

ECLA/POS 74/12

Date: 26 November 1974

ECONOMIC COMMISSION FOR LATIN AMERICA  
Office for the Caribbean

THE NEED FOR  
TECHNICAL ASSISTANCE IN STATISTICS  
IN THE CARIBBEAN

With particular reference to the  
Smaller Territories

Prepared by  
W.L. Whittingham



## C O N T E N T S

|  | <u>Page</u> |
|--|-------------|
| PREFACE  | i           |
| Glossary of Abbreviations used   | ii          |
| INTRODUCTION   | 1 - 2       |
| THE EXISTING SITUATION   | 2 - 9       |
| The Statistical Units  | 2 - 4       |
| Substantive Work including Preparation<br>of Publications  | 4 - 6       |
| Some Problem Areas   | 6 - 9       |
| BASIC STATISTICAL NEEDS  | 9 - 18      |
| Available Data and Current Needs   | 9 - 13      |
| A Minimum Programme of Statistical Series,<br>Inquiries and Publications   | 13 - 15     |
| Role of the Statistical Office in Selected<br>Fields   | 16 - 18     |
| NEED FOR ASSISTANCE  | 19 - 21     |
| BROAD AREAS IN WHICH ASSISTANCE IS REQUIRED  | 21 - 23     |
| SOURCES OF TECHNICAL ASSISTANCE IN STATISTICS  | 23 - 28     |
| Major Sources of Technical Assistance  | 23 - 24     |
| Type and Nature of Technical Assistance  | 24 - 27     |
| Co-ordination  | 27 - 28     |
| APPENDIX I - SELECTED INFORMATION ON STATISTICAL<br>SERVICES   |             |
| APPENDIX II - INFORMATION ON SELECTED STATISTICAL<br>SERIES OF THE SMALL COUNTRIES OF<br>THE ENGLISH SPEAKING CARIBBEAN AREA |             |
| APPENDIX III - EXPENDITURE ON SALARIES AS A PERCENT-<br>AGE OF GDP FACTOR COST; AND OF<br>TOTAL RECURRENT EXPENDITURE        |             |



P R E F A C E

This document revises the Draft document prepared for submission to the Sixth Conference of Commonwealth Caribbean Government Statisticians held in Nassau, Bahamas from 27 November to 5 December 1974. The revision is necessary because of the shortage of time and other constraints under which the Draft document had to be prepared, the availability of additional data received since the Draft was prepared and the necessity to incorporate certain amendments which have become necessary as a result of the discussion on the Paper.

The cooperation of statisticians of the various countries in the region in furnishing information and comments are very gratefully acknowledged.



Glossary of Abbreviations Used

|         |  |
|---------|--|
| BDD     | British Development Division in the Caribbean, the Caribbean arm of the UK Ministry of Overseas Development.   |
| CARICOM | Caribbean Common Market consisting of the ECCM countries listed below plus Belize (formerly British Honduras), Barbados, Guyana, Jamaica and Trinidad-Tobago.        |
| ECCM    | East Caribbean Common Market consisting of Antigua, Dominica, Grenada, Montserrat, St. Kitts-Nevis-Anguilla, St. Lucia, and St. Vincent.                             |
| ECLA    | United Nations Economic Commission for Latin America.  |
| FAO     | Food and Agriculture Organization  |
| ILO     | International Labour Organization  |
| LDC     | Less developed countries of the Commonwealth Caribbean.  |
| MDC     | More developed countries of the Commonwealth Caribbean, i.e., Barbados, Guyana, Jamaica and Trinidad-Tobago.   |
| RDA     | Regional Development Agency, now defunct, included the ECCM countries and Barbados.  |
| UNDP    | United Nations Development Programme   |
| WISA    | West Indies Associated States - Includes the ECCM countries except Montserrat and since February 1974 exclude also Grenada which attained independence on that date. |





## INTRODUCTION

Taken as a whole the statistical services of the Commonwealth Caribbean Countries must be characterized as inadequate when viewed in the context of the demands of the last third of the Twentieth Century. As is well known, the present situation derives on the one hand from the historical factors such as political and economic dependency with decision-making powers overseas, when policies were shaped by the metropolitan country mainly to suit its own needs. On the other hand the small size of the countries and their generally small amount of human, natural and financial resources have conspired with the inherited legacies to concentrate on a system in which direction of economic activity was virtually outside the realm of local decision-making. Nevertheless, some tradition of recording aggregates was handed down in the form of population censuses, records of vital statistics and international trade in merchandise.

A distinction, of course, must be made between the larger and smaller territories and between those achieving political independence earlier (only 8-12 years ago!) and those newly independent or still of a semi-independent political status. The larger countries, not unexpectedly, have the more developed statistical services. Faced with the problems of responsibility for the well-being of their citizens the independent countries have come to realize the urgent necessity for organizing, planning and directing economic activity under constraints of scarce resources. To support these activities a large body of detailed statistical data are necessary and an adequate statistical service becomes important.

There are many instances in the larger countries where all the kinds of information required for decision-making are not readily available for a number of reasons, many of which are outside the control of the statistical services. In the less developed countries, (the LDC's), the problems are more acute.

Though all countries in the area could make use of technical assistance in statistics in some aspects of their work, it is clear that the greater need exists in the LDC's. Therefore this paper will focus mainly on the needs of the smaller states. The discussion begins with a brief general summary of the situation, goes on to identify some of the needs and the fields in which assistance is required, and indicates some sources of technical assistance.

It hardly needs to be said that taking into account the need for statistical data to facilitate planning and decision-making in the difficult 1970's, general improvement in statistical services is a prime necessity. The organizers of this Conference must have been very much aware of the problem when they included a topic such as this on the Conference Agenda.

## THE EXISTING SITUATION

### The Statistical Units

Data on size and budgeted expenditure for some of the Less Developed Countries are given in Appendix I. These figures are derived mainly from the Government Revenue and Expenditure Budget Estimates and may not accurately reflect staff actually in service. In some instances staff actually on board and expenditure in any year will be lower than shown because of turnover, unfilled posts, and new recruits entering at lower salary levels. It will be observed that the size of the statistical units varies greatly. As of 1974 Bermuda had the largest staff and expenditure with plans for additional staff in 1974. Late in 1973 a Chief Statistician was appointed in Antigua under the United Nations Technical Assistance Programme. At the same time a Statistical Unit was formally established with a planned staff of eight. As of June 1974, staff actually on board amounted to six.

In 1972, St. Lucia allocated around \$38,000 for a staff of 10. This amounted to approximately 0.18 per cent of the total government budget for all recurrent expenditure. Comparable figures for other countries are given in Appendix III.

As shown in the table below, the favourite location of the statistics unit is the Ministries of Finance or Planning and Development. In some instances these two ministries are combined. Historically, statistical offices have been shifted between government ministries. Planning units are a relatively recent creation and obviously are a major user of statistical data. In some instances, the Premier's Office has the responsibility for the Ministry under which the Statistical Office falls.

Generally, the statistical office and personnel are not placed high enough in the hierarchy of the government to have effective voice in plans or decisions affecting statistical work. It should be noted here that once again the situation in St. Lucia and, more recently, in Antigua are exceptions to the general rule in the CARICOM Area. Outside of the CARICOM Area, Bermuda, though very small in geographical area and population, is a notable exception. In terms of size of staff, main tasks and expenditure the Bermuda situation is more nearly related to the pattern of the more developed than the less developed countries of the region.

TABLE 1

Location of Statistics Office in Government Organization Structure

| Country | Ministry of Department  |
|---------|---|
| Antigua | Ministry of Development Planning -<br>Premier's Office  |
| Belize  | Ministry of Finance, Planning and<br>Development; Planning Unit (General<br>Statistics); Customs Department<br>(External trade statistics). |

TABLE 1 (continued)

| Country                      | Ministry of Department                                  |
|------------------------------|---|
| Bermuda                      | Finance Department                                      |
| British Virgin Islands       | Finance Department                                      |
| Dominica                     | Ministry of Development Planning                        |
| Grenada                      | Ministry of Finance                                     |
| Montserrat                   | Ministry of Finance - Premier's Office                  |
| St. Kitts/Nevis/<br>Anguilla | Ministry of Trade, Industry & Tourism                   |
| St. Lucia                    | Ministry of Development Planning -<br>Premier's Office. |
| St. Vincent                  | Premier's Office  |

Substantive Work Including Preparation of Publications

The statistical offices are engaged mainly in processing and compiling external trade statistics, collecting retail prices, preparing publications, assembling ad hoc statistical data for use of government, regional and international organizations and assisting in the infrequent censuses and surveys. As indicated earlier, some statistical units do not perform all the tasks set out above. However the Bermuda Statistical Office covers a wider field and prepares more publications than the offices in other countries.

All of the countries publish annual external trade reports while most have put out statistical abstracts or digests in the last three years. The situation with the statistical abstract improved this year when Montserrat published an abstract for the first time. Both Antigua and the British Virgin Islands plan to release a statistical digest early in 1975. Monthly or quarterly external trade bulletins are currently published by two countries, two others having suspended these publications during the last few years. The appendices show the position with respect to frequency and latest available publications for each country.

As indicated by the foregoing, the main area of work is External Trade Statistics. The statistical offices utilize import and export documents as their basic source material. In a few cases, an officer is stationed in the Customs Department to do preliminary processing including checking for legibility and accuracy of the documents. In Antigua and Belize, up to now, the entire task of compiling, tabulating, etc. is done by the Statistical Unit. In other ECCM countries since 1969 initial coding, processing etc. is done in the statistical offices and sent to an independent data processing centre (either Dominica or St. Vincent, or in the case of St. Kitts-Nevis-Anguilla to Barbados) for further processing.

Data for the monthly or quarterly retail price index are usually collected by the Statistical Units but in a few cases the Ministry of Labour performs this function. The methodology had been developed by independent consultants as part of a programme for the entire ECCM region.

Most of the other data for statistical abstracts, including sectoral data are collected from business firms, commodity organizations or other Government Departments such as the Registrar of Births and Deaths, Ministries of Agriculture, Health, Education, etc. It is not unusual for statistical office personnel to compile aggregate figures from detailed reports kept by these various organizations and departments.

Censuses and surveys are quite irregular except for the decennial Population Census, which is planned and administered by the Commonwealth Caribbean Census Coordinating Committee and local Census Committees. In some cases, the Statistical Officer is the Census Officer and other statistical personnel assist with the census work. Other major surveys such as household surveys, and agricultural surveys have been carried out largely with outside expert assistance. Statistical Office personnel also conduct or assist with ad hoc inquiries when required.

National Accounts estimates for most of these territories were done by the University of the West Indies during the early part of the 1960's. For more recent years and up to 1972, this work was done by the British Development Division in the Caribbean located in Barbados, except in the case of Dominica where Gross Domestic Product estimates have been made locally, apparently jointly by the Statistical Unit and the Ministry of Development Planning. Antigua, Belize, Bermuda and the British Virgin Islands are in the process of developing National Accounts Estimates.

### Some Problem Areas

#### Attitude towards statistics

Perhaps the most basic problem is the apparent lack of recognition of the importance of detailed, comprehensive statistics to fully understand and evaluate performance of the economies, to provide background information for making rational policy choices and decisions, and for planning social and economic development. This lack of recognition which exists at all levels of government and private enterprise in most countries is manifest in the inadequate staff and facilities, the low hierarchical position of the statistical units and the lack of meaningful support of regional statistical efforts.

Many government departments collect data as a part of their normal routine duties. However, most of these data are frequently not compiled into aggregates related to the various important categories for specified periods. Even in cases where departments are legally required to produce reports, those prepared are either outdated by the time they appear, are not prepared at all, or omit important quantitative data. Most statisticians can recall instances where they were refused data by officials of some government departments or agencies.

There is frequent difficulty in collecting basic information from businesses. A variety of reasons has been given, some of which are linked to fear of information being divulged to possible competitors and to the income tax authorities. The general public, too, are generally not favourably disposed to revealing information to government officers. It does not appear that many attempts have been made to educate or persuade them otherwise. It is worth noting that the general consensus appears to be that answers to the "incomes" question in the Population Census are most suspect.

### Staffing

The problems with personnel derive partly from the low hierarchical position of statistical units as mentioned above, and frequently this results in less cooperation than is desirable for effective performance. The units are seriously undermanned for the most part and cannot be expected to provide the statistical services necessary to an economy actively engaged in economic development. It is physically impossible for two or three persons to collect the detailed data that are required.

The personnel of statistics units are sometimes not selected for special aptitude or inclination, but placed after positions in more prestigious departments are filled. There are occasions when the statistical officer has not been permitted a voice in the selection of staff.

Most members of staff in the various islands have received some form of training, including attachments overseas and formal courses in foreign institutions plus in-service training. Admittedly, the general level of training is lower than that required for a modern dynamic office. This training, however, should mean a generally high level of performance of the unit but paradoxically it contributes to another problem - the high rate of turnover so prevalent in statistical offices.

The efficient staff member with experience and training either seeks employment in more prestigious departments, or is offered more attractive opportunities, or goes on to further education in areas other than statistics.

It is clear that solution of some or all of these problems would contribute to improved performance of the statistical units.

#### Physical Environment and Equipment

Generally, many government offices are still located in dilapidated buildings despite the construction of new government buildings in recent years. Statistical offices seem to be accorded low priority in the assigning of office space. Consequently there is overcrowding, improper lighting and lack of adequate filing and storage space for documents and papers. There is also a shortage of furniture and equipment. One study in 1972<sup>1/</sup> indicated that in some offices there was less than one adding or calculating machine per staff member, and that sharing of machines with other offices was common. The damage to morale and the lower productivity that results from sharing of desks, and waiting for long periods on colleagues and other departments to do calculations are clearly obvious. Correction of these conditions alone would materially improve both the image and performance of statistical units.

Government computer installations exist in Dominica and St. Vincent. External Trade statistics for most of the West Indies Associated States and Montserrat have been processed since 1969 on the St. Vincent computer, and the Dominica Computer Centre is now to take over the bulk of this work. There have been problems associated with the processing<sup>2/</sup> but certain recent organizational and operational changes are expected to result in improvement.

---

<sup>1/</sup> Economic Commission for Latin America, Office for the Caribbean; The Situation of Statistics in the West Indies Associated States, (ECLA/POS 72/11).

<sup>2/</sup> See Caribbean Development Bank: Technical Report No. 6; "Statistics in the Associated States, British Honduras and Montserrat"; and ECLA Caribbean Office: The Situation of Statistics in the West Indies Associated States, (ECLA/POS 72/11).



### Regularity, Timeliness and Currency of Data

Data in Appendices I and II show the position with respect to available publications, statistical series and latest reference dates. Historically, the major problems resulting in delays in the publication of data were related to personnel turnover and lack of printing capacity. In the last five to six years another problem has been added with the introduction of the computer processing. This problem has been discussed elsewhere;<sup>3/</sup> suffice it to say that the use of a computer did not increase the speed with which External Trade data became available in ECCM countries. It has been stated that checking of computer tabulation sheets and correcting errors required so many man-hours of staff time that work other than external trade statistics has been severely handicapped.

Unfortunately the situation with respect to staff has worsened in some countries, and the printing problem remains virtually intractable. Statistical publications continue to get lowest priority at the government printeries. The recent increases in the cost of paper and other material will certainly exacerbate this situation, and it will be some time before any marked improvement can be expected.

## BASIC STATISTICAL NEEDS

### Available Data and Current Needs

Appendix II shows, inter-alia, the type and nature of statistics available in the various countries, the agency responsible for collecting the data and the frequency with which such data are collected or published. Statistical abstracts have been published in recent years by most countries

---

<sup>3/</sup> Ibid.

though in some instances on an irregular basis. In addition to the data collected and processed by the Statistical Offices all countries have basic records in such fields as health, education, transportation, etc., and some statistics are compiled as a subsidiary function of the substantive work of several Government Departments.

Bench-mark data are available in three major fields: Population, Agriculture and Household Expenditure, but these are outdated except for the Population Census. The 1970 Population Census which was somewhat more comprehensive in coverage than the previous one in 1960 was carried out in 7 April. Much of the detailed data are not yet available in published form though the tabulations are still complete. The difficulties however is not at level of the small countries in this instance but rests with the Census Co-ordinating Committee, who have the responsibility for publication.

The West Indies Agricultural Census of 1961 covered such details as land utilization, form of tenure, acreage and number of holdings in various crops, harvested production, number of livestock by type, farm population, farm employees and power and machinery use. It should be noted that earnings and most items of input and cost were not included. The Agricultural Survey of Grenada conducted during 1965-66, included data on average farm gate prices during the twelve-month period for some crops.

Since 1972 the British Development Division in the Caribbean has been conducting agricultural censuses in the countries of the West Indies Associated States, Grenada and Belize. It was planned to do the enumeration in two stages, six months apart, in each country. It is reported that enumeration has now been completed in all except one country. This census should provide much needed bench-mark data and it is hoped that the results will be available early. The statistics departments were not involved in this exercise. Agricultural Censuses were carried out in Belize and Montserrat in 1972. In both instances the Statistics Office and the Ministry of Agriculture did the work jointly.

The latest household expenditure surveys for most of the ECCM countries were carried out in 1961-62. These surveys are obviously outdated. A Household Survey was conducted in Belize for the year 1969 but this is already five years old. More recently such Surveys were conducted in Dominica and Montserrat. There is no evidence of formal surveys in other economic sectors of the ECCM countries though ad hoc inquiries have been made of the Hotel sector, for example. Departments of Agriculture in some countries also make estimates of output of various commodities but these are usually not published. The Bermuda Statistical Office has conducted a Census of Establishments for 1971, a Consumer Expenditure Survey and a Survey of Housing needs. An Establishment Survey was carried out in the British Virgin Islands in 1971 and a Tourism Survey is planned for 1975.

As noted before, most of the statistical offices are mainly engaged in compilation of external trade statistics from records of customs departments, collection of prices and compiling retail price indexes, and in some instances, collection of quantum of output figures for selected agricultural and industrial commodities. It should be noted that in addition, Balance of Payments statistics are compiled in Bermuda and Belize.

Fairly detailed external trade statistics are available, but in some cases, the details have proved inadequate; for example, many countries experience difficulty in furnishing statistics on imports and exports of the 22 items of the Agricultural Marketing Protocol to the CARICOM Agreement. This situation will have been corrected, however, in the 1973 reports when they become available. It is of course difficult to provide information on all possible detailed commodities that might be required for various purposes.

Retail price indexes are usually calculated by the statistical office. The main problem here is that the "market basket" of goods is almost certainly not fully representative of the current consumption pattern since for the most part, the "market basket" was compiled in 1961-62. The recent household budgetary surveys in some countries have apparently not yet been utilized in compiling new indexes.

Generally, quantum of output figures are not collected from individual producing units, for the most part, but from the most accessible secondary sources such as records of government revenue departments, Ministries of Agriculture and Trade, and commodity organizations. Some of these data therefore, relate to goods sold, delivered from bonded warehouses or exported, etc. and often do not accurately reflect actual production.

Various other government departments also collect figures in the course of their normal duties, but in many cases data are not available in published form. In some cases the statistical offices compile aggregates from the detailed records. The problem with this situation is the lack of systematization<sup>4/</sup> and the fact that data collection is only incidental to the work of the substantive organizations. Much more useful information could be derived from immigration records, government revenue and expenditure data, and health and education statistics, for example.

A major shortcoming with the available published figures of government expenditure in some countries is the lack of detailed information on actual capital receipts and expenditure. A detailed breakdown of capital expenditure by wages and salaries, goods and services purchased as well as other specified payments would be very useful. For some countries data on Government Expenditure by Economic function are also not available.

Typically vital statistics are collected by district registrars or health departments unconnected with statistical offices. Some of the useful information contained in these detailed records are not available in published form. Furthermore, these records could also be re-designed to yield other useful statistics.

The situation is obviously worse in other important areas such as man-power statistics, and in statistics on industry and service activities. Data on levels of employment, wage rates, value of output, costs of fuels, raw materials and so on, are extremely scarce or just not available, at least, not in published form.

---

<sup>4/</sup> Includes questions of definition.

There is a central problem with both collecting and publishing statistical data in the LDC's that ought to be emphasized and that is related to the number of units, particularly in the goods-producing sectors. On the one hand, in agriculture, the number of producing units are frequently small and widely dispersed throughout the country making it difficult to collect data. On the other hand, in industry, particularly manufacturing, frequently there are only one or two firms in a particular sub-sector. In many such cases establishments simply do not supply the data for fear of divulging information to competitors and even where data are supplied, they cannot be published.

A Minimum Programme of Statistical Series,  
Inquiries and Publications

The United Nations Statistical Division has recently prepared a document<sup>5/</sup> recommending statistical series which ought to be collected in developing countries. Comparison of this list with series now available in the More Developed CARICOM countries show significant areas which are still to be covered. A major deficiency is in the area of social statistics. Obviously the position in the LDC's is worse, and the list of recommendations is far outside the scope of what these smaller states could reasonably be expected to attempt in the near future.

A more realistic statistical programme will therefore have to be designed for the LDC's and some suggestions are given in Table 2 below. It will be observed that the statistical offices are not expected to undertake to collect all the statistical data that are of relevance. In certain specified fields the data collection function would remain with agencies and departments responsible for the substantive subject matter work. The statistical office would become however the government's source of expertise in statistics, co-ordinating the

---

5/ Statistical Series for the Use of Less Developed Countries in the Second Development Decade, (E/CN.3/448.)

statistical aspects of the work of other departments, providing technical direction to such work and in general, streamlining such operations to yield an efficient flow of relevant data.

A second category of work relates to the surveys of industry, construction, the service sub-sectors and households where the results would provide inputs into the National Accounts and other statistical fields. It would appear that this category requires the assistance of outside expertise. Here a regional statistical programme could be of immense assistance.

In addition, statistical offices need to improve on the series now being published especially in respect of currency and in certain aspects of definitions, concepts and methodology.

TABLE 2

Suggested Minimum Programme of Statistical Series

| Series or Inquiries          | Periodicity of Collection | Suggested Responsibility of Statistical Offices  |
|------------------------------|---------------------------|--|
| Population Census            | Decennial                 | Participation in Regional programmes. Local field work.  |
| External Trade               | Continuous                | First phase of statistical processing; checking, coding etc., some compilation (assumes electronic data processing).                 |
| Retail price index           | Monthly                   | Collect basic data and compile index.  |
| National Accounts            | Annual                    | Compilation by Statistical Office on basis of surveys, inquiries, etc. and other data (some regional or other assistance necessary). |
| Household Expenditure Survey | Every five years          | Participate in regional programmes, local field work and computation (some regional or other assistance necessary).                  |

TABLE 2 (continued)

| Series or Inquiries                    | Periodicity of Collection | Suggested Responsibility of Statistical Offices   |
|--|---------------------------|---|
| Survey of Manufacturing establishments | Annual                    | Collect and compile data to serve partly as input into National Accounts estimates (some regional or other assistance necessary). |
| Labour Statistics                      | Annual, some monthly      | Collection and compilation. Some of this data will be derived from periodic surveys.  |
| Construction                           | Annual                    | Collect and compile data to serve partly as input into National Accounts.   |
| Wholesale, Retail Trades & Services    | Annual                    | Full responsibility of Statistics Office to collect and compile data.   |
| Public Utilities                       | Annual, (mainly)          | Collect and compile data. (Very few enterprises).   |
| Agriculture, Forestry, Fishing         | Annual, some monthly      | In general minimal operational participation of Statistical Offices.  |
| Vital Statistics                       | Continuous                | Technical direction of Statistics Office; compilation of aggregates.  |
| Migration                              | Continuous                | Technical direction of Statistics Office, compilation of aggregates.  |
| Tourism                                | Annual, some continuous   | Technical direction of Statistics Office only (possibility of full direction of work in some countries).                          |
| Social Statistics                      | Annual, some continuous   | Technical direction of Statistics Office only.  |
| <u>Publications</u><br>(preparation)   |                           |   |
| Statistical Abstract                   | Annual                    | } Completely the responsibility of the Statistical Office   |
| External Trade Statistics              | Annual                    |   |
| External Trade Statistics              | Quarterly                 |   |
| National Accounts                      | Annual                    |   |
| Ad hoc publications                    |                           |   |

### Role of Statistical Office in Selected Fields

The statistical fields selected for brief mention below are those on the "Minimum Programme" where the involvement of the statistical offices so far has been peripheral or non-existent. Suggestions are offered as to the role the statistical offices should play in each case, namely to co-ordinate the technical aspects of data collection, direct co-operation in the operational phase of the work or assuming full responsibility for the work. It is recognized that as circumstances differ in each country variation in roles would be the rule rather than the exception.

Vital Statistics: A system of collecting vital statistics exists in all the LDC's. General improvement is however required in collecting and storing basic data, also in design of forms to elicit additional information. Closer co-operation between the Statistical Office and the Registrar's Office or other appropriate agency is necessary.

Migration Statistics: At present, migration statistics are derived from immigration records. Bearing in mind the large divergence between population census data and expected population figures, it would appear that at least one of the causes was inaccurate migration figures. Among other things, migration figures should permit analysis of "the brain drain". What seems to be needed in this field is closer co-operation between the Immigration Authorities and the Statistical Department and technical direction from the Statistics Department.

Labour Statistics: In view of the major unemployment problem in the sub-region, this is a most important area, but figures are scarce. Some data are collected by the Labour Departments in some countries. This needs to be properly organized whether within the Labour Departments or assigned to Statistical Offices. In the former case, co-ordinating machinery must be set up.



A whole range of data need to be collected, for example, numbers employed at specified periods in various sectors, type of business, occupational classes, man-hours of work, wages and salaries paid, job opportunities, skills required etc.

Agriculture, Forestry and Fishing: The Agricultural Census Programme of the British Development Division in the Caribbean - (enumeration already completed for most countries) - will provide bench-marks for extrapolation. It is not known exactly what follow-up work is planned. The Census work was done within the Ministry of Agriculture and the Statistical Offices were not involved. It will be necessary to have annually, estimates of acreage, production and yield of main crops, numbers of livestock held and slaughtered, some data on removal of trees from forests, size of fishing fleet and catch, prices etc. Close co-operation between the Statistical Office and the Ministry of Agriculture is necessary.

Manufacturing: The series now available for most countries relate only to volume of output of traditional commodities, such as sugar, beverages, matches and edible oil. In a few countries some diversification has occurred in recent years but no data have been available (if at all collected). It is necessary to have as detailed and comprehensive an inquiry as possible to establish bench-marks. Central registers of establishments should be set up as part of this exercise. These should be followed up by annual or more frequent inquiries. Data to be collected under this head would include not only volume and value of output but raw materials and fuel consumed, level of inventory and employment and wage data.

Construction: Construction activities are beginning to be fairly important in the LDC's and will become even more important. Consequently, it will be necessary to monitor the sector. Series should include floor space constructed, value of output, raw materials and other input costs, employment, etc. Annual surveys would be necessary in this field and should be the responsibility of the statistical offices.

Wholesale and Retail Trade and Related Services: These activities constitute a large and growing part of total economic activity in all the countries of the region but hardly any data are available. The sector also engages a large number of persons, including many self-employed. There is also a large number of small firms in this sector suggesting that the data collection process could usefully employ sampling.

It would seem that a comprehensive survey will be necessary as a first stage; this could be repeated at five-year intervals. It would be necessary also to conduct annual inquiries to collect a range of data as input into the National Accounts Estimates.

The kind of data to be collected include number of establishments by kind of activity, value of sales or receipts, gross margins, value of inventories, employment and wages etc. The Statistical Office is the obvious agency to carry out this work.

Tourism: Tourism is very important to many countries of the region but the data available relate mainly to number of visitors, by origin, distinguishing between mode of travel and whether long or short stay, number of hotel beds or rooms and sometimes length of stay and total estimated expenditure.

The need here is for comprehensive surveys, perhaps every five years, supplemented by annual inquiries to derive major indicators of activity in the sector and more reliable estimates of tourist expenditure, occupancy rates and inputs to tourism from other sectors. This broader role should be the responsibility of a statistical office.

Social Statistics: Some basic data are normally collected in the routine operation of agencies concerned with health, education, social security, housing, etc. Data are also generated by Population Censuses, Household surveys and other inquiries. What seems to be needed urgently is systematization of procedures and machinery for compilation and publication of the data.

### NEED FOR ASSISTANCE

Local commitment on the part of politicians and top Government officials to the idea of improving statistics is not yet a reality in most of the countries. Furthermore, local resources are too few or not adequately developed to tackle the job. If effective planning for the economic development of these countries is to be undertaken, some of the statistical problems outlined above would have to be resolved and a broader base of statistics must become available. It should not be overlooked that technical assistance, which most often derives from non-regional sources tend to command greater respect in official circles. Foreign experts often can get more sympathetic hearing, assistance and co-operation. Foreign Technical assistance might then be one of the ways of improving local attitudes towards statistics.

Available resources may conveniently be divided into two: Man-power Resources and Financial Resources. It will be recalled from earlier discussion that the statistical units have been generally stagnating in terms of man-power and scope of work. If it is accepted that the kind of programme outlined above is necessary, it follows that more highly trained personnel will be required. These are not now available in the LDC's and would either have to be recruited or trained, and this leads to the question of financial resources.

The proposition that financial resources in the LDC's are scarce hardly needs further demonstration. It may be useful however to take a look at expenditure on salaries of statistical personnel. For the period around 1970 to 1972, annual expenditure on salaries of statistical office personnel in the LDC's varied from about 1/10 to 1/5 of 1 per cent of total Government Recurrent Expenditure. Curiously, this ratio is not dissimilar to the ratios for the MDC's (this is, of course, a rough indication only since the scope of the

work of all statistical offices is not identical). In terms of total salary expenditure the highest of any MDC up to 1972 was more than 15 times the highest expenditure among the LDC's. There is some indication that given the wider range of operations that is considered the essential minimum, expenditure in statistical units of the LDC's will be proportionately larger with respect to total government expenditure than in the More Developed Countries. This seems inevitable in view of the similar scope of work that is necessary in all countries. Given the resource limitations, the chances of getting additional funds cannot be viewed optimistically especially since statistical work is not a direct revenue producing operation.

Expenditure on statistics can however be justified on the grounds of indirect financial benefit to Government. First of all, more accurate and complete data can provide more valid parameters on which to base development planning efforts. This should lead to more efficient planning and better allocation of resources. By the very nature of the economies, there is large dependence on exports. Export promotion therefore, ought to be pursued vigorously, but the rather detailed data on such aspects as output, unit costs, raw material availability by sources, suitability of soils, trained labour force, etc., often are not available. In view of the policies of promoting and attracting investment and granting of fiscal incentives, countries should need to know market research information such as size of the market for various commodities, existing and potential competitors, output in competing production, and the level of skilled work force. They should also be in a position to measure benefits and/or losses that may be involved. Availability of External Trade Statistics and other data at an earlier date could assist in marketing research and business promotion activities which if realised can lead to additional tax revenues for Government, and other net benefits to the community.

Most of these countries are members of CARICOM. Under the CARICOM Treaty certain information must be collected. These include information on origin of goods entering into intra-regional trade which, with some specified exceptions, must contain at least 50 per

cent of domestic (CARICOM) value-added. In addition, local value-added is one of the props on which the scheme of harmonization of fiscal incentives to industry rests. Under the Oils and Fats and the Agricultural Marketing Protocols countries must furnish information to the CARICOM Secretariat on estimated output, consumption, as well as imports and exports of specified items. Information on local prices and costs would be a valuable aid in determining prices for purposes of the Treaty.

International organizations also make frequent demands for data from these countries, much of which cannot be supplied. Technical assistance experts experience difficulty in making quantitative evaluations, having to spend a disproportionately large part of their time on data collection, and this no doubt has some effect on the quality of their reports and recommendations.

The need for rapid improvement is urgent which means that the initial financial outlay would of necessity be large. Even in those countries with reasonably good economic growth potential, large additional outlays on statistics could not be financed from local revenue sources immediately. It would seem then that outside assistance is necessary. This assistance should be geared to the needs and to creating self-sufficiency in statistical work. Ultimately, of course, the countries would have to bear a larger part of the cost, but their contribution could be gradually increased over a period as technical assistance is phased out.

#### BROAD AREAS IN WHICH ASSISTANCE IS REQUIRED

Assistance is required in four major areas:

1. Establishing the organization and administrative machinery.
2. Operational assistance.
3. Training.
4. Financing - (a) equipment  
(b) local salaries, fellowship costs, travelling expenses, etc.

A first step is organizing or reorganizing the machinery for performing the necessary statistical functions. Included here would be ensuring that there is an adequate legal base which may require drafting or revising the statistical law. Other considerations should include assigning duties and functions of the statistics unit as well as other departments involved in collecting statistics. The relationship between the statistical office and these other departments should be specified. The appropriate size of the statistics department would be determined on the basis of the functions assigned to it. Another important factor to be considered is the location of the statistical office in the overall governmental machinery.

Implementing the tasks assigned to the unit is another essential area where assistance is required. The assistance would include advice on methodology and all operating procedures up to the stage of publication of statistics. In some instances assistance may be required in directing the work of a particular statistical office or some aspect of the work programme.

Training is another area where technical assistance is required. Taking the LDC's as a whole the required training covers the whole range of possibilities. Technical assistance in the area would need to be long-term and flexible. It would need to be long-term because of the seemingly inherent turnover problem which beset statistical offices. The need for flexibility derives from the fact that the circumstances differ in the various islands and the technical assistance should not be hamstrung by administrative rigidities, but should be responsive to actual needs.

Not the least of the areas in which assistance will be required especially for a broader based programme of statistics is financial assistance. All technical assistance of course has a financial cost whether it be purely advisory or operational. Financial assistance should be geared to the needs as demonstrated above and thus should be extended to provision of equipment, payment of local salaries and the cost of printing, in addition to financing the services of advisers and paying the costs of personnel taking up fellowships.

There is scope for a two-tiered system of Technical Assistance in the region owing to the small size of most of the countries and the existence of a formal machinery under the regional integration programme. The means that economies can be realized in combining some projects through the CARICOM Secretariat. There would thus be national and regional projects co-ordinated in preparation and execution.

Training and some advisory services are ideally suited for a regional scheme. Certain aspects of household and other surveys or inquiries would also be feasible of centralized planning and administration. Similarly, projects can be executed simultaneously and experts even at the operational level can work in more than one country during the same time period.

## SOURCES OF TECHNICAL ASSISTANCE IN STATISTICS

### Major Sources of Technical Assistance

There are many sources of technical assistance in the various fields of statistics. It would seem, however, that for a number of reasons the Commonwealth Caribbean countries have apparently not tapped all the possible sources. At the top of the list are the international organizations headed by the UN family of organizations, especially the United Nations Development Programme (UNDP), but also the specialized agencies such as FAO, ILO, ETC.

Next are the regional organizations. In this region there are the Inter-American Statistical Institute (IASI) which is part of the Inter-American system of organizations, and the ECLA which may be considered a regional organization but strictly is the Latin American regional arm of the United Nations. ECLA is funded by the United Nations and has allied

to it the Latin American Demographic Centre (CELADE) and the Latin American Institute for Social and Economic Planning (ILPES). More closely related to the Caribbean area are CARICOM and ECCM with an undeveloped potential for technical assistance.

A third source of technical assistance is bilateral i.e., countries offering technical assistance on a country-to-country basis. Though in principle this could include all countries in the world, as far as the Commonwealth Caribbean area is concerned, the following are the main countries involved:

- (i) The United Kingdom - mainly through the British Development Division in the Caribbean, a sub-regional arm of the UK Ministry of Overseas Development.
- (ii) Canada - through its Canadian International Development Aid Programme (CIDA).
- (iii) The USA - through its Agency for International Development mainly.
- (iv) The Netherlands.
- (v) Individual CARICOM countries, especially the more developed member countries.

Commonwealth Caribbean countries, of course, contribute to Technical Assistance programmes indirectly through contributions to regional and international organizations.

Some assistance is also available through the Commonwealth Secretariat based in London. (It is certain that distinguished delegates to this Conference could add other organizations and countries to this list).

#### Type and Nature of Technical Assistance

With such a large number of organizations and countries offering technical assistance, the available expertise extends over the entire range of statistics. The technical assistance activities in the United Nations system cover all major fields of statistics. This broad scope of activity is partly in response to resolutions of the United Nations and its Economic and Social Council. A recent resolution of the United Nations Statistical



Commission (No. 1566 of the Seventeenth Session November, 1972) resolved to undertake ... "concerted action to assist the developing countries in strengthening their statistical systems as the basis for the development plans and the evaluation of their economic and social progress".

Technical assistance activities in the UN system is decentralized among the component organizations in accordance with their main areas of responsibility. For example, Agriculture, forestry and fisheries statistics falls within the purview of the FAO, Labour statistics is the responsibility of the ILO and so on. Assistance concerning National Accounts, industrial statistics, external and internal trade, prices and demographic statistics is generally the responsibility of the United Nations itself. Similarly, assistance in planning, organizing and administering National Statistics systems and services is furnished mainly by the United Nations. Assistance in the application of sampling methods in particular fields is usually rendered by the agency responsible for that field. However, assistance is also furnished on the general aspects of sample design, collection and estimation by the United Nations.

The type of assistance provided by the UN system covers mainly advisory services, statistical training, provision of equipment, programme formulation, support and evaluation and technical guidance. Advisory services are performed by experts designed to individual countries as well as by regional and inter-regional advisers. Member states are already familiar with the systems under which training and equipment are provided. Equipment however is defined to include such items as calculating, copying and duplicating machines, typewriters, computers, etc. Technical guidance refers to assistance in preparation of technical documents, handbooks, etc. and the organization of technical meetings. Programme formulation, support and evaluation involves assessing regional and inter-regional requirements for technical assistance in statistics, aiding in the recruitment and technical supervision of

technical assistance experts assigned to countries, and reviewing the implementation and evaluation of the results of technical assistance in statistics. This latter function is also performed by the United Nations Regional Economic Commissions.

The Inter-American Statistical Institute (IASI) provides technical assistance in statistics, especially direct technical assistance and training. Direct technical assistance here takes the form of support to national efforts in strengthening the statistical systems and to improve the production of basic statistics, both in scope and quality. There is cooperation between ECLA and IASI since to a large extent, and prior to 1962 especially, both organizations covered identical countries.

Technical assistance from non-regional bilateral sources is also wide in the scope of possibilities. The MDC's of the region have been able to make use of technical assistance from a large number of bilateral sources because of their status as independent countries. Most of the LDC's are less fortunate apparently because of limitations imposed by their constitutional status; consequently for them the major source of bilateral assistance in statistics has been the UK, although some assistance has been provided by the US and Canada. Among recent direct technical assistance provided by the UK are the following:

- (i) Assistance in procuring computer installations in Dominica and St. Vincent;
- (ii) Provision of Data Processing Advisers;
- (iii) Provision of some computer related processing equipment in several ECCM countries;
- (iv) Volunteer Service Organization's personnel have been active in statistical work in several LDC's;
- (v) Technical assistance in the form of advisory services and equipment have been provided to the LDC's to conduct a Census of Agriculture.

The indirect activity includes budgetary support to some countries and partial financing of the Regional Development Agency (RDA) (now absorbed by the ECCM Secretariat) which had a responsibility for statistics in the Eastern Caribbean countries.

Some US and Canadian assistance was also provided through the RDA. Certain other countries have made their facilities available to the LDC's by providing fellowships and attachments to their national institutions.

At present, Commonwealth Caribbean countries are not capable of offering statistical assistance over as broad a range of activities as that covered by other sources. Assistance is currently limited to specific projects and to training, but the range is increasing within the framework of the mutual assistance arrangements under the CARICOM Treaty.

#### Co-ordination

With the plethora of actual and potential donors there arises a problem of co-ordination to ensure that countries derive maximum benefit from available funds.

Within the UN system there exists machinery for consultation at the highest levels and areas of responsibility are fairly well defined. In the field co-ordination is more difficult. The UNDP offices consult with relevant donors before formulating their country and inter-country programmes. In the light of practical experiences, however, it would seem that countries should co-ordinate their technical assistance requests and offers to avoid tying up scarce manpower resources and minimise duplication of efforts.

Even at the Regional level there is sometimes duplication of effort. In recent times the UN programme has taken on greater flexibility in the region especially since the emergence of the so-called Indicative Planning Figure (IPF). The nature of the many small economies of the Regional Integration Movement logically seems to have demanded more regional emphasis.

The total quantum of assistance required for a period of say five years should be the subject of a major study. This should include the means for co-ordination of the technical assistance programmes of all the donor agencies and countries offering assistance to the region. It is wasteful to burden

countries with superfluous offers of technical assistance and the LDC's (and MDC's also) should insist jointly and separately on a co-ordinated approach. It does not make sense if the flow of technical assistance is increasing and the benefits to countries do not increase at least proportionately.

APPENDIX I

SELECTED INFORMATION ON STATISTICAL SERVICES

| Country | SIZE OF STATISTICAL UNIT |                  |                      |                   |                  |                      | Salary Budget        | Expenditure Estimates<br>EC\$  | Main Tasks  | Publications |
|---------|--------------------------|------------------|----------------------|-------------------|------------------|----------------------|----------------------|--|---|--------------|
|         | BUDGETED                 |                  |                      | IN SERVICE        |                  |                      |                      |  |   |              |
|         | Statis-<br>tician        | Stat.<br>Officer | Others <sup>1/</sup> | Statis-<br>tician | Stat.<br>Officer | Others <sup>1/</sup> |                      |  |   |              |
| ANTIGUA |                          |                  |                      |                   |                  |                      |                      |  |   |              |
| 1972    |                          | 1                | 1                    | n.a.              | n.a.             | n.a.                 | n.a.                 | Compiling external trade statistics.   | 1. Annual Trade Report, 1970  |              |
| 1973    | 2                        |                  | 5                    | 2                 | -                | 4                    | n.a.                 | Compiling consumer price index.  | 2. Cost of Living Index 1969-1974   |              |
| 1974    | 2                        |                  | 6                    | 2                 |                  | 6                    | 47,200               | Ad hoc tasks as required, including in 1974 compiling results from a sample of the completed 1970 Population Census questionnaires; study financial effect of ECCM tariff etc. Preparing publications. | 3. Census of Population Vols. I & II (Vol. III at Printers)<br>4. Annual Abstract of Statistics (First issue 1974 in preparation) |              |
| BELIZE  |                          |                  |                      |                   |                  |                      |                      |  |   |              |
| 1972    | 1                        | -                | 1                    | n.a.              | n.a.             | n.a.                 | 11,250 <sup>2/</sup> | Collect a variety of Statistical data for <u>Abstract of Statistics and Annual Economic Survey</u> .<br>Ad hoc tasks such as compiling population census data, compiling data for Planning Unit etc.   | 1. Annual Abstract of Statistics 1969.<br>2. Annual Overseas Trade Report, 1970 <sup>3/</sup><br>Census bulletins.                |              |
| 1973    | 2                        |                  | 2                    | 2                 | 1                | 12,968 <sup>2/</sup> |                      |  |   |              |
| 1974    | 2                        |                  | 2                    | 2                 | 1                | 13,459 <sup>2/</sup> |                      |  |   |              |

See footnotes at end of table.

| Country                               | SIZE OF STATISTICAL UNIT |                  |                      |                   |                  |                      |
|---------------------------------------|--------------------------|------------------|----------------------|-------------------|------------------|----------------------|
|                                       | BUDGETED                 |                  |                      | IN SERVICE        |                  |                      |
|                                       | Statis-<br>tician        | Stat.<br>Officer | Others <sup>1/</sup> | Statis-<br>tician | Stat.<br>Officer | Others <sup>1/</sup> |
| <b>BERMUDA</b>                        |                          |                  |                      |                   |                  |                      |
| 1972/73                               | n.a.                     | n.a.             | n.a.                 | n.a.              | n.a.             | n.a.                 |
| 1973/74                               | n.a.                     | n.a.             | n.a.                 | n.a.              | n.a.             | n.a.                 |
| 1974/75                               | 3                        | 2                | 18                   | 2                 | 2                | 15                   |
| <br>                                  |                          |                  |                      |                   |                  |                      |
| <b>BRITISH<br/>VIRGIN<br/>ISLANDS</b> |                          |                  |                      |                   |                  |                      |
| 1972                                  | n.a.                     | n.a.             | n.a.                 | n.a.              | n.a.             | n.a.                 |
| 1973                                  | n.a.                     | n.a.             | n.a.                 | n.a.              | n.a.             | n.a.                 |
| 1974                                  | 1                        | 1                | 2                    | 1                 | 1                | 2                    |

See footnotes at end of table.

Salary Expenditure  
 Budget      Estimates  
                     EC\$

Main Tasks

Publications

|         |                        |                   |
|---------|------------------------|-------------------|
| n.a.    | Conducting Surveys -   | 1. Population     |
| n.a.    | Consumer Expenditure   | Census, 1970.     |
| 258,456 | and Establishments     | 2. Census of Es-  |
|         | Analysis of Censuses   | tablissements,    |
|         | of Population and      | 1971.             |
|         | Establishments.        | 3. Census Report. |
|         | Compile retail price   | 4. Statistical    |
|         | indexes. Developing    | Digest, 1973.     |
|         | Administrative         |                   |
|         | Statistics. Statis-    |                   |
|         | tical consultant to    |                   |
|         | Government Ministries. |                   |
|         | Compiling external     | 1. Annual Trade   |
|         | trade statistics.      | Report, 1973.     |
| n.a.    | Collecting and com-    | 2. Employment     |
| n.a.    | piling retail price    | Survey, 1973.     |
| 20,000  | index. Conduct         | 3. Statistical    |
|         | Employment Survey      | Analysis of       |
|         | (1973). Compile        | Tourism 1973.     |
|         | tourism statistics.    | 4. Monthly        |
|         |                        | Bulletin of       |
|         |                        | Price Indexes.    |
|         |                        | 5. Monthly        |
|         |                        | Bulletin of       |
|         |                        | Tourism.          |

| Country            | SIZE OF STATISTICAL UNIT |                  |                      |                   |                  |                      |
|--------------------|--------------------------|------------------|----------------------|-------------------|------------------|----------------------|
|                    | BUDGETED                 |                  |                      | IN SERVICE        |                  |                      |
|                    | Statis-<br>tician        | Stat.<br>Officer | Others <sup>1/</sup> | Statis-<br>tician | Stat.<br>Officer | Others <sup>1/</sup> |
| <b>DOMINICA</b>    |                          |                  |                      |                   |                  |                      |
| 1972               | -                        | n.a.             | n.a.                 | -                 | n.a.             | n.a.                 |
| 1973               | -                        | 1                | 4                    | -                 | 1                | 4                    |
| 1974               | -                        | 1                | 4                    | -                 | 1                | 4                    |
| <br><b>GRENADA</b> |                          |                  |                      |                   |                  |                      |
| 1972               | -                        | 1                | 6                    | -                 | n.a.             | n.a.                 |
| 1973               | -                        | 1                | 6                    | -                 | n.a.             | n.a.                 |
| 1974               | -                        | 1                | 6                    | -                 | n.a.             | n.a.                 |

See footnotes at end of table.



Salary Expenditure

| Budget | Estimates | Main Tasks | Publications |
|--------|-----------|------------|--------------|
|        | EC\$      |            |              |

|        |  |  |  |
|--------|--|--|--|
| n.a.   |  | Compiling external trade statistics.   | 1. Annual Overseas Trade Report, 1969.                                     |
| 27,800 |  | Collecting prices for retail price indexes.  |  |
| 27,180 |  | Collecting variety of information for <u>Statistical Digest</u> .  | 2. Annual Statistical Digest (irregular) - 1970-72.                        |
|        |  | <u>Ad hoc</u> tasks - as required, e.g. assist in Population Census, supplying data to Government and other users. | 3. Monthly External Trade Report (Temporarily suspended).                  |
|        |  | Compiling external trade statistics.   | 1. Annual Overseas Trade Report, 1968.                                     |
| 23,792 |  | Collecting prices and computing monthly retail price indexes (temporarily suspended).                              | 2. Quarterly External Trade Report (Oct-Dec. 1968, temporarily suspended). |
| 24,728 |  | Collecting variety of statistical data now mainly on <u>ad hoc</u> basis.  | 3. Quarterly Statistical Bulletin (temporarily suspended).                 |
| 25,688 |  | <u>Ad hoc</u> tasks - as required, e.g. assist in Population Census, supplying data to Government and other users. |  |
|        |  | Preparing publications.  |  |

| Country                                       | SIZE OF STATISTICAL UNIT |                  |                      |                    |                  |                      |
|---|--------------------------|------------------|----------------------|--------------------|------------------|----------------------|
|   | BUDGETED                 |                  |                      | IN SERVICE         |                  |                      |
|   | Statist-<br>tician       | Stat.<br>Officer | Others <sup>1/</sup> | Statist-<br>tician | Stat.<br>Officer | Others <sup>1/</sup> |
| <b>MONTSERRAT</b>                             |                          |                  |                      |                    |                  |                      |
| 1972  | 1                        | n.a.             | n.a.                 | 1                  | n.a.             | n.a.                 |
| 1973  | -                        | 1                | 2                    | -                  | 1                | 2                    |
| 1974  | -                        | 1                | 2                    | -                  | 1                | 2                    |
| <br><b>ST. KITTS-<br/>NEVIS-<br/>ANGUILLA</b> |                          |                  |                      |                    |                  |                      |
| 1972 <sup>4/</sup>                            | -                        | 1                | 1                    | -                  | 1                | n.a.                 |
| 1973 <sup>4/</sup>                            | -                        | 1                | 1                    | -                  | 1                | n.a.                 |
| 1974  | -                        | n.a.             | n.a.                 | -                  | 1                | 2                    |

See footnotes at end of table.

Salary Expenditure  
 Budget      Estimates  
                     EC\$

Main Tasks

Publications

|                         |   |   |
|-------------------------|---|---|
| n.a.<br>n.a.<br>12,600  | Compiling external trade statistics.<br>Collecting variety of Statistical data for <u>Statistical Digest</u> .<br><u>Ad hoc</u> tasks as required, e.g. assist in Population Census; Conducting Surveys e.g. Agriculture and Household Expenditure; supplying data to Government and other users. Preparing publications. | 1. Annual Overseas Trade Report 1973.<br>2. Report on Vital Statistics 1967 and 1968.<br>3. Statistical Digest, 1974.                 |
| 9,780<br>10,080<br>n.a. | Compiling external trade statistics.<br>Collecting variety of statistical data for <u>Statistical Abstract</u> .<br><u>Ad hoc</u> tasks as required, e.g. assist Population Census; supplying data to Government and other users. Preparing publications.   | 1. External Trade Report (Annual) - 1972.<br>2. Digest of Statistics (Annual) - 1973.<br>3. Summary of CARIFTA Trade (Annual) - 1966. |

| Country     | SIZE OF STATISTICAL UNIT |                  |                      |                   |                  |                      | Salary Expenditure |           | Main Tasks                       | Publications       |
|-------------|--------------------------|------------------|----------------------|-------------------|------------------|----------------------|--------------------|-----------|----------------------------------|--------------------|
|             | BUDGETED                 |                  |                      | IN SERVICE        |                  |                      | Budget             | Estimates |                                  |                    |
|             | Statis-<br>tician        | Stat.<br>Officer | Others <sup>1/</sup> | Statis-<br>tician | Stat.<br>Officer | Others <sup>1/</sup> | EC\$               |           |                                  |                    |
| ST. LUCIA   |                          |                  |                      |                   |                  |                      |                    |           |                                  |                    |
| 1972        | -                        | 1                | 9                    | -                 | 1                | n.a.                 | 38,240             |           | Compiling external trade         | 1. Annual Over-    |
| 1973        | -                        | 1                | 7                    | -                 | 1                | 7                    | 34,420             |           | Statistics.                      | seas Trade         |
| 1974        | 2 <sup>5/</sup>          | 1                | 10                   | -                 | 1                | n.a.                 | 53,880             |           | Collecting prices and            | Report 1972.       |
|             |                          |                  |                      |                   |                  |                      |                    |           | computing monthly retail         | 2. Annual Statis-  |
|             |                          |                  |                      |                   |                  |                      |                    |           | price indexes.                   | tical Digest,      |
|             |                          |                  |                      |                   |                  |                      |                    |           | Collecting variety of            | 1972-73.           |
|             |                          |                  |                      |                   |                  |                      |                    |           | statistical data for             | 3. Quarterly Over- |
|             |                          |                  |                      |                   |                  |                      |                    |           | <u>Statistical Digest.</u>       | seas Trade         |
|             |                          |                  |                      |                   |                  |                      |                    |           | <u>Ad hoc</u> tasks as required, | Report - Oct-      |
|             |                          |                  |                      |                   |                  |                      |                    |           | e.g. assist in Population        | Dec. 1972.         |
|             |                          |                  |                      |                   |                  |                      |                    |           | Census, supplying data to        |                    |
|             |                          |                  |                      |                   |                  |                      |                    |           | Government and other users.      |                    |
|             |                          |                  |                      |                   |                  |                      |                    |           | Preparing publications.          |                    |
| ST. VINCENT |                          |                  |                      |                   |                  |                      |                    |           |                                  |                    |
| 1972        | -                        | 1                | 5                    | -                 | 1                | 5                    | 25,560             |           | Compiling external trade         | 1. Annual Over-    |
| 1973        | -                        | 1                | 5                    | -                 | 1                | 5                    | 25,500             |           | statistics.                      | seas Trade         |
| 1974        | -                        | 1                | 5                    | -                 | 1                | 5                    | 27,900             |           | Collecting a variety of          | Report 1967.       |
|             |                          |                  |                      |                   |                  |                      |                    |           | statistical data for             | 2. Digest of       |
|             |                          |                  |                      |                   |                  |                      |                    |           | <u>Digest of Statistics.</u>     | Statistics         |
|             |                          |                  |                      |                   |                  |                      |                    |           | <u>Ad hoc</u> tasks as required, | No. 23, 1973       |
|             |                          |                  |                      |                   |                  |                      |                    |           | e.g. assist in Population        | (irregular).       |
|             |                          |                  |                      |                   |                  |                      |                    |           | Census, supplying data to        | 3. Quarterly       |
|             |                          |                  |                      |                   |                  |                      |                    |           | Government and other users.      | Overseas Trade     |
|             |                          |                  |                      |                   |                  |                      |                    |           | Preparing publications.          | Report, Oct.-      |
|             |                          |                  |                      |                   |                  |                      |                    |           |                                  | Dec. 1969.         |

<sup>1/</sup> Include typists; in some cases clerk/typists, in the case of Montserrat part-time typist.

<sup>2/</sup> Exclude External Trade Statistics.

<sup>3/</sup> Compiled by Customs and Excise Department.

<sup>4/</sup> These two posts only are identifiable in the Government Budget Estimates.

APPENDIX II  
INFORMATION ON SELECTED STATISTICAL SERIES OF THE  
SMALL COUNTRIES OF THE ENGLISH-SPEAKING CARIBBEAN AREA

| Statistical Series and Inquiries<br>(1)  | Country<br>(2)           | Agency Collecting<br>Basic Data<br>(3)   | Frequency of<br>Collection<br>(4)   | Latest<br>Published<br>(5)      | Notes, Remarks, etc.<br>(6)  |
|--|--------------------------|--|---|---------------------------------|--|
| <b>1. POPULATION - Census</b>  |                          |  |   |                                 |  |
| Data on number of persons on census day classified by: Type of households, ethnic and national origin, marital status, age, sex, religion, literacy and working population, etc. | All countries            | Statistical Offices using specially recruited and trained enumerators and supervisors.                                   | Decennial   | April 1970                      | Organization, coordination preparation of manuals, etc. in hands of Central Coordinating Committee headed by University of the West Indies personnel. 1970 Census included in addition data on Housing and Income. Antigua did its Census independently. |
| <b>2. VITAL STATISTICS AND MIGRATION</b>   |                          |  |   |                                 |  |
| Births, deaths, net migration, estimated year and population, marriages, still births, etc.  | Antigua                  | <u>Births, deaths, marriages -</u><br>Registrar's Office or Health Dept.<br><u>Migration data -</u><br>Immigration Dept. | Migration -<br>Arrivals and departure registered at time of event; Births, deaths and marriages shortly after occurrence. | n.a.                            |  |
|  | Belize                   |  |   | 1972                            |  |
|  | Br. Virgin Is.           |  |   | 1973                            |  |
|  | Dominica                 |  |   | 1968                            |  |
|  | Grenada                  |  |   | n.a.                            |  |
|  | Montserrat               |  |   | 1973                            |  |
|  | St. Kitts-Nevis-Anguilla |  |   | 1973                            |  |
|  | St. Lucia                |  |   | 1973                            |  |
|  | St. Vincent              |  |   | 1973                            |  |
|  | Bermuda                  |  |   | Dept. of Labour and Immigration | Continuous   |

| Statistical Series and Inquiries<br>(1) | Country<br>(2)  |
|---|---|
| <b>3. LABOUR</b>                        |   |
| Wage rates                              | Belize<br>Bermuda<br>Dominica                         |
| Labour force projections )              |   |
| Wage rates and earnings )               | St. Kitts-  |
| selected occupations )                  | Nevis-  |
| Wage rates of government )              | Anguilla  |
| non-establishment workers )             |   |
| Number employed in Govern-              |   |
| ment Public Works Dept.                 | St. Lucia   |
| Number employed and Wage                | British Virgin  |
| rates                                   | Islands   |
| <b>4. AGRICULTURE</b>                   |   |
| i) Census                               | All ECCM<br>countries except<br>Montserrat            |
|   | Grenada   |
|   | Belize and all<br>ECCM countries<br>except Montserrat |
|   | Montserrat  |
|   | Bermuda   |

| Agency Collecting<br>Basic Data<br>(3)   | Frequency of<br>Collection<br>(4) | Latest<br>Published<br>(5)             | Notes, Remarks, etc.<br>(6)  |
|--|-----------------------------------|--|--|
| Labour Dept.<br>Statistical Office<br>Labour Dept.   | Annual<br>Annual<br>n.a.          | 1972<br>1974<br>1972                   | See also under Population.<br>1970 Census data available<br>for Labour Force and em-<br>ployed by occupational<br>category, age and sex. |
| Labour Dept.   | n.a.                              | 1973                                   |  |
| n.a.<br>Statistical<br>Office  | Quarterly<br>Annual               | 1973<br>1973                           |  |
| West Indies<br>Federal Govt.<br>Standing Committee<br>on Agriculture<br>British Development<br>Division in the<br>Caribbean<br>British Development<br>Division in the<br>Caribbean | -<br><br><br>ad hoc<br><br>-      | 1961<br><br><br>1965/66<br><br>1972/74 | Most countries have<br>completed enumeration.<br>The scope and coverage<br>is somewhat broader than<br>the 1961 Census.                  |
| Ministry of Agri-<br>culture & Dept.<br>of Statistics<br>Statistical Dept.   | -<br>Decennial                    | 1972<br>1971                           |  |

| Statistical Series and Inquiries<br>(1)        | Country<br>(2)                                      | Agency Collecting<br>Basic Data<br>(3)  | Frequency of<br>Collection<br>(4)                       | Latest<br>Published<br>(5)           | Notes, Remarks, etc.<br>(6)  |
|--|---|---|---|--------------------------------------|--|
| 4.ii) Agricultural output data                 | All countries                                       | Ministry of<br>Agriculture  | Usually annual in<br>some cases monthly<br>or quarterly | 1973<br>or<br>earlier                | For some commodities in<br>some countries Commodity<br>Organizations collect the<br>data, e.g., Bananas and<br>Arrowroot in St. Vincent.<br>Few output data are published. |
| 5. MINING AND MANUFACTURING                    |   |   |   |                                      |  |
| i) Establishment Surveys or<br>Censuses.       | Bermuda   | Statistical Office  | -   | 1971                                 | Frequency intended to be<br>decennial.   |
| ii) Quantum of Output selected<br>commodities. | All countries,<br>except British<br>Virgin Islands. | In most cases data<br>compiled from records<br>of Administrative Depts;<br>in few cases data<br>collected directly by<br>Statistical Office | variable  | 1973<br>or<br>earlier                |  |
| 6. ELECTRICITY                                 |   |   |   |                                      |  |
| Capacity, Generation and<br>Consumption.       | All countries                                       | Mainly Statistical<br>Office from estab-<br>lishment records  | Annual except month-<br>ly in case of Antigua           | 1973;<br>earlier<br>in most<br>cases | No published data available<br>for St. Vincent.  |
| 7. RETAIL TRADE                                |   |   |   |                                      |  |
|  | Grenada   | Statistical Office  | Monthly   | April<br>1970                        | Discontinued from April 1970.  |
|  | Antigua   | " "   | Quarterly   | Oct-Dec.<br>1974                     | Indexes semi-annual 1969 to<br>1973.   |
|  | Montserrat  | " "   | "   | Oct-Dec.<br>1974                     |  |
|  | St.Kitts-Nevis-<br>Anguilla                         | Labour Dept.  | Monthly   | -                                    | Indexes are usually published<br>monthly in the Government<br>Gazette or other sources.  |
|  | All others ex-<br>cept Belize                       | Statistical Office  | "   | -                                    |  |



| Statistical Series and Inquiries<br>(1)   | Country<br>(2)  | Agency Collecting<br>Basic Data<br>(3)   | Frequency of<br>Collection<br>(4)                  | Latest<br>Published<br>(5)              | Notes, Remarks, etc.<br>(6)   |
|---|---|--|--|---|---|
| <b>8. EXTERNAL TRADE</b>  |   |  |  |   |   |
| (a) Quantity and value of trade of detailed commodities and commodity groups by origin and destination.                                 | Antigua<br>Br. Virgin Is.<br>Dominica<br>Grenada  | Statistical Office<br>from Customs document.   | Monthly in principle (in at least one case daily). | 1971-72<br>1973<br>1969<br>1968<br>1973 | St. Kitts and Montserrat do not show table (b). Series shown here are common to all except as specified. Some countries notably St. Lucia show also additional series such as trade by SITC Divisions and trade by regional and geographic groupings. |
| (b) Summary of trade by Currency Areas and principal countries.   | Montserrat<br>St. Kitts-Nevis-<br>Anguilla  |  |  | 1972<br>1972<br>1972                    |   |
| (c) Summary of trade by all countries.  | St. Lucia<br>St. Vincent  |  |  | 1972<br>1971                            |   |
| (d) Principal items of imports and exports.   | Belize<br>Bermuda   | Customs Dept.<br>" "   |  | 1971<br>1973                            |   |
| (e) Trade by SITC section.  |   |  |  |   |   |
| <b>9. GOVERNMENT BUDGET DATA</b>  |   |  |  |   |   |
| Detailed items of actual and estimated Recurrent Revenue and expenditure.   | All countries   | Accountant General's Department & Budget Unit of Ministries of Finance.              | Annual   | 1974                                    | Details of actual capital expenditure not published for many countries. Few countries publish economic classification of expenditure.   |
| Summary tables of major revenue and expenditure heads.  |   |  |  |   |   |
| Details of estimated capital revenue and expenditure  |   |  |  |   |   |
| Income tax assessments  | St. Lucia   | "  | "  |   |   |
| <b>10. MONETARY STATISTICS</b>  |   |  |  |   |   |
| Money supply  | Belize  | Ministry of Finance  |  | Dec.1973                                | Data published in <u>Quarterly Economic and Financial Review</u> by ECCA.   |
| Commercial Banks Assets and Liabilities distinguishing foreign loans and advances by economic categories. Selected interest rates, etc. | Leeward Islands<br>(Antigua, St. Kitts-Nevis-Anguilla, Montserrat)<br>Windward Islands<br>(Dominica, Grenada, St. Lucia, St. Vincent) | East Caribbean Currency Authority<br>from information furnished by Commercial Banks. | Quarterly  | June<br>1974                            |   |

| Statistical Series and Inquiries<br>(1)  | Country<br>(2)   |
|--|--|
| 10. Cont'd   | Bermuda<br>British Virgin<br>Islands   |
| 11. SOCIAL STATISTICS  |  |
| (a) <u>Education</u><br>Data on number of schools,<br>teachers and pupils.                           | Belize<br>Bermuda<br>Dominica<br>St. Lucia )<br>St. Vincent )<br>British Virgin )<br>Islands )<br>Montserrat ) |
| (b) <u>Health</u><br>Data on hospitals and patients<br>incidence of diseases and deaths<br>by cause. | Belize<br>Dominica<br>Montserrat<br>Bermuda<br>British Virgin<br>Islands<br>St. Lucia<br>St. Vincent           |
| (c) Crime statistics   | Belize<br>Bermuda<br>Dominica<br>Montserrat<br>St. Lucia<br>St. Vincent<br>Br. Virgin Is.                      |

| Agency Collecting<br>Basic Data<br>(3) | Frequency of<br>Collection<br>(4) | Latest<br>Published<br>(5)                           | Notes, Remarks, etc.<br>(6)   |
|--|-----------------------------------|--|---|
| Monetary Authority                     | Monthly                           | 1973   |   |
| Statistical Office                     | Quarterly                         | n.a.   |   |
| Ministry of Educa-<br>tion             | Annual                            | 1972<br>1973<br>1971<br>1972<br>1973                 | In principle, various<br>government departments are<br>charged with keeping re-<br>cords in the areas of their<br>competence. |
| Department of<br>Education             |                                   | 1973<br>1973   |   |
| Ministry of Home                       | Annual                            | 1972   |   |
| Affairs & Health                       | Annual                            | 1971   |   |
| Department of Health                   | Annual                            | 1973<br>1973   |   |
|  |                                   | 1973<br>1973<br>1973                                 |   |
| Police and judicial<br>authorities     | Annual                            | 1972<br>1973<br>1971<br>1973<br>1973<br>1973<br>1973 |   |

| Statistical Series and Inquiries | Country  |
|----------------------------------|--|
| (1)                              | (2)  |
| <b>12. TRANSPORTATION</b>        |  |
| Motor vehicles registered        | Bermuda  |
|                                  | All others,<br>except Antigua<br>& Grenada                       |
| Ships - Arrivals & Cargo         | Bermuda  |
|                                  | Belize<br>Dominica<br>All others,<br>except Antigua<br>& Grenada |
| Aircraft - Arrivals & Cargo      | Belize   |
|                                  | Bermuda<br>Br. Virgin Is.<br>Dominica                            |
|                                  | Montserrat<br>St. Kitts-Nevis-<br>Anguilla                       |

| Agency Collecting<br>Basic Data<br>(3) | Frequency of<br>Collection<br>(4) | Latest<br>Published<br>(5) | Notes, Remarks, etc.<br>(6) |
|--|-----------------------------------|----------------------------|-----------------------------|
| Ministry of Trans-<br>port             | Annual                            | 1973                       |                             |
| Police Department                      | Continuous                        | 1973                       | Belize 1972                 |
| Dept. of Marine &<br>Port Services     | Continuous                        | 1973                       |                             |
| Customs Dept.                          | "                                 | 1972                       |                             |
| Customs Dept.                          | "                                 | 1971                       |                             |
| Customs Dept.                          | "                                 | 1973                       |                             |
| Dept. of Civil<br>Aviation             | Continuous                        | 1972                       |                             |
|  | "                                 | 1973                       |                             |
| Immigration Dept.                      | "                                 | 1973                       |                             |
| Min. of Communica-<br>tion & Works     | "                                 | 1971                       |                             |
| Customs Dept.                          | "                                 | 1973                       |                             |
| n. a.                                  | "                                 | 1973                       | Landings only.              |

| Statistical Series and Inquiries<br>(1) | Country<br>(2)            | Agency Collecting<br>Basic Data<br>(3)  | Frequency of<br>Collection<br>(4) | Latest<br>Published<br>(5) | Notes, Remarks, etc.<br>(6) |
|---|---------------------------|---|-----------------------------------|----------------------------|-----------------------------|
| 13. TOURISM                             | Belize                    | Tourist Board                           | Annual                            | 1973                       |                             |
|   | Bermuda                   | Ministry of<br>Tourism                  | Monthly/Annual                    | 1973                       |                             |
|   | British Virgin<br>Islands | Immigration Dept/<br>Statistical Office | Quarterly/Annual                  | 1973                       |                             |
|   | Dominica                  | Tourist Board                           | Annual                            | 1973                       |                             |

NOTE: The information contained in this Appendix does not cover all the data collected in all the countries. In general, it refers to the more recently published data available to the ECLA Port of Spain Office. Some information was received in response to written requests.

APPENDIX III

EXPENDITURE ON SALARIES AS A PERCENTAGE OF GDP FACTOR COST; AND OF TOTAL RECURRENT EXPENDITURE

| Countries                | Period                  | GDP at<br>Factor<br>Cost<br>EC\$ m | Expenditure on<br>Salaries of Statis-<br>tical Office<br>EC\$ | Column 4 as %<br>of Column 3 | Total Recurrent<br>Expenditure<br>EC\$ '000 | Column 4 as %<br>of Column 6 |
|--------------------------|-------------------------|------------------------------------|---|------------------------------|---|------------------------------|
| (1)                      | (2)                     | (3)                                | (4)   | (5)                          | (6)   | (7)                          |
| Antigua <sup>2/</sup>    | 1972                    | 84.2                               | 7,980   | 0.01                         | 22,854                                      | 0.03                         |
| Dominica                 | 1971                    | 43.2                               | 24,375  | 0.06                         | 13,254                                      | 0.18                         |
| Grenada                  | 1972                    | 60.2                               | 23,792  | 0.04                         | 19,367 <sup>1/</sup>                        | 0.12                         |
| Montserrat               | 1972                    | 15.6                               | n.a.  | n.a.                         | 4,384                                       |                              |
| St. Kitts-Nevis-Anguilla | 1972                    | 43.0                               | 9,780   | 0.02                         | 14,266                                      | 0.07                         |
| St. Lucia                | 1972                    | 73.3                               | 38,240  | 0.05                         | 21,747                                      | 0.18                         |
| St. Vincent              | 1972                    | 45.0                               | 27,060  | 0.06                         | 15,890                                      | 0.17                         |
| Belize <sup>3/</sup>     | 1971                    | 104.8                              | 9,369   | 0.01                         | 19,158                                      | 0.05                         |
| Barbados                 | 1973/1974 <sup>4/</sup> | 410.7                              | 347,390   | 0.08                         | 130,300 <sup>1/</sup> & <sup>6/</sup>       | 0.27                         |
| Guyana                   | 1973                    | 515.0                              | 74,193  | 0.01                         | 159,920 <sup>5/</sup>                       | 0.05                         |
| Jamaica                  | 1971/1972 <sup>4/</sup> | 2624.4                             | 545,083   | 0.02                         | 474,300 <sup>1/</sup> & <sup>6/</sup>       | 0.11                         |
| Trinidad & Tobago        | 1971                    | 1776.5                             | 377,036   | 0.02                         | 334,914                                     | 0.11                         |

<sup>1/</sup> Revised Estimate

<sup>2/</sup> Ministry of Health personnel

<sup>3/</sup> Exclude Statistical personnel in Customs Department

<sup>4/</sup> Data for fiscal year

<sup>5/</sup> Estimates

<sup>6/</sup> Recurrent expenditure adjusted to calendar year basis from data in estimates.

n.a. Not available.

Source: Official Budget Estimates and Data supplied by GLA.

