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ABSTRACT

This report on St. Vincent is one of five case studies prepared as a part of an overall study of urbanization in the Caribbean region. The final report (Urbanization in the Caribbean: Prospects and Management Priorities, by G. Thomas Kingsley, Jeffrey P. Telgarsky, Ivor Jackson and Milagros Nanita-Kennett) pulls together the findings of all five case studies and region-wide analyses of demographic, economic, and urban trends. It also offers a number of guidelines for policy that are suggested by the analysis.

Urbanization in the Caribbean: Prospects & Management Priorities

St. Vincent Case Study

October 1990

OFFICE OF

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W O R K I N G P A P E R

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**Urbanization in the
Caribbean: Prospects &
Management Priorities**

St. Vincent Case Study

October 1990

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Kingston, Jamaica

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PREFACE

This is one of five case studies prepared as a part of an overall study of urbanization in the Caribbean region. The final report (*Urbanization in the Caribbean: Prospects and Management Priorities*, by G. Thomas Kingsley, Jeffrey P. Telgarsky, Ivor Jackson and Milagros Nanita-Kennett) pulls together the findings of all five case studies and region-wide analyses of demographic, economic, and urban trends. It also offers a number of guidelines for policy that are suggested by the analysis.

ECONOMIC OVERVIEW

Economic Trends

After poor economic performance in the 1970s (brought on by poor weather conditions and the depressed international economy), St. Vincent and the Grenadines (SVG) has maintained high levels of growth throughout the 1980s (Table 1). During 1980-1989, GDP has grown by an average of 5.9 percent annually. This growth has been achieved despite setbacks associated with hurricanes in 1986 and 1987 and the regional downturn associated with Trinidad and Tobago's weakened economy. In fact, the average annual rate of growth during 1985-1989 was 5.9 percent, slightly higher than the average rate of 5.7 percent annually during 1980-1985.

Growth in 1980-1985 was driven mainly by the recovery of agriculture after poor growing conditions and the expansion of the tertiary sector; transport, communications, and retail and wholesale trade all developed rapidly during this period. Since 1985, the agriculture sector rebounded in 1988-1989 from previous poor weather and was also aided by favorable foreign exchange developments for the banana industry. Also, the construction sector (fueled by a just-completed, major hydroelectric project, Projects by the National Government (GOSVG) on the Kingstown waterfront, and private sector residential and commercial developments) and manufacturing sector were major contributors to growth.

Economic performance has also been buoyed by GOSVG reforms to public sector spending. These changes have resulted in the movement of public savings back into surplus, a cut in the personal income tax rates, and a restructuring of

Table 1
St. Vincent and the Grenadines Economic Data 1980-1988

	1980	1985	1986	1987	1988
GDP (1980 EC\$ m)	131.5	173.6	184.4	190.1	206.1
GDP Growth (%)	3.9	6.7	6.2	3.1	8.4
Structure of GDP (%)					
Agriculture	15.1	21.4	20.3	21.1	n/a
Manufacturing	10.8	9.2	8.2	8.3	n/a
Other Industry	16.9	14.6	15.1	14.7	n/a
Services	57.3	54.8	53.5	55.9	n/a
CPI Inflation (%)	9.5	1.3	0.5	3.4	2.1
External Accounts (US\$ m)					
Exports	39.6	82.6	87.5	72.8	87.4
Bananas	8.3	16.7	19.4	19.7	19.5
Travel & Tourism	17.6	18.9	18.9	20.7	20.4
Imports	65.0	92.3	100.5	113.5	125.1
Current Account	(9.3)	3.7	3.8	(18.5)	(6.5)
External Debt (US\$ m)	10.6	25.2	31.8	39.0	45.2
Debt-Service Ratio* (%)	1.1	4.0	3.7	3.9	3.8

* Ratio of debt service to exports (expressed as a percentage)

Sources: EIU (1990), GOSVG (1989), IMF (1989), World Bank (1989).

public sector pay levels to retain skilled personnel. Government programs are also being undertaken to improve the country's competitiveness, further diversify export agriculture, accommodate expanded export manufacturing, and further develop the tourism industry.

The external accounts have also improved through the 1980s. The current account shifted from a deficit of 23 percent of GDP in 1980 to a surplus of 3 percent in 1985; during this time, the value of exports approximately doubled. Since 1985, the current account has slipped back into deficit, mainly due to the investment needs of the ongoing large public sector investment program. In 1988, the current account deficit was equal to 7.2 percent of GDP. Total external debt has risen more than four-fold since 1980, from US\$10.6 million to US\$45.2 million in 1988. However, with the positive developments in the export sector, the debt service ratio in 1988 remained at a low 3.8 percent.

Despite these positive developments, the high level of joblessness has not changed significantly. World Bank (1988) estimates of the unemployment rate

range between 25 and 35 percent; no official statistics on employment are published. With current high rates of fertility and population growth, employment creation is sure remain a pressing issue in the future.

Inflation, on the other hand, remains low. The rise in the consumer price index for 1989 was estimated to be 2.0 percent, just above the average annual rise of 1.9 percent during 1985-1988.

Sectoral Developments and Policies

The Vincentian economy is driven by the agricultural sector. However, the future of the main export crop, bananas, is cloudy. In the face of a weaker agricultural sector, other sectors, such as manufacturing and tourism, are being looked to as future sources of economic growth and employment.

Agriculture. The banana export industry dominates the agricultural sector, with about one-third of all arable land under banana cultivation. The industry is also a major component of the economy, accounting for 15 percent of GDP and 24 percent of exports in 1988. The banana export market is almost entirely concentrated in the United Kingdom, which buys bananas from certain Caribbean producers at above-market prices and keeps out other banana imports from the "dollar" producers in Central and South America through quotas and tariffs. The recent rise of sterling against the U.S. dollar has increased the incomes of banana growers (as the Eastern Caribbean (EC) dollar is tied to the U.S. dollar). In addition to improved price incentives, better growing practices have also contributed to more than double the volume of banana production since 1981, from 29,400 metric tons to 63,600 metric tons in 1988.

The future of the banana industry is threatened by the arrival of the single market in the EEC in 1992. The present banana import arrangements (enshrined in the Lomé Convention), involving divergent national legislation and restrictions on the free trade of bananas within the EEC, are not compatible with the objectives of the 1992 single market. While negotiations are currently underway to reach a satisfactory compromise (France also has a similar import arrangement), it seems certain that current advantageous arrangements are bound to be scaled back over time. In the case of SVG, it will be difficult to match the economies of scale and low wages of the dollar banana producers and compete effectively in the world market. Production in the Windward Islands is mainly from small, family-based growers and the Vincentian land reform program is breaking up larger estates into more small-holder operations. The land reform program is subdividing about 9,000 acres on nineteen estates into small plots of averaging 5 to 6 acres in size.

In this context, the GOSVG is trying to head off the difficulties that would be caused by a future decline of the banana industry. (SVG has experienced these problems before with the rapid decline of the arrowroot and coconut oil industries that boomed and then collapsed as substitute products took over in the market.) Efforts are being made to improve the quality of the bananas shipped and to persuade growers to diversify their crops. This task is made more difficult by the attractive characteristics of the present banana market to growers: strong price, assured demand (for now), regular weekly income, and past investment in and

promotion of the industry by government. Exports of other crops—such as eddoes, dasheens, and sweet potatoes—aimed at the regional Caribbean market, have declined because of the economic downturn in Trinidad and Tobago, the major export market. However, the GOSVG is looking to break into market niches in the U.S. for crops such as mangoes, pineapples, papayas, and avocados. In addition, further development of the tourism sector is also seen as a source of demand for increased production of vegetables, fruits, poultry products, and pork.

Manufacturing. The manufacturing sector continues to keep pace with growth in the rest of the economy, maintaining a share of about 10 percent of GDP. However, more rapid growth is constrained by the unavailability of additional factory space and sites. Development of large- and medium-scale properties has fallen almost exclusively to the public sector; private sector developments are limited to small-scale properties.

The bulk of manufacturing activity is concentrated in the Camden Park Industrial Estate, constructed west of Kingstown as part of a direct foreign investment program in the 1970s. The manufacturing sector contains both local firms producing for the domestic and export markets and enclave industries mainly carrying out assembly work for parent companies in the U.S. or Canada. The largest employers at Camden Park are a sporting goods manufacturer and garment assembly operations; other operations include a flour mill, a brewery and bottling plant, and electronics assembly plants. At present, the estate provides about 200,000 square feet of industrial space. An additional 45,000 square feet is being added; this will complete the development of the estate. Total employment at Camden Park is about 2,000 persons.

Box 1
Demand for Manufacturing Employment in St. Vincent

With the concentration of population in the southern part of the island and high levels of unemployment, the demand for manufacturing employment is very high despite average wages of only US\$30 per week. Van de Velde (1989) provides this description of a typical garment manufacturing operation at the Camden Park Industrial Estate:

Typical of the units of the Camden Park Estate is Polly Flinders, a children's wear company whose materials are imported, stitched, and smocked at Camden park, and sold back to the principals in the US for marketing. The company has operated since 1981, and in that time its workforce has grown from 25 to 235, with a further 1,500 women employed throughout the island on a cottage industry basis. Some of the girls and women travel from miles away (public transport takes the form of privately-run minibuses, which are frequent, cheap, and relatively safe); others find it worthwhile to stay with relatives in the neighborhood during the week, returning home at weekends. Murray Bullock, the Vincentian manager at Polly Flinders, has a file, six inches thick, of job applications. Posts never need to be advertised, although, surprisingly, staff turnover is relatively high at 10-15 percent annually, due not so much to job dissatisfaction as to emigration.

The space constraint facing the manufacturing sector is being met by the development of a second industrial estate by the parastatal Development Corporation (Devco) at Diamond, east of Kingstown. The estate will eventually cover 58 acres and provide factory space to accommodate over 4,000 workers. Infrastructure for the first phase (financed by Canadian International Development Agency (CIDA) and USAID) is to be completed in 1990, with factory shells (financed by the Caribbean Development Bank (CDB)) available in 1991.

The GOSVG's development strategy for the manufacturing sector is to concentrate on light, "dry" industries producing for export and agro-industry. Dry industries are preferred for two reasons. First, the chances of environmental degradation arising out of industrial production are reduced, since dry industries normally use lesser quantities of toxic or dangerous chemicals; the GOSVG is concerned to minimize the negative environmental impact of the development. Second, current water supply to the Diamond Estate would be unable to support the heavy demands of "wet" industries.

Agro-industrial development is targeted for areas outside Kingstown, but the feasibility of these developments is dependent on the agricultural sector diversifying its production into crops other than bananas. Such a development will be dependent on two factors: (1) the extent to which land distributed under the land reform program is used for alternative crops rather than house-building and subsistence farming or increased banana production; and (2) convincing farmers that alternative crops can be grown and sold profitably—which may require further development of marketing systems, road transport, and shipping facilities.

Tourism. The tourism sector in SVG has not shown the dynamic growth that has been demonstrated in other Caribbean locations. Travel earnings rose only an average of 2.2 percent annually between 1981 and 1988, from US\$17.6 million to US\$20.4 million. The sector accounted for 16 percent of GDP in 1988 and employed about 3,000 persons (9 percent of the labor force).

The number of visitors has increased during the same time period, from 93,200 to 129,000, but the annual levels have been varied, from 79,100 in 1982 to 114,600 in 1984. About 40 percent of all visitors are stayover tourists (arriving mainly by air); the remainder are excursionists (mainly cruise ship passengers and those arriving by air on day-trips from other islands).

SVG caters mainly to the high end of the tourism market, with small resorts and private islands that rely on the islands' reputation for natural, unspoiled beauty. However, the lack of an airport able to accommodate jet aircraft has limited the growth of the tourism industry. Potential visitors face an inconvenient change of airplanes to smaller, less comfortable propeller airplanes. In addition, these smaller aircraft carry only about 20 passengers, and so severely restrict the number of potential arrivals to SVG by air. Currently, about 400 passengers can be accommodated on flights to both the main island and the Grenadines.

This lack of capacity (and relative unreliability of the air service) is cited by the SVG Tourist Board as a key reason why investors are unwilling to commit to the development of a major resort facility. SVG offers only 1,059 rooms, with 47

percent in small hotels (the average hotel has about 15 rooms and no hotel has more than 50 rooms) and the rest divided between guest houses, villas, and apartments. Most of these operations are small and family-based. This places the tourism sector at a disadvantage in several respects: there are few opportunities for upward advancement and managerial skill-acquisition within the sector; the hotels tend to be under-capitalized and over-priced relative to other Eastern Caribbean destinations; and they are also too small to carry out their own international marketing programs and so are reliant on the Tourist Board for much of their promotion in North American and European markets.

The tourism policy of the GOSVG aims to protect SVG's reputation for natural beauty and keep the tourism sector well-integrated into the local economy. Developments are confined to low-rise and cottage-type facilities; no high-rise development is allowed. Facilities must be strongly linked to the local economy in terms of employment and supplies; no enclave developments are foreseen. A national marine park is planned for the Tobago Cays to protect the area and promote marine sports and activities. Also, the GOSVG is trying to attract at least one investor to develop a large resort facility (of at least 100 rooms) on St. Vincent (probably at Otley Hall, west of Kingstown). Such a development would allow SVG to begin to compete with other destinations for conference/convention business and provide management and marketing opportunities and spin-offs that the smaller hotels and resorts do not provide.

URBAN STRUCTURE AND TRENDS

Demographic Overview

The population of SVG was estimated at 113,900 in 1988, with about 93 percent of the population residing on the main island of St. Vincent. Net population growth was relatively low during the 1960s and 1970s, averaging 0.8 percent and 1.3 percent annually, respectively. The rate of net population increase has increased in the 1980s, averaging 1.9 percent since 1980.

The change in population growth rates is not explained by natural demographic factors; since 1960, the birth rate has fallen more than the death rate. Rather, it appears the rise in the population growth rate is explained by changes in migration patterns. During the 1960s and 1970s, SVG experienced high rates of migration to North America, the U.K., and other Caribbean countries (particularly Trinidad and Tobago). This migration reduced the rate of net population growth in 1960-1980 to about half the rate of natural increase, about 9,000 persons in total. Since 1980, the rate of emigration has apparently slowed (due to more restrictive immigration policies in developed countries and the recession in Trinidad and Tobago), producing a higher rate of net population increase.

The age composition of the Vincentian population shows a high proportion of persons under age 15. This generates age-dependency ratios near 100, the level at which there are as many persons of working age in the population as persons who are supported by those of working age. The implication of a high age-dependency ratio, in this case, is heavy demands on the educational system and other social

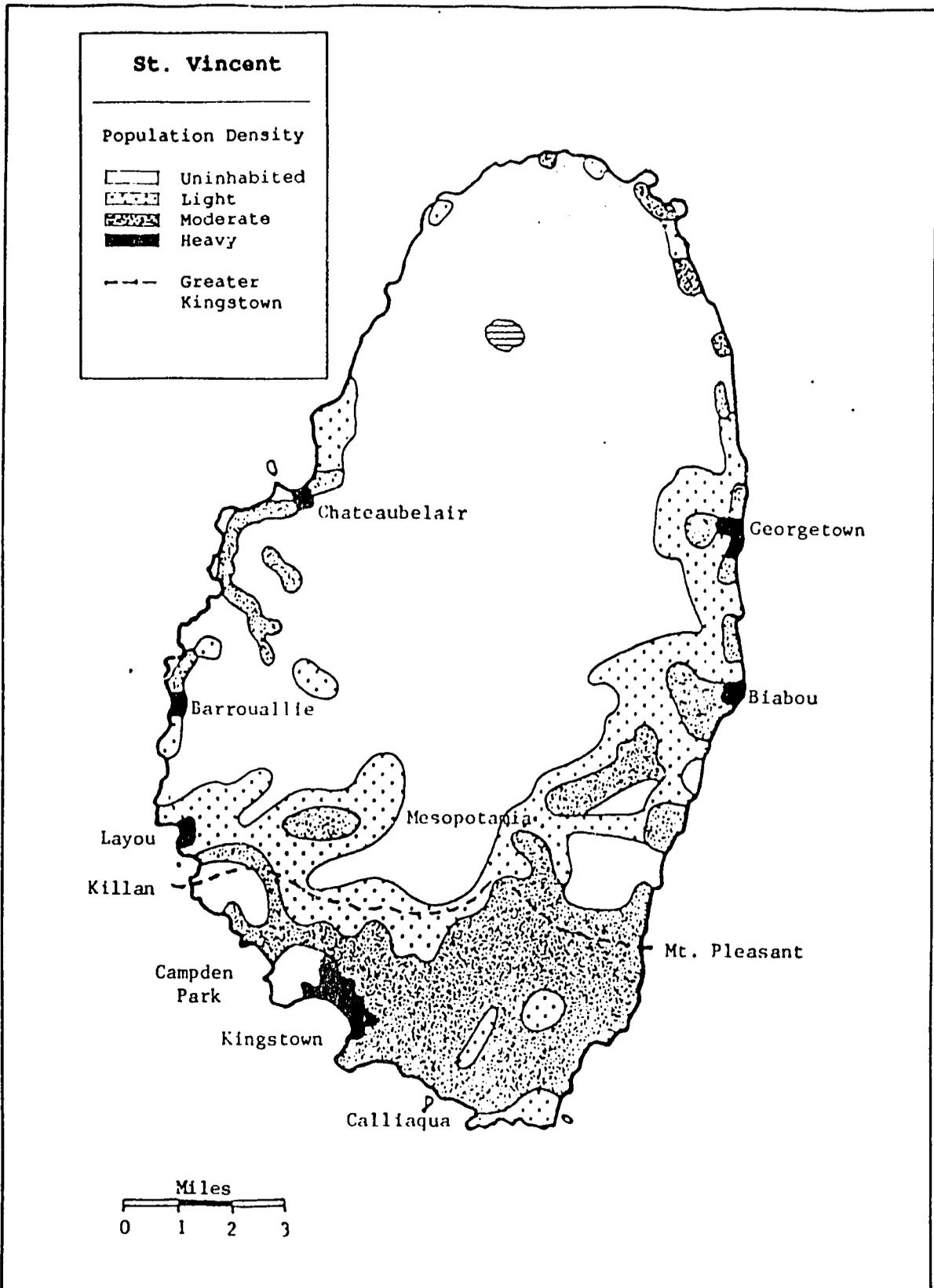


Figure 1

infrastructure supporting children. The slight decline in the age-dependency ratio between 1970 and 1980 indicates some easing of these pressures. However, it also implies greater pressures in the labor market, as the peak of young dependents from the 1960s and 1970s have reached working age and are seeking employment opportunities.

Urban Structure

There is no official definition of urban areas in SVG, although some settlements (beyond Kingstown) have been designated as "towns" for the purposes of assigning limited local government functions. These towns include Georgetown on the east coast and Calliaqua, Layou, Barrouallie, and Chateaubelair on the west coast. Applying a functional definition (population in excess of 3,000 and public services such as government offices, police station, and social service centers), Browne (1989) classifies all of the above towns plus Mesopotamia as urban areas.

Kingstown, the capital, is the dominant urban center. It serves not only as the administrative center, but is also the economic center. It is SVG's major port and (because of the limited airport capacity) its chief trading link with external markets. Kingstown's role as chief governmental and trading center has assured its dominance in other aspects: commercial, financial, professional, and educational. This concentration of activity has caused Kingstown to spread out beyond its formal boundaries. In fact, Kingstown's area of dominance, or Greater Kingstown, can be considered to cover the bottom fifth of the island, from Rilland Hill on the west coast to Mount Pleasant on the east coast. The Greater Kingstown area contains 52,000 inhabitants, about half the population of the main island.

The remaining towns are coastal centers (with the exception of Mesopotamia, which is located inland) that serve the surrounding rural populations. These rural populations live along valleys, extending along roads and rivers. The top third of the island and most of its interior is uninhabited or lightly settled because of the mountainous terrain and the presence of La Soufriere, an active volcano, in the north of the main island.

The spatial pattern of Kingstown as the dominant urban center will continue for the foreseeable future. The city is the hub of the banana trade and will remain the center of any export-oriented agricultural activity because of its port facilities. It is also the locus of activity in the manufacturing and tourism sectors. Both the Camden Hall and Diamond estates are on the periphery of Kingstown. The best tourism development sites are on the south coast just east and west of Kingstown and travel by air and sea into the island and to the Grenadines is centered on the city. In addition, Kingstown's role as national capital has given it the highest level of social and educational services on the island.

Despite the efforts of the land reform program, it seems likely Kingstown will continue to draw rural migrants in search of employment and better living conditions; the 1980 census reported that over 60 percent of Kingstown residents were born in another part of the island. The increasing spread of the greater Kingstown area is a reflection of this inflow: squatters are occupying fringe urban

land and middle-income households are moving to low-density, suburban developments.

URBAN SERVICE PROVISION

Water and Sewerage. The Central Water and Sewerage Authority (CWSA) is responsible for the provision of potable water and sewerage services in SVG. The Authority is currently attempting to deal with a number of issues which seriously hamper its ability to provide adequate service.

The CWSA serves about 13,000 residential, commercial, and public sector customers with 7 million gallons per day (MGD) of water; about 90 percent of the population is served through either direct connections or public standpipes. However, the poor financial condition of the Authority in previous years has led to the deterioration of the distribution network. Water loss rates are estimated at 40 to 45 percent. The combination of high loss rates with up to 50 percent declines in production during the dry season has created shortages and loss of service in several areas during droughts (as in 1987). The CWSA is taking steps to ameliorate this situation: negotiations are now underway for EC\$3 million from the CDB and France to finance improvements to the distribution system. A priority area for action is the area surrounding the Camden Industrial Estate; development of both industry and surrounding housing have outpaced the capacity of the installed infrastructure.

The CWSA carries out its own maintenance and capital works, using its own equipment and construction crews. The Authority has found that SVG lacks contractors with adequate experience and skills necessary for installation and maintenance of water distribution networks.

The CWSA is also acting to improve their financial performance. Higher rates and more aggressive collections efforts have allowed the Authority to finance all of their operations and maintenance costs out of revenues and lower the level of outstanding debt from EC\$10 million in 1984 to EC\$4 million in 1990. The CWSA is also installing a PC-based accounts receivable system and plans to install a further 4,000 meters to existing connections. (Currently, 40 percent of customers have metered connections.)

The number of connections has been rising steadily, at about 60 new customers per month (with an additional 30 reconnections of customers whose service was cut off because of arrears). Connections are available to households with some form of proof of ownership, such as a land title, proof of sale, or letter from a responsible public official. No service is extended to illegal squatters, although squatters on public land who are recognized by the Housing and Land Development Corporation (HLDC) are eligible for service. Metered customers pay a progressive tariff, ranging from EC\$5 per 1,000 gallons to EC\$15 per 1,000 gallons for consumption over 15,000 gallons per month. This rate structure has been very effective at reducing domestic consumption. Unmetered households pay EC\$6 to EC\$35 per month depending on the number of taps. Industrial and commercial

customers pay EC\$10 per 1,000 gallons. The current average cost of water production is EC\$1.70 per 1,000 gallons.

The CWSA is also responsible for the central sewerage system in Kingstown, which serves about 25 percent of the city's population. (The Health Department is responsible for other septic systems, although, in practice, they confer closely with the Authority.) The Kingstown sewerage system has no treatment facility; untreated effluent is discharged through a sea outfall.

The CWSA has serious concerns about protecting the watersheds from which the island's water supply is drawn. Currently, the CWSA's water sources are sufficiently pure so as to require no treatment except for chlorination. Encroachment of catchment areas by farmers, causing erosion and possible contamination by chemicals, would require more expensive treatment facilities to protect water quality. The CWSA has been advocating stronger protection of the catchment areas, tighter regulation of the use of fertilizers and pesticides, and more public education on the cost of damage to the island's watersheds.

The potential growth of the manufacturing and tourism sectors does not yet pose serious problems for the CWSA. It has (unlike with Camden Park) been closely involved in the advance planning for the Diamond Industrial Estate. Phase I installation of the distribution network and storage tanks should be completed in 1990. Phase II work will bring in a new primary water supply to meet the needs of all future industrial customers and planned housing in the area. Similarly, the CWSA can handle foreseeable tourism development on the main island. However, increased development in the Grenadines will likely require development of larger-scale water supply (either through desalination plants or transport of water from St. Vincent by barge).

Electric Power. The St. Vincent Electricity Services Limited (VINLEC) provides power on St. Vincent and Bequia; power on the other Grenadine islands is provided by private generating plants. VINLEC has a total of 15 megawatts (MW) of generating capacity, 5.7 MW of hydro power and 9.3 MW from diesel generators. An additional 3.3 MW diesel generator is being installed at Cane Hall in Kingstown, with space for one further unit to be added. These units should be adequate to meet power requirements in St. Vincent for the next ten years.

VINLEC is concerned about future problems with maintaining output from its hydroelectric plants, as the trend in river flows over time has been downward. Part of the reduced flow has been attributed to deforestation in the watershed that feeds the rivers. To address this problem, the recently-completed Cumberland hydro project included both reforestation and forest management components. Further development of hydro sites is not contemplated, as analysis shows diesel generators are still more cost-effective.

A recent rate increase granted to VINLEC (its first since 1985) plus the inclusion of a fuel surcharge which reflects the cost of imported diesel fuel on a month-by-month basis has stabilized the financial status of the utility. Revenues are currently adequate to cover operations and maintenance costs plus the debt

service on capital spending. Besides adding to generating capacity, VINLEC is upgrading its primary and secondary transmission systems to reduce power losses.

To date, VINLEC has been able to keep pace with the development of St. Vincent. About 1,400 new customers were added in 1989, mainly through extensions of the transmission grid and new housing developments in the southern part of St. Vincent. This brought the total number of customers to 15,000 on the main island (plus 2,000 in the Grenadines). However, the lack of consultation with VINLEC about proposed and approved development often leads to last-minute requests for service, which are becoming increasingly difficult to meet on a timely basis.

Developers of residential, commercial, or tourism properties are liable for some of the costs associated with the extension of the transmission grid to service their development. VINLEC will only carry the share of these costs which allows it to reach its target rate of return; the developer must pay the balance. Electric power from VINLEC is available to all households which have a certificate indicating the premises have passed an electrical inspection; no proof of ownership is required. All connections are metered and new customers are required to post a EC\$100 deposit (which is refundable with 4 percent annual interest when the service is terminated) with VINLEC. Pirating of power used to be a serious problem, with losses as high as 26 percent of production. The ease of gaining service, relocation of meters to points in public view and the successful prosecution of customers caught tampering with meters have brought this problem under control.

Roads. The road network of SVG covers about 700 miles, of which approximately half are paved. The main road system comprises three highways which center on Kingstown: the Leeward and Windward Highways along the coasts and the Vigie Highway that travels inland from the city, linking the island's secondary towns with the capital. The other paved and unpaved roads link these towns with smaller settlements in their agricultural hinterland. The island's topography imposes steep grades and many curves upon the road network.

Despite the island's recent strong economic growth and increasing numbers of vehicles, there has been little expansion and extension of the road network. Some agricultural areas still remain inaccessible to vehicular traffic. Most of the GOSVG's current efforts are directed to rehabilitating and maintaining the current road system, which has deteriorated from a previous lack of investment. Most road works are planned and supervised by the Public Works Department of the Ministry of Communication, the works being carried out by local contractors.

URBAN LAND AND SHELTER

Urban Land Market. With the growth of the Greater Kingstown area in the south, agricultural land on the fringes of the urban areas are being converted to residential and commercial use. In most cases, the land is privately owned; only about 10 percent of the land in Greater Kingstown is public land, with much of it being concentrated in the industrial estates at Camden Park and Diamond. The

remaining public lands are often occupied by squatters, some of whom have been on the land for several years. (Private landowners do not usually allow squatters to become established on their land.)

The land market is relatively undeveloped, with little turnover and few formal mechanisms for providing information about property sales and prices. While there are some private developers who subdivide land and sell serviced lots, most land made available for housing is sold off a few lots at a time by the owner. With the limited amount of land available in SVG, most landowners only dispose of land if they do not have other alternatives.

Urban land prices show a wide degree of variation: from EC\$1.50 per square foot for unserviced residential land on the periphery of Greater Kingstown to EC\$5.75 for land with access to urban services. (It currently costs private developers about EC\$3.50 to EC\$6.00 per square foot to develop serviced land.) Land prices have been restrained to a certain degree by the availability of public lands for squatting and the disposal (at prices ranging from EC\$0.12 to EC\$0.60 per square foot) of some public lands formerly rented as agricultural plots on the urban fringe by the GOSVG. The HLDC has also been engaged in land sales, at prices ranging from EC\$0.12 per square foot to squatters to EC\$2.00 for newly-developed urban sites. (The HLDC's development costs for serviced sites are currently about EC\$2.50 to EC\$3.50 per square foot.)

With the constraint on land available for development growing tighter and the need for increased protection of agricultural and forested land, it seems inevitable that urban land prices will continue to climb. The HLDC is looking at the feasibility of land banking to be able to provide affordable land in the future. Unfortunately, private investors in the land market have beat them to it and are already stockpiling land for future sale.

Land Management and Regulation. The scarcity of land in SVG and the importance of sectors with land-based inputs—agriculture requires productive land used in a sustainable fashion and tourism requires land which is not subject to environmental degradation—implies that efficient land management is a must for achieving enduring economic growth. Already, though, suitable land is difficult to find for important uses: residential development is closing in on the present Kingstown landfill site; any of the proposed locations for a new airport will be close to existing developed land.

The land policy of the GOSVG seeks to conserve existing agricultural and forested lands and limit urban growth to prevent the premature and inefficient spread of urban areas. In addition, the HLDC is mandated to undertake advance acquisition of land to provide an adequate supply of residential sites for low-income households. However, as noted in the section on housing below, the HLDC participation in the housing sector has been limited and targeted mainly to middle-income households.

The Town and Country Planning Act of 1976 provides for the control of development through the Physical Planning and Development Board (PPDB). Although the PPDB has published guidelines on development, as yet no legally

binding regulations on planning and building standards have been adopted. As a result, the PPDB's planning decisions can often be successfully challenged. The practical result is that there is little control exercised over development on private land. While this provides short-term benefits through the economic stimulus of construction activity and employment, long-term costs are being incurred through the inefficient development of scarce land.

This problem is exacerbated by subdivisions that are carried out without the approval of the PPDB. In up to 75 percent of the subdivisions that took place in 1985-88, owners of the land simply had their subdivision plan approved by the Chief Land Surveyor and proceeded with the sale of lots. The result was development with incompatible uses and high costs for providing urban services that must ultimately be borne by the purchaser or the service agency.

Unmanaged development of public lands occurs mainly through squatting. While the policy of the GOSVG is against the unlawful occupation of public lands, in practice there have been no actions to prevent it or to remove squatters. The lack of affordable land for low-income households and the *de facto* acceptance of squatting has led to establishment of substantial communities (with permanent, concrete structures) that will require expensive regularization in the future.

Finally, the existing land information system is based on manual records that cannot provide accurate and timely data on titles, land values, and lot boundaries. There is not island-wide cadastral system and many land owners lack clear title or have disputed boundaries, which inhibits the development of the property. PADCO (1988) reports that, while the time required to register and process a land transaction is not overly burdensome, the costs associated with legal expenses and other charges can be prohibitive to low-income households.

Housing Production. The GOSVG estimated in 1985 that the country's housing deficit stood at 6,000 units, and that annual production of 760 units would be required to meet current demand (new household formation and replacement of substandard units being taken out of the housing stock).

The HLDC has been the main vehicle for public sector participation in the housing sector. In the past, it has concentrated mainly on finished housing, with only limited success. Of the 150 two-bedroom units planned for its scheme at Fairhall, only one-third were built, and the project was marked by cost overruns. The units were priced near EC\$50,000, well above the affordable level for most of the population and certainly out of reach of low-income households. The HLDC is also planning to develop 100 two- and three-bedroom units adjacent to the Diamond Industrial Estate. These units will be on lots ranging in size from 3,750 to 5,000 square feet and cost between EC\$60,000 and EC\$100,000. Again, these units will be affordable only to middle- and upper-income households. (This development faces two possible problems: (1) the units may not be saleable to middle-income households that can buy large lots for less money slightly further out of Kingstown; and (2) if the HLDC site is not developed fast enough, squatters may occupy the land.)

The HLDC is developing some projects that do not involve finished housing: a sites and services project is planned as part of the Diamond development; lands controlled by HLDC that have been occupied by squatters are to be regularized and vacant land offered as services sites; households in designated upgrading areas can receive credit for the purchase of building materials with repayment over periods varying from 1 month to 5 years. Households which purchase sites from HLDC must meet the following conditions: (1) they cannot own other land; (2) they must have a plan for construction approved by the PPDB and start building within a fixed time (though there is no time limit for completion of construction); and (3) within the first five years of ownership, the land can only be sold back to the HLDC. The Corporation estimates that a two-bedroom, "model" house could be constructed by a private contractor for EC\$55,000 and that, using self-help labor, this same house could be constructed by the household for EC\$30,000. Including land costs of approximately EC\$6,000 for a minimum 3,000 square foot lot, this total cost is still unaffordable to households with annual incomes less than the median of EC\$6,000.

The private sector provides about 600 new residential units annually (or 90 percent of the total). Of these, about 40 percent are constructed using a traditional formal model: planning approval, block and steel construction, mortgage financing. Developers usually develop land in small blocks of a few acres and deliver up to ten serviced plots (or finished units if requested by the purchaser). Private developers report some delays in provision of infrastructure by the CWSA and VINLEC (although it is not clear where these developments were located and how much advance notice the utilities were given).

The remaining 60 percent of private construction is undertaken in an informal manner by low-income households that cannot afford to meet all the legal requirements. These units are typically built without planning permission in an incremental fashion, using less expensive and less permanent building materials. The units are financed through the household's own cash savings, loans from relatives, or loans from credit unions.

Housing Finance. There are about 20 financial institutions in SVG lending for housing; these include commercial banks, credit unions and building societies, and insurance companies. Mortgage finance from these institutions has typically been accessible only to those households with incomes in the top third of the income distribution that could meet the stringent conditions: 12 percent interest over a 12- to 15-year term, a 75 percent loan-to-value ratio, and maximum repayments limited to 30 percent of income. Despite these conservative conditions, lending for land and construction rose from EC\$8.5 million in 1983 to EC\$73.5 million in 1987 (partially fueled by increasing liquidity in the banking system).

In 1988, the National Commercial Bank (NCB) opened a mortgage window with financing from the CDB and NIS which offered mortgages with 20-year terms and a 10 percent interest rate. Other banks have followed suit and lowered their rates to 10 percent as well. Despite these changes, mortgage finance retains its traditional structure (there are no adjustable rate or variable-payment mortgage instruments) and remains inaccessible to the majority of Vincentian households.

DEVELOPMENT ISSUES AND POLICY IMPLICATIONS

Sectoral Issues

Agriculture. The uncertainty about the future of the banana export market implies actions need to be taken to soften the blow should the U.K. act to reduce the preferences that the industry currently enjoys. Given the scale of the industry and its dominance of SVG's export earnings, a sudden end to the preferential U.K. exports in 1992 would be a tremendous shock to the island's economy. Even the phasing out of the preference over time (say, ten years), which seems the most likely outcome, will place large strains on the economy as it attempts to adjust and find other means to earn foreign exchange. As is noted below, both the manufacturing and tourism industries face significant problems related to their future expansion. Within the agricultural sector, continued efforts by the GOSVG will be required to promote production of other export crops. However, the markets for these crops will be much less certain and require more intensive marketing efforts than have been required to date in the banana industry.

Manufacturing. While the GOSVG has been acting to address the current shortage of factory space through the development of the Diamond Industrial Estate, several structural weaknesses within the manufacturing sector remain. First, the lack of an airport capable of handling jet aircraft places SVG at a distinct disadvantage with other Eastern Caribbean islands as a manufacturing site. Assembly work in the garment and electronics industries, which require quick turn-around times, cannot be undertaken in SVG as components and finished goods can only be shipped by sea.

Second, the development of only large-scale industrial space by the Devco fosters a sectoral structure that is highly segmented between large concerns (mainly foreign-owned) and small, local manufacturers. With the smallest unit being offered by the Devco sized at 6,000 square feet, there is almost no space available for small manufacturing firms that wish to expand. This lack of space suitable for small- to medium-sized firms will become more of a constraint as Vincentian entrepreneurs with experience gained from the existing manufacturing operations set up their own firms and attempt to expand. Facilitating this type of growth will be key if the manufacturing sector is to gain more depth and become less reliant on foreign-owned, footloose assembly operations.

Tourism. The tourism sector is influenced by two contrary forces. On the one hand, SVG is marketed as a Caribbean destination that is still relatively unspoiled by the trappings of modern tourism. On the other hand, the sector must grow if it is to develop into a significant part of the economy and provide badly-needed employment opportunities. At present, the sector's small scale keeps costs up and makes it difficult for SVG to compete effectively with other Caribbean destinations. Development of larger resorts (perhaps under the management of a foreign hotel group) would provide a more competitive product and inject new managerial techniques into the sector. However, it will be a difficult task to bring in such development and still retain the natural qualities of the islands, which are the major attraction of SVG.

The major constraint to expansion of the tourism sector is the lack of an airport that can accommodate jet aircraft and allow more convenient links with regional hubs in Barbados and Puerto Rico. It seems likely that until this constraint is addressed, the lack of air capacity to deliver passengers to SVG will limit the sector's growth. The GOSVG is in the process of identifying a site for a new airport and seeking international financing for its construction. However, the estimated costs (in excess of US\$50 million) remain an almost insurmountable hurdle without concessionary financing.

Urban Development Issues

Urban Infrastructure. The main infrastructure providers, CWSA and VINLEC, seem well-placed to keep up with the potential growth of the manufacturing and tourism sectors. Both utilities have recently received rate increases and are covering both their operations and maintenance costs and their debt service. However, one of the most serious problems facing these service providers is rooted in rural areas.

Both agencies are concerned with developments in the national watersheds upon which they rely; CWSA for its water supply through catchment systems and VINLEC for the portion of its power generated by hydro power. Deforestation is occurring at a pace which presents serious problems for SVG. Squatters and landless farmers are moving higher up mountain slopes (pushed by increased cultivation of bananas and other cash crops). Without tenure, these farmers have little interest in preservation of the land and simply move on to another plot when the soil has been exhausted or eroded out of use. Other forested areas are being destroyed for use as fuel or to produce charcoal. The GOSVG is undertaking large efforts through its land reform program and by reforestation measures taken in association with the Cumberland hydro project. CIDA is funding a forestry management project to preserve the forests, prevent soil erosion, and strengthen the laws and regulations governing forested areas.

Land Management. The most significant issue facing SVG in the land management field is the efficient use of its scarce resources to provide the necessary land inputs required for economic growth. The lack of a suitable regulatory structure to control development, plus a lack of coordination between the various responsible bodies and agencies, has left the country with a shortage of land for important functions. At the same time, these problems have allowed residential development to spread outside of Kingstown, consuming productive agricultural land and placing environmentally sensitive areas under increasing pressure. There is a need to develop regulations that clearly state where development is to be allowed, what uses are acceptable, and the norms to which development must conform. At the same time, the regulations should not be so strict as to place an onerous burden on the investor.

Housing. The formal housing delivery system is not addressing the needs of the lowest-income households in SVG. The main public sector producer, the HLDC, is only slowly shifting its production to serviced sites. Even so, affordability problems remain, as purchasers of the serviced sites are required to build housing that has been approved by the development control authorities. As a result, the

"minimum" package has a total cost of EC\$36,000—well beyond the means of households with incomes less than the median of EC\$6,000.

As a result, households that are unable to obtain housing through the formal sector turn to squatting (almost exclusively on public land) to satisfy their need for shelter. In this manner, the households are able to make the provision of housing affordable (by building in an incremental fashion). However, the unplanned nature of these developments implies substantially higher costs to the country, both in terms of sub-optimal use for many of the lands occupied by squatters and the cost for regularizing the settlement and providing infrastructure at a later date.

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