# UNITED NATIONS ECONOMIC COMMISSION FOR AFRICA

Report on a Mission to the Republic of Sao Tome and Principe 1-6 August 1976

by

K.T. de Graft-Johnson Project Officer African Census Programme

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This report is the sole responsibility of the writer. It has been submitted to the Office of Technical Co-operation, United Nations, which may alter or supplement these findings.

### L. Introduction

The mission was undertaken with the primary objective of assisting the Government of Sao Tome and Principe to prepare a Project Document in connection with its request for assistance in conducting a population census as soon as possible. During the mission, I was also requested by the Government to look into the wider question of strengthening and re-organizing the Statistics Office with a view to making it play a more effective role in meeting the needs of Government for data required for planning purposes. I had discussions with the following ministers, heads of departments and United Nations personnel during my visit:

Mr. Miguel Anjos da Cunta Lisboa Trovoada, Prime Minister and Minister for Economic Co-ordination and Co-operation

Mr. Leonel Mario d'Alva, Minister for Foreign Affairs

Madam Alda Neves da Graca do Espirito Santo, Minister of Education

Mr. Daniel Lima Dos Santos Daio, Minister of Information

Mr. Helder Barris, Secretary, Ministry of Foreign Affairs

Mr. Alnaldo Pereira, Chief of Statistical Services

Mr. Airea Trovoada, Director of the State Press

Mr. Leopoldo Carlos Carvaltio de Vale, Chief of the Geographical and Cartographic Service

Mr. Xavier Otero, IMF Consultant to the Central Bank of Sao Tome and Principe,

Mr. Francois Pavillon, FAO Expert

Dr. Jacquet Elienne, WHO Expert

Ms. Dee McCaroll, UNDP

On my way back from Sao Tome, I briefed Mr. Wolff, the UN Resident Representative in Gabon who is also responsible for Sao Tome and Principe.

The following background information on the country is being provided here for a better understanding of the problems which are discussed hereafter.

The Republic of Sao Tome and Principe, situated off the west coast of Central Africa, 187 miles by air from Libreville, Gabon, is made up of two main islands (Sao Tome and Principe) and a number of smaller islands, most of which are uninhabited. The surface area is 96% sq. km. and the population density as at 30 September 1970 was 81 per sq. km. Sao Tome, the larger of the two main islands had a population of about 70,000 and Principe just under 5,000 in 1970. The main areas of population concentration are the north-east corner of the island of Sao Tome. It must however, be mentioned that according to available information there is no nucleated settlement with a population of 5,000 or more in the country. It should also be mentioned that Principe is 101 miles, approximately north of Sao Tome. Normal communication with the outside world is through Libreville, and Luanda where there are regular connecting flights.

The report which follows does not record in chronological order the various discussions held with the persons listed above but rather attempts to list by subject-matter the main areas of discussion.

### 2. The Re-organization and Strengthening of the Staff of the Statistical Service

The Portuguese who were formerly in charge of the office left without a proper handing over of their functions to the nationals who were taking over. These nationals who were largely without any high level training in statistics had thus to shoulder the onerous responsibility of running the Statistical Office without proper preparation. At the time of my visit, the Statistical Office consisted of one Chief of Service, one Technical Assistant 2nd Class, two First Officials, two Second Officials, two Third Officials, one Census Enquiry Agent (let Class), one clerical assistant, two typists, one messenger and one cleaner.

All technical staff had only secondary education followed by a very shortterm statistical course. The areas now being covered by the office are:

### a) External Trade Statistics

The information on imports is coded in the Statistical Office and forwarded to Portugal for punching and listing. The listed information is then sent to Sao Tome for checking before being sent back to Portugal for tabulation. Exports, since they are limited in number, are dealt with manually in Sao Tome.

If a computer were brought in for the census, it could obviate the necessity of sending the external trade data to Portugal for processing, a facility which might not exist indefinitely.

### b) Vital Statistics

The registries of births and deaths collect information on vital events (See Annexes Ia - Id). Data collected relate to births, deaths, foetal deaths and marriages. I examined in some detail the data on births and deaths. It seemed that there had been a sharp decline in the number of events registered in 1974 as compared to 1975. This could not be explained by any real drop in the birth and death rates and was almost certainly due to poor registration. It would seem that some assistance in this area would be needed in the near future. I undertook to have a closer look at their registration forms and to recommend changes, if any, after a rather thorough examination. In the meantime, I recommend that the present forms be used but briefing courses be held for the registration assistants at suitable intervals to enable them to improve on their performance.

It should be noted that the Statistics Office is itself not the registering authority. It merely processes the forms completed by the registration assistants.

## c) Agricultural Statistics

Under the Portuguese administration the collection of current agricultural statistics was done by the Statistics Department. However, arrangements were being made to transfer the Agricultural Statistics Unit to the Ministry of Agriculture. Not much work, however, was being done in the meantime because there was no competent professional to direct work in that unit. It is, however, planned to conduct an economic survey of small scale farmers and an agricultural

survey would form the second stage of this survey. The FAO was also designing forms for the control of the big farms and plantations which had been nationalized. Although the modalities for this control have not yet been finalized, Mr. Pavillon explained that it might be necessary to have about 200 statistical clerks on the state farms to fill out questionnaires on a monthly basis. These questionnaires would reflect the stock and production situation and would form the basis for the control of state farms by the Ministry of Agriculture. In his view the data which would be obtained for these returns need only be supplemented by data from the small scale farmers to provide a comprehensive picture of the current agricultural situation. Thus, there would be some advantage in having the Agricultural Statistics Unit within the Ministry of Agriculture. It should be pointed out that the completion of the statistical returns will form only a part of the functions of these statistical clerks.

### d) Labour Statistics

As shown in Annexes II - IV, data is collected on the employment of persons aged 18 and over and their salaries in commercial and industrial enterprises. For agricultural enterprises, data is collected on persons aged 12 years and over. Very little work seems to have been done in this area and ECA was invited to advise on what improvements should be introduced into the questionnaires at present being used to collect labour statistics.

### e) National Accounts

The Portuguese prepared some estimates of national accounts. These estimates are regarded by most people now as being deliberately inflated. However, the Statistics Office does not have a single competent person to revise them. The Government attaches great priority to the preparation of revised national accounts, and during the course of my mission the Government urged that ECA should take urgent action to ensure that the services of an expert be made available to the Statistics Office as early as possible to help to revise these estimates. In the Government was informed of the availability of the services of Mame. Nguyen, but was told that due to prior commitments she probably could not undertake a mission to Sao Tome until later this year. In view of the urgency ... of the matter, however, discussions were held with Mr. Otero of the IMF who was on a visit to \$ao Tome and he referred to some work which had been done in this. area by Mr. A. Foz of the African Department of the IMF. ... lthough these were crude estimates, he felt that pending the preparation of more reliable estimates. these could be used in the meantime by the Government. These estimates were not available to me and I was thus not in a position to evaluate their utility in the circumstances outlined by the Government.

f) Apart from the areas listed above there are two other areas where no substantial work had so far been done - industrial statistics and distributive trade statistics. I am informed with respect to the former that there are only two manufacturing enterprises of any significance: 1) a brewery, and 2) a meat preservation plant, and thus it had not been considered important to collect data in those areas. It should also be pointed out that attempts are being made to start work in health statistics and education statistics in the relevant ministries. The following notes on these are relevant:

- (i) Health Statistics: In order to have any basic data on health statistics, it is necessary to reorganize the medical records being kept in the hospitals and clinics. The WHO Expert attached to the Ministry of Health Dr. Jacquet Elienne, has made proposals to the Ministry but so far no decision has been reached on his suggestions. Since the Republic of Sao Tome and Principe is small both in land surface and population, it should be relatively easy to set up a reliable system of vital registration and an efficient medical record system. The former will provide estimates of crude birth and death rates, while the latter will provide information on morbidity and causes of death.
- (ii) Education Statistics: The Ministry of Education is about to embark on an ambitious programme of "universal" primary education and for this it requires reliable statistics on persons of school-going age as well as data on school attendance. A survey is planned in the next few months to collect this information which will make uwe of data from the vital registration scheme and the results of a special survey. Census data should be more reliable for this type of work in view of the obvious defects of the vital registration data but in the absence of any data it seemed practical to the Ministry of Education to prepare these estimates using the above procedure pending the outcome of the census.

It is hoped that education statistics on a regular, rather than an ad hoc, basis can later be introduced soon since there would be no great problem in organizing the regular collection of basic data on teachers, enrolments etc, using the existing list of schools.

### 3. The Census PRODOC

The census project document attached hereto was prepared during my mission. This document is being translated into French by Mr. I.Ba of the Population Division of ECA and will be pouched to the Government of Sao Tome and Principe for necessary action. In this report, some basic assumptions made in the project document are examined further:

- a) Estimated Population: It may be recalled that the last census in Sao Tome and Principe was held in September 1970 under the Portuguese administration. It is the view of many people in the present Government that the figure of about 75,000 obtained in that census was unreliable. The present day estimate made by various people ranges between 80,000 and 100,000. For purposes of preparing the PRODOC, the higher figure of 100,000 has been used though it is likely to be an overestimate.
- b) Cartographic Preparations: No cartographic expert is being recruited for this operation. The Geographical and Cartographic Service of the Government of Sao Tome and Principe will be required to undertake this major operation with the assistance of ACP regional advisory staff. Provision has also been made for one month of consultancy. In general, it is assumed that the cartographic work will be completed in three months with the maximum slippage to four months. But this will require proper direction being given to the geographic and cartographic surveys. The objectives of census cartography will have to be spelt out quite clearly to the Chief of the Cartographic Services. In addition to the staff of the Cartographic Services, five Enumerators (Cartographic Assistants) are to be made available to the service. These Enumerators will provide estimates of the population of houses and localities which will form the basis for the formation of Enumeration Areas.

- c) Questionnaires As agreed with the Government of Sao Tome and Principe, a draft questionnaire will first be prepared by ECA and submitted to the Government which will then amend the questionnaire in the light of its own priorities. The wish was expressed that the questionnaire include some items which are normally included in the agricultural census. I agreed to consider this possibility but pointed out the risk involved in asking questions which might raise some doubts in the minds of respondents about the objectives of the census. However, it is possible to expand the question on industry to obtain information on the type of agricultural holding that the farmers have and this probably will be explored in the design of the questionnaire. As this questionnaire has to be translated into Portuguese, New York would be contacted to see whether the services of a Portuguese-speaking translator could be provided.
- d) <u>Personnel Requirements</u>: The project document states quite clearly that the personnel required on both the Government and the UN side. The major point which needs to be stressed is that the UN Expert to be provided should be Portuguese speaking and should also be capable of providing training in basic statistical methods. It should be emphasized that none of the national personnel is a trained statistician and thus considerable in—service training has to be given before local personnel can be used for the census.

With respect to the number of enumerators given in the project document, it may be noted that this figure is slightly in excess of the number of enumeration areas, even allowing for a reserve of 10 per cent. At this stage it is not clear how many enumeration areas will be obtained after the cartographic work is completed. Owing to the dispersed nature of the settlements, we have allowed a reserve of 20 per cent at this stage. This figure will be modified after the EA's have been created.

e) Data Processings For a country of the size of Sao Tome and Principe, it would have been advisable to process the data in another country since this would have been much cheaper. I discussed this possibility with the Government representatives but they were reluctant to accept this alternative and suggested instead that arrangements should be made for the provision of a mini-computer which could be used for processing the data. This would, in addition to ensuring that they would have complete control of the census data, also make it possible for an intra-country data processing capability to be maintained after the census operations are completed. It is on the basis of this that provision has been made in the budget for the purchase of a mini-computer for both data recording and processing.

The cost of programming, as cleared with the UN Statistical Office, is \$12,000. This, in the budget, has been put against the cost of a Data Processing Consultant. But if it is intended to use the funds in some other way, then a transfer to the appropriate sub-head should be made. Also retained in the budget is provision for five operators. Two of these are computer operators and the remaining three can be retained depending on the type of computer which is to be purchased. Originally these three were supposed to handle dependent data recording equipment.

f) Budget: The budget itself is self-explanatory. The only section which needs explanation is the budget item "Sundry". This is made up as follows:

Printing of census questionnaires \$2,000
Printing of census report \$1,000
Travelling and transport \$2,000

Total \$5,000

g) Timing of Operations: It will be noted from the report subsitted that there is little time between the submission of the project document and the beginning of project operations. This has been done for two main reasons: Firstly, the size of the funds requested from UNFPA and secondly, the urgent need of Sao Tome and Principe to conduct a population census, since there are many activities of government which will depend on the results of a population census. If approval in principle is given to the budget request, it is possible for some preliminary work to be started on the census preparations with the assistance of the ACP regional staff. This will necessarily be of a limited nature, since there is no Portuguese-speaking statistician on the staff of the ACP.

The timing of operations from beginning to end has also been collapsed into a period of 14 months. But taking into account the size of the population of Sao Tome and Principe, it is possible to complete all operations within the time schedule set out in the project document.

#### 4. Conclusions and Recommendations

Sao Tome and Principe is a newly independent republic and like all such countries has manpower problems. This is particularly so in the statistics field. But basic statistical data are indispensable to development planning. The Government is fully aware of this and is anxious to take the necessary steps to obtain the relevant information. It is for this reason that it is very anxious to obtain the help of ECA in the re-organization of its statistical services. It also recognizes that the population census is basic to any planning involving the human resources of the country. However, care should be exercised so that in trying to attain its objectives too much haste is not made to try to achieve all objectives at the same time with inadequate resources. My recommendations on the re-organization of the statistical services and on the population census project which are given hereunder underline the need to proceed slowly in order that the necessary infrastructure can be built up before the more complicated types of statistics are collected. My recommendations are as follows:

- a) The Government should initially concentrate on preparations for the population census. Participation in this census will provide the office staff with the necessary basic statistical training on which they can build.
- b) On-going work in external trade and vital statistics should be continued.
- c) Basic data required for the compilation of national accounts, as indicated by Mme. Nguyen during her proposed mission, should also be collected.
- d) Briefing courses for registration assistants should be held as soon as possible to improve the performance of these assistants.

- The Government should request United Nations and bilateral assistance in the training of its statisticians. training strategy, the Government should bear in mind its short-term objective of continuing without interruption the work of the statistical services and its long-term objective of obtaining highly qualified statisticians to man the Statistics Office. A useful institution for training Portuguese-speaking statisticians is "Fundação Instituto Brasileiro de Geografia e Estatistica" in Rio de Janeiro to which is attached a Statistical Training School. An alternative which is worth exploring and which has in fact been suggested to another Portuguese-speaking African country is the "Institut de Formation Statistique" (IFS), Yaoundé, which trains French-speaking middle level statistical personnel and has now started a course for professional statisticians. I gather that French is a second language in all Sao Tome and Principe schools and thus language should not present any insurmountable problems to prospective candidates for IFS. An obvious advantage of IFS is that training will be given in an African millieu.
- f) Apart from the main areas indicated in a, b, and c above, work in other areas should await the improvement in staff and the availability of more resources to the statistical services.
- g) ECA should make available to the Government of Sao Tome and Principe as soon as possible the services of Mme. Nguyen to help in revising its estimates of national accounts. The Government's preference is for September and I am informed that BCA is making every effort to arrange this.
- h) UNFPA should give urgent action to the request by the Government of Sao Tome and Principe for assistance in conducting a population census to enable preparations for the census to start as soon as possible. In order to avoid unnecessary delays, approval in principle of the budget can be conveyed as soon as possible by cable to both the UN Resident Representative of Sao Tome and Principe and ECA.