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SPECIAL ECONOMIC AND DISASTER RELIEF ASSISTANCE

Assistance to Grenada

Report of the Secretary-General

1. In its resolution 34/118 of 14 December 1979, the General Assembly, inter alia, aware of the special problems faced by Grenada in respect of many of the particular impediments hampering the economic development of many island developing countries as well as the serious adverse effects on its economy of the persistent world-wide economic and financial problems, stressed the urgency of rendering all necessary assistance to Grenada in its efforts to develop and strengthen its economy and requested the international community to intensify assistance to Grenada.
2. Further, the General Assembly requested the Secretary-General to mobilize the financial, technical and economic assistance of the international community, in particular that of the developed countries and the appropriate organizations of the United Nations system, with a view to helping to meet the short-term and long-term development needs of Grenada and to report to the Assembly at its thirty-sixth session on the progress achieved in the implementation of resolution 34/118.
3. In implementation of the resolution, the Secretary-General arranged that the text, with an appeal for assistance, was brought to the attention of Member States, particularly the developed countries, and of the specialized agencies and organizations within the United Nations system, as well as regional and interregional organizations and international financial institutions.
4. In addition, in consultation with the Government of Grenada, the Secretary-General arranged for a multiagency mission to visit Grenada in September 1981. The report of the mission, which is annexed hereto, describes the economic and financial position of the country, outlines a major programme of assistance to help meet the short-term and long-term development needs of Grenada, and provides information on the assistance being provided to Grenada by the international community.

ANNEX

Report of the mission to Grenada

(26 to 30 September 1981)

CONTENTS

	<u>Paragraphs</u>	<u>Page</u>
I. INTRODUCTION	1 - 6	2
II. GENERAL BACKGROUND	7 - 29	3
III. DEVELOPMENT OBJECTIVES AND ASSISTANCE REQUIRED	30 - 136	9
A. Agriculture and forestry	31 - 72	9
B. Industrial development	73 - 83	17
C. Transport	84 - 102	20
D. Health and housing	103 - 117	23
E. Education	118 - 136	26
F. Summary of assistance required	137	30
IV. ASSISTANCE BEING PROVIDED	138 - 140	32
A. Projects for which funding negotiated	138	32
B. Assistance from the United Nations system	139	36
C. Summary of international assistance pledged or provided since 1979	140	38

I. INTRODUCTION

1. The General Assembly, in its resolution 34/118 of 14 December 1979, mindful that the particular impediments hampering the economic development of many island developing countries - especially those handicaps resulting from their smallness of size, remoteness, constraints in transport and communications, great distances from market centres, highly limited internal markets, lack of marketing expertise, limited resource endowment, lack of natural resources, heavy dependence on a few commodities for their foreign exchange earnings, shortage of administrative personnel and heavy financial burdens - call for the continued attention of Governments and of the organizations of the United Nations system, and aware of the special problems faced by Grenada in respect of many of those impediments, as well as the serious adverse effects on its economy of the persistent world-wide economic and financial problems, stressed the urgency of rendering all necessary assistance to Grenada in its efforts to develop and strengthen its economy and requested the specialized agencies and other organizations within the United Nations system, international financial institutions and aid donors to intensify their assistance to Grenada.
2. Further, the General Assembly requested the Secretary-General to mobilize the financial, technical and economic assistance of the international community, in particular that of the developed countries and the appropriate organizations of the United Nations system, with a view to helping to meet the short-term and long-term development needs of Grenada, and to report to the Assembly at its thirty-sixth session on the progress achieved in the implementation of the resolution.
3. The text of resolution 34/118 was sent to Member States, specialized agencies and organizations within the United Nations system and to regional and interregional organizations and international financial institutions, together with an appeal for assistance. Further, the Secretary-General arranged for an interagency mission to visit Grenada from 26 to 30 September 1981.
4. The mission was led by the Joint Co-ordinator for Special Assistance Programmes in the Office for Special Political Questions of the Secretariat and included representatives of the Economic Commission for Latin America (ECLA), the Food and Agriculture Organization of the United Nations (FAO), the United Nations Educational, Scientific and Cultural Organization (UNESCO), the United National Industrial Development Organization (UNIDO), and the World Health Organization (WHO). The mission was received by the Acting Prime Minister and Minister of Finance, the Honourable Bernard Coard, who briefed the mission on the economic and financial situation of Grenada and on the major constraints on the country's development. Throughout its stay, the mission held regular meetings with a committee of senior officials from all the relevant ministries, presided over by the Permanent Secretary for Planning.
5. In preparation for the mission's visit, the Government had prepared documentation on each of the projects and programmes for which it required

assistance and on the economic and financial situation of the country, as well as documents relating to the damage and destruction caused by uncharacteristically heavy rains in 1979, hurricane "Allen" in 1980, and the freak wind and rain storms which struck Grenada in early 1981.

6. The mission wishes to express its appreciation to the Government of Grenada for all the arrangements made for its visit. Every effort was made to provide the mission with the information necessary for its work and to enable the mission to visit a number of key development projects for which international assistance is required. The mission also wishes to acknowledge the assistance provided by the office of the United Nations Development Programme (UNDP) in Barbados and by the various United Nations experts serving in Grenada.

II. GENERAL BACKGROUND

7. Grenada is one of the smallest nations in the Caribbean with a total land area of 133 square miles and a population of 110,000 people. Because of its comparatively recent volcanic origin, most of the terrain of the main island is extremely rugged with steep slopes and numerous valleys. Grenada possesses some of the most beautiful landscapes and beaches in the Caribbean.

8. Grenada is an almost classic case of the small island developing economy. Its resource base is limited and its small internal market and distance from large market areas makes it extremely difficult for the country to take advantage of economies of scale. The country is almost completely dependent on external markets for both its exports and its imports. Its relative remoteness adds to its inaccessibility, exacerbated by the infrequency and unreliability of transport and communication links with the more developed centres from which it obtains its necessary imports and in which it sells its exports. In addition, Grenada is located in an area prone to natural disasters - particularly hurricanes and freak rain storms which, when they occur, devastate the entire country, not just one region or location.

9. The economy is predominantly agricultural and service oriented. Its major exports - bananas, cocoa, nutmeg and mace - are sold predominantly in the European markets. Indeed, in recent years, over 80 per cent of Grenada's exports have been sold in four European countries.

10. Although Grenada imports from a large number of countries, the bulk of the imports - with the exception of petroleum products from Trinidad and Tobago - come from industrial countries. As a result, the economy is seriously affected by inflation and recession in the industrial countries. In addition to agricultural exports, tourism has provided Grenada with a significant amount of foreign exchange. This source of foreign exchange earnings is also vulnerable to recession in the industrial countries and, given Grenada's relative isolation, highly dependent on the efficiency of international air transport.

11. Two features of Grenada's economy need emphasis. Firstly, because of its small size and the absence of major engineering and construction firms, the economy is dependent upon outside contractors for all major capital works. This necessarily involves very high organization and start-up costs which add to the expense of constructing major infrastructure such as roads, ports and airports.
12. Secondly, because of the nature of the soil and topography, the country is particularly vulnerable to erosion, landslides and damage from excessive rains and high winds. This vulnerability to disruption becomes particularly serious because of lack of adequate construction and heavy earth-moving equipment in the country.
13. During the past two decades, the economic development in Grenada has shown wide and sometimes violent fluctuations. During the 1960s, after a period of disruption, the agricultural sector expanded and became more diversified. During the same period, however, the tourism industry over-expanded, with resulting excess capacity and financial difficulties for the firms involved. The heavy dependence of Grenada on agriculture, tourism and services is shown in table 1, which shows the sectoral origin of Gross Domestic Product (GDP). Since 1975, agriculture has shown a relative decline which has been compensated by a relative growth in wholesale and retail trade and in Government and general services. Striking features of the economic structure are the low level of manufacturing and the very small proportion of GDP originating in the construction industry. Indeed, until 1980, when there were major expenditures on the new airport, construction had in no year contributed even 3 per cent of GDP.
14. It is thus easy to see why, at this time, significant investments are necessary to improve the social and economic infrastructure in Grenada. In the period from 1975 to 1979, little construction activity was carried out, implying inadequate repair and maintenance of houses, roads, schools, clinics and public buildings.
15. Although the economy of Grenada had developed in the 1960s, it stagnated during the early 1970s largely as a result of the disruption of tourism and foreign trade and the effects of the agricultural reorganization. Beginning in 1975, there was a revival in both agriculture and tourism, and GDP in real terms increased by nearly 10 per cent annually. In 1977, however, the rate of growth fell largely as a result of adverse weather conditions, outbreaks of plant diseases and a reduction in the acreage cultivated. However, continued recovery in tourism compensated for the setback in agriculture and during 1977 and 1978 GDP in real terms continued to grow at about 5 per cent per annum.
16. In 1979 and 1980, however, there was virtually no real growth in GDP. The growth in tourism levelled off, while agriculture was adversely affected by heavy rainfall in late 1979 and by a major hurricane in the summer of 1980. Indeed, in a period of nine months, Grenada's economy and infrastructure were severely battered. During the period November 1979 to January 1980, abnormally heavy rainfall (four to five times the normal) caused damage estimated at \$10 million. Before the island could recover and rehabilitation programmes could be carried out, hurricane "Allen" - judged by many to be the most destructive to visit the Caribbean this century - again devastated the island, causing damages in excess of \$6 million.

Table 1

Grenada - Sectoral origin of gross domestic
 product at current factor cost, 1975-1979
 (percentage)

	1975	1976	1977	1978	(Preliminary) 1979	(Estimate) 1980
Agriculture, fisheries and forestry	38.6	34.9	33.1	30.0	31.9	24.0
Manufacturing	2.8	2.7	2.8	2.9	2.8	3.0
Electricity and water	2.0	2.1	1.9	1.8	1.8	a/
Construction	2.5	2.6	2.7	2.3	2.2	5.0
Wholesale and retail trade	11.6	11.6	14.7	13.7	15.0	16.0
Transport and communications	5.6	5.6	7.3	6.6	6.3	7.0
Hotels and restaurants	2.8	2.7	3.3	3.2	2.9	a/
Government services	16.9	22.0	18.5	24.1	22.1	22.0
General services	17.0	15.8	15.6	15.4	14.7	23.0 a/
GDP at factor cost	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
GDP at factor cost (Millions of \$EC)	84.6	96.8	110.9	135.5	156.3	173.0

Source: Ministry of Finance and mission's estimates.
 Rate of exchange: \$EC 2.70 = \$US 1.00.

a/ Included, with other, in general services.

A measure of the significance of the rain storms and hurricane damage is that 40 per cent of the bananas, 30 per cent of the nutmeg and nearly a quarter of the cocoa crops were destroyed.

17. During the rains and the hurricane, rivers flooded, destroying roads and bridges and sweeping away food and tree crops in the alluvial plains along the river courses. Road surfaces were destroyed, landslides occurred all over the island and the foundations of roads and bridges were undermined. The sheer weight and volume of water caused topsoil on sloping lands to shift, and landslides made feeder roads impassable. Of more long-term significance were the severe loss of soil fertility brought about by erosion and the leaching of soil nutrients and the destruction of forest cover.

18. In summary, although there was significant damage to infrastructure, the economy suffered its greatest setback, both in the short and long-term, in the agricultural sector. As a consequence of this destruction, real GDP stagnated during 1979 and 1980.

19. The weakness of the economy of Grenada was masked between 1975 and 1979 by significant improvements in the terms of trade. Although inflation occurred in the countries supplying Grenada's imports, the prices of Grenada's exports increased more than proportionately. On average, the prices of exports increased by nearly 28 per cent per year between 1976 and 1979, mainly as a result of increased cocoa prices. In 1980 and 1981, however, the terms of trade moved sharply against Grenada. In 1980, the Government estimates that the terms of trade deteriorated by nearly 20 per cent, whereas in 1981 all of Grenada's exports experienced sharp declines in prices. Cocoa prices have fallen nearly 50 per cent, nutmeg prices nearly 20 per cent, and mace 15 per cent. Bananas - another major export - have faced difficult markets, partly as a result of the displacement of Windward Island bananas by bananas from central America following the disruption of supplies from the Windward Islands after the hurricanes in 1980.

20. This deterioration in the terms of trade is particularly important for Grenada, which has consistently run a trade deficit (see table 2). It will be seen in table 2 that the trade deficit doubled between 1977 and 1980. Although no estimates are available for 1981, it seems clear that the position will deteriorate further as a result of the serious decline in export earnings. In the past, earnings from tourism have been important in covering part of the substantial trade deficit. However, the tourist industry has itself faced a decline of nearly 20 per cent in 1981. Under these circumstances, there is a need for additional inflows of resources if Grenada is to be enabled to carry out its short-term and long-term development programmes.

Table 2

Grenada - Merchandise trade
 (Millions of US dollars)

	1975	1976	1977	1978	1979	(Estimate) 1980
Exports	12.4	13.0	14.3	16.9	21.6	16.8
Imports	<u>24.2</u>	<u>25.3</u>	<u>31.4</u>	<u>35.7</u>	<u>53.6</u>	<u>50.0</u>
Trade deficit	<u>11.8</u>	<u>12.3</u>	<u>16.9</u>	<u>18.8</u>	<u>32.0</u>	<u>33.2</u>

Source: Ministry of Finance.

Government finances

21. For many years, a major problem has been the financial weakness of the central Government. With the exception of 1977, the Government's recurrent expenditures exceeded current revenues in every year from 1975 to 1978 (see table 3). In practice, the central Government's position was substantially worse than the figures suggest, as there was a significant accumulation of arrears amounting in 1979 to nearly \$EC 10 million. a/ It should be noted that these substantial current deficits and arrears occurred during a period when the economy was growing at a reasonably rapid rate. Beginning in 1979, a deliberate effort has been made to eliminate the Government's deficit on current account and to pay off or regularize arrears. This programme had been completed by the end of 1980 and a significant part of the current expenditures in 1979 and 1980 actually relate to goods and services purchased by the Government in the earlier period. The improved tax collection system and strict controls over expenditures introduced in 1979 have thus allowed the Government of Grenada, for the first time in many years, to cover current expenditures with current revenues. Indeed, in the absence of the arrears problem, it would have been possible to make a significant contribution to investment from the current budget in 1979 and 1980. The depressed prices for exports in 1981, combined with the reduction in tourism, makes it impossible for the recurrent budget to generate any surplus for investment purposes during 1981.

22. In summary, the economy of Grenada has recently been faced with relative stagnation, increasing unemployment, and a decline in the level of services provided

a/ Rate of exchange - \$EC2.70 = \$US1.00.

Table 3

Grenada - Central Government finances
(Millions of EC dollars)

	1975	1976	1977	1978	1979	1980	1981
Current revenue	18.8	27.3	33.2	44.8	54.9	58.9	69.4
Current expenditure	23.0	33.1	31.3	48.8	53.9	59.6	68.9
Current balance	-4.2	-5.8	+1.9	-4.0	+1.0	-0.7	-0.5

Source: Ministry of Finance.

to the people. While this is in part a reflection of the development policies pursued in the early 1970s, a major factor in the past three years has been adverse weather conditions - excessive rains, hurricanes and frequent storms. These not only damaged crops but also damaged the economic and social infrastructure.

23. In recent years, a number of obstacles to more rapid economic development have been identified. One was the inadequate public finance system and the resulting low level of public savings. Second was the inadequacies of both the internal and external transport systems which seriously hindered any expansion of the country's productive sectors. A third was the weak institutional arrangements which not only made it difficult for Grenada to utilize effectively the international assistance available but failed to mobilize local initiative in self-help and development-oriented activities.

24. During the past two years, significant improvements have been made in all three areas. The Government's recurrent budget has been brought into balance by widening the sources of revenue and improving revenue collection procedures while at the same time introducing much more careful controls of expenditures and eliminating all outstanding arrears. Thus, the economy is now in a position to generate surpluses as economic growth and development take place.

25. There has also been a significant improvement in the institutional arrangements by which international assistance is co-ordinated and utilized combined with a widespread programme for community self-help and co-operation, particularly at the village level.

26. With respect to the inadequacies of the transport system, important advances have been made, particularly with regard to external transport. Thus, a beginning has been made on the new airport, and projects are now in the process of implementation to improve the ports and to strengthen the vehicle and heavy equipment maintenance arrangements.

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27. Unfortunately, largely as a result of the sharp reduction in agricultural output, unemployment has continued to grow. Further, the shortage of local resources has made it impossible to make any significant improvements in the internal transport system.

28. In an attempt to revitalize the economy, the Government is focusing its development efforts in five major areas. These are: agriculture; industry, particularly agro-industry; tourism; transportation; and the improvement of the level of services available to the people, particularly those with lower incomes.

29. In consultation with the Government, the mission was able to identify a number of projects in these areas of concentration designed to meet some of the major weaknesses of the economy.

III. DEVELOPMENT OBJECTIVES AND ASSISTANCE REQUIRED

30. The development needs and the assistance required for projects and programmes designed to meet these needs have been grouped together under agriculture and forestry; industrial development; transport; health and housing; and an education.

A. Agriculture and forestry

31. Agriculture has been and continues to be the dominant economic activity in the country, normally contributing over 30 per cent of GDP and providing employment to more than one third of the labour force. The soils of Grenada, volcanic in origin, are relatively fertile and derive from parent material that is highly erodable. Intensive rainfall causes widespread leaching with huge losses of soil nutrients. An important feature is the presence of substantial areas of volcanic rocks in ash deposits. These formations, many of which are found in the lower areas near the coast, are extremely unstable during heavy rainfall.

32. Grenada experiences marked dry and wet seasons. Although just south of the recognized hurricane zone, the island is occasionally within the path of hurricanes and frequently experiences unusual wind and rain conditions. When hurricanes pass in its neighbourhood, unusual rains and winds cause major destruction in view of the highly erodable nature of the soil and the topography of Grenada. The island is very hilly with about 46 per cent of the land having a slope of between 20 degrees and 30 degrees, and 23 per cent of the land having slopes exceeding 30 degrees.

33. A striking feature of the land use pattern is that the main economic crops are tree crops - cocoa and nutmeg - and bananas. These crops are found mainly in the hilly areas where rainfall is high, interspersed with a wide assortment of fruit trees and food crops at medium and lower elevations. The highest areas of the country are largely forest, although some highlands are cultivated. While the tree cover serves as an anti-erosion measure, it is insufficient to prevent serious damage and erosion during heavy rains and is vulnerable to destruction by strong winds.

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34. At present, there are approximately 46,000 acres of land under cultivation. Although up-to-date information is not available, it is estimated that in the period since 1961 there has been a loss of land for agriculture of nearly 1,000 acres annually. Most of the land which went out of agricultural production has been used for housing or for uneconomic garden plots one-half acre or less in size.

35. Two important features of land tenure in Grenada are shown in table 4. Some 88 per cent of the arable acreage is owned by operators who have either inherited small parcels or purchased plots of one or two acres as they became available and when the operator could afford to make a purchase. The second feature relates to the small fragmented holdings, which are often uneconomic in size. The mission was informed that many of these smaller holdings are located on poor lands in hilly or inaccessible areas of the country.

Table 4

Land tenure

<u>Land distribution</u>				
<u>Category</u>	<u>No. of holdings</u>	<u>Acreage</u>	<u>Per cent of acreage</u>	<u>Acreage per holding</u>
Holdings owned	9,740	53,132	88.3	5.5
Holdings rented	2,027	2,105	3.5	1.0
Rent free	454	558	.9	1.2
Mixed tenure	1,875	4,402	7.3	2.3
	<u>14,096</u>	<u>60,197</u>	<u>100.0</u>	<u>4.3</u>
<u>Farmland fragmentation</u>				
<u>Farm size (acres)</u>	<u>No. of holdings</u>	<u>No. of parcels</u>	<u>Parcels/holdings</u>	
Under 1	6,458	7,497	1.16	
1 - 5	6,052	11,066	1.83	
5 - 10	934	2,579	2.76	
10 - 25	418	1,124	2.69	
25 - 50	100	226	2.26	
50 - 100	42	75	1.74	
100 - 200	28	32	1.14	
200 - 500	52	81	1.56	
500 +	12	13	1.08	

Source: 1961 West Indies Census of Agriculture.

36. Agriculture in Grenada is dualistic in nature with an export sector consisting of State and larger farms and a small farm sector producing largely for subsistence needs but with some small marketable surplus for local consumption.

37. The main export crops are cocoa, bananas and nutmeg (with mace). Until recently, the export sector has been reasonably well served with an institutional structure organized to provide credit, agricultural inputs, and marketing. On the other hand, the small farm sector has tended to be characterized by insecurity of tenure, a low level of technology, a high proportion of crops wasted, a lack of credit availability and a lack of social organizations for mutual self-help. Extension and other supporting services provided by the Government have generally been inadequate. The disadvantages facing the small farm sector are considered a major factor in the drift of younger and more energetic people away from agriculture.

38. Notwithstanding the importance of agriculture to the country and the relatively large numbers engaged in subsistence production, food makes up nearly 38 per cent of Grenada's import bill. Indeed, in 1979, when export agriculture was affected by natural disasters and seriously depressed, food and food product imports were equal to the value of agricultural exports.

39. One reason given for the large import bill has been the over-emphasis on export agriculture. However, the Government believes that an equal, if not more significant, reason has to do with the attitudes towards agriculture as an occupation. Historically, agricultural pursuits involving field work have been unattractive, being associated with drudgery, indignity, poor pay and little or no prospects of betterment. During the period when the export sector was largely controlled by foreign interests, the lack of prospects for advancement and higher incomes was also true in the plantation sector. Thus, younger people tended to shun agriculture, especially those who had succeeded in obtaining intermediate levels of education.

40. Young people leaving agriculture found it difficult to obtain gainful employment in alternate industries and for a number of years the unemployment rate has been around 30 per cent of the labour force. For many of the young people, the only real alternatives to remaining on the land - working on the estates or in the tourist industry - were both seasonal in nature. As a consequence, many of the people in the services sectors are part-time farmers with small, excessively fragmented holdings. This structure of ownership and cultivation necessarily results in poor management practices and low levels of technology. The exodus of youth shows up in the high average age of full-time farmers, now estimated to be over 50 years and steadily increasing.

41. The new Government has adopted, as a primary objective, the creation of a healthy and viable agricultural sector capable of absorbing the unemployed, especially the large number of unemployed youth. In order to accomplish the above, as well as related objectives, the Government has identified three main target sectors in the rural sector:

- (a) Small farmers - accounting for about 13,000 holdings of under 10 acres;

(b) Co-operatives - including both primary and secondary societies for production and marketing;

(c) State farms - consisting of some 3,000 acres of lands purchased by the previous Government but largely unused.

42. The Government is anxious to provide improved services, including extension, marketing and credit to the small farmer, whether working as an individual, associated with the State farms or as part of a co-operative arrangement. To assist in accomplishing this, the Government is attempting to change the traditional attitude towards farming via a programme of education and an appeal to national consciousness. The development of co-operative societies is expected to play an important role in this process. Indeed, the Government has chosen to rely on co-operative development as a principal mechanism for socio-economic development within the rural community.

43. Although the new programme has been in effect for only two years, notable progress has been achieved in relation to the foregoing target sectors. Extension services have been intensified and marketing facilities have been improved. As of mid-1981, some 19 registered co-operative societies for marketing, production and rural crafts have been organized and were operational. The State farms, which were previously idle lands, are being organized into viable productive units and already are providing inputs into local agro-industries for processing.

44. In order to continue and intensify the programme and revitalize the agricultural sector, the Government is seeking international assistance to implement six projects.

1. Strengthening the agricultural extension service

45. It is now generally accepted that the core of any Ministry of Agriculture is its Extension Service. The extension officer is an "agent of change" with vital day-to-day contact with the farming community. Unless the country is able to provide adequately trained and equipped extension officers to service the farming community, especially those smaller farmers who for a variety of reasons are virtually cut off from access to other sources of information and assistance, most of the measures being adopted for agricultural revitalization are unlikely to succeed.

46. There are at present only 25 established extension service posts in the Ministry. With the present farm population of some 14,000, this results in a ratio of one extension officer for 560 farmers - an unacceptably low ratio by any standards.

47. In addition to the heavy burden that must be assumed by every extension officer, his operations in Grenada are further handicapped by the fact that (a) he is not provided with any form of transportation, which may mean walking from farm to farm; (b) he is not provided with housing for his family and himself, which may mean that he is unable to live in his particular service area; (c) he is not

provided with office space and facilities; and (d) he has no access to audio-visual and other teaching aides. Further, there are no arrangements for in-service training designed to both advance skills and mobilize enthusiasm. Any officer seeking further training must temporarily vacate his post and leave the country.

48. It is to correct this situation that the Government is seeking assistance for a project designed to strengthen its extension services.

49. A major element would be the training of 25 young people (possibly in Jamaica or Trinidad) to obtain two-year diplomas in agriculture. On their return to Grenada, these students would join the extension service, thus lowering the agent/farmer ratio to 1:280 -- a not ideal but at least a more tolerable ratio.

50. The other major element in the project is the provision of infrastructure, vehicles, equipment and training facilities to the extension service staff members in Grenada. The total cost of the project would amount to \$US 1.63 million.

3. Emergency aid to the banana industry

51. In the past 20 months, agriculture in Grenada has been hit hard by hurricanes and storms on three occasions. The most recent, in August 1981, was a freak windstorm which reduced the production of bananas by 25 per cent.

52. Because of the over-all importance of bananas to the economy of the country, representing one of the major earners of foreign exchange as well as a source of employment and income for a large part of the population, it is vital that the industry remain healthy. However, largely as a result of natural calamities, the industry has been severely depressed in recent years. The Grenada Banana Growers' Association, which is the farmers' agency representing them with the buyers on the one hand and supplying them with inputs on the other, is now financially destitute. It is financially overextended and is unable to go on without additional assistance.

53. Phase 1 of the proposal is to provide six months of inputs to the Banana Growers' Association for distribution to farmers, which would at least bring the industry back to where it was in late 1979 and allow it to become self-financing.

54. The total amount needed would be \$US 555,000, distributed as follows:

(Thousands of
United States dollars)

1. Fertilizer	
- 500 tons 16.8.24	170
- 200 tons calcium ammonium nitrate	37
2. Puradan pesticide -- 30 tons	73
3. Gramozone (Paraquat) -- 6,000 litres	34
4. Blue diothene -- 1,000 rolls	50
5. Sprayter oil -- 25,000 gallons	55
6. Benlate fungicide -- 5,000 lbs.	46
7. Aviation gasoline -- 2,000 gallons	4
8. Four-wheel-drive vehicle -- 2	30
9. Shipping boxes -- 50,000 or 6 months' supply	56

3. Further development of the banana industry through creation of a revolving fund for farm inputs

55. The second phase of the project is concerned with the further development and intensification of the industry. It is estimated that there are approximately 3,000 acres on which bananas are grown but only one-half ton of fertilizer is applied to each acre, half the recommended rate of one ton per acre. Underfertilizing results in reduced yields and poor quality of product.

56. To revitalize the banana industry, an essential step is to apply the recommended amount of fertilizer to each of the 3,000 acres in bananas, a total of 3,000 tons. The Grenada Banana Growers' Association is already importing 1,500 tons.

57. Such a programme would also make it possible to carry out extensive replantings of banana plants over an 18-month period and provide the necessary shade for cocoa, which also needs rehabilitation.

58. The cost for the extra 1,500 tons of fertilizer (16:8:25) would be \$US 510,000. It is proposed that this amount be provided to form the basis of a revolving fund that would be administered by the Banana Growers' Association. Unless provided as a grant, an 18-month period of grace for repayment of principal and interest is needed to correspond to the gestation period of three planned new plantings over that period of time.

4. Emergency assistance to combat the cocoa thrips epidemic in Grenada

59. Cocoa is the major export crop in Grenada and many of the limited resources are devoted to combating the many pest and disease problems at present confronting the

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industry. Despite such efforts, production has shown little increase. (From 1945 to 1975, normal annual exports of cocoa were 5.8 million pounds. For 1979, exports amounted to 5.7 million pounds and fell to 4.6 million pounds in 1980.) Average yields are extremely low (350 pounds/acre) in relation to potential yields (1,000 pounds/acre).

60. The various natural disasters over the last 20 months severely affected the cocoa industry through the destruction of bananas and wind-breaks which provide the important shade that cocoa requires for healthy growth. With the removal of the shade, the cocoa plants became exposed to the full effect of sun and insect pests. In addition, Moko disease in bananas, which is controlled by the destruction of banana plants, has also caused cocoa fields to be exposed.

61. Cocoa thrips (*Solenthrips rubrocinctus*, Giard) is causing serious damage throughout the island and is presently at epidemic proportions. The present level of control is unlikely to be able to contain the pest. A technical committee comprising personnel from the Ministry of Agriculture, the Cocoa Association, the Caribbean Agricultural Research and Development Institute and the Inter-American Institute for Agricultural Sciences has been set up to make recommendations for dealing with the problem. It has recommended an expanded programme which involves strengthening the capability of the control team by increasing the level of expertise involved in the campaign, the number of spray machines and the quality of pesticides used.

62. Assistance amounting to \$350,000 is required to provide an expert for one year and to purchase 150 turbine spray machines, 20,000 litres of Folithion Insecticide, 5,000 pounds of Kocide Fungicide, 5,000 litres of Agral Sticker/Spreader, 100 gallons of Gramoxane Weedicide, 20 spray cans and 2 four-wheel-drive vehicles with trailers.

5. Production of forest products

63. Presently, there are some 9,800 acres under forestry in Grenada, of which well over 90 per cent is in indigenous species. Harvesting from this area produces one third of the country's annual requirements of 3 million board feet. Most of the forest area is in the Grand Etang Forest Reserve.

64. It is intended to implement an organized extraction and reforestation programme designed to produce another 1 million board feet and thus meet two thirds of the country's requirements. The programme will also be directed to the preservation of water catchment areas, employment generation and erosion control.

65. The programme will include the following measures: (a) road construction over a 10-year period in the Grand Etang Forest area; (b) planting new areas; (c) construction of a dryer shed and necessary office buildings for administrative purposes; (d) propagation of planting material at three nursery sites; and (e) production of timber, split fencing, telegraph poles and fence posts. It is also proposed to purchase chain saws, a skyline winch, a four-wheel-drive truck and one crawler tractor.

66. Estimated annual revenues derived from the increased production (i.e. for timber, etc.) range from \$US 316,000 in year one to \$US 940,000 in year five and should cover recurrent costs. Preliminary estimates show a favourable benefit/cost ratio and internal rate of return. On social ground, the programme will provide much-needed infrastructure (Grand Etang Forest road) to assist rural development and tourism and generate additional employment. The increase in domestic production of timber and other forest products will reduce imports and thus save foreign exchange.

67. Assistance is required for the capital costs - road construction, planting, machinery and buildings - amounting to \$810,000.

6. Rehabilitation and expansion of the Mirabeau Agriculture Training School

68. Assistance is needed to reconstruct and expand the country's single institution for training in the practical aspects of agriculture - the Mirabeau Agriculture Training School. The school was intended to graduate some 50 students, both men and women. Originally, it had been intended to double the number of students per annum to 100 but the school was destroyed by fire in January 1981. Classes have continued, however, employing makeshift facilities, largely constructed by the students themselves.

69. It is proposed to make the school farm a commercially viable enterprise which, in addition to serving as a demonstration model, would assist in providing a portion of the food consumed by the students who live on the school grounds. In order to achieve these objectives, additional buildings, including dormitories, staff quarters, a library, laboratory and storeroom, will have to be built. It will also be necessary to acquire an additional 50 acres of land to enlarge the existing school farm.

70. The Food and Agriculture Organization of the United Nations (FAO) has provided some \$US 10,000 for the purchase of needed equipment and books. Further, before the destruction of the school by fire, the European Development Fund (EDF) had informally indicated considerable interest in providing some \$US 184,000 towards the proposed expansion.

71. The Government now wishes to reconstruct the school and to proceed with the planned expansion.

72. The capital costs for the project have been estimated at \$US 645,000. Total external assistance needed is estimated at \$US 565,000. Other capital expenditures, including purchase of land and establishment of 12 acres of pasture and annual operating costs, will be borne by the Government. However, should EDF provide the \$184,000 previously discussed, only \$381,000 additional will be needed.

B. Industrial development.

73. Although industrial growth has been considerably constrained in the past by a number of factors, e.g. small internal markets, transport costs, lack of skilled manpower, scarcity of investment finance and poor infrastructure, the Government is anxious to develop a vibrant industrial sector based mainly on agro-industries and light manufacturing activities in order to ensure the maximum utilization of local human resources and raw materials.

74. The sector comprises a very small number of enterprises which, by using simple technologies, produce largely for the domestic market and generate less than 3 per cent of GDP.

1. Agro-industries

75. In mid-1981, the Government established a Ministry of Agro-Industries and Fisheries in order to streamline the various activities in the public sector geared to promote agro-industrial development.

76. A laboratory for agricultural research (agro-lab) and a plant to process agricultural products (agro-plant) operate as part of the Ministry.

77. The agro-lab comprises three produce chemists and one engineer. Current research and development activities focus on the processing of nutmeg, mace, cinnamon, ginger, pimento, cloves and turmeric. The agro-industrial plant, which started operations in 1980, produces jams, jellies, sauces and fruit juices. The staff consists of a manager, two produce chemists, an engineer for equipment maintenance, one salesman and 11 workers for the processing line.

78. In order to diversify and expand the agro-industrial sector, the Government is seeking financial assistance from the international community for the following agro-industrial projects:

	<u>(United States dollars)</u>
(a) <u>Expansion of the sugar industry</u>	
(i) Cultivation and harvest of an additional 900 acres of cane in order to become self-sufficient in sugar	747,100
(ii) Replacing the steam generating system in the existing sugar factory	1,280,400
(iii) Purchase of a distillery plant to meet local demand for rum and industrial alcohol	489,500
(b) Establishment of a dairy industry for the reconstitution of milk and production of milk-based beverages, cheese and icecream	130,000
(c) Establishment of a micro-biological quality control laboratory to monitor locally produced food-stuffs	499,000
(d) Adviser to the Ministry of Agro-industries and Fisheries on the operation of the agro-lab and the agro-plant -- (24 man/months)	160,000
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2. Manufacturing

79. The Government emphasized the need to diversify the manufacturing sector by establishing export-oriented activities such as garments, furniture and electronics assembly. In order to encourage local and foreign investors, the Government has participated in an investment promotion meeting jointly organized by the United Nations Industrial Development Organization (UNIDO) and the Caribbean Development Bank (CDB) and soon will publish guidelines for investors.

(a) In this context, the Government requires a short-term consultancy to explore the various industrial usages of non-agricultural local raw materials (estimated cost: \$US 50,000). One important local raw material is lumber.

(b) The Government intends to establish a national furniture production organization to provide training in furniture repair and manufacturing. The cost of the assistance required is \$US 359,000.

3. Marketing

80. In 1973, the Government established a National Marketing and Importing Board (NMB) as a statutory body which comes under the portfolio of the Ministry of Trade and Industry. Currently, NMB purchases and markets locally non-traditional agricultural produce like vegetables, root crops and grain; exports certain non-traditional agricultural products; and imports and distributes sugar, rice and cement to wholesalers and supermarkets. The problems faced by NMB are:

(a) Shortage of personnel to identify (export) markets;

(b) Lack of proper transportation facilities to take commodities to identified outlets;

(c) Lack of adequate infrastructure to ensure proper packaging, storing and general handling of products prior to export.

The financial assistance which is required for NMB amounts to:

	<u>(United States dollars)</u>
(Export) marketing specialists (24 man/months)	140,000
Purchase of a small coast vessel	52,000
Storage, packaging, loading equipment	48,400
Buildings	110,600
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Total	351,000
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4. Grenada Development Bank

81. The Grenada Development Bank (GDB), the former Grenada Agricultural and Industrial Corporation, is a statutory body, created in 1976, which comes under the portfolio of the Ministry of Finance. The Bank exercises the functions of a development financing institution for projects related to industrial and tourist development, housing, higher education, agricultural development and other development projects. Under a loan agreement with CDB, the Bank receives funds for on-lending to small businessmen and farmers. Among the activities supported are the making of handbags, concrete blocks and furniture.

82. In 1980, the Bank approved loans for \$EC 1.1 million and disbursed \$EC 780,000. In 1981, the Bank only approved loans for \$EC 375,000 and disbursed \$EC 262,500.

83. There is a shortage of managerial staff and the Bank requires an industry specialists for two years. The estimated cost is \$US 140,000.

C. Transport

84. Both internal and external transport facilities are in need of improvement if Grenada's economy is to develop. Inadequate infra-structure and high local transport costs are a constraint not only on export-oriented industries but also on the development of tourism. Even in agriculture, the inadequacies of the transport system are a serious constraint to serving the local market. External transport links have been, for some years, the greatest single limiting factor in achieving the country's growth potential. However, a major priority, which was identified as early as 1972, is the reconstruction of the road system. The existing road network consists of 188 miles of primary roads, 137 miles of secondary roads and 240 miles of tertiary roads. In total, about 360 miles are asphalt surfaced. Ten years ago, a consultant's report recommended the immediate reconstruction of 100 miles of primary roads. However, road conditions have deteriorated significantly since then because of drastic and reduced road maintenance expenditures which, in the 1970s, averaged only about 10 per cent of the figures budgeted in the late 1960s. Almost all expenditures on road maintenance have been devoted to keeping the primary roads open to traffic, while the secondary and tertiary roads were neglected. The Government now estimates that nearly \$100 million will be required to reconstruct and rehabilitate the road system and bring the roads back to the standards of 15 years ago. The Government recognizes that such funds are unlikely to be available.

85. In consultation with the mission, the Government identified a number of projects to improve both internal and external transport.

1. Roads

(a) Emergency road programme

86. Because the road system is in an extremely poor condition due to both deferred maintenance and a succession of natural disasters whose effects have been cumulative, the road network will need to be improved as an ongoing long-term programme. The most urgent needs involve \$10.5 million to repair 85 miles of road in rural districts and \$6.1 million for emergency repairs on 56 miles of feeder roads in order to restore and improve access to agricultural areas. Part of the expenditure is required to make up for deferred maintenance, part to repair and strengthen bridges, sea defence walls and retaining walls and to clear river courses of debris and thus repair the damage caused by prolonged heavy and unseasonal rainfall in 1979 and the hurricane in 1980.

(b) Road design and construction management unit

87. The Government needs to establish a unit for road design and construction management aimed at providing on-the-job training to enable personnel to manage such projects. Such a unit is estimated to cost \$335,000 over a three-year period.

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(c) Soils and materials laboratory

88. While some soils and materials testing equipment is in use in Grenada, particularly in conjunction with the new airport, there is insufficient equipment to establish and operate a laboratory for the purpose of testing soils and construction materials. Such a facility is needed as a permanent addition to the Government's infra-structure in support of programmes to increase the use of local materials in road construction and to decrease construction and maintenance costs by prolonging the life of road surfaces. Such a laboratory would also be useful to test other types of construction materials and to maintain standards. It is estimated that \$US 79,000 is required to purchase the additional equipment, and some \$121,000 is needed for technical assistance and training.

(d) Quarry development

89. The Government wishes to upgrade and develop three quarries to supply crushed stone for major civil engineering works. The estimated total cost is \$US 1,250,000 and no source of funding has been identified, although EDF has been approached.

(e) Sea-wall defences - \$US 1,000,000

90. It should be noted that a considerable part of the coastline of Grenada is subject to severe erosion and flooding by the sea. It is, therefore, essential to build and maintain sea defences. The first phase of this work entails a comprehensive survey and analysis of all the sea defences in Grenada, Carriacou and Petit Martinique. This would be followed by a second phase which would carry out the construction and repair work identified. The total cost is estimated at \$US 1 million.

(f) Feeder roads

91. While it is recognized that the reinstatement of the existing road system is of prime importance, further development of the agricultural sector is dependent on an adequate feeder road system. A programme was proposed in 1971 to construct 90 miles of feeder roads, but only about 16 miles have so far been completed. The proposal to initiate a long-term extension of acreage under cocoa and bananas will require the completion of the feeder-road programme, which is estimated to cost \$US 8.2 million.

2. Maritime transport

92. In recent years, there has been little investment in port development to match the changing requirements of international shipping. Further, transport between Grenada and Carriacou continues to be a problem.

(a) Port development - St. Georges

93. St. Georges is the principal port for imports and exports and is also extensively used by cruise ships. There is a long-term plan to expand and improve

the main port facilities by reclaiming land for container storage, enlarging the schooner berths, constructing a roll on/roll off ramp and providing for cruise ships. The estimated cost of the long-term plan for port development is \$10.3 million.

(b) Hillsborough Jetty - Carriacou

94. The existing jetty at Carriacou is being reconstructed with the assistance of the European Development Fund (EDF), which is also financing the construction of four other jetties to assist the local fishing industry. The Government is seeking international assistance for a new facility which is planned for the post-1984 period to replace the existing structure on Carriacou. The estimated cost is \$350,000.

3. Civil aviation

95. A major priority of the Government is improved tourist access to the country. The potential for the tourism sector is considered excellent although development has been constrained by the inadequate airport facilities and airline services.

96. Owing to its various attractions, Grenada was able to participate in the growth of Caribbean tourism which took place in the 1960s and early 1970s. Between 1966 and 1972, arrivals of stay-over visitors more than doubled from 18,000 to nearly 38,000. In that period, substantial tourist capacity was created and, overall, the quality of hotel stock in Grenada is among the highest of any of the Caribbean islands. Beginning in 1972, however, the number of visitors stagnated. In this connexion, it should be noted that during 1969, 1970 and 1971 the number of stay-over visitors to Grenada exceeded the number in Saint Lucia. However, since 1972, when Hewonarra airport opened in Saint Lucia, the number of visitors to that country has grown at a much more rapid rate and is now nearly treble the number for Grenada.

97. The Government is hoping to attract some 100,000 to 135,000 stay-over tourists by the end of this decade. It is recognized that to achieve this number it will be necessary to undertake intensive publicity campaigns and marketing studies as well as to make additional investments in new hotels and services. If the figure of 100,000 were to be achieved, it would require about 400 jumbo jets with an 80 per cent load factor to bring the tourists to Grenada each year.

98. The Government has embarked on a programme to construct a new international airport capable of handling large jet aircraft. The existing airport, Pearls, could not be extended, and the approach around a mountain prevented night landings.

99. It is intended to construct the new airport in three phases. It is hoped to complete the first phase by the middle of 1982, which will allow feeder aircraft to operate on a 24-hour basis. This first phase will be followed by an extension to handle intermediate jets with a facility rated at International Civil Aviation Organization (ICAO) Category B standards. The third phase will involve upgrading to ICAO Category A - capable of handling the largest commercial aircraft. The

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first phase will provide a runway of 5,000 feet, the second phase 7,700 feet, and the final phase 9,000 feet. The Government is hopeful that the airport will eliminate excessive bottle-necks which hinder tourist and other development in Grenada.

100. In a submission to potential donors in 1981, the Government estimated that \$71 million of external financing was required for the new airport. Substantial contributions have already been obtained from Cuba, Venezuela, Algeria, the Syrian Arab Republic and the Libyan Arab Jamahiriya. Given the magnitude of the project, Grenada needs massive external assistance in addition to the assistance already pledged. At this stage, the Government is requesting an additional \$33 million in order to complete the first and second phases.

101. Within the first two phases, it is essential that assistance be provided in order to ensure that the airport has adequate fire and rescue requirement, instrument landing systems and VOR/DME for safe, efficient operation when the airport is expanded for intermediate-range jets.

102. The Government had prepared a draft project document in UNDP format to cover a five-year training programme in air traffic control, airport management, radio maintenance, fire and rescue services and maintenance of plant and equipment. The estimated total cost of the five-year training programme was \$US 860,000. The mission was informed that, given the small indicative planning figure from UNDP and the need to complete ongoing projects, no funding was available from that source. The training project needs international assistance in order to ensure that the new airport is fully operational.

D. Health and housing

Health

103. The Government subscribes to the goal of "Health for all by the year 2000", as stated in the Alma Ata Declaration (1978), and has adopted Primary Health Care as major strategy to reach this goal. Active participation of people from a wide spectrum of the community is felt to contribute to the effectiveness of the health system.

104. The Government's national health programme is focused on further upgrading of health facilities, maternal and child health care and environmental sanitation. The programme includes improving health education at all levels, the integration of health with food and nutrition policies and programmes, upgrading health information systems and accelerating manpower development.

105. Further external assistance is required for upgrading and extending health facilities, environmental sanitation, water supplies and manpower development.

1. Upgrading and extension of primary health care facilities

106. The delivery system for primary health care is organized on a district basis

with the functions of the District Health Centre and the health visiting stations complementing each other.

107. However, the present system leaves much to be desired due to poor physical facilities and the lack of equipment. Of 33 primary care facilities, only four are in good conditions; five are being renovated with external assistance (USAID and EDF). The Government requires further assistance for repair and upgrading, construction and relocation of primary care facilities. The estimated cost of repair and upgrading of nine visiting stations, constructing two new health centres, and refurbishing the hospital centre on Carriacou Island is \$US 850,000.

2. Medical storage centre

108. The present storage centre is housed in a poorly constructed wood/galvanized facility and needs to be replaced by an adequate building with space for offices, a receiving area, a distribution area, fragile and controlled storage, cold/cool storage and bulk storage. Technical assistance is also needed. The estimated cost is \$US 395,000.

3. Upgrading and-extension of sewage system in the south
(Grand Anse-Morne Rouge Sewerage Project)

109. The project provides for upgrading the existing sewage system in St. George's and its extension. The existing system is over 40 years old and has not been adequately maintained. The tourist development areas of Grand Anse and Morne Rouge are unsuitable for septic tanks because of low-lying terrain and high ground-water tables; soil pollution and other environmental sanitation problems are evident and on the increase. Raw sewage is presently being discharged into the sea through short outfalls around the Grand Anse beaches. In 1975, the Pan American Sanitary Bureau (PAHO)/WHO, with funds from UNDP, studied the problem and prepared an extensive engineering and economic feasibility report on which this proposal, which was estimated to cost \$US 1.5 million in 1974, is based. The Government requires external funding for the proposed project and technical assistance to update the project document and to manage implementation. Construction should be completed in 18 months. The cost of the technical assistance needed to finalize the project is estimated at \$50,000.

4. Solid waste management programme

110. Grenada's solid waste collection and disposal practices are inadequate and are considered to be both potential public health hazards and impediments to the development of the tourist industry. The three present landfill sites for solid waste disposal are low-lying coastal swamps - breeding grounds for malarial mosquitos - and are felt to be very suitable for the sanitary landfill disposal method for the next 10 to 15 years. Improvement of solid waste management in the country requires external assistance, both financial and technical, and would include a survey of solid waste production, the development of landfill sites and of collection procedures, the promotion of community education and the provision of

solid waste collection and disposal equipment. The total estimated cost is \$730,000.

5. Water supply development

111. The Grenada population is presently being served by some 23 water systems. Supply is of the order of six million gallons per day - a shortfall of three million gallons - according to present demand figures. To accommodate this shortfall, the Central Water Commission is actively refurbishing existing systems and developing new supply systems with external assistance from the Caribbean Development Bank and from the Government of Cuba. Further external financial assistance is required for the following project components:

(a) Development of the Belvedere Water System at an estimated cost of \$670,000;

(b) Borehole development for south-west Grenada and construction of water tanks at Woburn and Mount Mauriz at an estimated cost of \$500,000;

(c) Upgrading and extension of rural water systems:

(i) Les Avocot water system - cost \$200,000;

(ii) Spring Garden water system - cost \$200,000.

6. Manpower development

112. School of Health Sciences - The project proposal, which is in the conceptual stage, provides for the construction and equipping of a School for Health Sciences and for the development of most appropriate institutional structure in which an inter-professional approach to locally-based training of para-medical personnel could be organized. The Government requires a consultant to assist in preparing a project document. The estimated cost is \$8,500.

Housing

113. Limited and restrictive credit facilities, coupled with increasing costs of building materials, have resulted in a large decline in the construction of new dwelling units as well as inadequate maintenance of existing houses. Living conditions have therefore continued to deteriorate, with the increased population being forced to remain in already over-crowded housing units, most of which lack the essential services of sanitary facilities, piped water and electricity. The physical condition of the existing housing units has also deteriorated substantially with 32 per cent requiring replacement and 42 per cent needing major repairs. Twelve hundred units will need to be constructed annually for the next 10 years in order to meet the housing requirement.

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7. Housing loan scheme

114. The scheme is designed to assist the following categories of low-income people to build, repair or purchase their own homes:

(a) Persons who already own a plot of land would be eligible for construction loans for the purpose of acquiring building materials to build their own homes either through self-help efforts or with the assistance of paid labour;

(b) Owners of existing units would receive loans to repair their homes and install sanitary facilities, piped water and electricity;

(c) Persons who own neither house nor land would be eligible for assistance to purchase low-cost housing units constructed by the National Housing Authority.

115. In order to meet the financial requirements of the housing sector, investment capital has to be mobilized from both internal and external sources. Since 1979, a total of \$EC 7,000,000 has been raised from local sources to finance house construction. However, funds available locally for investment in housing are only available at commercial rates.

116. It is therefore necessary to seek financing from external sources, particularly for low-income housing projects, so as to allow for greater flexibility in establishing repayment terms and conditions at rates that would be within the financial capability of the lower income families.

117. With a housing requirement of 1,200 units per year for a period of 10 years, it would be necessary to spend a minimum of \$EC 28 million annually on house construction, based on present prices. The need to develop cheaper methods of construction, while maintaining the quality of the unit provided, is evident and new construction methods are now being investigated. External assistance required to establish the scheme amounts to \$US 3.7 million on highly concessionary terms.

E. Education

118. A UNESCO/World Bank Co-operative Programme survey mission has recently completed a detailed examination of the educational sector in Grenada. The report of the survey will be available by the end of 1981 and is expected to contain an integrated programme for the development of education, including the identification of a number of projects for financing by the international community.

119. As a result of a series of natural disasters which have caused severe damage to the economy of the country, the Government has been obliged to divert funds which might have been spent on capital investment - such as school construction and repairs - to other sectors of the economy. The construction and renovation of school buildings remains an urgent priority along with a number of related areas which the Government has identified for immediate assistance.

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School-building programme

120. Almost all schools in Grenada, especially those at the primary level, suffer from a lack of furniture, equipment and teaching aids and what exists is in a derelict state. There is excessive overcrowding in many schools. Of the 66 primary schools, 80 per cent need minor to major repairs and one school needs rebuilding. In 1980, a large-scale school repair programme was started with voluntary community labour and many major repairs were carried out. Much, however, remains to be done to bring schools up to standard. There is also a need for one new primary and two new secondary schools.

121. The extensive refurbishing and construction programme which the Government intends to carry out will require the ongoing services of school building specialists to monitor the construction programme and train local staff to operate a school facilities unit within the Ministry. Technical assistance will be required to set up this unit.

122. The following three projects have been identified by the Government for early donor assistance:

(a) Funds to build one primary school and two secondary schools.
Estimated cost: \$1.4 million.

(b) Funds to repair and refurbish the 66 primary schools.
Estimated cost: \$650,000.

(c) Funds for technical assistance (a school architect and a school engineer, 6 work/months each); setting up a school facilities unit; selection of counterparts and fellowships. Estimated cost: \$180,000.

Reform of secondary education

123. Grenada, like most other countries in the eastern Caribbean, has inherited an educational system which is ill adapted to the present socio-economic needs of the country. Curricula are outmoded, lack precise objectives and are basically text-book oriented. Highly selective examination produce a very small, university-oriented élité, while the majority of the rejected students are left without the necessary practical skills to become productive members of society.

124. In 1979, only 40 per cent of secondary school-age children attended secondary schools. Of the 261 teachers in secondary schools in 1978, only 24 were trained graduates, 30 had training only, and 51 were untrained graduates. The mission was informed that the situation has not significantly improved.

125. The Government of Grenada is determined to upgrade and diversify the agricultural sector as well as to promote agro-industrial development. The single greatest impediment to these plans is the lack of skilled technicians at all levels. In order to meet the urgent need for skilled, middle-level technicians, wide-ranging reforms of secondary-level education are envisaged, centred principally on

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a practically-oriented secondary-level curriculum relevant to the development needs of Grenada. Six main areas will be given special attention:

(a) Teacher training at the secondary level

126. In order to train new teachers and upgrade those in service, a pilot learning resource centre is foreseen, to be annexed to the Teachers' College, St. George's. The centre would be used by teachers and students. Phase I would provide the model for Phase II (five additional centres). The estimated cost of Phase I is \$250,000.

(b) The provision of land, equipment, tools and training for the development of vocational skills

127. As agriculture will be the backbone of economic development for some years to come, there is an immediate need to upgrade the teaching of basic agricultural knowledge and skills throughout the education system. Agricultural skills are not taught effectively in the all-age primary and lower secondary schools, which lack skilled teachers and equipment. Transportation difficulties suggest that a series of training centres are needed to encourage youth to engage in self-employment as individual farmers and to provide the needed skills. Although eventually 14 agricultural-skills training centres are foreseen, initially two pilot centres would be set up where land is available.

128. As the Government also wishes to encourage skill training in the technical and vocational areas in order to promote commercial and agro-industrial development, two additional multi-purpose institutes with workshops are needed. After experimentation, further centres or mixed multi-purpose workshops would be built based on local requirements, land availability and other factors.

129. The eventual plan is a network of 14 multi-purpose workshops situated in different parishes to meet the need for skilled, middle-level technicians. In Phase I, it is suggested that two multi-purpose workshops (teaching construction skills, metal work, basic electricity, basic mechanical skills and home economics) be set up outside St. George's. These workshops would serve not only the needs of the upper forms of all-age primary and all post-primary students in school but also the requirements of modular skill training programmes, skill needs for adult education programmes and training of farmers in appropriate farm improvement and maintenance. The emphasis would be on the transfer of practical knowledge and skills.

130. The assistance required for Phase I to establish two agricultural-skills training and two multi-purpose workshops at selected sites is \$1.8 million.

(c) Adult education and literacy

131. The Government has been carrying out adult education and literacy campaigns since 1979. The Centre for Popular Education, which is spearheading a major adult literacy programme, operates in 130 out of 135 villages and has recruited 1,400

volunteer teachers for its 2,000 registered students. While the basic literacy campaign is being continued, a second phase for 5,000 post-literates is now under way. These programmes are costly and, although Cuba and the World Council of Churches have given some assistance, an additional \$600,000 is required to meet the administrative costs as well as the cost of teaching materials, basic texts and teaching aids.

(d) Special education

132. The Government of Grenada, fully conscious that 1981 is the International Year of Disabled Persons, is making a determined effort to assist handicapped children both within the formal education system and outside it. At the present time, there are four institutions in Grenada concerned with handicapped children: the Kennedy Home, the Blind Workshop, the Grenada School for Special Education and the Governor Baxter School for the Deaf.

133. The Government has decided to carry out a public awareness campaign for doctors, teachers and nurses and an early stimulation programme aimed at the parents of disabled children. The existing schools are to be upgraded with new equipment and furniture. Special education classes will be organized in the other schools, and teachers will be upgraded and trained in specialized fields. Workshops are planned for rural areas and special education councils are to be set up in the six parishes to assist the disabled to become more self-reliant. The estimated cost of the programme is \$130,000.

(e) Cultural research, documentation and training centre

134. There are 48 cultural groups in the country with 548 members and 96 individual artists. There is only one trained drama tutor and almost no opportunities for training or practice in the major cultural activities, in spite of the great demand. Cultural facilities catering for children's activities are non-existent. Many of the buildings and sites forming part of Grenada's cultural heritage are in a state of disrepair through ignorance, neglect and a lack of funds.

135. It is proposed to set up a national cultural research documentation and training centre to meet the cultural needs of the nation. This centre would be situated in a run-down, neglected old wooden building, itself of historic interest, after renovation and refurbishing. The centre would develop a core of workers in the field of culture and the arts whose function would be to diffuse their knowledge and transfer their skills to others. The centre would promote, on a weekly basis, cultural seminars, readings, exhibitions, films, workshops, children's activities, theatrical productions and song-and-dance training. The estimated cost (including repairs and refurbishing the building) is \$540,000.

(f) Food-for-Work and supplementary feeding programme

136. The Government is anxious to organize a programme to supply a proportion of the daily nutrient requirement of the nutritionally deprived groups, including children under five years, primary school children, pregnant and nursing mothers, the elderly and voluntary community and agricultural co-operation workers. Food production for school meals will be encouraged and some \$1.4 million will be needed to meet these urgent needs. The Government intends to approach the World Food Programme (WFP) and the European Economic Community (EEC) for assistance.

F. SUMMARY OF ASSISTANCE REQUIRED

137. The following is a summary of the assistance required:

US dollars

A. <u>Agriculture and forestry</u>		
1.	Strengthening agricultural extension services	1 630 000
2.	Emergency aid to the banana industry	555 000
3.	Further development of the banana industry	510 000
4.	Emergency assistance to combat cocoa thrips	350 000
5.	Production of forest products	810 000
6.	Rehabilitation and expansion of Mirabeau School	381 000
B. <u>Industrial development</u>		
1.	Agro-industry	
	(a) Sugar industry	2 517 000
	(b) Dairy industry	130 000
	(c) Microbiological laboratory	499 000
	(d) Technical assistance	160 000
2.	Manufacturing	
	(a) Short-term consultancy	50 000
	(b) Furniture establishment	359 000
3.	Marketing	Assistance to National Marketing board
		351 000
4.	Grenada Development Bank	Technical assistance
		140 000
C. <u>Transport</u>		
1.	Roads	
	(a) Emergency road programme	16 600 000
	(b) Road design and management unit	335 000
	(c) Soils and materials laboratory	200 000
	(d) Quarry development	1 250 000
	(e) Sea-wall defences	1 000 000
	(f) Feeder roads	8 200 000
2.	Maritime transport	
	(a) Port development - St. George's	10 300 000
	(b) Hillsborough Jetty	350 000
3.	Civil aviation	
	(a) International airport	33 000 000
	(b) Five-year training programme	860 000

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	<u>US dollars</u>
A. <u>Agriculture and forestry</u>	
D. <u>Health and housing</u>	
1. Primary health care	850 000
2. Medical storage centre	395 000
3. Sewage system in south	
(a) Technical assistance	50 000
(b) Sewage system	1 500 000
4. Solid waste management	730 000
5. Water supply development	
(a) Belvedere	670 000
(b) Borehole development	500 000
(c) Rural water systems	400 000
6. School of Health Sciences - Technical assistance	8 500
7. Housing loan scheme	3 700 000
E. <u>Education</u>	
1. Construction of schools	1 400 000
2. Repair and refurbishment	650 000
3. Technical assistance	180 000
4. Teacher training, phase I	250 000
5. Agricultural training centres and multi-purpose workshops, phase I	1 800 000
6. Adult education and literacy	600 000
7. Special education	130 000
8. Cultural research	540 000
9. Food-for-work and supplementary feeding	1 400 000

IV. ASSISTANCE BEING PROVIDED

A. Projects for which funding negotiated

138. The Government provided the mission with a list of projects which had been prepared for the meeting for the Caribbean Group for Co-operation and Economic Development held in June 1981 (see table 5). The list includes information on external funding which has been pledged or provided, including the source of such assistance.

Table 5

Projects for which funding negotiatedOngoing projects

(Thousands of US dollars)

	Total cost	Negotiated external funding	Source
Feeder Road I	1 585	1 372	Caribbean Development Bank
Small Farmers Multiple Cropping System	367	367	United States Agency for International Development
Mirabeau Farming Training Centre	171	92	Non-governmental organizations
Field station	135	103	European Development Fund
Fishery study and laboratory	200	200	Canadian International Development Association
Banana Development II	176	146	United Kingdom of Great Britain and Northern Ireland
Fisheries Development Phase IB	750	750	Cuba
Farm Improvement Credit II	213	213	Caribbean Development Bank
Agricultural Production Credit I	148	148	Caribbean Development Bank
Agricultural and Industrial Credit I	635	635	Caribbean Development Bank
Spice processing laboratory	86	80	Organization of American States
Small industry credit	189	189	Caribbean Development Bank
Port pre-investment study	83	83	Caribbean Development Bank
Sea defence Dothan	146	146	United Kingdom
Bridges reconstruction (Equipment)	260	260	United Kingdom
Wodburn-Calivigny Road	200	200	United Kingdom
Eastern Main Road I	2 315	2 000	European Development Fund
Carriacou Airstrip (Equipment)	350	Part	Organization of Petroleum Exporting Countries

Table 5 (continued)

	Total cost	Negotiated external funding	Source
Water Development I	1 006	980	Caribbean Development Bank/Canadian International Development Association
Student Loans	127	127	Caribbean Development Bank
Student Loans	74	74	Caribbean Development Bank
Happy Hill School	580	580	United Kingdom
Happy Hill School (Consultants Fees)	33	33	United Kingdom
Children Services Project I	220	118	United Nations Children's Fund
Curriculum development	131	131	Organization of American States
Educational planning system	116	54	Organization of American States
Mount Harman Youth Centre	204	87	European Development Fund
Micro projects	465	240	European Development Fund
Technical assistance	200	200	United Nations Development Programme
National planning system	1 452	1 208	Organization of American States
<u>New projects</u>			
Marli Cocoa Fermentary	1 408	1 067	Caribbean Development Bank
Corinth Cocoa Fermentary	1 408	1 067	Caribbean Development Bank
Mirabeau Farm School Reconstruction	643	Part	European Development Fund
Artisanal fishing project	2 629	2 226	International Fund for Agricultural Development/ Venezuela

Table 5 (continued)

	Total cost	Negotiated external funding	Source
Construction of international airport (Point Saline)	70 900	Part	Cuba
Construction of jetties	88.8	88.8	European Development Fund
Quarry development	1 222.8	1 870	European Development Fund
Rural water system	1 870	Part	United States Agency for International Development
Water development at Mamma Cannes	1 333	1 333	Caribbean Development Bank
Primary health care centres	420	370	European Development Fund

B. Assistance from the United Nations system

139. In resolution 34/118, the General Assembly requested the specialized agencies and other organizations within the United Nations system to intensify their assistance to Grenada. A number of specialized agencies and organizations have reported assistance being provided (see table 6). In addition to the assistance listed in table 6, Grenada is participating in a number of regional projects being carried out by the International Labour Office (ILO), the World Meteorological Organization (WMO), the World Health Organization (WHO), the Economic Commission for Latin America (ECLA) and the United Nations Conference on Trade and Development (UNCTAD).

Table 6

Assistance being provided by organizations and agencies

Organizations:

- UNCTAD Grenada is a beneficiary and participates in the UNDP - financed/UNCTAD-executed (in association with the Inter-Governmental Maritime Consultative Organization), project CAR/80/001 and RLA/79/051 entitled "Regional Shipping in the Caribbean".
Cost: \$846,000. Headquarters: Saint Lucia.
- UNICEF A sum of \$74,000 is available for programme support in 1981.
- UNDP A sum of \$1.88 million was allocated during 1977-1981 for projects in agriculture, rural development and energy, etc. The allocation for 1982-1986 has been increased to \$2.1 million. Grenada also received assistance under the Caribbean Multi-Island Programme with a budget of \$4.5 million for 1982-1986. Further, it benefits from the UNDP-financed regional programme for CARICOM as well as from the activities of the Caribbean Group for Co-operation in economic development.
- UNFPA Assistance was provided for the training of four youth educators and for the 1981 census. Assistance through 1980 totalled \$125,000.

Agencies:

- ILO In September 1980, a vocational rehabilitation advisory mission was mounted and the Regional Adviser on Management Development undertook a mission in February 1981. Assistance is also being provided under the regional and subregional programme consisting of the Automotive and Heavy Equipment Maintenance Accelerated Training Project, the Multi-Island Social Security Projectt, and the services of the regional advisers. Under the ILO's regular budget, assistance is being made available for the development of occupational health and safety programmes, etc.

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Table 6 (continued)

- FAO Two projects were completed in 1980:
- (a) Eradication of the Moko disease of bananas (\$106,000);
 - (b) Emergency supply of seeds, etc.
- FAO is now financing three projects:
- (a) Assistance to agricultural development (\$38,000);
 - (b) Assistance to the Mirabeau School (\$10,000);
 - (c) Formulation of agro-industry projects (\$15,000).
- Three projects for financing by trust funds, for a total of \$60,000, have been prepared relating to fishing and the education of rural women. Under FAO/UNDP, two projects are at present operational: agricultural development (\$1,150,000) and food processing (\$248,000). Grenada is also participating in a regional project (\$2,162,000) for agricultural development, etc.
- UNESCO Under the 1979-1980 Participation Programme, a sum of \$20,500 was provided, and for 1981-1983 \$28,000 has been approved. Further, to date, under the Special Account for Increased Aid to Developing Countries, a sum of \$173,250 has been provided. In accordance with General Conference resolution 1/107, a major project is being organized for the educational development of individual countries of the region, including Grenada. Its over-all objectives are:
- (a) Provision of a minimum of 8 to 10 years' general education to all children of school age by 1999;
 - (b) Eradication of illiteracy before the end of the century, and development of adult literacy;
 - (c) Improvement of the educational system.
- WHO Co-operation is taking place in the development of health services and environmental health.
- World Bank Bank project assistance has so far been channelled through loans to the Caribbean Development Bank. An economic mission recently visited Grenada and its report was presented to the annual meeting in June 1981 of the Caribbean Group for Co-operation in Economic Development.

Table 6 (continued)

IMF	Grenada purchased the equivalent of SDR 1.4 million under three standby arrangements since it became a member of the Fund in August 1975. In addition, Grenada purchased the equivalent of SDR 0.5 million under the oil facility and the equivalent to SDR 1.9 million under the Trust Fund. Grenada has made a drawing under the Compensatory Financing Facility equivalent to SDR 2.1 million, and a one-year standby arrangement equivalent to SDR 3.425 million has also been approved. Direct distribution of profits from gold sales amounted to SDR 250,000. In addition, Grenada has received a cumulative SDR 0.9 million in SDR allocations.
UPU	Postal organization and training was provided consisting of a consultant's mission, one fellowship and equipment.
WMO	As an executing agency of UNDP, WMO is providing assistance to the national meteorological service.
IFAD	A technical assistance grant amounting to \$25,000 was made available and an agreement has been signed for a loan of \$1.5 million for fisheries development.

C. Summary of international assistance pledged or provided since 1979

140. The Government provided the mission with a summary statement showing the major sources of assistance which has been provided since 1979 or pledged for 1981. This information is shown in the following table:

Table 7

Major sources of assistance provided or pledged - 1979-1981

(EC dollars)

Bilateral

Algeria	18 900 000
Australia	96 600
Canada	14 472 400
Cuba	40 600 000
France	1 517 000
Iraq	24 300 000
Libyan Arab Jamahiriya	11 610 000
Mexico	291 000
Syrian Arab Republic	5 400 000
Union of Soviet Socialist Republics	3 000 000
United Kingdom of Great Britain and Northern Ireland	5 237 765
United States of America	9 398 364
Venezuela	4 130 000

Multilateral

Fourth EDF	57 886 728
Fifth EDF	15 767 160
OPEC Special Fund	10 800 000
Latin American Energy Organization (OLADE)	960 000
Organization of American States	1 813 333
Caribbean Development Bank	24 949 429
World Tourism Organization	45 682
Commonwealth Fund for Technical Co-operation	430 500

Table 7 (continued)

United Nations system

UNCTAD	141 692
UNIDO	475 729
UNICEF	137 532
UNDP	5 779 535
UNFPA	81 300
ILO	595 037
FAO	1 474 240
UNESCO	216 800
ICAO	100 654
WHO/PAHO	100 267
UPU	5 420
ITU	41 422
WMO	26 324

Voluntary and non-governmental organizations

Appropriate technology international	54 000
OXFAM	600 958
Caribbean Action for Development East Caribbean	133 960
International Planned Parenthood Federation	484 553
