lome Convention in 1992 and low world prices, there is also growing pressure to scale back the preferences granted to Caribbean banana producers.

In the face of these negative prospects for traditional exports, alternative crops for export are being sought. Expectations for some likely candidate are mixed (Bourne, 1988):

- Moving more strongly into world markets in such crops as cocoa beans and citrus fruits or exporting processed foods have been suggested. However, Caribbean suppliers currently occupy a small part of the market and face strong competition, stagnant world demand (cocoa), or protected major markets (U.S. market for citrus). Tariff escalation and non-tariff barriers on processed foods place Caribbean and other overseas producers at a cost-disadvantage compared to local operations.
- Caribbean producers of coffee (Jamaica, Trinidad) are negligible producers in terms of world volume, but have strong reputations for quality. World demand for coffee has been growing and income elasticities are favorable. The Caribbean could probably increase its production substantially without greatly affecting international prices or global supply.
- Caribbean governments are looking at less traditional crops—mangoes, papaya, and other tropical fruits; cut flowers and foliage; spices and vegetables—in order to diversify export products and achieve higher value-added per unit of land. Experience to date suggests these areas have potential, but face difficulties in terms of technical support, production standards, and marketing.

Manufacturing

The manufacturing sector in the Caribbean has grown in the post-war era, but this growth was late in coming—not until the 1960s—and has not been as strong as that experienced in other industrializing countries, such as those in Asia. The lack of domestic raw materials and resources has made the pace of industrial development largely dependent on foreign investment, foreign exchange earnings, and imported raw materials. During the 1960s and 1970s, manufacturing was aimed at the domestic and regional market as part of an import-substitution strategy of development.

Bourne (1988) notes that most Caribbean countries maintain complex fiscal incentives for domestic manufacturers, such as tariff exemptions for imported inputs, concessionary credit, direct subsidies, and quantitative restrictions and

tariffs on competing imports. In the first half of the 1980s, some Caribbean states even added protectionist barriers against competition from imports from other Caribbean countries.

While these distortions have hindered the development of an export orientation by manufacturers established to serve the domestic market, manufacturing activity aimed almost exclusively at export markets has been developing. Spurred by export privileges granted under Section 807 of the U.S. Tariff Schedule (which waives duty on the value of U.S. content on goods assembled overseas) and the CBI Textile Program (which guarantees access for specified levels of clothing exports to the U.S. from Caribbean countries), manufactured exports to the U.S. from the Caribbean doubled between 1983 and 1988 (Economist, 1988). Many firms (both American and non-American) have established plants in the Caribbean to assemble clothes or electronic goods from cloth and components supplied from the U.S..

Access and proximity to the U.S. market and low-labor costs are the major attractions to establishing operations in the Caribbean. Garment manufacturers can typically reduce their unit costs about 60 percent by moving labor-intensive assembly operations from the U.S. to the Caribbean. In addition, Caribbean governments have offered low-cost industrial space (mainly in duty-free zones) and tax holidays to attract foreign manufacturing operations (see Table 2.9).

A second source of manufacturing growth in the Caribbean is "936 twin plants." These facilities qualify for a tax break granted to U.S. firms with operations in Puerto Rico under Section 936 of the U.S. Internal Revenue Code. Qualifying firms are allowed to retain the 936 tax advantage while being permitted to add up to 35 percent of the labor value of products produced in their Puerto Rico operations in twin plants elsewhere in the Caribbean. So far, twin plants for apparel have been established in Jamaica and the Dominican Republic. (The Dominican Republic is the preferred Caribbean location because of its combination of low labor costs and Spanish-speaking work force.)

Such manufacturing operations offer some significant benefits:

- Capital costs are reduced since inputs and equipment are usually provided by U.S. contractors—even when the manufacturer is domestically owned;
- Short-term planning is improved as suppliers have guaranteed outlets for as long as their contracts last;
- Workers and management gain technical skills (even if at a low level) and experience in working to meet deadlines and exact specifications with tight profit margins;
- These benefits are gained with minimal foreign exchange.

Table 2.9
Manufacturing Costs and Incentives
(US\$)

	Hourly Wage*	Relative Productivity (US=100)	Adjusted Hourly Wage	Industrial Building Rent† (Annual/SqFt)	Tax Incentives
Barbados	1.83	85	2.15	2.00-4.00	100%/10 yrs
Belize	0.85	65	1.31	1.00-3.50	Negotiable
Dominican Republic	0.61	85	0.72	0.72-4.00	100%/8-10 yrs
Guyana	0.70	60	1.17	2.50-4.00	Negotiable
Haiti	0.58	80	0.73	1.65	100%/Exports
Jamaica	0.91	85	1.07	2.75-4.25	100%/10 yrs
Suriname	n/a	n/a	n/a	n/a	n/a
Trinidad & Tobago	1.32	75	1.76	0.08-0.17	100%/5-10 yrs
<i>Independent OECS Countries</i>					
Antigua & Barbuda	1.75	65	2.69	1.50	100%/5 yrs
Dominica	0.75	65	1.15	2.30	100%/15 yrs
Grenada	0.75	65	1.15	1.25-2.75	100%/15 yrs
St. Kitts & Nevis	0.90	70	1.29	2.00-2.68	100%/15 yrs
St. Lucia	0.75	70	1.07	2.00-2.75	100%/15 yrs
St. Vincent & Grenadines	1.15	70	1.64	2.00-2.75	100%/15 yrs

* Includes fringe benefits (in US\$).

† Mainly in duty-free zones.

Source: Bobbin Consulting Group (1989).

However, there are also important limitations to consider:

- Caribbean manufacturers do not gain much experience in the more technical aspects of an industry, such as design and marketing;
- Profit margins are low—foreign exchange earning potential and capital accumulation opportunities are limited;
- Infrastructure investment requirements and revenue forgone from tax holidays can be substantial;
- A manufacturing facility can become unviable because of reasons outside the control of the local operator.

In balance, most Caribbean countries seem to feel the benefits outweigh the costs, particularly since it is not apparent how the large expansion of employment associated with manufacturing could have been achieved otherwise. However, this pattern of industrial development still retains some basic problems that prevent it from acting as a cure-all. First, most of these manufacturing operations can move to locations offering better conditions without much problem. For example, Intel,

Table 2.10
Travel Earnings 1980-88
(US\$ millions)

	1980	1985	1988	Share of Goods & Services Exports (%)			Average Annual Real Growth (%)	
				1980	1985	1988	1980-85	1985-88
Barbados	252.4	310.8	381.0*	44.1	39.1	55.4	-1.0	7.5
Belize	n/a	10.7	24.4	n/a	8.4	14.2	n/a	27.9
Dominican Republic	172.6	451.0	592.7	13.1	33.5	33.8	15.1	6.2
Guyana	3.9	26.8	n/a	1.0	10.2	n/a	39.6	n/a
Haiti	76.3	95.1	71.6	24.7	27.8	27.9	-0.8	-11.8
Jamaica	240.7	406.8	507.1	16.9	32.1	29.5	5.5	4.4
Suriname	18.7	5.3	3.6	2.9	1.4	0.8	-26.2	-14.6
Trinidad & Tobago	153.1	97.2	93.6*	4.5	3.7	5.3	-13.3	-4.7
Subtotal	917.7	1,403.7	1,674.2	11.4	19.7	24.5	3.4	4.0
<i>Independent OECS Countries</i>								
Antigua & Barbuda	42.8	147.8	188.4*	40.0	81.6	84.6	21.6	9.7
Dominica	3.3†	9.8	11.8	20.1	25.1	17.1	25.9	4.4
Grenada	19.5	26.2	29.6*	49.9	50.5	45.5	0.7	3.2
St. Kitts & Nevis	9.9†	20.1	36.2	30.0	44.7	51.7	14.5	19.3
St. Lucia	38.5†	43.7	68.5	44.0	36.0	31.1	-1.0	13.9
St. Vincent & Gren.	17.8†	17.5	19.6	44.9	21.2	22.5	-4.5	1.9
Subtotal	131.8	265.0	354.1	40.9	50.9	48.2	9.2	8.0
TOTAL	1,049.5	1,668.7	2,028.2	12.6	21.9	26.8	4.2	4.7

† 1981
• 1987

Sources: IMF (1989a); IMF (1989b).

an American electronics manufacturer, closed its plant in Barbados in 1986 after 10 years on the island. More than 1,000 workers were laid off—about 1 percent of the national workforce (Economist, 1988). Second, evolution of these manufacturing operations into more sophisticated enterprises using more advanced technology and creating more value-added requires aggressive, local entrepreneurs. Until recently, the domestic manufacturing sector has been producing for small, protected markets. It will take some time before attitudes and capacity evolve to allow Caribbean manufacturers to take full advantage of new markets and trading conditions.

Tourism

The potential of tourism as a leading sector for development has long been downplayed. Critics cite the high import content of expenditures and the domination of industry management by foreigners. However, the data for the Caribbean suggest this attitude may be misinformed. Tourism has become the leading foreign exchange earner for several countries (see Table 2.10). In 1988, it

accounted for almost half the export earnings in the Eastern Caribbean and Barbados and almost a third of the exports of two large exporters (Dominican Republic and Jamaica). The Caribbean Tourism Research and Development Centre (CTRDC) reports that domestic leakage from tourism spending is declining as more hotels, restaurants, and car-rental firms are locally owned; two recent studies estimate that 42 percent of tourist spending is retained in the local economy (Economist, 1988).

Demand for Caribbean vacations has proved resilient. Sources of tourist arrivals have become more diversified—a greater share of visitors from Europe and Japan, a smaller share from North America—through marketing and changes in income distribution in industrial countries (Bourne, 1988), as well as a strengthening of other currencies relative to the U.S. dollar in this period. Data on tourist arrivals show large increases for countries that have recently expanded their tourism development, such as the Dominican Republic and the East Caribbean countries (see Table 2.11). Overall, tourist arrivals in the region increased 83 percent between 1980 and 1988.

Continued tourism development faces several problems:

- The tourism industry is mature (many hotels are over 10 years old) and some countries (like Barbados) have relatively high labor costs. Tourists expect quality accommodations and service for the prices commanded in the Caribbean.
- The tourism industry is seasonal, retaining its image as a winter destination despite marketing efforts to promote the region in summer.
- Tourism development depends not only on increased numbers of visitors but also on increased spending by each tourist and increased local retention of that spending. The region can do more to increase local capture of tourism spending. For example, the CTRDC reports that 70 percent of meat and poultry consumed in hotels in the Windward Islands is imported (Economist, 1988).
- Increased tourism development can have negative impacts on the environment if supporting infrastructure is not developed. Environmental degradation can destroy the assets that make the region attractive as a tourist destination.

Table 2.11
Stop-Over Tourist Arrivals
(Thousands)

	1981	1985	1988	Average Annual Growth (%)	
				1981-85	1985-88
Barbados	353.0	359.1	451.5	0.4	7.9
Belize	n/a	93.4	142.0	n/a	15.0
Dominican Republic	451.0	660.2	1,116.4	10.0	19.1
Guyana	n/a	46.4	71.1	n/a	15.3
Haiti	140.0	149.7	122.0	1.7	-6.6
Jamaica	406.4	571.7	648.9	8.9	4.3
Suriname	n/a	31.6	40.0	n/a	8.2
Trinidad & Tobago	181.0	187.1	187.7	0.8	0.1
Subtotal	1,531.4	2,099.2	2,779.6	5.9	9.8
<i>Independent OECS Countries</i>					
Antigua & Barbuda	84.7	156.0	195.0	16.5	7.7
Dominica	17.4	21.5	31.8	5.4	13.9
Grenada	25.1	52.0	61.8	20.0	5.9
St. Kitts & Nevis	35.4	46.1	69.6	6.8	14.7
St. Lucia	70.2	94.5	125.3	7.7	9.9
St. Vincent & Grenadines	44.7	42.1	47.0	-1.5	3.7
Subtotal	277.5	412.2	530.5	10.4	8.8
TOTAL	1,808.9	2,511.4	3,310.1	6.6	9.6

Sources: Bourne (1988), Caribbean Update (Various).

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3

URBAN PROSPECTS AND POLICY IMPLICATIONS

This chapter begins by reviewing the growth of urban areas in the Caribbean over the past three decades. It then considers the effects the changing economic trends reviewed in Chapter 2 are likely to have on future urbanization. Next, a projection of future urban growth is presented that is generally consistent with that analysis. The chapter closes with an analysis of implications for policy.

URBAN TRENDS SINCE 1960

Level and Growth

Tables 3.1 and 3.2 present United Nations' estimates of the urban population in the region that are consistent with those for total population examined in Chapter 1.¹ According to these estimates, 9.9 million people (47 percent of the Caribbean's 20.7 million total population) live in urban areas in 1990. In four countries more than half of all inhabitants live in cities and towns: Trinidad and Tobago (69 percent), the Dominican Republic (60 percent), Jamaica (58 percent) and Belize (52 percent). At the other end of the spectrum, Haiti is least urbanized at present (30 percent). The urbanization level in Antigua and Barbuda is 33 percent and in Guyana 35 percent. In all other countries, the level falls in the 40 to 50 percent range.

¹Dominica, Grenada, St. Lucia, and St. Vincent and the Grenadines have not employed formal criteria for defining urban areas over this period, so the U.N. has not estimated their urban populations. The estimates presented in tables for them (in the aggregate) simply assume that their urban populations have represented the same percentages of their total populations in the years shown as the weighted averages for all non-OECS countries in the region.

**Table 3.1
Caribbean Region Urban Population Growth**

	Urban Population (000)			Growth (%/yr.)	
	1960	1990	2020	1960-90	1990-2020
Barbados	68	117	215	1.8	2.0
Belize	49	94	208	2.2	2.7
Dominican Republic	975	4209	8917	5.0	2.5
Guyana	165	360	855	2.6	2.9
Haiti	580	2272	8684	4.7	4.6
Jamaica	550	1452	2642	3.3	2.0
Surinam	137	192	400	1.1	2.5
Trinidad & Tobago	190	886	150	25.3	1.8
Subtotal	2714	9582	23423	4.3	3.0
Independent OECS Countries					
Antigua & Barbuda	22	28	65	0.8	2.8
St. Kitts & Nevis	14	24	48	1.8	2.3
Other*	83	216	432	3.3	2.3
Subtotal	119	268	545	2.8	2.4
TOTAL	2833	9850	23968	4.2	3.0

Source: United Nations, 1987

*Includes Dominica, Grenada, St. Lucia, and St. Vincent and the Grenadines. (See text for explanation of estimate.)

The 1990 average for the region as a whole (47 percent urban) represents a very large jump from the comparable figure for 1960 (26 percent). In absolute terms, the region's 1990 urban population is 3.5 times as large as it was in 1960. This is the equivalent of an annual growth rate of 4.2 percent, while the Caribbean's rural population only grew at an annual rate of 1.0 percent during this period. The total increase in urban dwellers (7.0 million) represented 72 percent of the region's 9.7 million total population growth.

Three countries experience urban growth rates that are remarkably high in world terms, indicating major societal transformations: Trinidad and Tobago (5.3 percent), the Dominican Republic (5.0 percent), and Haiti (4.7 percent). At the low end, four countries experienced urban growth rates of less than 2 percent per annum (Barbados, Suriname, Antigua and Barbuda, and St. Kitts and Nevis). In all countries but three, urban growth rates by far exceeded rural growth rates.

Table 3.2
Urban Percentages and Absolute Growth

	Urban Population (000)			Growth (000/yr.)	
	1960	1990	2020	1960-90	1990-2020
Barbados	29	45	65	1.6	3.3
Belize	54	52	70	1.5	3.8
Dominican Republic	30	60	78	107.8	156.9
Guyana	29	35	57	6.5	16.5
Haiti	16	30	53	56.4	213.7
Jamaica	34	58	75	30.1	39.7
Suriname	47	48	67	1.8	6.9
Trinidad & Tobago	23	69	82	23.2	20.5
Subtotal	26	48	65	228.9	461.4
Independent OECS Countries					
Antigua & Barbuda	40	33	54	0.2	1.2
St. Kitts & Nevis	27	48	69	0.3	0.8
Other*	26	48	65	4.5	7.2
Subtotal	28	46	64	5.0	9.2
TOTAL	26	47	65	233.9	470.6

Source: United Nations, 1987

* Includes Dominica, Grenada, St. Lucia, and St. Vincent and the Grenadines. (See text for explanation of estimate.)

Urban Structure

Except for Jamaica and the Dominican Republic where consistent definitions are used, data on the populations of individual cities in the Caribbean are notoriously weak. In Table 3.3 we have pieced together information on the topic (for differing dates in the 1980s) from a variety of sources. While the data should be used with caution, the overall pattern is consistent with expectations.

In almost all countries, the urban pattern has been dominated by one large city with other settlements much smaller in size. By far the largest cities in the Caribbean (with rough estimates of their populations in the early to mid-1980s) are Port-au-Prince, Haiti (1.5 million), Santo Domingo, Dominican Republic (1.3 million), and Kingston, Jamaica (680,000). Only 11 other cities in the region had populations in excess of 50,000 (6 of these are in the Dominican Republic).

There are indications that the dominance of the primate cities is slipping somewhat, at least in those countries large enough to have secondary cities. In Jamaica, census data show that metropolitan Kingston's annual population growth

Table 3.3
Caribbean Region Urban Areas (Estimates of Population in Thousands)

Country,Urb.Area	Pop.	Country,Urb.Area	Pop.
BARBADOS (1980C)		SURINAME	
Bridgetown*	107.5	Paramaribo*	NA
BELIZE (Mid-1985E)		TRINIDAD AND TOBAGO (1980)	
Belize City	47.0	Port of Spain*	158.4
Belmopan*	4.5		
DOMINICAN REPUBLIC (1981)		INDEPENDENT OECS COUNTRIES	
Santo Domingo*	1313.2	ANTIGUA AND BARBUDA	
Santiago de los Cabel	278.6	St. Johns*	36.0
La Romana	91.6	DOMINICA (1981C)	
San Pedro de Macoris	78.6	Roseau*	20.0
San Francisco de Maco	64.9	GRENADA (1980E)	
Concepcion de la Vega	52.4	St. George's*	29.4
San Juan	49.8	ST. KITTS AND NEVIS (1980E)	
Barahona	49.3	Basseterre*	14.2
San Felipe de Puerto	45.3	ST. LUCIA (1986E)	
GUYANA (Mid-1976)		Castries*	52.9
Georgetown		ST. VINCENT/GRENADINES	
Central city	72.0	Kingstown*	33.7
Fringe	115.0		
Total	187.1		
HAITI (Mid-1980's)			
Port au Prince*	1,500.0		
Cap Hatien	70.0		
JAMAICA (1982)			
Kingston*	681.6		
Montego Bay	70.3		
Maypen	41.0		
Mandeville	34.5		

Source: Data for Jamaica from the Jamaican national census. Data for Haiti from Fass and Roy, 1989. Data for Barbados, Dominica, Grenada, St. Vincent, and Trinidad from *The Statesman's Yearbook*. All other data from *Europa World YearBook, 1989*.

NOTE: * = National Capital

rate from 1970 to 1982 was only 2.3 percent compared with an average of 5.3 percent for the next five largest cities. These emerging secondary centers have specialized functions that sustained particularly rapid growth over the period. Tourism has been the primary cause of growth in Montego Bay and Ocho Rios whereas Mandeville and Maypen are primarily service centers for their rural hinterlands with some diversification into manufacturing. Anecdotal evidence suggests that secondary cities in the Dominican Republic may also be growing more rapidly than Santo Domingo.

PROBABLE EFFECTS: ECONOMIC CHANGE AND URBANIZATION

Research has shown that most households—certainly those that are poor—make decisions about where to locate primarily on the basis of how they see comparative opportunities to earn income. Expanding employment opportunities in an area will stimulate migration, whereas improvements in the quality of the physical environment (nicer housing, better hospitals, cleaner streets) alone have negligible impact.

Consistent with this view, migration to cities can occur because of "push factors" (when employment opportunities in the countryside are insufficient to support labor force growth, people have to move to the cities to survive even when opportunities there may be only marginally greater at the moment) and "pull factors" (when employment growth and higher wages in the cities attracts migrants even when the rural job base may be expanding). From the review above, it is apparent that factors of both types interacted to cause the rapid urban growth that occurred in the Caribbean through 1990. With some exceptions, income prospects in the countryside have dwindled and the cities and towns have offered a wider range of new opportunities.

Understanding the prospects for future urban growth in the region, therefore, rests primarily on a knowledge of likely changes in the economy. The analysis in Chapter 2 indicates that economic prospects brightened in most Caribbean countries in the late 1980s but many uncertainties remain. The basis does not exist for a sensible long-term forecast of employment by sector. Nonetheless, the information presented does provide at least a general sense of direction: one which suggests that the urban share of all employment generation is likely to be even larger in the coming decade than it has been in the past.

Manufacturing

While the sector has more to do to prove itself, manufacturing is sure to be one of the areas regional governments rely upon for future growth. Today, more than ever before, manufacturers must reduce costs to be competitive. Except for some agro- and mineral-processing activities, manufacturers normally locate in cities or towns because those locations offer significant "agglomeration economies" that lower their operating costs and facilitate their operations. These include better physical services (electric power, telecommunications, etc.) and professional services (lawyers, accountants, etc.). Transportation costs are reduced for shipments both from suppliers and to customers. Furthermore, many manufacturers place

emphasis on face-to-face interactions with customers, competitors, and others to keep up to date on various trends that affect their business prospects.

In many developing countries, government policy has attempted to mandate manufacturing growth in remote areas. A number of the free zones in the Dominican Republic, for example, have been located at substantial distances from urban centers, but these are now creating tensions. Producers face higher expenses and workers face extraordinarily difficult commuting problems. In St. Lucia, further development of the industrial estate at Vieux Fort has been halted because of the difficulty in attracting additional investors and workers away from the capital city and the high cost of bringing additional workers in from surrounding towns.

With an increased awareness of the importance of cost-competitive production, national economic planners in many countries are dropping extreme decentralization programs. India, for example, now considers that most prior investments in the attempt to stimulate manufacturing in remote areas has failed. Its National Commission on Urbanization (1988) recommends emphasis instead on 100 secondary cities—considerably smaller than the major metropolitan areas but large enough to offer some agglomeration economies and with enough of a record of recent growth to suggest sounder prospects. Similarly, urban manufacturing growth in the Caribbean need not concentrate only in the largest cities. Secondary centers (like Montego Bay in Jamaica, with a 1982 population of 70,000) are already showing promise in this regard.

Tourism

A number of the region's most successful tourist locations are in or near urban centers. Again, Montego Bay is an example. Some tourists want the beach along with a broader array of shops, restaurants, and cultural activities than an isolated resort can provide. Tourism in and around Caribbean cities clearly has growth potential, and the new jobs it stimulates will be urban based.

Many other promising areas for tourism development are in presently more isolated locations. It seems likely, however, that even these facilities are likely to stimulate the creation or expansion of urban settlements, although though some may be fairly small. Government policy will attempt to maximize linkage to the local economy, generating more jobs for local workers and more interaction with local shops and service establishments. The economics are likely to favor clustering in many instances. This has been the case, for example, at Rodney Bay and Gros Islet in St. Lucia, where residential and commercial growth have followed initial tourist developments.

Agriculture

Today's economic policies in the Caribbean still place a major emphasis on agriculture. Some growth opportunities look quite promising, although there is little expectation that agriculture will regain its status as leading sector region-wide. As noted in Chapter 2, market prospects for traditional exports such as sugar remain unfavorable, and the future for banana production is now questionable.

More interest is now being placed on non-traditional crops such as coffee, mangoes, papaya, other tropical fruits, cut flowers, spices, vegetables. With more competitive markets and institutional and other difficulties in the diversification process, governments do not seem to be counting on substantial growth in output over the short term. Also, success in agriculture will depend on more competitiveness, which in turn will imply fewer jobs per unit of output. While the sector offers important opportunities for growth, it seems quite unlikely that they will yield enough new jobs to have much effect on slowing the growth of cities and towns.

Other Sectors

After grave difficulties in the early 1980s, the prospects for mining have recently improved. However, it has not been, and is not likely to become a major employment generator even if its contribution to GNP expands. With the exception of public administration, other sectors in the economy, however, (construction, transportation and utilities, trade, finance, business and personal services) have seen considerable expansion in employment of late in almost all Caribbean countries. To the extent that the leading sectors noted earlier are successful, these sectors will also expand and probably at a somewhat disproportionate rate. Such employment has always been predominantly urban, and there is no reason to expect a change in this pattern.

FUTURE URBAN GROWTH

The U.N. projections for future urban growth in the region (again, developed consistently with the population projections presented in Chapter 1) are also presented in Tables 3.1 and 3.2. The U.N. projection method (urban-rural growth rate difference approach) does not rely on projections of structural change in national economies. Nonetheless, the method has proven reasonably accurate world-wide in the past and the results do seem broadly in line with the assumptions about economic change and its linkages to spatial patterns we have outlined above.

Regional Totals

The projections indicate that the Caribbean's urban population will grow from 9.9 million in 1990 to 24.0 million in 2020, a growth of 14.1 million (142 percent) over the 30 year period. At this level, *urban areas will capture 88 percent of the region's 16.1 million total population growth* (well above the 72 percent of 1960-1990).

The urban growth rate will not be as high as in past (3.0 percent per year compared to 4.2 percent over 1960-1990), but the absolute size of the growth increment will be much larger. Urban areas will have to accommodate an average of 470,600 new inhabitants annually over the next 30 years (compared to 233,900 per year over the past 30).

Country Variations

The tables show that just two countries are expected to account for the largest share of all urban (as well as total population) growth from 1990 to 2020. Haiti, the least urbanized country at present, has had among the highest urban growth rates (4.7 percent annually) and a continuation at near the same rate is anticipated. Because of this and its large population base, Haiti is expected to account for 45 percent of region's total urban population increase. The Dominican Republic is expected to account for another 33 percent. While its urban growth rate is projected to decline (to an average 2.5 percent per annum over the next 30 years) a large population base again makes its absolute growth increment quite large.

The remaining countries, however, will also face considerable urban growth pressures considering their own size and resource base. Urban growth rates in excess of 2.0 percent are expected for all except Trinidad and Tobago. Together they will have to absorb an average of 100,000 new urban dwellers annually over 1990-2020, 43 percent greater than the 1960-1990 average.

The populations of all Caribbean countries are expected to be more than half urban by 2020. More than 70 percent of the populations of Belize, Dominican Republic, Jamaica, and Trinidad are expected to be urban by then.

POLICY IMPLICATIONS

A decade ago, a portrait of the future so dominated by urban growth would have been troubling to the leaders of most developing nations. At that time, there was considerable anti-urban sentiment among government officials as well as representatives of many donor agencies. Before drawing policy implications for the Caribbean, it should be useful to review some of the major reasons why this sentiment existed and why it has been changing.

Reasons for a More Positive View of Urbanization

Limits on Rural Labor Absorption. Even though the hopes of the early 1960s for major expansions in agricultural output have since been fulfilled in many countries, it is now clear that doing so did not stem movement to the cities. Two states in India illustrate the point. Agricultural productivity in West Bengal has remained among the lowest in the country (104 tons of foodgrains produced per worker in 1981). In the face of continuing population growth and with such limited opportunities in the countryside, it is not surprising that urban growth rates increased (from 2.5 percent per annum in the 1960s to 2.8 percent in the 1970s). Punjab, in contrast, was one of the great successes of the green revolution. Its 1981 agricultural output per worker was more than four times that of West Bengal. Yet its urban growth accelerated even more, with rates climbing from 2.3 percent in the 1960s to 3.8 percent in the 1970s.

As evidence like this has been compiled, there is now much broader acceptance of the view that rural areas will not be able to absorb a significant

share of the growing labor force even after they are successfully developed. USAID's Bureau for Asia and the Near East (1989) recognizes this and the importance of urban-rural linkages in the development process:

As agriculture continues to grow, the demand for labor declines as yield increases begin to slow. New entrants into the rural labor force, who are often better educated, tend to look into the industrial and services sectors for employment. Expansion in these sectors, caused by growing domestic demand for non agricultural goods and services, leads to increased employment there, and to declines, first in the rate of growth of the agricultural labor force and then in its relative size

Dynamism in Urban Labor Markets. A dominant theory of the 1970s held that the urban labor supply in developing countries increases faster than urban labor demand. Institutional rigidities in the cities tend to artificially raise wage rates in the formal or modern sector of the urban economy. This stimulates continuing excess migration by job seekers from the countryside even when there is insufficient demand for them. The result is, first, escalating unemployment in the cities as even a relatively low probability of finding a high-paying job justifies migrants adding themselves to the urban labor pool, and second, a dualism in urban areas as a burgeoning informal sector springs up to absorb the severe underemployment caused by the lack of jobs in the formal sector (see Todaro, 1971 and 1977). The rapid growth of squatter settlements and street vending in virtually all major third world cities during that decade seemed to verify the theory. The continued growth of these concentrations of poverty was seen as a most basic threat to societal aspirations and even to stability.

Research by Kahnert (1987), Kannapan (1985), and others, however, indicates that the assumptions underlying this model have not been holding up. Kahnert's major conclusions are: (1) There is little evidence that open urban unemployment rates are on a generally rising trend . . . if anything, available evidence suggests these rates have been falling over the 1970s; (2) Similarly, underemployment, if defined as involuntary short time, is nowhere near as large as frequently claimed . . . (it) may amount to as little as 2-7 percent or so of total hours actually worked; (3) Nor can support be found for the view that high wages and low wages observed side by side in urban areas portray severe labor market segmentation and misallocations of labor. . . the major part of wage variance in urban activities, at least in the private sector, is explained by productivity-related worker attributes; (4) A large portion of informal sector incomes are well above what labor with comparable skill levels can earn in the formal sector; (5) (Recent migrants) are not nearly as grossly over-represented among the unemployed, the underemployed, in the informal sector and among the poor, as is widely believed. . . some evidence shows them to do as well or better than urban natives; (6) Many of the poor are not unemployed or underemployed, but work long hours at low wages or earn reasonable incomes but have large numbers of dependents at some stage in their life. Thus while more jobs and more working hours will help some of the poor, others can be helped only if their productivity and income per hour worked rises.

The Question of Comparative Development Costs. Because of higher densities, urban growth necessitates infrastructure investments (piped water supply, sanitation, better local roads) that are not required to absorb equivalent population growth in the countryside. Capital needs for the productive activities that typically locate in cities (e.g., manufacturing) are also higher per worker. Estimates made in the 1970s of the total investment costs associated with urban growth were immense in relation to resources in most developing nations (see for example, Prakash, 1977). But these earlier estimates were based largely on shelter and infrastructure standards inherited from developed countries.

More recent studies suggest that with more reasonable standards and less capital intensive technologies, basic urban infrastructure needs can be met within domestic resource capacities at least in several developing countries (Acharya and Mohan, 1990, Richardson, 1987). Second, there has been greater understanding that, while it will be difficult to do so, there is the potential for extracting much greater cost recovery for infrastructure from middle- and upper-income groups than was anticipated in the past. Finally, there is more acceptance of the view that while more initial capital may be required per urban worker, the yield on that investment may be much higher still. (See discussion in Linn, 1982.)

The Association between Urbanization and Development. Recent studies have suggested that the process of economic advancement in developing countries may not be that different from what has occurred in what are now more mature economies. Sectors such as manufacturing, trade, and services contribute more value added per worker than agriculture and, as would be expected, they offer higher wages. As development proceeds, a larger share of the work force moves into these higher productivity sectors. In the world's developed economies, the share of the labor force in non-agricultural activities has increased substantially (from 42 percent in 1900 to 75 percent in 1960) as has per capita income (data from Bairoch and Limbor, 1968). Similar changes are beginning to occur in much of the developing world.

This theory is supported by data showing a strong correlation between per capita GNP and urbanization in developing countries: in general, the higher the percent of the population living in urban areas the higher the per capita GNP (Peterson, Kingsley and Telgarsky, forthcoming). Given what we have said about why this happens, it does not make sense to assert that more urbanization *causes* higher incomes. It is not too much of an oversimplification to say that the primary cause of income growth is productivity increases that occur with structural change in the economy, but higher levels of urbanization seem almost invariably associated with it.

Implications for the Caribbean

These findings argue that Caribbean countries should now be more willing to accept expanding urbanization, and to take positive steps to make the best of it. They clearly do not imply abandoning emphases on rural development or making any effort to "promote" urbanization. In most of the world, the trend is for governments and donors to strive for a level playing field, endorsing policies that promote development in both the cities and the countryside without spatial bias.

Efforts to "prevent" growth in the face of effective demand, either in the cities or the countryside, has high costs to the economy as a whole.

Nonetheless, this orientation will require governments to focus more clearly on their urban problems and opportunities than they have in the past. Analysis of the effects of urban growth in the region (physical, social, economic, and environmental) is needed as a starting point. Data are not available to permit a comprehensive review of such outcomes for all countries. As an alternative, we have examined them in some depth in five Caribbean countries in separate case study reports. The countries are the Dominican Republic, Haiti, Jamaica, St. Lucia, and St. Vincent and the Grenadines. Results from these case studies have been incorporated into the executive summary of this report.

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