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A REVIEW OF THE DEVELOPMENT OF THE  
TRANSPORT SYSTEM IN THE CARIBBEAN WITH  
REFERENCE TO THE ESTABLISHMENT OF REGIONAL  
INSTITUTIONS AND THE INVOLVEMENT OF  
AID DONORS

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## I N T R O D U C T I O N

This paper reviews the development of the existing transport system in the Caribbean. It defines the area under consideration and then provides an historical perspective on the formation of the regional institutions, the presence of the Economic Commission for Latin America and the formation of the Caribbean Development and Co-operation Committee.

There follows a description of the existing pattern of services and the attendant infrastructure in the aviation and maritime sectors.

Estimates are given on the volume of imports and exports in the Caribbean by broad commodity groups.

Finally, there is a description of the transport activities undertaken in the Caribbean both by the Caribbean Group for Co-operation in Economic Development and by the CDCC.

There is a set of statistical tables to support the text.



## 1. DESCRIPTION OF THE CARIBBEAN REGION

The Caribbean is a term that has many definitions. At its broadest it is the area of land around the Gulf of Mexico and the Caribbean Sea separated from the Atlantic Ocean by the Bahamas Islands, and the Greater and Lesser Antilles. Thus its northern boundary is the North American Continent, its western boundary is Central America, its southern boundary is South America and its eastern boundary is the Atlantic Ocean.

However, that is not the definition that this paper will use. Transportation links rarely conform to political boundaries. This paper therefore attempts to deal with a Caribbean Transport System area. The mainland areas will be excluded with the exception of Belize in Central America, and Guyana, French Guiana and Suriname in South America. These countries have a separate cultural and economic heritage from their neighbours on the continental land mass with few surface transportation links.

The Caribbean so defined consists of the twenty-five countries and territories given in Table 1. Fifteen of these are fully independent with St. Kitts/Nevis due to attain that status in September 1983, eight are either colonies of Britain or Dependent Territories of the United States and the Netherlands, while the French Antilles comprising the islands of Guadeloupe, Martinique and French Guiana are French Overseas Departments.

The largest country by area is Guyana with 215,000 square kilometres; the smallest in Anguilla with 91 square kilometres. Cuba has the largest population with 9.5 million, while the Turks and Caicos is the smallest with 6.0 thousand.

The total land area is 731 thousand square kilometres and the total population is 28.7 million.

When St. Kitts-Nevis attains independence in September 1983, it will become the sixteenth member of the United Nations from the Caribbean. It should be noted that Central and South America have 17 members between them.

The Caribbean was colonized by four powers: Spain, France, the Netherlands and Britain. This diverse heritage still clearly influences the region as will be shown later in the description of air services. States from a similar heritage maintain strong transport links between themselves and to the former metropolitan power. Former territories from a different heritage have much weaker links. It is often not possible to travel between states from a different heritage in the Caribbean without either making inconvenient connexions, or in the extreme cases, of having to stop overnight en route.

## 2. AN HISTORICAL PERSPECTIVE OF INTEGRATION IN THE CARIBBEAN, THE ESTABLISHMENT OF THE REGIONAL INSTITUTIONS AND THE ECLA PRESENCE

"The idea of integration or federation predates World War II. It arose out of frustration with the slow progress of democracy under colonialism. Federalism was initially fostered by contacts among trade unionists and was seen as a vehicle for developing more democratic institutions. A parallel and reinforcing movement was that of local independence, which became feasible once India and Ghana had provided the precedents. During the 1950's, the movement towards local autonomy advanced faster than that of federalism among the larger British possessions in the Caribbean. By the time of its establishment in 1958, therefore, the West Indies Federation was no longer viewed as a necessary instrument of reform. Indeed, the Federation had built-in 'self-destruct' features, the most important of which was its lack of power to tax. When Jamaica withdrew in 1962, following a negative referendum vote, the Federation fell apart.<sup>1/</sup> Independence was achieved in 1962 by Jamaica and by Trinidad and Tobago, and in 1966 by Guyana and Barbados. With the break-up of the Federation, the renowned West Indian economist, Sir Arthur Lewis, attempted to organize a smaller Federation among the

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<sup>1/</sup> One lasting legacy of the federation movement is the University of the West Indies. It has campuses at Mona, Jamaica, St. Augustine in Trinidad, and Cave Hill in Barbados. It also maintains close working relations with the University of Guyana. Another regional institution which survived is the regional shipping service.



Eastern Caribbean islands, but his efforts proved unsuccessful. Instead, the islands, except for Montserrat became associated British States - a half-way house towards independence. In ambitiously tackling the different aspects of regional association first, the West Indies Federation had ignored the lessons of history, which suggest that the chances of successful integration are enhanced when a community of economic interests is established beforehand.

The idea of a regional economic association was revived in the mid-1960's. At the initiative of Guyana (which had remained outside the West Indies Federation), articles of a Caribbean Free Trade Association (CARIFTA) were drawn up in 1965, and were accepted by Barbados and Antigua. The provisions of the Agreement were largely modelled on those of the European Free Trade Association (EFTA). All twelve Commonwealth Caribbean countries were able to agree on the formation of a free trade area, based largely on the text of the 1965 Agreement, and CARIFTA came into existence in May 1968. At the same time, the Eastern Caribbean islands were developing closer forms of co-operation which culminated in the formation of the Eastern Caribbean Common Market (ECCM) in June 1968.

Another important regional institution established during this period was the Caribbean Development Bank (CDB). Under the firm guidance of Sir Arthur Lewis as president, the Bank began operations in 1970 with fourteen founding regional members, and two non-regional members - Canada and the United Kingdom; the United States also provided financial assistance and Venezuela and Colombia joined later. The main purpose of the CDB, according to the Charter is to '... contribute to the harmonious economic growth and development of the member countries in the Caribbean ... and promote economic co-operation and integration among them, having special and urgent regard to the needs of the less developed members of the region'.

In October 1972, some of the CARIFTA member countries decided to form a Caribbean Community and Common Market (CARICOM). The Community, which came into being on 1 August 1973, represents a deepening of regional integration and has achieved such objectives as the establishment of a common external tariff, a harmonized system of fiscal incentives for

industry, double-taxation and tax-sparing agreements, and the formation of a Caribbean Investment Corporation (CIC), designed to channel equity funds to the less developed member countries.<sup>2/</sup> It initially comprised the four MDCs - Jamaica, Trinidad and Tobago, Guyana and Barbados; by the end of July 1974, all the other CARIFTA members had acceded to the Community Agreement".<sup>3/</sup>

Mainly as a result of Independence, the ECCM states have reorganized into the Organization for Eastern Caribbean States (OECS). Haiti and Suriname have both applied for membership of CARICOM but membership remains restricted to English-speaking states. It is felt by CARICOM members that there is need to deepen the integration movement and strengthen it before any extension occurs, notwithstanding the advantages that a larger market would offer.

In 1966, the Economic Commission for Latin America established an office in Port-of-Spain, Trinidad.

Since the 1950's, ECLA had promoted the concept of the economic integration of the countries of Latin America and it was, therefore, natural that in assigning priorities for activities in the Caribbean, that promotion of economic co-operation was to be the major thrust.

"In the priorities that were set, it was envisaged that there would be two elements: integration of the countries of the Caribbean, and integration of the Caribbean countries with the rest of the Latin American region. It was emphasized that the first task would be to give attention to the newly independent countries that so far had not been included in the scope of ECLA's work. But beyond that, it was not articulated in advance how integration within the Caribbean could proceed, nor how the integration of the Caribbean with the rest of Latin America might be attempted".<sup>4/</sup>

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<sup>2/</sup> The Community also provides for co-operation in "non-economic" areas - health, education, culture, meteorology, sea and air transport - and for consultations to harmonize the foreign policy of the independent member states.

<sup>3/</sup> Source: "The Commonwealth Caribbean: The Integration Experience". A World Bank Country Economic Report.

<sup>4/</sup> "ECLA and The Caribbean: Some Thoughts on Strategy for the Future: The Situation in Perspective". S. St. A. Clarke, 1975.

The ECLA Office was initially involved in the establishment of CARIFTA, ECCM and CDB, and maintains close working relationships with the regional institutions.

#### Establishment of the CDCC

At the Sixteenth Session of the Economic Commission for Latin America held in Trinidad in 1975, it was agreed to establish the Caribbean Development and Co-operation Committee (CDCC) which was comprised of the countries "within the sphere of action of the ECLA Office in Port-of-Spain and the Governments of Cuba, the Dominican Republic and Haiti and other Caribbean countries as they achieve independence".

The CDCC is a permanent subsidiary body of the Economic Commission for Latin America at the governmental level and reports to ECLA which in turn reports to the Economic and Social Council. The Secretariat for CDCC was designated as the ECLA Office for the Caribbean.

### 3. DIRECT AIR SERVICES

Virtually all passengers in the Caribbean, both from inside and outside the region, are carried by air.

There are a large number of airlines based in the region operating in competition with extraregional carriers based in North, Central and South America and Europe. Operators from the region with extraregional services are based in Trinidad, Suriname, the Netherlands Antilles, Barbados, Bahamas, Guyana, Jamaica, Cuba, the Dominican Republic and Belize. There has been little attempt to consolidate these operations. Charter traffic from North America and Europe is also important.

Intraregional operators are based in Martinique, Guadeloupe, Puerto Rico, the British Virgin Islands, Antigua, Haiti and St. Maarten.

There are also a number of small charter operations scattered throughout the region.

As was mentioned in the introduction, the diverse colonial heritage is clearly reflected in the present day structure of direct air services.

While the full details are given in Table 2, showing city pairs and the number of flights per week, this information has been summarized in Table 2A. From this it will be seen that there are 17 airports with direct services to Europe, 26 to North America, 18 to South America and 8 to Central America. Only Cuba has direct links to Africa. The main hub airport for South America is CARACAS. Other destinations are served mainly by European-South American services. Panama acts as the hub for Central and South America because it is the termination point for European services. The integration of Puerto Rico into the North American network with 16 separate destinations is clearly shown in Table 2, while the economic influence of both the United States and Canada is reflected in Table 2A as no fewer than 26 of the 33 airports listed have at least one direct connexion. Since that paragraph was written a service has been initiated from Barbados and Trinidad to Manaus, Brazil, with onward connexions to eastern South America and Avianca has announced a Colombia-Barbados service.

#### 4. AVIATION INFRASTRUCTURE

The region is characterised by the close proximity of airports capable of handling the largest commercial jet aircraft. These airports are frequently less than an hour's flying time apart. Table 3 lists them with the length of runway and the largest scheduled aircraft in operation.

There are a number of reasons for this proliferation of airports and it is appropriate to examine them now. It will be seen later that a similar situation has arisen in maritime transport. The multi-national archipelago nature of the Caribbean is the primary cause but there are others.

##### (a) Provision of aid funds

Historically, aid funds have not been difficult to obtain in the Caribbean. Donors have traditionally been willing to provide transport infrastructure rather than transport equipment. Sources have been British budgetary support and Canadian aid, while France and the Netherlands have spent a great deal on former colonies. The United States has provided funds on a similar scale for the Dominican Republic and Haiti as well as contributing aid to the rest of the region. These funds were made available and spent on a country-by-country basis, and as a result the regional transport system has developed in an ad hoc way instead of being planned. Perhaps this has been the natural outcome of the existence of small

political units and the resultant diseconomies are part of the price to pay for this system.

This problem was recognized by the British, Americans and Canadians who initiated the Tripartite Study of 1966 to determine how aid funds might best be spent. One result from that study was donor support for the establishment of the Caribbean Development Bank (CDB), through which aid was intended to be channelled. In practice, these three donors divided the aid programme between them and continued on an ad hoc bilateral basis as before, while also contributing to the CDB. In fairness to the donors it should be pointed out that this happened in large part on the insistence of the individual governments.

As a result, the donors failed to indicate how much aid was to be provided for each sector in the region and so the opportunity was lost for system planning on a rational basis. In the 1966-1976 period large amounts were spent on transportation, but there still remained a number of deficiencies in the system that could have been rectified with proper planning in a regional perspective had the total amount available for the sector been known at the outset.

(b) Strategy Adopted for Generating Foreign Exchange

The countries of the region adopted the strategy of generating foreign exchange through tourism. Any negative effects of tourism were ignored as was the fact that each country was generally in competition with its neighbours for the same market. However, further comment on this strategy is outside the scope of the paper.

Tourism Development Plans were generally over-optimistic in growth projections and usually stated that a major tourist complex could not really develop unless tourists could be and were taken directly to their destination.

This theory of the necessity to carry the tourist direct to his final destination on the same flight is clearly not universally true. Tourists crossing the Atlantic in either direction do not necessarily expect this. Neither did Thailand consider it necessary to build a new airport to serve Patthya Beach when this was developed as an international tourist centre. Why then should it have been a requirement in the Caribbean?

(c) Conversion of Military Facilities

After the Second World War, the region inherited a number of military airfields such as Hewanorra in Saint Lucia, Coolidge in Antigua, and Pearls in Grenada. Some of these facilities have been converted and expanded by donors over the years. It was not therefore a case of constructing completely new facilities.

The problems associated with over-investment were foreseen by the present President of the Caribbean Development Bank. Shortly after taking office he wrote:

"Another important aspect of rationalization of Air Transport concerns the duplication of large international jet ..... airports in the various countries of the Eastern Caribbean. The distances between the countries are short and it is clearly wasteful to spend several millions of dollars to duplicate such facilities. Even if the funds come from external soft loans and grants, resources are wasted in that Governments have to spend money on maintenance and, what is more, the aid funds involved could have been used to better advantage on other projects in the various countries and in the Region. It is very much to be hoped that the trend towards this wasteful pattern of competitive expenditure will be arrested immediately."<sup>5/</sup>

There is no argument that every state needs an airport. In the Caribbean context that is an international airport. However the size of that airport and the type of aircraft it is required to take are matters for careful consideration. Furthermore there are States which either already have or are developing two international airports and even, in one or two cases, three. It is possible that the net revenues deriving from tourism might, in special cases, justify two airports, but very careful and sophisticated studies should be undertaken to ensure that this is the case. It would be even more difficult to justify a third airport.

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<sup>5/</sup> William G. Demas: West Indian Nationhood and Caribbean Integration: CCC Publishing House - Barbados: October 1974: P.72.

The end result in the region has been under-utilization. A recent report by ICAO on the Caribbean situation stated:

"It is not possible to give any precise indication of the number of aircraft, passenger and freight unit movements necessary to enable an airport to break even since this varies considerably with the type of airport and the character of the traffic handled. Nevertheless it is clear that within each stage of an airport's development approximately the same facilities are required and the same costs are incurred in handling aircraft and passenger movements at the lower end of the airport's capacity as at the upper end. Many of the airports cannot hope to break even on their current utilization, nor on any currently projected utilization."

An airport is an asset that generates the requirement for large amounts of recurrent expenditure. Notwithstanding the policy of a government on tourism it may well be beyond the capability of a small island state to generate sufficient revenue to maintain that asset. While not developing this thought further, although it would form an interesting topic for a university thesis, it will be seen later in the paper how the donors and recipients in the region are working together through the Caribbean Group mechanism to ensure the maximum impact on aid projects.

Mention should be made at this point of a situation that developed in the region with regard to consultants. Most donors usually insist on employing their own nationals in this work.

Consequently, there have been many consultancy studies and reports in transport, funded by a variety of donors. In several cases even the organization which commissioned the work was dissatisfied with the conclusions. Some recommendations were not implemented, much work was repeated.

There would appear to be two main reasons for this unsatisfactory history. First, the transport policies appropriate to a multinational

archipelago with disparity both in trading history and physical size were more difficult to comprehend than consultants were used to. Second, the difficulties of communication, travel and data collection in the Caribbean were not often fully taken into account by external consultants unfamiliar with the region.

The end result was that studies were re-examined rather than implemented, and the Caribbean found itself educating successive generations of consultants rather than receiving the benefits of their work expressed in tangible improvements to the system.

Having made such a sweeping condemnation it is incumbent on me to justify it.

Notwithstanding the remarks just quoted from the President of CDB about wasteful duplication, and not wishing to enter into any contentious debate about the new airport at present under construction in Grenada, it is apparent that the airport at Pearls, Grenada is totally inadequate to serve that state mainly due to its inability to handle night flights in a part of the world where sunset occurs between six and six-thirty throughout the year.

The British first studied the problem in 1955 and since then seven or eight major studies have been completed. The Government desired better air communications, the lack of which was blamed, rightly or wrongly, for the slow growth in tourism and general economic development. The solution to the problem was sought for nearly twenty-five years before construction began on the new facility at Point Saline. One final comment appears appropriate. The new airport due to open later in 1983 is located on the site recommended by the original 1955 study and most if not all of the subsequent re-evaluations.

## 5. SHIPPING SERVICES

There are adequate links between the subregion and major trading partners, using a variety of vessel types. The World Bank estimated in the Caribbean Regional Transport Review that more than 50 steamship lines operated in Caribbean extraregional trade.



Four major conferences serve the region. They are:

- (a) The Association of West Indies Trans-Atlantic Steamship Lines (WITASS);
- (b) The United States Atlantic and Gulf - Jamaica Conference;
- (c) The Leeward and Windward Islands and Guyana Conference;
- (d) The Japan-Latin America Eastbound Freight Conference.

Full details are given in Table 4.

Some regionally operated services to extraregional destinations have been established. Several countries are studying the UNCTAD Code of Conduct for Liner Services and considering the possibility of either entering a joint venture or establishing new lines. In the bulk trade several joint operations already exist.

#### Shipping services within the subregion

These are operated by two government-owned shipping companies, WISCO and NAMUCAR; a fleet of small vessels generally under 500 net register tons, confined mainly to the Eastern Caribbean, and by extraregionally owned shipping services.

In 1977/1978 it was found that CARICOM intraregional traffic amounted to about 400,000 tons annually (see Table 1 of Shipping Statistics of CDCC Countries (CEPAL/CARIB 80/9)).

It is not possible to ascertain the breakdown of traffic between the three types of operations, but there are no indications that it would be significantly different from previously found ratios. Previous studies have found that small vessels carry up to 60% of the traffic in the Eastern Caribbean, with extraregional shipping carrying more than 20%, the balance being carried by WISCO.

With the exception of some cabotage traffic in Haiti, services between Trinidad and Tobago, St. Kitts and Nevis within the United States Virgin Islands and between the United States Virgin Islands and the British Virgin Islands, and in the Bahamas, all passenger traffic is carried by air. Cruise ship traffic is significant throughout the Region.

Most freight is moved by sea, although air freight is increasing in importance, especially in the case of Trinidad and Tobago. Nonetheless, the percentage of total traffic carried by air remains insignificant.

Both NAMUCAR<sup>6/</sup> and WISCO<sup>7/</sup> have been consistent loss-makers despite governmental support.

Inter-island small vessels carry a large percentage of the regional trade and there is a heavy concentration of services in the Eastern Caribbean. While these vessels do not operate regular scheduled services, they tend to remain on the same route. Half of the fleet operates between Trinidad, Guyana and Barbados, while there are regular sailings between these ports and Saint Lucia, St. Vincent and Grenada. The traditional small wooden-hulled vessels with sails and an auxiliary engine have gradually been replaced with single or twin-screw steel-hulled vessels carrying up to 500 tons of cargo.

The small vessels have traditionally provided the cheapest form of sea transport, and this is made possible by low standards of service. There are frequent transit delays; damage and pilferage of cargo is prevalent. In an area where fresh fruit and vegetables form a significant part of the total traffic, there is an almost complete lack of reefer or chilled space. Spoilage losses are high. Insurance of cargo is difficult to obtain mainly due to the poor physical condition of the ships. Where it can be obtained, the cost is roughly double that for larger vessels and generally applies only to total loss. The newer steel-hulled vessels can obtain more favourable rates. Individual vessel owners seldom entertain claims for cargo damage, even when this is attributable to poor cargo handling or pilferage. Finally, it is almost impossible to obtain finance for the purchase of replacement vessels.

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<sup>6/</sup> NAMUCAR originally served Tampico, Veracruz, Havana, Kingston, La Guaira, Puerto Cabello, Barranquilla, Cartagena, Cristobal, Puerto Limon, Bluefields, Houston, New Orleans, Curacao and Port-of-Spain. Considerable financial losses resulted in service cutbacks and present service is not known.

<sup>7/</sup> WISCO serves Guyana, Trinidad, Barbados, Grenada, St. Vincent, Saint Lucia, Dominica, Antigua, Montserrat, St. Kitts, Jamaica, Puerto Rico, Miami and Belize.

The problems associated with this type of operation between Eastern Caribbean islands are similar to those found in Haiti, where a lack of roads make outlying communities dependent on small vessels in coastal service.

The inter-island small vessel services do not demonstrate the same pattern as air services, and cut across heritage and language boundaries. However, there has been no scheduled passenger sea services in the Eastern Caribbean since WISCO ceased to operate a joint cargo/passenger vessel in 1975. Small vessel operators carry passengers by signing them on as crew.

The Caribbean has recently suffered from a peculiar phenomenon in shipping due to the current economic recession and the complete laissez-faire attitude to shipping services provided by extraregional shipping lines.

As noted above WISCO operates a government subsidized service between CARICOM states and to Puerto Rico and Miami. The economic situation in Trinidad remained much less affected by external economic factors due to the buoyant market for its oil and gas exports. There was a tremendous demand in Trinidad for both capital goods, consumer goods and food items. It has only been in the last six months or so that the general public has been aware of harsher economic conditions ahead. However, for some time the Trinidad market was still expanding whilst other markets were contracting.

Due to the loss of business elsewhere, the Caribbean in general and Trinidad in particular experienced a dramatic rise in the volume of shipping space being offered. This in turn caused Caribbean shipping rates to be depressed and WISCO was forced to make rate reductions in order to maintain traffic. The end result has been a rise in the deficit and the government owners have expressed some reluctance to support this increase at a time when extraregional lines are undercutting the rates and there is no shortage of service.

Of course it could be argued that this is beneficial as rates are lowered thus reducing costs to the Caribbean states' imports. One might say that if a government-owned line cannot compete it should be allowed to go out of business.

However, if that were to happen, what would be the end result? Let us assume a recovery in the world economic situation. Presumably the extraregional lines will revert to their former trades. At least some will. This will cause rates to rise and reduce shipping space offered. Some ports will have an inadequate service.

The current situation of increased supply of shipping space at a time of reduced demand would change to one of reduced shipping space at a time of increased demand.

Unless WISCO is protected today, it may not be in existence tomorrow.

This problem is now receiving serious attention from both the WISCO Directors and CARICOM and, of course, the governments will review the situation in establishing policy on the UNCTAD Liner Code of Conduct. A similar situation applies to air services where as a result of the United States de-regulation of the Aviation Industry, PANAM is currently offering very cheap United States Caribbean air fares and some Caribbean governments have applied them in the reverse direction to the disadvantage of BWIA and other carriers in the region. A meeting was held recently in Antigua to discuss the problem. CARICOM, OECS, ECLA, WISCO and UNSHIPRO attended and a series of proposals will be presented to the Heads of Governments for decisions.

Whatever the final outcome it seems obvious that the Caribbean region will have to impose some controls on extraregional shipping and aviation operators.

## 6. MARITIME TRANSPORT INFRASTRUCTURE

Most states now have deep water port facilities capable of handling large ocean vessels. However, as noted in the aviation sector, there is some evidence of over-investment or investment in inappropriate facilities.

Initially, each Port Development Plan was produced in isolation so that the World Bank Mission to CARICOM in 1973 found that all of the plans assumed that each facility would handle not only domestic traffic but transshipment traffic as well. The total projected traffic for the region taken from a summation of each of the separate plans was therefore wildly optimistic. The total lack of regional planning was again in evidence.

While the initial investment in airports was largely complete by about 1972, port development occurred throughout the seventies. By December 1979, loans from the Caribbean Development Bank (CDB) amounting to US\$29 million had been approved for this purpose. That amounted to 10.8% of all loan approvals made by CDB.<sup>8/</sup> By the end of 1982, CDB had approved loans in transport and communications of about US\$104 million, slightly more than 25% of all approvals. Of this amount \$29 million was for Road Transport, \$48 million for Maritime Transport and \$18 million for Aviation. (CDB Annual Report 1982).

It can be accepted that the CDB had to yield to demands made by members in its formative years, and in fact strenuous efforts were made to scale down the proposals and restrict the amount lent. It can also be accepted that there was a need to eliminate lighterage where it was still practised. But with the benefit of 20:20 hindsight, at the end of the programme, when deep water facilities are available and the loans become due, it may well be questioned on the grounds of under-utilization if it was necessary to provide deep water berths at all ports. Few of the plans made provision for RORO ramps and some of the decking structures were not designed to handle full container loads.

As is known, the trend in ocean transportation is towards larger ships making fewer port calls. Already, container ships serve the region from Europe, North America and the Far East. Major intraregional shippers are demanding containers for shipments. Furthermore, 65% of intraregional trade is carried in small vessels. WISCO plans to operate shallow draft vessels to serve the small Eastern Caribbean

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<sup>8/</sup> CDB, the first ten years 1970-1980.

ports with intraregional breakbulk and container traffic, as well as offering transshipment service to ocean lines. Some ocean lines have themselves announced feeder services to the smaller islands. Lines serving the region from Miami and Puerto Rico use RORO or tug and barge equipment. In the light of these developments, the provision of deep water berths in excess of 20 feet at each port would appear to be unnecessary as most, if not all, of the vessels calling at the ports will not require this depth.

As most of the Port Developments plans were produced before these trends became evident, CDB had little opportunity to modify them before construction proceeded, resulting in the need for further expenditures.

In the case of Dominica, for example, while it was necessary to eliminate lighterage, a deep-water port was built at a cost of US\$5.4 million. This facility is only likely to be used regularly by the GEEST banana boats, which usually call once every ten days. GEEST, with its vertical integration of operations, will gain the main benefits, while the Government of Dominica pays the bill. Ironically, this facility was damaged by Hurricane David before its official opening and had to be rebuilt.

The relatively plentiful provisions of port infrastructure in the Caribbean can be judged from the facilities available as listed in Table 5.

#### Relationship between Transport and Trade

Transport service should not be viewed in isolation but as part of a system that includes production, storage and marketing. Transportation is crucial to economic development and growth. Transport services provide a means of getting products to market. In the Caribbean with the potential for increasing international trade, the provision of transport services is an important determinant of the pace and pattern of development. The success of regional integration is also a production of the development of a viable regional transport system.

## 7. ESTIMATED VOLUME OF IMPORTS AND EXPORTS

The estimated volume of imports to the Caribbean from selected groups of countries by metric tonnes is given in Table 6A and by shipping characteristic in Table 6. Similar tables for exports are given in Tables 7A and 7. Although not listed, this data is also available by commodity type.

The source is UNCTAD which has used United Nations Trade Statistics incorporating a conversion to metric tonnes developed by the UN Statistical Office. The data was produced as an alternative for the data that UNSHIPRO intended to produce from shipping manifests. The UNSHIPRO project will be described in more detail later in this paper.

Perhaps to emphasize the point earlier about various definitions of the Caribbean, these tables contain data for Venezuela. This information was retained to illustrate the tremendous volume of mainly oil exports that cross the Caribbean Sea and to emphasize the need for environmental protection in the area. It is also useful to compare the total size of the market if this traffic is excluded.

The total imports amount to 168 million tonnes. Oil accounts for 142 million tonnes of this traffic as can be seen from Table 6 referring to the Netherlands Antilles, the Bahamas and the United States Virgin Islands.

Similarly, reference to Table 7A shows that total exports amount to 254 million tonnes and Table 7 shows that 207 million is oil. Total regional imports excluding this commodity are about 26 million tonnes and exports about 46 million tonnes. However, Table 7 shows that of this 46 million tonnes, 40 million is comprised of bulk dry commodities, namely bauxite and sugar.

The total volume of imports and exports of refined food and general cargo can thus be seen to be relatively small.

An internal examination by the ECLA Caribbean Office into CARICOM trade showed that these countries had developed trade links with the United Kingdom, which were mainly established during the colonial era.

During the last 25 to 30 years and notwithstanding the existence of CARICOM, intraregional trade has remained well below 10% of all imports to and exports from the region.

The share of intraregional trade of CARICOM countries in domestic exports was estimated to average 6% in the 1960/65 period. The share grew modestly after the formation of CARIFTA and CARICOM, reaching a peak 10.3% of all domestic exports in 1973. Then it dropped to an average of 8% in the 1974-1980 period. Sales to developed countries in the 1960-1965 period were above 70% of all domestic exports. This was mainly to the United Kingdom and North America. This share fell in the 1970-1973 period reaching as low as 59.8% in 1972 - but climbing again to around the 70% level in the 1976-1980 period. This reflects the enormous importance of the United States and Canada for Caribbean exports, and the increase in exports to other regions since 1973. The oil crisis in 1973 probably contributed to the decline in the intraregional trade percentages and the consequent growth of the rest of the world's share. Another factor was that the value of Trinidad and Tobago's exports of oil to extraregional markets rose proportionately more than the value of its exports to regional markets.

Also worth noting is the relatively small but continuing importance of both imports and exports from CARICOM to other Caribbean countries and to the Latin American region in general. In fact, imports from Latin America are similar in amount to intra-CARICOM trade; and CARICOM exports to other Caribbean countries are approaching the levels of intra-CARICOM trade. These trends are also shown in the tables on trade.



## 8. TRANSPORT ACTIVITIES INITIATED SINCE THE FORMATION OF THE CDCC

Since the inception of the Caribbean Development and Co-operation Committee (CDCC), it was recognized that there were problems in transportation which might restrict economic growth. The Constituent Declaration of the CDCC states the intention to "carry out joint activities for increasing and improving national transportation facilities within the subregion and with other countries".

At the same time the importance of the maritime sector was recognized. It was noted that efficient shipping services were an indispensable prerequisite for the success of any integration effort.

Before describing the work carried out it is necessary to explain the establishment of the Caribbean Group for Co-operation in Economic Development (CGCED) and its relationship to the CDCC work programme in transport.

The World Bank has long shown a keen interest in the Caribbean and sent a Regional Mission to assess the workings of CARICOM in 1973, in which I participated. The findings were published as a World Bank Country Report entitled "The Commonwealth Caribbean - The Integration Experience" which contains a detailed appraisal of the then existing transport system. There is an extract from this earlier in this Paper.

In 1977, the World Bank initiated the CGCED which brought together donors (both new and traditional), international donor agencies and the Caribbean countries in an attempt to consolidate efforts for economic development. Initially Suriname declined but subsequently indicated that it wished to participate, so that by 1980 the CGCED included all CDCC countries, except Cuba, which is not a member of the IMF or World Bank Group.

At the first meeting of the Caribbean Group in Washington in June 1978, the Caribbean Regional Transport Review, was considered. This report assessed the ongoing and proposed transport projects in the Caribbean, identified major transport needs and gaps in pre-investment work, and made proposals for subregional and country projects to assist development in the maritime and aviation sectors.

Prior to this meeting, the Group had established a Technical Assistance Steering Committee (TASC) chaired by UNDP to review the proposals made in the Transport Review and to prepare projects for financing by the Caribbean Group.

To carry out this mandate, TASC organized a series of technical meetings of transport specialists, attended by representatives from UNDP, CDB, CARICOM, OECS, IDB, ECLA/CDCC, UNCTAD, ICAO and IBRD. During these meetings discussions were held on the conclusions and regional project proposals set out in the Review. In addition, other relevant material was examined.

It was generally agreed among participants at these technical meetings that a prerequisite for future investment in maritime facilities was rationalization of intra-Caribbean maritime transport. Furthermore, there was a broad consensus on the need for strengthening regional co-operation and harmonization of national policies for maritime and air transport. It was felt that in order to exploit the full potential of the physical infrastructure constructed over the previous decade by donors, there was a need for a relatively modest investment in transport equipment. It was also agreed that Regional Programmes would have priority.

a) CGCED Transport Programme

As a result of these deliberations, seven proposals were submitted to the Caribbean Group as preparatory assistance or projects; four in the maritime sector and three in civil aviation. These were:

1. Regional co-operation in the development of shipping;
2. Shipping traffic data survey;
3. Port Authority legislation;
4. Caribbean container distribution and load centre study;
5. Caribbean Airports Maintenance and Operations Study (CAMOS);
6. LIAT;
7. Caribbean air transport board or council.

### Maritime Sector

Despite the efforts which had been made to develop genuine Caribbean shipping fleets and to improve port facilities, the Caribbean region remained dependent on foreign shipping services. Both the intra and extra-Caribbean trades needed to be improved in order to reduce transport costs, enhance the quality of shipping services, foster the development of regional co-operation and protect shippers' interests.

A large amount of technical assistance had been provided to the region, and maritime transport had been given significant attention by the CDCC Secretariat. Due to the importance of the maritime sector and the relationship between it and other sectors, it was felt that the efforts being made by agencies involved in maritime matters should be consolidated. With this aim in view, and following discussions between the CDCC Secretariat, IMO and UNCTAD, a joint plan of action was prepared. Funding was provided by UNDP through the CGCED, for the Regional Co-operation in the Development of Shipping, Including Support for Small Vessels and Schooners Project, or "UNSHIPRO".

It was a comprehensive project in the maritime sector, executed by UNCTAD/IMO and based in St. Lucia. The Project had a duration of three years and a cost of US\$930,000. It is due to be completed this year. The Project team consisted of four experts, two UN Volunteers and a number of consultants together with regional and national counterparts.

The Project was an attempt to establish a focal point for analysis, decision-making and upgrading of shipping in the Caribbean. The initial thrust of the work programme was to cover the upgrading of the small vessel fleet in the Eastern Caribbean, the development of the maritime sector, the provision of information systems and maritime safety. In fact the Project has tended to concentrate on the training of people in the collection of traffic statistics rather than the production of needed statistics on a regular basis.

In 1978 a study by CARICOM showed that the Eastern Caribbean small vessel fleet consisted of more than 150 vessels and carried 60% of the

intra-CARICOM trade. This amounted to about 230,000 tons, with an annual freight revenue of about US\$6 million.

The effectiveness of the fleet could be significantly improved by a tighter control of cargo loading patterns and sailings, with faster port turnaround. There was some overtonnaging which prevented a fully effective commercial operation.

General standards of safety were unsatisfactory. Officers and ratings were not always qualified and owners appeared to have little regard for maritime safety. Ships were often seriously overloaded and some have been known to sail with decks awash. The majority of the ships and their equipment were neither maintained in a serviceable condition nor regularly inspected. This resulted in a high loss rate of both vessels and crew as well as cargo.

As a result, hull and cargo insurance was unobtainable for a substantial part of the fleet, and even for well-maintained vessels rates were as high as 14% of the ship's value, compared to a more normal 4%.

The Project aimed to provide a set of guidelines on the appropriate function, size and technical standards of the small-vessel fleet, alternative routes and tariff structures, and its role as part of the shipping network for the area. This has not yet been initiated due to the failure to produce the data base. The Project included the definition of a group insurance scheme and financing schemes for repairs and improvements, and recommendations for ship repair facilities for appropriate navigational aids and the possible establishment of a vessel owners' association. This work has been largely completed.

The IMO work on Maritime Safety including the production of a set of Maritime Rules and Regulations and the training of officials to enforce the regulations has been completed. This together with work undertaken on a Draft Maritime Code will enable Caribbean Governments to enact their own Maritime Law and establish the necessary enforcement procedures to ensure compatibility with the international conventions covering Maritime Safety. The region may establish national maritime safety administrations.

### Shipping Traffic Data Survey

It was recognized that the lack of adequate information on the volume of freight moving through the ports of the Caribbean severely hampered planning for both port facilities and shipping services.

In 1977 an attempt was made to redress this situation when as part of an investment study for WISCO, carried out by CDB with funding provided by the Canadian International Development Agency, the ECLA Office for the Caribbean and CARICOM worked together to produce shipping statistics on WISCO routes. This work was published as the Inter-Island Shipping Survey (CEPAL/CARIB 77/1).

When the Caribbean Group was formed, UNDP agreed to provide funds to update the previous exercise and the data collection and processing was again undertaken by ECLA/CDCC.

The results of this work were published as Shipping Statistics of CDCC Countries (CEPAL/CARIB 80/9). This report gave details of the methodology used and the problems encountered and also provided sample tabulations from the data collected. This pilot scheme was then handed to the UNSHIPRO Project for implementation.

### Port Authority Legislation, Functions and Management Structure for the CARICOM LDC's

A pre-feasibility study was undertaken by a joint UNCTAD/IMO team funded by CDB. The mission found three common problems:

- i. A shortage of the technical skills needed to operate and repair new facilities efficiently, especially in relation to modern shipping technologies;
- ii. General limitations in the administrative structures that have been established; which restricted management's freedom of action and prejudiced the efficient use and development of existing facilities.
- iii. A general lack of management skills, for instance, with respect to delegation of authority, staff development and labour relations.

This resulted in higher than necessary operating costs, including significant cargo losses through damage and theft.

While the number of experts required, time frame and total funds needed for the proposed project remained to be determined, a draft project document was produced and preliminary estimates suggested that US\$600,000 was needed. The proposal was not further developed.

#### Caribbean Container Distribution and Loading Centre Port Study

It was proposed to carry out a detailed analysis of existing and planned developments in container handling facilities and services. The EEC indicated that it was prepared to consider funding for such an examination if it was a CARICOM priority item.

This matter was duly considered, but as there was no container development planned by CARICOM States at that time, CARICOM did not designate container handling as a priority area. It is interesting to note that subsequently both Aruba and Curaçao (neither of them CARICOM members but also eligible for EEC aid under LOME) requested financing from the Netherlands to construct container handling facilities in the Netherlands Antilles.

#### Maritime Training

Governments in the English-speaking Caribbean were concerned about the absence of facilities within the region for training seagoing personnel, particularly in subregional trade, and the CARICOM Secretariat has given priority to the establishment of maritime training facilities.

Subsequently, under a bilateral agreement with Norway, Jamaica established a maritime training facility and would like to co-operate with other governments in the region to solve their maritime training needs.

IMO preparatory assistance, financed by UNDP from the UNSHIPRO Project, was provided in order to update information on maritime training needs and give technical advice on ways and means of meeting those needs under a regional approach.

A report was submitted to the CARICOM Standing Committee of Ministers of Transport.

Caribbean Airport Maintenance and Operations Study (CAMOS)

The objective of the study was to determine what was needed in terms of improvement in maintenance, operations, and equipment in order to bring 35 Caribbean airports up to the ICAO standards needed for safe and efficient handling of the current and expected traffic levels. The report found that US\$40.5 million was required immediately for this purpose, while the planning and construction of further facilities was still proceeding. This raises an extremely interesting point. While small island communities need aviation facilities and wish to encourage tourism to enhance foreign exchange earnings, the high cost associated with maintaining expensive infrastructure can be a considerable drain. The CAMOS report clearly indicates that standards are not being maintained, thus suggesting that the individual governments are unable or unwilling to maintain these assets obtained mainly through soft loans and aid. The donors see any remedial work as being on a once only basis and will insist that airports be placed on a sound financial footing.

From a maintenance viewpoint, two aspects stand out clearly. First, most airport pavements needed some attention. Second, buildings and facilities deteriorated especially when they were occupied by personnel who were only assigned from other governmental units for airport duty. There were no regular inspections nor any routine maintenance programmes.

A serious situation was identified concerning fire and rescue services, which at Caribbean airports were generally below recognized safety standards. All appropriate national airport authorities appeared to be aware of this problem. Some authorities had been trying continuously to take remedial action, but others were faced with severe financial constraints and were unable to undertake the remedial actions. In nearly all cases fire and rescue equipment had been supplied by aid programmes.

Following the completion of the CAMOS study, the report was issued and circulated to the individual countries and to the donors. At the Fourth CGCED Meeting held in Washington, 1981, Canada announced that it was prepared to contribute up to \$50 million from its bilateral aid programme to effect improvements needed to bring airports up to the required safety level for operations. However, this programme applied only to those Caribbean States covered by the existing Canadian Aid Programme; about two-thirds of the total.

Further analysis by Canada has suggested that the total requirement may be much higher than first thought and to date no improvements have been initiated although action is expected during 1983.

Meanwhile, UNDP, responsible for co-ordination of technical activities within the CGCED mechanism, has initiated discussions with Canada and other potential donors with the aim of establishing a co-ordinated approach that will provide maximum effectiveness of the donors programme while obviating the need for duplication of administrative arrangements and obtaining the maximum benefits for the region. It would also appear that there is a role for ICAO in providing the required technical assistance and training.

#### LIAT Fleet Requirements and Routing Structure

EDF funded a consultancy through CDB to define the aircraft replacement programme and service improvements that would permit the company to attain viability. The operating costs and revenue that would be produced with both existing and alternate route structures were examined.

#### Establishment of a Caribbean Air Transport Council

This proposal, originating from the Transport Review, was considered by the CARICOM Standing Committee of Ministers of Transport. While such an organization would be useful it was felt that its introduction was premature considering the current state of aviation in the Caribbean. Such a mechanism may evolve as the CAMOS recommendations are implemented.



I believe the major impact of the CGCED has been in the co-ordination of the programmes by the donors and the provision of a forum where recipient countries can meet all donors collectively. This reduces wasteful duplication of effort and assists in maximizing the impact of scarce economic resources. It is recognized that it has also introduced a greater understanding of economic management in the smaller countries.

b) Other Transport Activities

In addition to this comprehensive work programme involving all the donors and recipients within the CGCED, the CDCC has initiated or been involved with a number of other activities in Transportation and Communications. The close working relations between the regional bodies and international agencies has been achieved to avoid wasteful duplication of effort.

Caribbean Postal Union

The Caribbean Governments are concerned about the quality of mail services. It was suggested that the establishment of a Restricted Postal Union could provide several advantages, including agreed preferential postage rates, co-ordinated training facilities, simplified accounting, and the abolition of surface mail. The Secretariat explored with member governments the advantages of establishing a Restricted Postal Union, and asked the UPU to assist CDCC member countries in its establishment as required.

With the help of the UPU, the ECLA/CDCC and CARICOM Secretariats have worked together to produce a draft convention and detailed regulations for the Caribbean Postal Union. Membership would initially be open to English-speaking States. Provision has been made for other states to apply for membership subsequently. Non-English-speaking Caribbean States already belong to the Postal Union of Americas and Spain (PUAS). Jamaica has offered to host the Caribbean Postal Union in the first instance, and it is hoped that it will be established during 1983.

### Search and Rescue

At about the time that the International Maritime Organization (IMO) was drafting the 1979 Search and Rescue Convention, a number of events occurred in the Caribbean to focus attention on this important aspect of maritime safety:

- i. Two super-tankers collided near Tobago; fortunately with minimal damage to the environment;
- ii. The USCG informed the region that it could no longer be relied upon to respond to all requests for assistance in SAR cases;
- iii. Some Caribbean States were considering the formation of joint coast guard services.

As a result, IMO was requested to seek assistance for the Caribbean. Nine fellowships were obtained from Norway to send Caribbean nationals to the USCG SAR School on Governor's Island, New York and money was obtained from the Netherlands to hold a seminar in Barbados. Lecturers from the USCG, Netherlands, ICAO and IMO explained the Draft SAR Convention and basic SAR methods to representatives from more than 20 Caribbean, Central and South American States.

During the course of the seminar, participants requested IMO - in pursuance of its responsibility as depository for the International Convention on Maritime Search and Rescue 1979, and in response to Resolution 8 on the promotion of technical co-operation as adopted by the International Conference on Maritime Search and Rescue, 1979 - in co-operation with ECLA to seek the necessary financial resources for consultations between Caribbean States in order to improve arrangements for the provision and co-ordination of Search and Rescue Services and to establish agreed areas of responsibility in accordance with the provisions of the 1979 SAR Convention. With generous financial assistance provided by the Government of Venezuela, ECLA on behalf of IMO convened three subregional meetings for this purpose in the South-Central, Western and Southern Caribbean areas in 1982.

IMO and ECLA are now preparing for the final meeting due to be held in Caracas, later in 1983. The purpose of this meeting is to:

1. Discuss and resolve any outstanding issues raised at the subregional meetings;
2. Finalize the Caribbean Maritime SAR plan and adopt a resolution or draft agreement outlining recommended co-operation between states for submission to the appropriate authorities;
3. Recommend accession to the IMO SAR Convention;
4. Examine in detail those SAR capabilities which are recommended but not yet available;
5. Quantify outstanding equipment needs;
6. Quantify outstanding training needs.

#### Telecommunications

A joint work programme on this subject has been prepared by ITU and CDCC, but no funding has been identified.

#### Facilitation

UNCTAD/FALPRO carried out a review of the problem in the CDCC area in 1979/1980. Three missions were undertaken to evaluate the commercial practices of different states. In October 1981, CDCC convened a meeting of experts on facilitation problems and the strengthening of transport institutions which made specific recommendations with respect to the evaluation of possible technologies for intra-Caribbean transport system, the establishment and strengthening of national facilitation organizations, and the harmonization and reduction of commercial documents, trade procedures and practices.

The UNCTAD/FALPRO recommendations as well as the conclusion of the October 1981 meeting have been incorporated into a project proposal entitled "Facilitation of Trade and Transportation". Funding for this work is being sought. This subject matter is of particular interest

to the Caribbean as a result of the U.S.-led CBI. Consequently, my colleague responsible for trade matters in ECLA's Caribbean Office is compiling national trade procedures guides for all CARICOM countries, which will be evaluated at a meeting scheduled for later this year, where the questions of harmonization and simplification will be discussed.

### Transport Planning

The unplanned nature of developments in transportation in the region has been highlighted several times. In an attempt to overcome this ECLA has established an Ad Hoc Working Group in Transport Planning. At the first meeting held late in 1982, the Working Group noted inter alia:

- Transportation planning in the Caribbean region was a relatively new concern of policy makers and researchers. Transportation planning was taking place without a clear specification of the macro-economic role of the transportation sector in the development process.
- Transportation decision-making in the region had been on an ad hoc incremental basis resulting in an unco-ordinated set of activities at both the research and implementation levels.
- There was a need for a multimodal, interdisciplinary and integrative approach to transportation planning and decision-making.
- The existing transport institutions in the region did not encourage the matching of research and implementation priorities to a regional transportation policy. There were no institutions vested with the responsibility to develop a comprehensive research programme for the region's transport economy or to encourage the development of national transportation plans.

It was agreed:

i. That the Transport Planners Working Group, established under authority of the CDCC Ministers should have the following terms of reference:

- a) Act as a focal point for transport research activities in the region;
- b) Agree on a work programme in transportation for the CDCC Secretariat and for a Multimodal Transport Research Unit;
- c) Encourage the development of National Transportation Plans in the CDCC countries;
- d) Set priorities for the MTRU and encourage the development of a transportation system that will deepen the integration process.

ii. That the MTRU be established as a permanent research institution with the regional universities.

iii. That the composition of the Transport Planners Working Group be widely based at the modal, activity and inter-disciplinary levels.

iv. That a research programme form the basis for the development of a detailed work programme for the Multimodal Transport Research Unit.

v. That a Transport Planners Course be organized for professionals engaged in Transport Planning with a view to encouraging a multimodal approach to planning and to instruct in techniques for transportation analysis.

vi. That all CDCC countries be encouraged to incorporate (where it does not exist) multimodal transport research functions in the most appropriate planning agencies in their respective countries.

vii. That CDCC countries be encouraged to formulate, develop and implement national transportation plans, utilizing an integrative multimodal approach to transport planning.

viii. That a comprehensive study on Proposed, Projected and Anticipated Transport Investment of as many CDCC countries as possible be undertaken with a view to assessing the existing state of affairs and the prospects for a co-ordinated investment programme in the region.

ix. That each CDCC country be encouraged to prepare a list of transport projects which it may wish to initiate, whether at the research, implementation or policy level.

The foregoing description clearly demonstrates that the region is heavily dependent on aid donors. What is perhaps not so clear is the close working relationship built up between the recipient countries, the regional organization and the United Nations agencies. There is a continuous dialogue so that duplication of effort is avoided and the benefit of one agency's expertise is shared with the rest.

This can perhaps be illustrated if a few minutes are taken to explain the way in which the CARICOM Secretariat approaches transportation, the way the CDB sees the future developing in the sector and finally one or two examples of co-operation between the various regional institutions in dealing with problem areas.

CARICOM has established a Standing Committee of Ministers of Transport which meets annually. It also has other sectoral ministerial groups. Above these is the Council of Ministers which meets usually twice yearly, and above the Council is the Heads of Governments which meet as necessary. The CARICOM Secretariat services these committees. CDB, OECS, UNDP, ECLA/CDCC and U.N. Specialized Agencies attend the sectoral ministerial meetings as observers. In addition to this formal structure, there are informal day-to-day contacts between the agencies. For example, in transportation it would be fair to state that contacts on all aspects of the sector are continuous between CARICOM, OECS, and ECLA/CDCC. This co-ordination has been further strengthened through the CGCED mechanism.

CARICOM has also established a number of ad hoc working groups that discuss specific sectoral problems and report back and make recommendations to the relevant Standing Committees of Ministers. For example in transportation there are several of these committees covering such diverse topics as:

air fares and rates; policy for regional airlines; maritime training; dealing with shipping conferences; drafting a regional maritime legal code; protection of regional carriers against unfair extraregional competition; work of regional harbour masters; work of regional directors of civil aviation. Some work is on an ongoing basis, while others meet to make recommendations on specific problems and then are dissolved.

One point of note is that in an area where expertise in transport is not readily available, CARICOM requests and receives assistance from other organizations such as ECLA/CDCC. An increasing amount of my time is spent on such ad hoc committees where regional problems can be freely and promptly discussed and recommendations made to the Ministers of Transport. This method also allows the CARICOM Secretariat staff to learn from the wider experiences in dealing with similar problems gained by the staff of other organizations.

Cross fertilization of ideas and experiences benefits all.

CDB has published a number of Sector Policy Papers including one on Transportation released in April 1981. It is intended that CDB should continue to finance certain transport activities while seeking to involve other agencies in co-financing operations. Emphasis will be placed on institution building, maintenance and the development of local contractor capability.

In road transport agricultural feeder roads, main roads, road maintenance and local contracting capability will be given priority.

In the maritime sector emphasis will be on regional shipping and the provision of specialized port handling equipment for the LDC's. It is intended to investigate the characteristics of shipping and port pricing so that the optimum benefits from port investments can be realized. Aviation is considered to be a prime candidate for co-financing projects with other donors but the priorities include assistance to regional carriers and the upgrading of airport facilities.

Urban transport problems have already appeared in the MDC's and is developing an investment strategy, CDB will be concerned with actions to promote more rational use of road space, linkages between inter-city roads and urban networks and road providing improved access to airports, ports and industrial locations. While total amounts required are beyond CDB's resources, the Bank is prepared to finance appropriate components in urban transportation.

Let me now provide an example to show how this works in practice. The UNSHIPRO Project executed by UNCTAD and IMO with ECLA, CARICOM and OECS as co-operating agencies. With UNDP these organizations form the project steering committee.

It has now become apparent that further work will be required to augment the UNSHIPRO work on the small vessel fleet. Following discussions between the regional agencies ECLA undertook to approach a CGCED donor to ascertain if there was interest in financing ongoing work. ECLA has produced a draft project document which has been refined following discussions between CARICOM and OECS and is now being submitted to the donor. It is anticipated that the donor will send a pre-feasibility mission to the Caribbean and review the draft document with these regional institutions. At this time the draft project document will be finalized and the region will co-operate with the donor to ensure that the project is executed successfully.

It should be noted that in this example, ECLA took the lead in the initial stages. Other examples can be found where this lead is taken by any of the other regional institutions. Perhaps Trinidad and Tobago's motto is appropriate: "Together we aspire, together we achieve".

There are a number of ongoing activities undertaken by the CARICOM Secretariat previously mentioned are undertaken in conjunction with other regional institutions and perhaps it would be appropriate to mention a few of these. In the maritime sector, ongoing activity for the small vessel fleet has already been mentioned. The protection of national shipping lines in conjunction with the UNCTAD Liner Code of Conduct is being actively dealt with. It is anticipated that policy recommendations will be made to the Heads of Governments at their next meeting in July.



The development of extraregional shipping services is the responsibility of the Shipping Lines Board of Directors. In the case of WISCO, for example, the question of expansion of service to non-member ports is being considered. If the directors agreed to a proposal it would only be passed to the ministers for information.

In aviation the Heads of Governments meeting in 1982 instructed the CARICOM Secretariat to consider the options facing the Regional Airlines. A report will be made to the Heads of Governments Meeting being held in Trinidad in July 1983 and that outcome will be awaited with interest.

It is clear that the small Caribbean based countries are at a severe disadvantage when negotiating Air Bilateral Agreements with North American and European countries. If the Caribbean countries could agree to nominate a single airline as the regional carrier, this disadvantage could be overcome as the Caribbean could offer landing rights at several points in exchange for the same in say, the United States. Antigua and Barbuda has suggested that there is insufficient service to tap the European Tourist Market. British Airways formally had a monopoly. On achieving independence and wishing to reach an Air Bilateral Agreement Antigua had no national airline. This problem could have been overcome if Antigua and Barbuda nominated, say BWIA, as its regional carrier. The same arguments apply to Fifth Freedom Rights. However, to date this concept has made little progress because of over-riding national goals.

However, there are a number of areas where technical co-operation agreements between the Caribbean Airlines could lead to economies of scale. Airline managements are known to be discussing a range of possibilities in this area.

There have also been discussions about establishing a regional holding company from which individual airlines could lease equipment. It is clear that a wide range of options are under consideration.

## C O N C L U S I O N S

The paper has attempted to show the development of the transport system to the shape it is in today by reference to the establishment of regional institutions and the involvement of aid donors.

The Caribbean in terms of size, population and trade potential is relatively small.

The difficulties encountered by donors in trying to assist the development of the individual small economies led to a country by country approach, and from a regional perspective massive over-investment in infrastructure. In an attempt to rationalize this situation the donors, both traditional and new, are working together within the CGCED with the Caribbean countries in order to maximize the effectiveness of the total aid programme.

The lack of any mechanism for transport planning on a regional basis has been recognized and a solution proposed by CDCC countries.

While the small size of the individual states making up the Caribbean, has caused some problems there have also been some advantages.

The region has seen developments of an experimental nature that, once proved, are available for solving similar problems in other regions. For example, the work on Search and Rescue can be used to develop a search and rescue plan, not just for South America, but for the Islands of South East Asia and the Pacific.

Finally, the paper shows that just as the development of transportation is an ongoing exercise that needs ongoing review to take account of technological changes, the integration movement is also similarly dynamic.

Building on the experience of CARICOM, there needs to be an extension of the integration movement first into the wider Caribbean and then with the integration movements of Central and South America.

As noted previously, the chances of successful integration are enhanced when a community of economic interests is established beforehand. Transportation is a service industry and as such has to respond to demands for service. Trade opportunities exist between the Caribbean and North, Central and South America. The existing transportation system in the Caribbean is capable of responding to the demands to be made on it as trade expands.

STATISTICAL

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Table 2

Direct Air Connections

(By Airports and Number of direct air connections per week)

BELIZE:

Houston-4; Miami-16; New Orleans-8; Washington DC-2; Guatemala-2;  
San Pedro Sula-11; San Salvador-16; Tegucigalpa-12.

JAMAICA, Kingston:

Amsterdam-3; Brussels-2; Frankfurt-1; London-11; Luxembourg-1;  
Moscow-1; Boston-7; Chicago-1; Miami-56; New York-21; Philadelphia-10;  
Washington-3; Burlington-7; Toronto-10; Lima-1; Panama-2.

JAMAICA, Montego Bay:

Amsterdam-3; Brussels-2; Frankfurt-1; London-6; Atlanta-2; Boston-7;  
Burlington-7; Chiacago-4; Miami-35; New York-23; Philadelphia-13;  
San Francisco-1; Los Angeles-1; Calgary-1; Montreal-1; Toronto-10;  
Winnipeg-1.

GRAND CAYMAN:

Atlanta-13; Detroit-6; Grand Rapids-6; Houston-4; Miami-32.

CUBA:

Berlin-4; Frankfurt-2; Lisbon-1; Luxembourg-1; Madrid-6; Moscow-11;  
Prague-4; Shannon-3; Montreal-6; Luanda<sup>1/</sup>; Maputo<sup>1/</sup>; Cape Verde<sup>1/</sup>;  
Tripoli-1; Lima-3; Managua-1; Panama-2; San José-1.

DOMINICAN REPUBLIC:

Madrid-3; Miami-26; New York-27; Barranquilla-2; Bogota-2; Caracas-8;  
Guatemala-2; Manaus-1; Panama-2; Rio-1; San José-1; Sao Paulo-1.

HAITI:

Paris-1; Miami-16; New York-13; Montreal-2; Toronto-1; Barranquilla-1;  
Bogota-1.

GRAND TURK:

Miami-3.

BAHAMAS, Nassau:

London-3; Bermuda-2; Atlanta-19; Baltimore-7; Boston-7; Chicago-11;  
Dallas-3; Detroit-7; Fort Lauderdale-49; Houston-7; Maimi-94;  
New York-28; Philadelphia-7; San Diego-3; Tampa-4; Tuscon-7;  
West Palm Beach-12; Washington-7; Toronto-3; Panama-2.



Table 2 (CONT'D)

BAHAMAS, Freeport:

Atlanta-7; Fort Lauderdale-63; Miami-54; New York-14; Orlando-10;  
Washington-7; West Palm Beach-54; White Plains-7; Montreal-2;  
Toronto-1.

PUERTO RICO:

Frankfurt-4; London-2; Madrid-5; Paris-1; Atlanta-28; Boston-16;  
Chicago-26; Cleveland-1; Dallas-12; Detroit-7; Miami-65;  
New York-85; Orlando-7; Philadelphia-11; Pittsburg-7; Portland-7;  
San Francisco-6; San José (Ca)-6; Seattle-7; Washington-7;  
Bogota-9; Caracas-12; Guayaquil-2; La Paz-2; Lima-6;  
Maracaibo-2; Quito-1; San José-1.

ST. THOMAS:

Miami-14; New York-14.

ST. CROIX:

Miami-21; New York-7.

TORTOLA:

CURACAO:

Amsterdam-4; Lisbon-4; Zurich-2; Miami-18; New York-7;  
Barranquilla-3; Bogota-3; Caracas-28; Guayaquil-1; Lima-2;  
Maracaibo-2; Medellin-2; Panama-3.

BONAIRE:

Miami-1; Caracas-3.

ARUBA:

Amsterdam-2; Lisbon-2; Miami-16; New York-8; Barcelona (V)-1;  
Barquisimeto-1; Barranquilla-3; Bogota-3; Cali-1; Caracas-15;  
Maracaibo-2; Medellin-2; Panama-3.

ST. MAARTEN:

Dallas-4; Miami-7; New York-14; San Francisco-4.

ANTIGUA:

London-2; Boston-3; Miami-15; New York-22; Toronto-6;  
Caracas-2.

ST. KITTS:

Miami-1; New York-1.

Table 2 (CONT'D)

MONTSEERRAT:

DOMINICA:

SAINT LUCIA:

London-1; Miami-6; New York-2; Caracas-2.

MARTINIQUE:

Paris-8; Bordeaux-1; Lyon-1; Mulhouse-1; Miami-8; New York-2;  
Montreal-2; Toronto-1; Caracas-2.

GUADELOUPE:

Paris-10; Bordeaux-1; Lyon-1; Mulhouse-1; Miami-5; New York-2;  
Montreal-2; Toronto-1; Bogota-1; Caracas-1; Lima-1; Quito-1.

ST. VINCENT:

GRENADA:

BARBADOS:

Brussels-1; London-8; Boston-7; Miami-18; New York-21; Montreal-2;  
Toronto-5; Caracas-3.

TRINIDAD:

Amsterdam-2<sup>2/</sup>; Lisbon-2<sup>2/</sup>; London-6; Boston-7; Miami-23; New York-22;  
Toronto-6; Caracas-7; Maturin-2; Panama-2.

GUYANA:

Miami-2; New York-3; Boa Vista-2.

SURINAME:

Amsterdam-3; Miami-2; Belem-2; Caracas-1.

ANGUILLA:

CAYENNE:

Paris-2; Belem-1; Lima-1; Manaus-1.

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1/ One Flight every two weeks.

2/ Currently suspended due to runway repairs in Trinidad.

Source: Official Airlines Guide, February 1983.

Table 2A

Summary of Direct Air Connections by Region

COUNTRY	EUROPE	NORTH AMERICA	SOUTH AMERICA	CENTRAL AMERICA	AFRICA
BELIZE		*	*		
JAMAICA: Kingston	*	*	*	*	
Montego Bay	*	*			
GRAND CAYMAN		*			
CUBA	*	*	*	*	*
DOMINICAN REPUBLIC	*	*	*	*	
HAITI	*	*	*		
GRAND TURK		*			
BAHAMAS: Nassau	*	*		*	
Freeport		*			
PUERTO RICO	*	*	*	*	
ST. THOMAS		*			
ST. CROIX		*			
TORTOLA					
CURACAO	*	*	*	*	
BONAIRE		*	*		
ARUBA	*	*	*	*	
ST. MAARTEN		*			
ANTIGUA	*	*	*		
ST. KITTS		*			
MONTSERRAT					
DOMINICA					
SAINT LUCIA	*	*	*		
MARTINIQUE	*	*	*		
GUADELOUPE	*	*	*		
ST. VINCENT					
GRENADA					
BARBADOS	*	*	*		
TRINIDAD	*	*	*	*	
GUYANA		*	*		
SURINAME	*	*	*		
ANGUILLA					
CAYENNE	*				

Source: Official Airlines Guide, February 1983.

Table 3

Airport Characteristics  
Airports Length and Largest Aircraft

Countries	Metres	Aircraft Type
BELIZE	1900	B720
JAMAICA: Kingston	3330	DC10
Montego Bay	2600	DC8
GRAND CAYMAN	2340	DC9
CUBA	3700	IL62
DOMINICAN REPUBLIC	3353	B707
HAITI	2423	B707
GRAND TURK	1530	DC6
BAHAMAS: Nassau	3630	DC10
Freeport	3353	B707
PUERTO RICO	3048	B707
ST. THOMAS	2100	B727
ST. CROIX	2320	B707
TORTOLA	970	DC3
CURACAO	3400	DC10
BONAIRE	2220	DC9
ARUBA	2740	B707
ST. MAARTEN	2150	DC8
ANTIGUA	2740	B747
ST. KITTS	2318	L15
MONTserrat	1020	HS748
DOMINICA: Melville Hall	1020	HS748
Canefield	650	DHC6
SAINT LUCIA: Hewanorra	3450	B747
Vigie	1020	HS748
MARTINIQUE	3300	B747
GUADELOUPE	3300	B747
ST. VINCENT	1020	HS748
GRENADA: Pearls	1660	HS748
Pt. Saline	3000 <sup>1/</sup>	
BARBADOS	3450	B747
TRINIDAD	3050	B747
TOBAGO	1980	DC9
GUYANA	2100	B707
SURINAME	3480	DC8
ANGUILLA	1020	HS748
CAYENNE	3200	B747

<sup>1/</sup> Under construction.

Source: Air Navigation Plan 1979.

Table 4

SUMMARY OF MAJOR FREIGHT CONFERENCES SERVING THE CARIBBEAN

	WITASS <sup>1/</sup>	CONECCA <sup>2/</sup>	CONCA <sup>3/</sup>	River Plate/ Caribbean/ River Plate Conference	Leeward and Windward Islands and Guyanas Conference	Other Conferences
Antigua	x	x			x	
Bahamas				x		
Barbados	x	x	x	x	x	
Belize	x	x	x	x	x	
British Virgin Islands	x					
Cayman Islands	x	x				
Cuba	x	x				
Dominica	x	x			x	
Dominican Republic	x	x	x			United States Atlantic and Gulf - Santo Domingo Con- ference.
Grenada	x	x			x	
Guyana	x	x	x	x	x	
Guadeloupe	x	x	x		x	
Haiti	x	x	x			United States Atlantic and Gulf - Haiti Conference.
Jamaica	x	x	x			United States Atlantic and Gulf - Jamaica Conference.
Martinique	x	x	x		x	
Montserrat	x	x			x	
Netherlands Antilles	x	x	x	x		United States Atlantic and Gulf - Venezuela and Netherlands Antilles Con- ference.

Table 4 (CONT'D)

	WITASS <sup>1/</sup>	CONECCA <sup>2/</sup>	CONCA <sup>3/</sup>	River Plate/ Caribbean/ River Plate Conference	Leeward and Windward Islands and Guyanas Conference	Other Conferences
St. Kitts/Nevis/ Anguilla	x	x			x	
Saint Lucia	x	x			x	
St. Vincent	x	x			x	
Suriname	x	x	x	x	x	
Trinidad and Tobago	x	x	x	x	x	
U.S. Virgin Islands						1. Inter-American Freight Conference - Puerto Rico and U.S. Virgin Islands (from Brazil).
Puerto Rico						2. Japan - Puerto Rico and United States Freight Agreement.
Venezuela	x	x	x	x		1. United States Atlantic and Gulf - Venezuela and Netherlands Antilles Conference. 2. Hong Kong - Venezuela Rate Agreement.

Source: CRONER'S WORLD DIRECTORY OF FREIGHT CONFERENCES, R.K. Bridges, Croner Publications Ltd., U.K.

Note: Some Caribbean countries are also served by the following conferences:

- a) Latin America/Pacific Coast Steamship Conference;
- b) Hong Kong/Latin America Associated Lines;
- c) Japan/Latin American Eastbound Freight Conference; and d) Brazil/Caribbean/Brazil Freight Conference.

<sup>1/</sup> From Europe: WITASS = The Association of West Indies Transatlantic Steamship Lines.

<sup>2/</sup> From Spanish Ports: CONECCA = Conference España - Caribe/Centro America.

<sup>3/</sup> From Italian and French Ports: CONCA = Conferenza Centro America.

Table 5

## PORT CHARACTERISTICS

Country and Name of Port	No. of Berths	Total Length Metres	Depth of Water Metres	Cranes		Container and Ro/Ro Facilities	Largest Vessel
				No.	Lifting Capacity Tonnes		
	1	2	3	4	5	6	7
<u>ANTIGUA:</u>							
St. John's	2	366	10.67	1 Mobile	150 t	Available	42,000 grt 9.45 m.d.
				1	10 t		
				1	75 t		
				1	50 t		
<u>BAHAMAS:</u>							
Freeport		1572	9.14	1	3 t	3 Ro/Ro ramps 3 Forklifts 1 20-ft. Container Crane	
Nassau	5	674	11.79	-	-	Available services	
<u>BARBADOS:</u>							
Bridgetown	8	518	9.75	2	20 t	Container Park Container wharf Transit shed Container cranes	
<u>BELIZE:</u>							
Belize City		569	7.3	1	35 t	Available services	204 m loa 9.14 m.d.
	Private	152	7.3	1	70 t		
<u>BRITISH VIRGIN ISLANDS:</u>							
Road Town	2	100	2.44	1	1 t	Forklifts available	
Port Purcell	2	244	6.70			" "	
<u>CUBA:</u>							
Havana	45+	8200	10.97		Available	12 12 t Gantry cranes Available container and Ro/Ro facilities	
<u>DOMINICA:</u>							
Roseau	2		11	1	1 t	Ro/Ro Barges	
				1	18 t		

Table 5 (CONT'D)

Country and Name of Port	No. of Berths	Total Length Metres	Depth of Water Metres	Cranes		Container and Ro/Ro Facilities	Largest Vessel
				No.	Lifting Capacity Tonnes		
	1	2	3	4	5	6	7
<u>DOMINICAN REPUBLIC:</u>							
Santo Domingo	9	433	9.14			No heavy lift Facility discharges by Ship's gear	50,000 t. vessel
Puerto Plato	3	436	10.67		Available		
<u>GRENADA:</u>							
St. George's	2	244	8.53	1	10 t	8 Forklifts discharges by Ship's gear	
<u>GUADELOUPE:</u>							
Pointe-a-Pitre	14 docks	2188	11		Available	2 40-ft. Container Cranes Container terminal 2 Ro/Ro berths	Largest vessel 200 M in length Max. draft 11 m.d.
<u>GUYANA:</u>							
Georgetown	9	59-229	6.10	4 1	2-8 t 13 t	1 20-ft. Container mover	
<u>HAITI:</u>							
Port-au-Prince	3 1 pier	244	6 9.14	1 2 1	30 t 90 t 150 t	2 Ro/Ro platforms	
Cap Haitien	1	183	6.4	1	15 t		



Table 5 (CONT'D)

Country and Name of Port	No. of Berths	Total Length Metres	Depth of Water Metres	Cranes		Container and Ro/Ro Facilities	Largest Vessel
				No.	Lifting Capacity Tonnes		
	1	2	3	4	5	6	7
<u>JAMAICA:</u>							
Kingston	14	2452	12.19	1	140 t (linkbelt)	2 40-ft Paceco cranes 3 Karrilift transporter cranes 2 Ro/Ro ramps of 24.38 m each	Largest vessel 240 m loa 10.06 m.d. 41,000 dwt
Montego Bay	3	419	8	Available	Available	Available	Largest vessel 198.1m o.a. of 256.5 t
<u>MARTINIQUE:</u>							
Fort-de-France		1400	10.5	No floating cranes as heavy lifts facilities		1 Ro/Ro Dock 1 Container Pier 2 40 t gantry cranes	
<u>MONTSEERRAT:</u>							
Plymouth	2		8.5	1	7 t	Limited forklifts	
<u>NETHERLANDS ANTILLES:</u>							
Curacao	9		10.06	1 1 1	14 t 24 t 150 t	Available	
Aruba	5	1267	10.97	Available		Available	
Bonaire	3	195	15.24	1	15 t	Ro/Ro facilities for vessels maximum 5000 grt No Container facilities	Largest vessel 35000 grt Max. 15.24 m.d.

Table 5 (CONT'D)

Country and Name of Port	No. of Berths	Total Length Metres	Depth of Water Metres	Cranes		Container and Ro/Ro Facilities	Largest Vessel
				No	Lifting Capacity Tonnes		
	1	2	3	4	5	6	7
<u>ST. KITTS/NEVIS/ANGUILLA:</u>							
Basseterre	3	415	3.35	2	Mobile Power Cranes	2 Ro/Ro berths at 4.9 m.d.	
				2	7 t	1 paceco 15 t gantry	
				3	2 t	Cranes	
<u>SAINT LUCIA:</u>							
Castries	3	158-244	12	1	140 t	Container handled by Ship's gear Ro/Ro ramps Forklifts trailers available	Largest vessel loa 213.3 m Max. d 12 m
<u>ST. VINCENT:</u>							
Kingstown	2		9.14	1	35 t		
<u>SURINAME:</u>							
Paramaribo	9	905	8.5				
<u>TRINIDAD AND TOBAGO:</u>							
Port-of-Spain	11	1341	9	1	80 t	Ro/Ro ramps	Largest vessel
				1	60 crane barge	2 Paceco gantry cranes 40 t capacity	up to 8.99 m
<u>U.S. VIRGIN ISLANDS:</u>							
St. Croix	2	500	7.62	1	12 t	3 Ro/Ro ramps	
				1	25 t mobile		
St. Thomas	1	681	9.14	1	90 t mobile		Largest vessel Max. 8.8 m.d.

Table 5 (CONT'D)

Country and Name of Port	No. of Berths	Total Length Metres	Depth of Water Metres	Cranes		Container and Ro/Ro Facilities	Largest Vessel
				No.	Lifting Capacity Tonnes		
	1	2	3	4	5	6	7
<u>PUERTO RICO:</u>							
San Juan	20+		9.14	Cranes up to 75 t		5 27 t Gantry Cranes	
				1	25 t	Ro/Ro facilities	
				2	45 t	3 Container terminals	
Ponce		871	9.14	Available		A Container terminal	
						1 Ro/Ro ramp	
<u>VENEZUELA:</u>							
Caracas	4	701	10.97	2	3 t + 8 t	Available	
				Others up to 4 t			
Punta Cardon	12	2572	15				

Source: Ports of the World, 1982, A Lloyd's list Publication, Lloyds of London.

Note: Abbreviations Used

- d. Draught
- dwt. Deadweight tonnage
- grt. Gross registered tonnage
- loa. Length overall
- m. Metre
- m.d. Metre draught
- t. Tonne

TABLE 6

## IMPORTS IN METRIC TONS

## INTERREGIONAL MARITIME CARGO OF SELECTED CARIBBEAN STATES 1980

	North America	Central America	Caribbean	South America North Coast	South America East Coast	South America West Coast	United Kingdom	Europe	Africa	Middle East	Southern Asia	Others	Total
	1-5	6	7	8	9	10	11	12-16	17/18	19	20	21-24	25
<b>ANTIGUA</b>													
Bulk, dry	13857	-	668	-	-	-	-	363	-	-	-	-	14892
Bulk, liquid	7772	-	106510	-	-	-	0	-	-	-	-	-	114282
Refrigred foods	2928	-	17	-	-	-	320	6	-	-	-	81	3352
General cargo, dry	37510	6	3357	125	70	-	725	508	-	-	2	332	42635
Other dry cargo	888	-	62	1	28	-	22	-	-	-	-	691	1692
<b>TOTAL</b>	<b>62955</b>	<b>6</b>	<b>110614</b>	<b>126</b>	<b>98</b>	<b>-</b>	<b>1071</b>	<b>877</b>	<b>-</b>	<b>-</b>	<b>2</b>	<b>1004</b>	<b>176853</b>
<b>BAHAMAS</b>													
Bulk, dry	208934	213	3161	-	108440	-	311	259	543	246	19511	14	341632
Bulk, liquid	2052	0	289438	245738	37995	315210	3553421	24298	9901921	6941158	-	144973	21456204
Refrigred foods	14073	38	21	-	-	-	482	1106	-	2	-	772	16494
General cargo, dry	144115	632	795	12	1410	31	7290	15614	-	578	43	515	171035
Other dry cargo	25083	12	2174	-	149	-	253	635	-	87	-	3523	31916
<b>TOTAL</b>	<b>394257</b>	<b>895</b>	<b>295589</b>	<b>245750</b>	<b>147994</b>	<b>315241</b>	<b>3561757</b>	<b>41912</b>	<b>9902464</b>	<b>6942071</b>	<b>19554</b>	<b>149797</b>	<b>22017281</b>
<b>BARBADOS</b>													
Bulk, dry	70035	-	10554	-	3344	-	9592	12151	-	-	-	6562	112238
Bulk, liquid	1403	-	144478	153898	-	-	32	6	-	-	-	-	299817
Refrigred foods	12905	-	3646	-	252	-	1431	1984	-	-	-	3407	23625
General cargo, dry	36442	69	26295	11798	8622	19	13170	8163	1	-	-	5451	110030
Other dry cargo	5446	1	592	1	102	-	3846	376	-	-	-	4420	14784
<b>TOTAL</b>	<b>126231</b>	<b>70</b>	<b>185565</b>	<b>165697</b>	<b>12320</b>	<b>19</b>	<b>28071</b>	<b>22680</b>	<b>1</b>	<b>-</b>	<b>-</b>	<b>19840</b>	<b>560494</b>
<b>BELIZE</b>													
Bulk, dry	18986	9	183	-	-	-	668	800	-	-	-	3	20649
Bulk, liquid	2	-	2269	-	-	-	4	-	-	-	-	-	2275
Refrigred foods	923	-	40	-	-	-	18	1836	-	-	-	120	2937
General cargo, dry	14798	1496	2118	1798	95	-	3857	3854	284	2	3	676	28981
Other dry cargo	2916	38	123	-	15	-	1366	133	-	3	-	63	4657
<b>TOTAL</b>	<b>37625</b>	<b>1543</b>	<b>4733</b>	<b>1798</b>	<b>110</b>	<b>-</b>	<b>5913</b>	<b>6623</b>	<b>284</b>	<b>5</b>	<b>3</b>	<b>862</b>	<b>59499</b>

Table 6 (CONT'D)

	North America	Central America	Caribbean	South America North Coast	South America East Coast	South America West Coast	United Kingdom	Europe	Africa	Middle East	Southern Asia	Others	Total
	1-5	6	7	8	9	10	11	12-16	17/18	19	20	21-24	25
<b>BR. VIRGIN ISLANDS</b>													
Bulk, dry	-	-	-	-	-	-	67	-	-	-	-	-	67
Bulk, liquid	-	-	17710	257	-	-	-	-	-	-	-	-	17967
Refrigred foods	-	-	-	-	-	-	95	-	-	-	-	25	120
General cargo, dry	-	4	109	4110	-	-	712	47	-	-	-	4	4986
Other dry cargo	-	-	-	-	24	-	110	-	-	-	-	43	177
TOTAL	-	4	17819	4367	24	-	984	47	-	-	-	72	23317
<b>CAYMAN ISLANDS</b>													
Bulk, dry	10498	-	45692	-	-	-	100	36	-	-	-	-	56326
Bulk, liquid	1071	-	32070	14560	-	-	340246	99	4428971	3160624	-	-	7977641
Refrigred foods	2338	163	7	-	-	-	2	-	-	-	-	43	2553
General cargo, dry	21720	286	2330	11236	27	-	1316	775	-	-	-	22	37712
Other dry cargo	5243	14	453	-	-	-	184	18	-	-	-	1985	7897
TOTAL	40870	463	80552	25796	27	-	341848	928	4428971	3160624	-	2050	8082129
<b>CUBA</b>													
Bulk, dry	1250558	13147	14	-	216040	52837	19392	851288	41195	-	-	56009	2500480
Bulk, liquid	2760	-	202	513972	-	-	487	6876722	-	-	-	-	7394143
Refrigred foods	16188	-	14	-	-	-	13332	113204	-	-	-	-	142738
General cargo, dry	371330	1213	76	4505	19636	1887	34371	1399957	6100	283	11	80011	1919380
Other dry cargo	7117	3	141	288	955	99	1777	78982	-	20	-	21102	110484
TOTAL	1647953	14363	447	578765	236631	54823	69359	9320153	47295	303	11	157122	12067225
<b>DOMINICA</b>													
Bulk, dry	3582	-	1562	-	300	-	7992	1761	-	-	-	220	15417
Bulk, liquid	4	-	2028	-	-	-	-	-	-	-	-	-	2032
Refrigred foods	1370	-	2	-	-	1	106	134	-	-	-	454	2067
General cargo, dry	9885	46	5871	618	17	-	4019	968	-	-	-	301	21725
Other dry cargo	509	-	44	-	-	-	630	84	-	-	-	934	2201
TOTAL	15350	46	9507	618	317	1	12747	2947	-	-	-	1909	43442
<b>DOMINICAN REPUBLIC</b>													
Bulk, dry	867176	11850	12035	7663	8495	40517	678	20221	100	20	-	51274	1019979
Bulk, liquid	1439	-	424015	1213645	-	-	1	560	-	-	-	-	1639660
Refrigred foods	16389	-	180	-	-	-	3	3344	-	-	-	500	20416
General cargo, dry	366828	9404	28326	11654	8183	5326	6603	55896	1225	56	244	36216	529961
Other dry cargo	44963	1061	779	623	2257	528	939	7341	1	8	-	47062	105562
TOTAL	1296795	22315	465335	1233585	18935	46371	8224	67141	1326	84	244	135052	3315578

	North America	Central America	Caribbean	South America North Coast	South America East Coast	South America West Coast	United Kingdom	Europe	Africa	Middle East	Southern Asia	Others	Total
	1-5	6	7	8	9	10	11	12-16	17/18	19	20	21-24	25
<b>GRENADA</b>													
Bulk, dry	54788	7	4902	-	999	-	753	66	-	-	-	5	61520
Bulk, liquid	7	-	18324	-	-	-	-	-	-	-	-	-	18331
Refrigred foods	1909	-	101	-	-	-	371	567	-	-	-	72	3020
General cargo, dry	2097	27	5949	6	71	-	2873	740	-	-	-	69	11932
Other dry cargo	65	7	97	-	8	-	299	9	-	-	-	664	1149
TOTAL	41884	41	29373	6	1078	-	4296	1382	-	-	-	810	95952
<b>GUADELOUPE</b>													
Bulk, dry	30740	9817	33938	14912	907	-	106	106001	109	-	-	107	196637
Bulk, liquid	8	-	248640	414927	-	-	1	2797	-	-	-	-	666373
Refrigred foods	1619	58	909	157	-	1	21	30921	9	-	-	1053	34748
General cargo, dry	12682	595	42619	8067	34	254	1224	292690	1622	102	20	851	360760
Other dry cargo	1475	-	718	-	220	-	186	21410	71	-	-	7467	31547
TOTAL	46524	10470	326824	438063	1161	255	1538	453819	1812	102	20	9478	1290065
<b>GUYANA</b>													
Bulk, dry	99125	-	38097	40	2397	-	4764	5231	-	-	-	1815	151469
Bulk, liquid	756	-	446087	772	-	-	49	-	-	-	-	-	447664
Refrigred foods	281	-	-	-	-	-	600	1173	4	-	-	1602	3660
General cargo, dry	94063	59	9299	322	1031	3	18798	9835	149	1	14	1553	135127
Other dry cargo	5766	1	238	-	1078	-	3671	2228	1	-	-	236	13219
TOTAL	199991	60	493721	1134	4506	3	27882	18467	154	1	14	5206	751139
<b>HAITI</b>													
Bulk, dry	204204	2198	19414	-	8010	-	723	9050	-	-	-	12596	256195
Bulk, liquid	206	-	81697	-	-	-	-	-	-	-	-	-	81903
Refrigred foods	1073	68	321	-	-	28	2	837	-	-	-	20	2349
General cargo, dry	122137	1160	22323	3026	3595	-	1853	19105	-	-	152	6046	179397
Other dry cargo	8556	17	544	17	342	-	181	2443	-	-	-	6021	18021
TOTAL	336226	3443	124299	3043	11947	28	2759	31435	-	-	152	24683	537865
<b>JAMAICA</b>													
Bulk, dry	354492	12309	27435	75639	4387	168	5604	17097	16	10	-	10544	507701
Bulk, liquid	1622	-	1354091	808676	-	-	70	444	24679	-	-	-	2189582
Refrigred foods	25666	318	230	18	1613	-	66	8989	-	74	-	2248	39222
General cargo, dry	757120	4807	50198	19925	844	404	15832	57320	219	133	184	6781	913767
Other dry cargo	23192	225	428	10	110	-	4858	1491	8	2	14	1789	32127
TOTAL	1162092	17659	1432382	904268	6954	572	26430	85341	24922	219	198	21362	3682399

Table 6 (CONT'D)

	North America	Central America	Caribbean	South America North Coast	South America East Coast	South America West Coast	United Kingdom	Europe	Africa	Middle East	Southern Asia	Others	Total
	1-5	6	7	8	9	10	11	12-16	17/18	19	20	21-24	25
<b>MARTINIQUE</b>													
Bulk, dry	3812	3594	29359	6930	2	-	797	83114	-	227	-	-	127835
Bulk, liquid	8	-	8996	-	-	-	1	3744	-	-	-	-	12749
Refrigred foods	3318	18	337	305	3	-	0	31384	1	-	-	903	36269
General cargo, dry	13198	405	29750	3215	598	2	1094	260542	438	90	18	105	309455
Other dry cargo	1767	-	419	4	55	-	411	23601	-	-	-	4	26261
TOTAL	22103	4017	68861	10454	658	2	2303	402385	439	317	18	1012	512569
<b>MONTSERRAT</b>													
Bulk, dry	810	-	605	-	-	-	767	2663	-	-	-	-	4845
Bulk, liquid	-	-	1958	-	-	-	-	-	-	-	-	-	1958
Refrigred foods	492	-	3	-	-	-	1111	966	-	-	-	4	2576
General cargo, dry	1420	1	2772	2	11	-	6360	3919	-	-	-	2	14487
Other dry cargo	117	-	100	-	-	-	928	198	-	-	-	222	1565
TOTAL	2839	1	5438	2	11	-	9166	7746	-	-	-	228	25431
<b>NETHERLANDS ANTILLES</b>													
Bulk, dry	64454	-	5073	1525	3801	-	218	17573	-	-	-	4716	97360
Bulk, liquid	23289	401216	174327	24746812	18790	2730996	547050	121678	12441111	28865610	-	162600	70233479
Refrigred foods	23066	-	734	27076	24	-	14	11989	-	-	-	7321	70224
General cargo, dry	159754	4370	19287	73028	1393	119	11813	71794	-	-	13	11363	252934
Other dry cargo	11932	66	106	721	1755	2	561	3866	-	-	-	11618	30627
TOTAL	282495	405652	199527	24849162	25763	2731117	559656	226900	12441111	28865610	13	197618	70784624
<b>ST. KITTS-N-A</b>													
Bulk, dry	9737	-	3421	-	-	-	906	3	-	-	-	-	14067
Bulk, liquid	-	-	17006	-	-	-	-	-	-	-	-	-	17006
Refrigred foods	2347	-	2	-	-	-	53	-	-	-	-	2	2404
General cargo, dry	12465	-	3767	-	30	-	1736	81	-	-	-	378	18457
Other dry cargo	187	-	32	-	-	-	440	2	-	-	-	277	938
TOTAL	24736	-	24228	-	30	-	3135	86	-	-	-	657	52872
<b>SAINT LUCIA</b>													
Bulk, dry	10084	-	9061	303	400	-	2434	41	-	-	-	5653	27976
Bulk, liquid	38	-	41595	-	-	-	-	-	-	-	-	-	41633
Refrigred foods	3878	-	4	-	-	-	575	209	-	-	-	58	4724
General cargo, dry	14016	54	5928	15963	701	-	3057	1321	-	-	-	386	41426
Other dry cargo	4996	-	102	208	-	-	312	105	-	-	-	1654	7377
TOTAL	33012	54	56690	16474	1101	-	6378	1676	-	-	-	7751	123136

	North America	Central America	Caribbean	South America North Coast	South America East Coast	South America West Coast	United Kingdom	Europe	Africa	Middle East	Southern Asia	Others	Total
	1-5	6	7	8	9	10	11	12-16	17/18	19	20	21-24	25
<b>ST. VINCENT</b>													
Bulk, dry	30488	-	5484	-	300	-	1225	35	-	-	-	-	37532
Bulk, liquid	8	-	13698	-	-	-	1	-	-	-	-	-	13707
Refrigred foods	1484	-	11	-	-	-	161	146	-	-	-	20	1822
General cargo, dry	5071	47	7296	7875	56	-	1837	517	-	-	-	14	22713
Other dry cargo	176	1	121	-	11	-	347	15	-	-	-	427	1100
TOTAL	37227	48	26610	7875	367	-	3573	713	-	-	-	461	76874
<b>SURINAME</b>													
Bulk, dry	60693	-	228510	24	3949	-	795	23383	-	-	-	623	317977
Bulk, liquid	158	-	707846	521	7883	-	20	77	-	-	-	-	716505
Refrigred foods	749	-	-	3	141	-	1	5938	-	-	-	1245	8077
General cargo, dry	318198	93	4648	4088	5921	43	3762	47828	25	-	17	4804	408885
Other dry cargo	5693	-	35	17	839	-	724	70936	-	-	-	6161	17126
TOTAL	385491	93	941039	4653	18733	43	5302	148162	25	-	17	12840	1468570
<b>TRINIDAD AND TOBAGO</b>													
Bulk, dry	397314	40344	82590	768001	467282	-	22336	22334	-	-	5	78382	1878588
Bulk, liquid	560	2	71853	123974	-	-	62	1276	415574	881355	-	3270506	4765162
Refrigred foods	40968	288	5562	967	-	388	2318	10591	-	52	-	9662	70797
General cargo, dry	205955	7116	111844	197427	5125	18573	58135	48239	129	22	687	29815	683067
Other dry cargo	25976	51	5400	407	588	2	16574	5325	6	-	8	27482	81819
TOTAL	670773	47801	277250	1090776	472995	18963	99425	87765	415709	881429	700	3415847	7479433
<b>U.S. VIRGIN ISLANDS</b>													
Bulk, dry	66	2844	-	-	-	-	10	24	-	-	-	603	3547
Bulk, liquid	-	-	9041	257	-	-	126539	164271	7534241	14036678	-	-	21871027
Refrigred foods	7	59	592	-	-	-	390	209	-	-	-	12	1269
General cargo, dry	748	197	9230	4516	15	-	2258	7119	-	-	-	318	24401
Other dry cargo	4	-	17	-	-	-	52	125	19	-	-	68	285
TOTAL	825	3100	18880	4773	15	-	129249	171731	7534260	14036678	-	1001	21900528
<b>VENEZUELA</b>													
Bulk, dry	3319694	25853	363132	48017	148122	148806	32902	693394	384058	17	7	509919	5676651
Bulk, liquid	5510	-	212491	2484	-	-	360	6287	247685	3	-	-	474818
Refrigred foods	81418	44	154	2566	629	3141	22	27697	4	3	-	8044	123722
General cargo, dry	1707238	76870	83325	582558	93859	100012	85383	1168645	6996	2855	513	176277	4084531
Other dry cargo	596548	5378	10180	1232	27198	40695	9135	97459	4285	82	31	33660	825883
TOTAL	5710408	110875	669282	636858	269808	292654	127802	1993482	643028	2957	551	727900	11185605



Table 6 (CONT'D)

	North America	Central America	Caribbean	South America North Coast	South America East Coast	South America West Coast	United Kingdom	Europe	Africa	Middle East	Southern Asia	Others	Total
	1-5	6	7	8	9	10	11	12-16	17/18	19	20	21-24	25
<b>OTHER CARIBBEAN</b>													
Bulk, dry	128877	12	6691	1653	-	-	745	158	-	-	19855	265	158256
Bulk, liquid	225	-	195998	-	34307	-	3	181	-	1284000	54000	26676	1595390
Refrigerated foods	11696	56	788	24	-	2	170	338	-	-	-	1630	14704
General cargo, dry	61461	10	7529	252	219	16	5180	7504	28	1	21	2302	84523
Other dry cargo	4329	1	252	1	-	0	522	4585	-	-	-	11293	20983
<b>TOTAL</b>	<b>206588</b>	<b>79</b>	<b>211258</b>	<b>1930</b>	<b>34526</b>	<b>18</b>	<b>6620</b>	<b>12766</b>	<b>28</b>	<b>1284001</b>	<b>73876</b>	<b>42166</b>	<b>1873856</b>
<b>TOTAL</b>													
Bulk, dry	7213004	124927	931581	924707	977175	242328	113889	1866996	426021	520	39378	739310	13599836
Bulk, liquid	48898	401218	4622368	28240494	98975	3046206	4568347	7202440	34994182	55169425	54000	3604755	142051308
Refrigerated foods	267085	1110	13676	31116	2662	3561	21664	253568	18	131	-	39298	633889
General cargo, dry	4490251	108967	485041	966126	151563	126689	293258	3502532	17216	4123	1942	364599	10512306
Other dry cargo	782944	6876	23157	3530	35734	41326	48330	253988	4391	202	53	188866	1389397
<b>TOTAL</b>	<b>12802182</b>	<b>643098</b>	<b>6075823</b>	<b>30165973</b>	<b>1266109</b>	<b>3460110</b>	<b>5045488</b>	<b>13079524</b>	<b>35441828</b>	<b>55174401</b>	<b>95373</b>	<b>4936828</b>	<b>168186737</b>

TABLE 6A

## TOTAL IMPORT TRADE - MARITIME CARGO 1980

(Metric tons)

	SUMMARY												Total
	North America	Central America	Caribbean	South America North Coast	South America East Coast	South America West Coast	United Kingdom	Europe	Africa	Middle East	Southern Asia	Others	
Antigua	62955	6	110614	126	98	-	1071	877	-	-	2	1004	176853
Bahamas	394257	895	295589	245750	147994	315241	3561757	41912	9902464	6942071	19554	149797	22017281
Barbados	126231	70	185565	165697	12320	19	28071	22680	1	-	-	19840	560494
Belize	37625	1543	4733	1798	110	-	5913	6623	284	5	3	862	59499
Br. Virgin Islands	-	4	17819	4367	24	-	984	47	-	-	-	72	23317
Cayman Islands	40870	463	80552	25196	27	-	341848	928	4428971	3160624	-	2050	8082129
Cuba	1647953	14363	447	578765	236631	54823	69359	9320153	47295	303	11	157122	12067225
Dominica	15350	46	9507	618	317	1	12747	2947	-	-	-	1909	43442
Dominican Republic	1296795	22315	465335	1233585	18935	46371	8224	67141	1326	84	244	13052	3315578
Grenada	41884	41	29373	6	1078	-	4296	1382	-	-	-	810	95952
Guadeloupe	46524	10470	326824	438063	1161	255	1538	453819	1812	102	20	9478	1290065
Guyana	199991	60	493721	1134	4506	3	27882	18467	154	1	14	5206	751139
Haiti	336226	3443	124299	3043	11947	28	2759	31435	-	-	152	24683	537865
Jamaica	1162092	17659	1432382	904268	6954	572	26430	85341	24922	219	198	21362	3682399
Martinique	22103	4017	68861	10454	658	2	2303	402385	439	317	18	1012	572569
Montserrat	2839	1	5438	2	11	-	9166	7746	-	-	-	228	25431
Netherlands Antilles	282495	405652	199527	24849162	25763	2731117	559656	226900	12441111	28865610	13	197618	70784624
St. Kitts-N-A	24736	-	24228	-	30	-	3135	86	-	-	-	657	52872
Saint Lucia	33012	54	56690	16474	1101	-	6378	1676	-	-	-	7751	123136
St. Vincent	37227	48	26610	7875	367	-	3573	713	-	-	-	461	76874
Suriname	385491	93	941039	4653	18733	43	5302	148162	25	-	17	12840	1468570
Trinidad and Tobago	670773	47801	277250	1090776	472995	18963	99425	87765	415709	881429	700	3415847	7479433
U.S. Virgin Islands	825	3100	18880	4773	15	-	129249	171731	7534260	14036678	-	1001	21900528
Venezuela	5710408	110875	669282	636858	269808	292654	127802	1993482	643028	2957	551	727900	11185605
Other Caribbean	206588	79	211258	1930	34526	18	6620	12766	28	1284001	73876	42166	1873856
<b>TOTAL</b>	<b>12802182</b>	<b>643098</b>	<b>6075833</b>	<b>30165973</b>	<b>1266109</b>	<b>3460110</b>	<b>5045488</b>	<b>13079524</b>	<b>35441828</b>	<b>55174401</b>	<b>95373</b>	<b>4936828</b>	<b>168186737</b>

Source: UNCTAD/SHIP/506 UNSHIPRO Interim Cargo Movement Information System for Selected Caribbean States - Volume 1. Table IX, December 1982. The Regional Shipping Development Project - (CAR/80/004 and RLA/79/051).

TABLE 7

## 1980 - INTERREGIONAL MARITIME CARGO OF SELECTED CARIBBEAN STATES EXPORTS

	North America	Central America	Caribbean	South America North Coast	South America East Coast	South America West Coast	United Kingdom	Europe	Africa	Middle East	Southern Asia	Others	Total
	(1-5)	(6)	(7)	(8)	(9)	(10)	(11)	(12-16)	(17-18)	(19)	(20)	(21-24)	(25)
<b>ANTIGUA</b>													
1. Bulk, dry	9365	-	4787	-	-	-	134	125	-	-	-	2	14413
2. Bulk, liquid	7709	-	-	-	-	-	9527	-	-	-	-	-	17236
3. Refined foods	21	-	27	-	-	-	-	-	-	-	-	-	48
4. General cargo, dry	12870	-	852	175	-	5	18	596	-	-	-	70	14586
5. Other dry cargo	24	-	4	-	-	-	-	42	1	-	-	-	71
6. TOTAL	29989	-	5670	175	-	5	9679	763	1	-	-	72	46354
<b>BAHAMAS</b>													
1. Bulk, dry	3664501	1	-	-	-	-	-	17965	-	-	5938	-	3688405
2. Bulk, liquid	21944588	-	-	39819	-	-	337784	2659436	-	-	-	-	24981627
3. Refined foods	7985	4	36	-	-	-	-	138	-	1	-	-	8164
4. General cargo, dry	265608	55	105	3057	27377	-	4750	34797	137	55	1	154	336596
5. Other dry cargo	1491	36	81	1030	-	-	21	44	6	1	-	3	2713
6. TOTAL	25884173	96	222	43906	27377	-	342555	2712380	143	57	5939	657	29017505
<b>BARBADOS</b>													
1. Bulk, dry	59825	-	13640	12	-	-	55463	91	-	31	-	-	129062
2. Bulk, liquid	6640	-	1	-	-	-	18	-	-	-	-	-	6659
3. Refined foods	37	-	225	-	-	-	9	-	-	-	-	1	272
4. General cargo, dry	2731	-	8779	42	18	6	1417	317	110	189	-	62	13671
5. Other dry cargo	582	-	974	106	-	-	1	-	2	7	-	-	1672
6. TOTAL	69815	-	23619	160	18	6	56908	408	112	227	-	63	151336
<b>BERMUDA</b>													
1. Bulk, dry	65773	-	6445	61	-	-	38215	384	-	-	-	262	111140
2. Bulk, liquid	29279	-	-	-	-	-	3006	-	-	-	-	-	32285
3. Refined foods	3736	-	61	-	-	-	13244	51	-	-	-	-	17092
4. General cargo, dry	2338	15	4744	18	133	-	2371	450	187	9	-	448	10716
5. Other dry cargo	301	111	2	0	-	-	5	366	-	-	-	-	785
6. TOTAL	101427	126	11252	79	133	-	56841	1251	187	9	-	710	172018

Table 7 (CONT'D)

	North America	Central America	Caribbean	South America North Coast	South America East Coast	South America West Coast	United Kingdom	Europe	Africa	Middle East	Southern Asia	Others	Total
	(1-5)	(6)	(7)	(8)	(9)	(10)	(11)	(12-16)	(17-18)	(19)	(20)	(21-24)	(25)
<b>BR. VIRGIN ISLANDS</b>													
1. Bulk, dry	-	-	29	-	-	-	-	748	-	-	-	-	777
4. General cargo, dry	-	-	-	66	-	-	37	1	-	-	-	-	104
5. Other dry cargo	-	-	1	-	-	-	-	2	-	-	-	-	3
6. TOTAL	-	-	30	66	-	-	37	751	-	-	-	-	884
<b>CAYMAN ISLANDS</b>													
1. Bulk, dry	22	6	128	-	-	-	150	-	-	-	-	-	306
2. Bulk, liquid	7796426	0	23	-	-	-	-	-	-	-	-	-	7796449
3. Refrigerated foods	3	361	21	-	-	-	-	195	-	-	-	-	580
4. General cargo, dry	58	274	208	17	-	7	80	14	-	-	-	25	683
5. Other dry cargo	169	76	71	2	-	-	-	-	-	-	-	15	333
6. TOTAL	7796678	717	451	19	-	7	230	209	-	-	-	40	7796351
<b>CUBA</b>													
1. Bulk, dry	266910	159	-	354	-	-	254	3381083	412392	411839	253	820433	5293677
2. Bulk, liquid	2760	-	-	-	-	-	-	80271	-	-	-	-	83031
3. Refrigerated foods	958	-	-	3	-	-	-	290199	-	-	-	2324	293484
4. General cargo, dry	4722	92	-	7993	-	22	119114	378783	803	-	-	-	511529
5. Other dry cargo	404	13	6	48	-	51	-	3	-	-	-	-	525
6. TOTAL	275754	264	6	8398	-	73	119368	4130339	413195	411839	253	822757	6182246
<b>DOMINICA</b>													
1. Bulk, dry	-	-	129	5270	-	-	54	-	-	278	-	-	5731
3. Refrigerated foods	-	-	31	4	-	-	8470	6	-	0	-	-	8511
4. General cargo, dry	5	4	8806	-	-	-	932	73	-	125	-	10	9955
5. Other dry cargo	145	120	2	-	-	-	1	25	-	2	-	-	295
6. TOTAL	150	124	8968	5274	-	-	9457	104	-	405	-	10	24492
<b>DOMINICAN REPUBLIC</b>													
1. Bulk, dry	1285803	22407	36898	514422	-	2625	885	57072	54510	21	-	4169	1978812
2. Bulk, liquid	138027	0	11847	0	-	-	-	32980	-	-	-	-	182854
3. Refrigerated foods	36326	35	1467	52	-	-	7689	138	-	-	-	11	35718
4. General cargo, dry	118607	2442	44260	7194	262	115	2400	48571	2478	94	-	23	226446
5. Other dry cargo	4827	8	566	567	-	-	13	651	45	-	-	2	6679
6. TOTAL	1573590	24892	95038	522235	262	2740	10987	139412	57033	115	-	4205	2430509

Table 7 (CONT'D)

	North America	Central America	Caribbean	South America North Coast	South America East Coast	South America West Coast	United Kingdom	Europe	Africa	Middle East	Southern Asia	Others	Total
	(1-5)	(6)	(7)	(8)	(9)	(10)	(11)	(12-16)	(17-18)	(19)	(20)	(21-24)	(25)
<u>GRENADA</u>													
1. Bulk, dry	45633	-	6121	-	-	-	-	36	-	-	-	-	51790
3. Refrigerated foods	-	-	506	-	-	-	11716	6	-	-	-	-	12228
4. General cargo, dry	212	-	732	-	-	-	1036	1934	-	-	-	5	3919
5. Other dry cargo	1	-	1666	-	-	-	-	-	-	-	-	-	1667
6. TOTAL	45846	-	9025	-	-	-	12752	1976	-	-	-	5	69604
<u>GUADELOUPE</u>													
1. Bulk, dry	11285	-	21100	27433	-	-	-	83517	-	-	-	-	143335
2. Bulk, liquid	20098	-	1638	-	-	-	-	10164	-	-	-	224	32124
3. Refrigerated foods	-	-	167	1	-	-	16213	58656	-	-	-	-	75037
4. General cargo, dry	841	9	42535	2474	-	7	1	6270	500	-	1350	236	54223
5. Other dry cargo	108	1	571	833	-	-	-	321	-	-	-	13	1847
6. TOTAL	32332	10	66011	30741	-	7	16214	158928	500	-	1350	473	306566
<u>GUYANA</u>													
1. Bulk, dry	720102	-	533214	32107	12975	2071	165543	277071	9324	3	-	42150	1794560
2. Bulk, liquid	13559	-	23147	-	-	-	-	-	-	0	-	-	36706
3. Refrigerated foods	2258	-	65	-	-	-	2	1	-	378	-	976	3680
4. General cargo, dry	14182	-	4561	158188	-	-	125075	32004	-	28	2	6	334046
5. Other dry cargo	32	-	70	-	-	-	7	277	-	120	-	551	1057
6. TOTAL	750133	-	561057	190295	12975	2071	290627	309353	9324	529	2	43683	2170049
<u>HAITI</u>													
1. Bulk, dry	509172	-	45	18	-	-	2635	3795	-	39	-	-	515704
2. Bulk, liquid	12683	-	0	0	-	-	-	7292	-	-	-	-	19975
3. Refrigerated foods	2021	1163	29	0	-	18	13	321	-	120	-	-	3685
4. General cargo, dry	28961	4	1180	113	114	34	1072	23745	400	401	-	181	56205
5. Other dry cargo	416	1	149	9	-	-	4	431	-	301	-	26	1337
6. TOTAL	553253	1168	1403	140	114	52	3724	35584	400	861	-	207	596906

Table 7 (CONT'D)

	North America	Central America	Caribbean	South America North Coast	South America East Coast	South America West Coast	United Kingdom	Europe	Africa	Middle East	Southern Asia	Others	Total
	(1-5)	(6)	(7)	(8)	(9)	(10)	(11)	(12-16)	(17-18)	(19)	(20)	(21-24)	(25)
<b>JAMAICA</b>													
1. Bulk, dry	8076081	15079	123641	106002	-	9170	787719	963060	189626	31629	-	1401	10303608
2. Bulk, liquid	-	15189	9221	50	756	-	666	2847	148	-	-	714	29591
3. Refrigerated foods	1929	236	1474	-	-	-	37290	1090	-	-	-	14	42035
4. General cargo, dry	24178	104289	134737	14216	1828	696	14652	8314	6	4104	1087	2887	310994
5. Other dry cargo	650	6921	3486	1437	-	-	76	322	4	-	-	749	13645
6. TOTAL	8102838	141716	272559	121705	2584	9866	840403	975633	189784	35933	1087	5765	10699873
<b>MARTINIQUE</b>													
1. Bulk, dry	8	-	219	90	-	-	-	1196	-	-	-	-	1513
2. Bulk, liquid	-	-	197768	1	-	-	-	-	2	-	-	-	197771
3. Refrigerated foods	-	-	239	43	-	-	-	73759	-	-	-	-	74041
4. General cargo, dry	-	-	2376	11187	2	6	1	23265	50	7	-	17	36911
5. Other dry cargo	191	-	444	452	-	-	4	277	2	-	-	-	1370
6. TOTAL	199	-	201046	11773	2	6	5	98437	54	7	-	17	311606
<b>MONTserrat</b>													
1. Bulk, dry	-	-	7395	-	-	-	651	263	165	-	-	-	8474
3. Refrigerated foods	-	-	358	-	-	-	53	14	-	-	-	-	425
4. General cargo, dry	-	-	74	-	-	-	95	506	4	-	-	-	679
5. Other dry cargo	-	-	103	-	-	102	24	-	-	-	-	-	229
6. TOTAL	-	-	7930	-	-	102	823	783	169	-	-	-	9807
<b>NETHERLANDS ANTILLES</b>													
1. Bulk, dry	199818	10	19464	26833	47103	8	148	2628	-	-	-	96971	392983
2. Bulk, liquid	53029122	324277	1789396	497510	163647	184321	118321	2677080	97822	-	-	89794	58971290
3. Refrigerated foods	6070	3699	2671	-	-	-	1	1983	-	-	-	217	14641
4. General cargo, dry	634694	4322	41389	60171	38045	24925	169699	142272	10414	25	33	76510	1201869
5. Other dry cargo	1490	7	2976	2056	-	-	26	1889	-	1	2	109	8556
6. TOTAL	53871194	332315	1855896	586570	248795	208624	288195	2825852	108236	26	35	263601	60589339

Table 7 (CONT'D)

	North America	Central America	Caribbean	South America North Coast	South America East Coast	South America West Coast	United Kingdom	Europe	Africa	Middle East	Southern Asia	Others	Total
	(1-5)	(6)	(7)	(8)	(9)	(10)	(11)	(12-16)	(17-18)	(19)	(20)	(21-24)	(25)
<u>ST. KITTS-NEVIS-ANGUILLA</u>													
1. Bulk, dry	3681	-	-	-	-	-	13548	-	-	-	-	-	17229
3. Refrigerated foods	1	-	-	-	-	-	-	-	-	-	-	-	1
4. General cargo, dry	381	-	753	5	-	-	17	12	-	-	-	1	1169
5. Other dry cargo	1	-	41	-	-	-	-	-	-	-	-	-	42
6. TOTAL	4064	-	794	5	-	-	13565	12	-	-	-	1	18441
<u>SAINT LUCIA</u>													
1. Bulk, dry	410	-	2560	-	-	-	13	-	-	-	-	-	2983
3. Refrigerated foods	-	-	72	-	-	-	59749	-	-	-	-	-	59821
4. General cargo, dry	79	10	13260	643	-	-	643	15	-	-	-	10	14660
5. Other dry cargo	16	-	52	990	-	-	1	-	-	-	-	-	1059
6. TOTAL	505	10	15944	1633	-	-	60406	15	-	-	-	10	78523
<u>ST. VINCENT</u>													
1. Bulk, dry	-	-	10217	-	-	-	-	14	-	-	-	-	10231
3. Refrigerated foods	-	-	2245	-	-	-	39003	2	-	-	-	-	41250
4. General cargo, dry	249	-	10512	24	-	-	3884	23	-	-	-	-	14692
5. Other dry cargo	-	-	441	-	-	-	3	-	-	-	-	-	444
6. TOTAL	249	-	23415	24	-	-	42890	39	-	-	-	-	66617
<u>SURINAME</u>													
1. Bulk, dry	1525842	-	324533	7680	-	-	9409	292615	-	19	-	14094	2174192
3. Refrigerated foods	585	-	22	447	-	-	22380	12132	-	-	-	1334	36900
4. General cargo, dry	261	-	24874	54056	60833	-	107868	712606	62	207	-	18	960785
5. Other dry cargo	239	-	2	344	-	-	6245	42481	-	134	-	6083	55505
6. TOTAL	1526927	-	349431	62507	60833	-	145902	1059834	62	360	-	21529	3227385

Table 7 (CONT'D)

	North America	Central America	Caribbean	South America North Coast	South America East Coast	South America West Coast	United Kingdom	Europe	Africa	Middle East	Southern Asia	Others	Total
	(1-5)	(6)	(7)	(8)	(9)	(10)	(11)	(12-16)	(17-18)	(19)	(20)	(21-24)	(25)
<b>TRINIDAD AND TOBAGO</b>													
1. Bulk, dry	808071	4900	43855	51097	-	-	64973	18252	-	-	-	-	991148
2. Bulk, liquid	12322205	437893	1224685	1253474	82178	16301	112974	2162677	389484	159068	-	19919	18200858
3. Refrigerated foods	11423	7	3907	77	-	-	137	235	2	-	-	17	15805
4. General cargo, dry	407830	11662	74477	14769	5891	8	122954	155135	33794	14	1	99	826634
5. Other dry cargo	1519	74	895	3372	81	3	894	1085	7	6	8	34	7978
6. TOTAL	13551048	454536	1347819	1322789	88150	16312	301932	2357384	423287	159088	9	20069	20042423
<b>U.S. VIRGIN ISLANDS</b>													
1. Bulk, dry	2844	-	-	-	13198	-	-	-	-	-	-	-	16042
2. Bulk, liquid	339661	-	-	-	-	-	-	-	-	-	-	-	339661
3. Refrigerated foods	59	-	-	-	-	-	-	-	-	-	-	-	59
4. General cargo, dry	439	-	6	18058	4140	-	13	7	15	-	-	21	22706
5. Other dry cargo	96	-	16	-	-	-	-	-	-	-	-	-	112
6. TOTAL	343099	-	22	18058	17338	-	13	7	15	-	-	21	378580
<b>VENEZUELA</b>													
1. Bulk, dry	3800274	237813	14624	75570	88050	11491	556000	7275259	20759	-	19166	242102	12341108
2. Bulk, liquid	37490504	3449685	28213569	625917	4007260	1166656	1114131	16721963	965066	-	72340	2605858	96432949
3. Refrigerated foods	94	-	24683	-	3	-	240	468	-	-	-	134	25622
4. General cargo, dry	76112	8448	54760	29877	80183	89292	27495	225491	9948	25	22	1462	603115
5. Other dry cargo	19072	884	1725	6	298	2367	144	9796	1	1517	20439	6137	62386
6. TOTAL	41386056	3696830	28309361	731370	4175794	1269806	1698010	24232977	995774	1542	111967	2855693	109465180



Table 7 (CONT'D)

	North America	Central America	Caribbean	South America North Coast	South America East Coast	South America West Coast	United Kingdom	Europe	Africa	Middle East	Southern Asia	Others	Total
	(1-5)	(6)	(7)	(8)	(9)	(10)	(11)	(12-16)	(17-18)	(19)	(20)	(21-24)	(25)
<u>OTHER CARIBBEAN</u>													
1. Bulk, dry	26991	-	11431	-	-	-	4987	11045	401	487	-	127	55469
2. Bulk, liquid	34664	-	19096	-	-	18422	-	6429	-	32014	-	9	110634
3. Refrigerated foods	106	-	7	-	-	-	-	33	11	-	-	45	202
4. General cargo, dry	283	-	610	449	146	2	3291	6559	7065	346	14	21	18786
5. Other dry cargo	135	1	36	-	3	-	326	3332	5	47	7	6	3898
6. TOTAL	62179	1	31180	449	149	18424	8604	27398	7482	32894	21	208	188989
<u>TOTAL</u>													
1. Bulk, dry	21082411	280375	1180475	846949	161326	25365	1700781	12386219	687177	444546	25357	1221711	40042692
2. Bulk, liquid	133187925	4227044	31490391	2416771	4253841	1385700	1196427	24381139	1452522	191082	72340	2716518	207471700
3. Refrigerated foods	63612	5507	38313	627	3	18	216209	439427	13	499	-	5073	769301
4. General cargo, dry	1595651	131626	474590	382792	218972	114495	708915	1801760	65973	5629	2510	82766	5585679
5. Other dry cargo	31909	8253	14380	11232	382	2523	7795	61344	73	2136	20456	13728	174211
6. TOTAL	155961508	4652805	33198149	3658371	4634524	1528101	4330127	39069889	2205758	643892	120663	4039796	254043583

TABLE 7A

## TOTAL EXPORT TRADE MARITIME CARGO 1980

## METRIC TONS

## SUMMARY

	North America	Central America	Caribbean	South America North Coast	South America East Coast	South America West Coast	United Kingdom	Europe	Africa	Middle East	Southern Asia	Others	Total
Antigua	29989	-	5670	175	-	5	9679	763	1	-	-	72	46354
Bahamas	25884173	96	222	43906	27377	-	342555	2712380	143	57	5939	657	29017505
Barbados	69815	-	23619	160	18	6	56908	408	112	227	-	63	151336
Belize	101430	126	11252	79	133	-	56841	1251	187	9	-	710	172018
Cuba	275754	264	6	8398	-	73	119368	4130339	413195	411839	253	822757	6182246
Dominica	150	124	8968	5274	-	-	9457	104	-	405	-	10	24492
Dominican Republic	1573590	24892	95038	522235	262	2740	10987	139412	57033	115	-	4205	2430509
Grenada	45846	-	9025	-	-	-	12752	1976	-	-	-	5	69604
Guyana	750133	-	561057	190295	12975	2071	290627	309353	9324	529	2	43683	2170049
Haiti	553253	1168	1403	140	114	52	3724	35584	400	861	-	207	596906
Jamaica	8102838	141716	272559	121705	2584	9866	840403	975633	189784	35933	1087	5765	10699873
Montserrat	-	-	7930	-	-	102	823	783	169	-	-	-	9807
Netherlands Antilles	53871194	332315	1855896	586570	248795	208624	288195	2825852	108236	26	35	263601	60589339
St.Kitts-N-A	4064	-	794	5	-	-	13565	12	-	-	-	1	18441
Saint Lucia	505	10	15944	1633	-	-	60406	15	-	-	-	10	78523
St. Vincent	249	-	23415	24	-	-	42890	39	-	-	-	-	66617
Suriname	1526927	-	349431	62507	60833	-	145902	1059834	62	360	-	21529	3227385
Trinidad and Tobago	13551048	454536	1347819	1322789	88150	16312	301932	2357384	423287	159088	9	20069	20042423
<b>CDCC</b>	<b>106340958</b>	<b>955247</b>	<b>4590048</b>	<b>2865895</b>	<b>441241</b>	<b>239851</b>	<b>2607014</b>	<b>14551122</b>	<b>1201938</b>	<b>609449</b>	<b>7325</b>	<b>1183344</b>	<b>135593427</b>
Br. Virgin Islands	-	-	30	66	-	-	37	751	-	-	-	-	884
Cayman Islands	7796678	717	451	19	-	7	230	209	-	-	-	40	7798351
Guadeloupe	32332	10	66011	30741	-	7	16214	158928	500	-	1350	473	306566
Martinique	199	-	201046	11773	2	6	5	98497	54	7	-	17	311606
U.S. Virgin Islands	343099	-	22	18058	17338	-	13	7	15	-	-	21	378580
Venezuela	41386056	3696830	28309361	731370	4175794	1269806	1698010	24232977	995774	1542	111967	2855693	109465180
Other Caribbean	62179	1	31180	449	149	18424	8604	27398	7482	32894	21	208	188989
Sub-total	49620550	3697558	28608101	792476	4193233	1288250	1723113	24518767	1003825	34443	113338	2856452	118450156
<b>TOTAL</b>	<b>155961508</b>	<b>4652805</b>	<b>33198149</b>	<b>3658371</b>	<b>4634524</b>	<b>1528101</b>	<b>4330127</b>	<b>39069889</b>	<b>2205758</b>	<b>643392</b>	<b>120663</b>	<b>4099796</b>	<b>254043583</b>

Source: UNCTAD/SHIP/506 UNSHIPRO INTERIM CARGO MOVEMENT INFORMATION SYSTEM FOR CARIBBEAN STATES  
 - Volume 1 Table VIII, December 1982 - Regional Shipping Development Project (CAR/80/004  
 and RLA/79/051).



