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SUMMARY OF COUNTRY PROGRESS REPORTS

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SUMMARY OF COUNTRY PROGRESS REPORT

Introduction

At the time of writing, only ten countries have replied to the ECA request to send a succinct note on the principal activities of their offices during the last two years.

All that the following summary can therefore mention is some of the main developments in the region, and reference can be made only to countries whose progress reports have reached the secretariat.

Organization of offices and co-ordination of activities.

On the whole, organization and reorganization work is continuing; new sections have been set up in Rwanda and the Gambia; the Senegalese statistics Office has been made into a directorate; in Nigeria, a new organization chart for the Federal Office of Statistics has come into force; Botswana, has presented the Statistics Act to Parliament, and Madagascar is making preparations to set up provincial delegations beginning in 1968.

As far as recruitment is concerned, opportunities offered by training centres within and outside Africa has been utilized and the personnel strength increases from year to year although not all needs expressed have yet been satisfied. Owing to political events in Nigeria, thirty-nine of the ninety officials of the Federal Office of Statistics have been transferred to the Eastern Region. In Madagascar, the number of statisticians has doubled while Lesotho has doubled the number of both its statistical officers and clerical staff.

The Federal Office of Statistics in Nigeria and the University of Ibadan have organized a two-year Junior Professional course, just completed by the first class. The Senegalese Statistics Directorate has established within the National Institute for Applied Economics, a Statistics College for training statistical officers. In Lesotho, courses in statistics are taken on a part-time basis at the University by a few civil servants, while in Botswana all government officers dealing in statistics were put through a three-week training course last September. In Rwanda, evening classes are organized for officers of the General Office of Statistics.

With respect to the co-ordination of activities, relations between statistical offices and other departments are becoming closer. The Central Statistics Office of Botswana is part of the Planning Unit; in Mauritius the creation of an Economic Planning Unit has made it necessary for the Central Statistical Office to take into account the planners' needs for statistical studies. As part of the reorganization of the Nigerian Federal Office of Statistics, a Co-ordination Branch has been set up, which will act as secretariat for the Standing Committee on Statistics and will co-ordinate statistical activities at departmental, national and federal levels. In Madagascar, a seminar on agricultural statistics was organized for agricultural officers, and a division for agricultural statistics was created within the Ministry of agriculture, with personnel from the National Institute of Statistics and Economic Research.

When necessary, regulations have been issued in Senegal, the Democratic Republic of the Congo and Madagascar making it compulsory for all statistical surveys to be sanctioned beforehand by the authorities responsible for statistics.

Data-processing

Data-processing facilities are becoming more and more abundant. During the analysis of the 1966 population census, Algeria had an IBM 360 computer installed. To expedite the analysis of the 1966 population census, Lesotho hired conventional mechanical data-processing equipment. In Nigeria, ever since the acquisition of the IBM 1401 computer, the Federal Office of Statistics Computer Centre has gradually been developing into the Central Electronic Data-Processing Centre for all government Departments. The mechanization of government accounting in Dahomey has necessitated the replacement of conventional by electronic equipment.

Population

As part of World Census programme, a certain number of countries have already taken a population census; this is true of Lesotho, Malawi and Swaziland; UAR and Ghana conducted population surveys while Algeria and Tunisia carried out a demographic and housing census.

A demographic sample surveys has been completed in the rural areas of Nigeria; in the urban areas, the operations had to be suspended, owing to political events. Burundi took a census of foreign residents of Bujumbura in 1966 after the demographic survey of 1964/65. In Madagascar, pilot censuses have been made in both urban and rural areas, and work is in progress on the publication of the 1966 demographic survey. Senegal has made a census of the communes of Bambey and Ziguinchor, to provide the background for the general plans of these cities. In Dahomey, demographic studies have been undertaken in the Hinvi and Agonvy regions in connexion with the development programmes anticipated for these regions. In the Sudan, a demographic and housing survey of urban areas has been completed and the latest results will be published by 1968. In Tanzania, population census field operations are now completed while, in Ethiopia, a housing census coupled with a population survey is under way in the city of Addis Ababa.

In Botswana and Mauritius, analyses and projections have been made on the basis of previous demographic census figures. In Madagascar, the authorities are trying to improve vital statistics records which at the moment list 70 per cent of all births and 50 per cent of all deaths. In Botswana, it has been decided that beginning with the year 1968 all births and deaths will be registered. In Senegal, the survey of vital statistics in rural areas continued in two departments of Sine-Saloun.

In Nigeria figures from a labour survey are being analysed, while in Botswana a manpower survey, which will be launched at the end of this year, is in preparation.

As far as education and health statistics are concerned, efforts are being made to improve the statistical series in Botswana, Mauritius, Rwanda and Dahomey.

In Dahomey, preliminary work on the setting up of a card-index of villages has been taken in hand, while in Senegal the card-index is now complete.

Agriculture

In Botswana, after trials in 1966 and 1967, a regular survey of agricultural production is to be organized, and a sample survey to provide more detailed information on the cattle population is under consideration.

In Lesotho, figures on sales of agricultural products and producer prices are collected monthly; in connexion with the World Census of Agriculture, a sample survey of agricultural production will soon be launched; it will take approximately two years to complete.

A two-stage sample survey of cowkeepers was made in Mauritius to provide the necessary background for development of the dairy industry and the improvement of living conditions for cowkeepers.

In Madagascar, a survey of agricultural patterns was carried out in the vicinity of Tananarive to observe changes in farming areas and patterns since the national survey of 1961/62; regular observations of paddy yields have been made for some time, and surveys on yields, crop forecasts and the age of clove and vanilla plantations will commence shortly.

In Burundi, after a pilot study in 1966, an agricultural survey was begun and will extend over the next three years, covering one-third of the country each year. In Rwanda, a trial of sampling methods for agricultural surveys has just been completed.

The Sudan, is in the process of publishing the results of an agricultural census made in five provinces where the effect of irrigation on development was studied; in the rainland of Kassala, on the other hand, it is the effect of mechanization of cultural methods on development that was investigated. Following a series of pilot studies, an agricultural sample survey of the settled population was made in six provinces; with regard to livestock, preparations are in hand for pilot studies aimed at evolving suitable techniques for estimating the number of livestock owned by nomads.

On completion of surveys on the yield of dura, sesame and wheat, studies will be undertaken to estimate the output of these products in the Blue Nile, Northern and Khartoum provinces.

In Kenya, a programme of Small Farms Surveys was introduced in 1965 for the purposes of developing a system of collecting basic and current agricultural statistics at district level. The surveys undertaken are conducted district by district and Province by Province starting with the Western Province (and repeating the districts already covered) until the entire country is covered.

In Malawi, a series of surveys of agricultural small holdings have been carried out in certain regions of Malawi since 1965. The purpose of these surveys was to collect information on farm operator, equipment and work animals, income and expenditure, crop areas, livestock and poultry, non-farm work and farming practices. Plans have been made for a National Sample Survey of Agriculture, covering the whole territory to be initiated during the 1967/68 agricultural season.

In Zambia, a number of statistical surveys have been undertaken in various Provinces of Zambia since 1965 for the purposes of developing a sound basis for the establishment of a comprehensive system of current agricultural statistics and for testing methods for a country-wide census of agriculture. The surveys conducted so far have been aimed at collecting data on agricultural holdings, crop areas and production, farm population, livestock numbers, use of tractors and production of vegetables.

In Tanzania, an agricultural survey to determine the cultural practices followed by cotton farmers in the cotton-growing Lake Region was conducted in the 1965/66 cotton season.

In Uganda, a large census of agriculture was conducted in 1963/65. As a follow-up on this work, and based on a sub-sample of parishes covered in the census, an agricultural survey was carried out in 1966/67 for the purpose of providing current agricultural statistics on an annual basis.

In Algeria, a survey of the structure of agricultural holdings was conducted; it consisted of an exhaustive census of the holdings of the socialist (automanaged) sector, and of a two-stage sample survey of the holdings of the private sector.

In Tunisia, an agricultural inquiry of the sector controlled by Government covered 128 cooperatives and 2,000 farm holdings. The crops from these holdings exceed half of the country agricultural output.

In Ivory Coast, a survey of the coffee crop forecast has been undertaken in 1966/67 similar to the survey of cocoa conducted in 1965/66.

In Upper Volta, with the assistance of a FAO expert, 108 enumerators and supervisors were trained in agricultural statistics, and a preliminary plan for the 1970 agricultural census has been formulated.

In Sierra Leone, a large national survey of agriculture was conducted in 1965, as the first stage of the programme for the development of a agricultural statistics in that country.

In Liberia, an agricultural survey was conducted in 1967 in the Bong County of that country. This survey was carried out after a series of training courses conducted in that country for the enumerators and is aimed at providing valuable experience for the carrying out of a country-wide census of agriculture around 1970.

In Nigeria preliminary arrangements for participation in the 1970 World Census of Agriculture are being made by the federal and some of the state authorities.

Budgets, consumption, prices

A rural household budget survey has been launched in Lesotho; this is a two-stage sample survey of farming households that will cover a period of twelve months. Studies for the computation of an urban price index are in hand in the main urban centres and have already been completed in two of them.

In Botswana, after the pilot survey carried out in Gaberones in 1966, a consumer expenditure survey is being planned. With regard to prices, in addition to the bi-annual collection of prices by the district commissioners, the staff of the Central Statistics Office have been collecting prices at Gaberones to serve as a check.

At Madagascar a household survey on nutrition, consumption and household budgets will be carried out in an urban zone and four rural zones affected by development projects; it will thus be possible to ascertain the development in the level of living in these regions by comparison with the results of the 1962 survey.

In Burundi, a survey was carried out on the budget expenditure of Burundi government officers at Bujumbura, and a consumer price index was computed for these officers, the method of calculating the European consumer price index was revised.

In the Sudan, a household budget sample survey of the settled population has been launched in six northern provinces. The sample comprises 9,000 households divided into urban, semi-urban and rural households; and operations in the field will last one year and results will be published in about 1970.

In Tunisia a household consumption and budget sample survey was conducted in rural areas.

In Nigeria, the rural and urban sample surveys continued on the same lines as in previous years, but detailed plans have been made to expand and develop the urban consumers' survey into an urban economic survey; in rural areas, the number of villages will be increased by 50 per cent, while the number of farming households studied as well as the number of resident field staff will be halved.

A survey on family budgets in rural areas is being planned in Senegal; operations are to begin in early 1968.

In the Gambia the interim index of retail prices is to be revised and a household budgetary survey will be undertaken for this purpose; in Rwanda, retail consumer prices and wholesale prices of building materials are collected every month; in Mauritius, it is planned to compute an index of wholesale prices.

Enterprises

In Lesotho, after the first census of enterprises in 1966, a second has just been carried out including additional information on capital expenditure. Mauritius is making a bi-annual survey of employment and earnings, to cover both plantations and non-agricultural establishments; the second census of industrial production will be launched in December and will be followed by the computation of an index of industrial production.

In Madagascar, a survey is in hand covering 3,000 foreign companies and industrial entrepreneurs in addition to artisans and small entrepreneurs, with the purpose of collecting a variety of information on structures and activities.

A first survey of industry, cottage industries and the hotel trade has been made in Rwanda; in Burundi, the censuses of enterprises were supplemented by a survey on the activity of the major establishments and a directory of commercial centres; it is now planned to carry out a census of enterprises in Bujumbura.

In Malawi, Tanzania and Zambia the card index of industrial establishments is kept up to date by yearly censuses of enterprises.

In the Democratic Republic of the Congo, the card index of industrial establishments has been revised and brought up to date; on the basis of the quarterly survey of enterprises it will be possible to compute an index of industrial production.

Apart from the quarterly survey of enterprises, an annual census of industrial production is being made in Nigeria, the establishments concerned are those with ten or more employees.

In Dahomey, after the first census of enterprises in 1966, a second has just been launched this year; in Senegal notes and compilations are published each quarter on industrial production, while a census of industrial activity is made annually.

Foreign trade

As Lesotho is in the same Customs area with South Africa, foreign trade statistics are prepared quarterly on the basis of returns submitted by businessmen and government agencies. At present it is planned to carry out a study to estimate the proportion of imports and exports with countries outside the Customs union

Botswana is also in Customs union with South Africa so that its foreign trade statistics are prepared from returns sent in by businessmen; as from January 1968, a shadow Customs organization is to be set up to provide statistics of all commodity flows with foreign countries.

In Mauritius it has been decided to use the Brussels Tariff Nomenclature from 1 January 1969; for this purpose, work is in hand for the adoption of the new nomenclature.

In the Democratic Republic of the Congo, exports of transistor radio receivers and plastic toys have made it necessary to extend the Customs nomenclature by adding six-digit sub-divisions.

Since 1 January 1967, foreign trade statistics for Dahomey covering the member countries of the West African Economic and Customs Union have no longer been published separately.

Finance and currency

In Madagascar a financial study of State intervention is being undertaken with the help of an ECA expert; this study will make it possible to prepare annual budgets and to choose among the interventions proposed in financing the plan.

In Lesotho and Botswana, which belong to the common currency area of South Africa, surveys are made of banks to assess flows of funds with foreign countries and to collect the information necessary for building the balance of payments accounts.

In Zambia, efforts are being made to collect more data for estimating the balance of payments. In the Democratic Republic of the Congo, the National Bank is making a survey of enterprises to obtain more detailed knowledge of the use made of their foreign exchange allocations.

National accounts

In Botswana, rough estimates of national income were made for 1965, but detailed information is not yet available for the preparation of sector accounts.

In Lesotho, after the preparation of a set of national accounts tables, work is in hand to establish more detailed accounts.

In Madagascar, it is expected that studies in hand will contribute to improving national accounts assessments.

The gross national product estimates for 1953-1965 in Mauritius have been streamlined and revised in the light of new data obtained; an estimate of expenditure on GNP at 1964 prices has been attempted for the same period. It has also been possible to make a better distribution of capital formation into user industries for the period 1958-1965.

In Nigeria, estimates of the GDP at constant prices are now based on 1962 instead of 1957; a start has recently been made with the preparation of estimates of expenditure on GDP; estimates of the gross domestic product for 1963/64, 1964/65, and provisional estimates for 1965/66 are now available.

Work on the formulation of national accounts is continuing in Burundi, the Sudan, Ghana and Senegal.

BOTSWANA

1. Introduction

The Central Statistics Office is of recent origin. Last year by the end of May the UNDP obtained the services of the Government Statistician (OPEX). The first few months were spent by the Government Statistician to organise the office. The Central Statistics Office was created within the Planning Unit which is under the Ministry of Finance. There is a move to create a Ministry of Planning and the Central Statistics Office will in future be a Department under the Ministry of Planning.

The first task of the Central Statistics Office was to find out what statistical materials are being collected during the administrative process by various departments and then suggestions were made to improve the method of collection. The figures thus collected were tabulated and presented into some readable form.

2. Statistics Act

The Statistics Act was drafted and presented to Parliament. It is being considered by the house and very soon it will be passed. With the passing of this Act the Statistics Office will have a legal status and will be equipped with the necessary powers to collect figures.

3. Training Scheme

The training scheme consists of two parts. In the first instance, the facilities made available by the ECA are being utilized to train the statistics staff. Last year one officer was sent to the East African Statistical Training Centre at Dar es Salaam. This fellowship was utilized again this year and another officer was sent for the middle level training.

In addition to this a training course is organized to train all Government officers dealing in statistics. This course is for a period of three weeks beginning from 15 September 1967. The services of Mr. Ba of the ECA has been obtained to conduct this course.

4. Statistical Abstract

The first Statistical Abstract of Botswana was published in December last year. This will be an annual publication and the Statistical Abstract for 1967 is under preparation.

5. Work done in the different branches of Statistics

a. Agricultural Statistics

So far statistics relating to acreage and production of different crops were based on inaccurate information provided by the field staff of the Department of Agriculture. Last year with the help of the FAO agricultural statistician an agricultural sample survey was conducted. For this survey ninety-eight enumeration areas were selected. This survey included crop cutting as well. The results of this survey are being tabulated.

This year the scope and extent of the survey is being enlarged to include two-hundred enumeration areas. It is our intention to continue this survey every year. The quality of the Agricultural Statistics will improve considerable by the adoption of this sample survey.

b. Livestock Statistics

Being a cattle producing country livestock statistics is fairly important. There is an annual livestock census which gives a rough idea of the total number of cattle by broad categories. A sample survey is being planned to get more detailed information on the cattle population.

c. Consumer Expenditure Survey

During the middle of last year a pilot consumer expenditure survey was conducted in Gaberones. The response was weak which damaged the quality of the data collected. A wider consumer expenditure survey is now being planned to cover the whole of Botswana. To start with we intend selecting one thousand households for this survey. Preliminary work is being done on this survey and as soon as funds are made available the survey will be put into operation. During this survey, it is proposed to collect additional information on housing and vital statistics.

d. Trade Statistics

So far import-export statistics are collected from the traders under the trade returns proclamation. The practice is to send a form at the end of the income tax year to the traders. This form requested information for one year. Last year the scope of the form was enlarged in order to get a wider breakdown of items imported or exported.

The figures collected from the traders appear to be very weak since they tend to correlate this form with the tax returns. This method of collection prevailed because of the common customs union with South Africa. Beginning from January 1968, a shadow customs organization is being set up to collect trade statistics. Once this is set up we will have a complete count of all commodity flows.

e. Price Statistics

Last year a system of collecting price statistics has been introduced. The District Commissioners were sent price statistics forms in June and December. Prices were collected for a wide range of articles. In addition to this the statistics staff of the Central Statistics Office have been collecting the prices of various items in Gaberones. This acts as a check on the prices collected from the District Commissioners. Next year we hope to introduce a test purchase scheme, where the common commodities of consumption will be actually purchased.

f. Tourists Statistics

A scheme is being organised to collect information on tourists and the amount they spend in Botswana. All tourists will be required to fill the forms as and when they pass through the border posts and other entry points.

g. Banking Statistics

Since Botswana belongs to the common currency area of South Africa and without a central Bank of its own, many problems are faced in this field. Last year with the cooperation of the commercial banks, some statistics relating to the operation of banks were collected. In addition to this a survey has been organized this year on a sample basis. This is mainly to assess the flow of funds between Botswana and the other countries. This is a sample survey and a complete count of all foreign transactions will be made for twenty-four days in the year. This survey will assist to a great extent in building the balance of payments accounts.

h. Education Statistics

With the appointment of the UNESCO Statistician much work has been done in this field. Figures relating to enrolment in different classes by individual ages and sex have been collected. Information has also been collected in the drop out of pupils in various classes. A survey is being conducted relating to the facilities available in schools.

i. Health or Medical Statistics

Figures have been collected for the number of cases treated by sex and diseases. The mortality figures by diseases are also being collected. Next year a survey is planned to assess the facilities available in hospitals and clinics.

j. Population and vital statistics

The only record available is the 1964 census data. Since a large number of questions were not asked in this census, it is difficult to estimate the various population rates. However, some projections were made based on the census figures. The next census is tentatively fixed for 1974. Beginning from January 1968, all births and deaths will be registered. Once this is done it will be possible to construct the life tables for Botswana.

k. Labour force Statistics

Some employment figures by industries are collected. Last December a manpower survey was conducted to get the occupational distribution. The response was very weak. A comprehensive manpower survey is planned for December this year.

l. Manufacturing and Construction Statistics

A census was conducted this year to collect figures relating to manufacturing and construction. The response has been quite good. The data is being tabulated.

m. Electricity Statistics

Monthly production and consumption of electricity is being collected from large organizations. There are a large number of private small electric generators. Figures are collected from these plants as well.

n. Petroleum Statistics

Imports of different petroleum products are obtained for every six months from the petroleum companies. These figures are fairly accurate and used as a check on the information collected by the returns.

o. Transport and Communication Statistics

Figures on rail transport are collected monthly. Motor vehicle registration figures are collected on an annual basis. Beginning from next year, the motor vehicle registration figures will be collected as and when the vehicles are registered. Telephone, radio and postal statistics are being collected on an annual basis.

p. Mineral Statistics

Production and exports of different minerals are collected on a monthly basis from the operating companies. Since last year there has been very little production of minerals. During the next few years when the copper production comes into force, there will be a substantial increase in the mineral production.

q. Income Tax Statistics

The income tax returns were analysed for the last three years into economic categories. Valuable information was collected relating to the operation of companies.

r. National Income Statistics

Rough estimates of national income has been made for the year 1965. Since detailed information is not available on the various sectors of the economy, the sector accounts could not be prepared. By the end of this year a definite attempt will be made to obtain a realistic estimate on national income. Preliminary work on this has already begun by analysing the Government accounts for the last three years.

LESOTHO

I. INTRODUCTION

Since the last report made in 1965 there have been considerable constitutional changes in the country. In October, 1966, the country became independent and changed its name from 'Basutoland' to 'Lesotho'. With the advent of Independence great pressure was exerted on the Bureau of Statistics to supply much needed statistical information. As you will have realised from my last report there was not very much information being collected due to a number of reasons outlined at the time, but this pressure exerted on the Bureau and also the foresight of the Director made it possible for the Bureau to embark on a number of projects. Details of these will be given in a later part of the report, all I can say at this stage is that considerable progress has been made during these past two years.

II. STAFFING

In 1965 the staff of the Bureau consisted of -

- 1 Director, who was an OPEX man, and
- 2 Statisticians.

At the moment of reporting the establishment of the Bureau stands at -

- 1 Director,
- 1 Deputy Director and
- 3 Statisticians.

The number of Statistical Officers' posts has also grown from 2 to 4, though the 4th still remains to be filled. The clerical staff has doubled. Even with this increase in the size of the establishment, the Bureau is still short staffed considering the amount of work that has to be done in the field of supplying the statistics necessary for sensible economic and national planning.

III. TRAINING

The local university is being encouraged to expand its curriculum to include more teaching in statistics along with its courses in Economic and Mathematics. A few civil servants were sent to the university on a part time basis to take courses in statistics, so that they could be of better service in their ministries, preparing statistical returns. With the aid of the United Nations, three officers from the Bureau have been sent out on study programmes in Statistics and National Accounts; the two who completed their studies did so successfully. It is hoped that by the time this report is presented at the Conference one more officer will have gone abroad to further his studies in statistics, specialising in the field of Demography.

IV. NEW PROJECTS

As indicated in Paragraph 1 of this report it has been necessary to embark on new projects in order to supply the planners with at least some of the information they need for the economic development of the country. Listed below are the projects that have been embarked upon since the last Conference, details of which will be discussed separately. Here I shall only give a summary of each of the projects.

(a) The 1966 Population Census and Data Processing

At the last Conference I reported that the Bureau of Statistics was preparing to take a population census of Lesotho the following year. This was conducted in April, 1966. The preliminary results of this Census have been issued and the processing of the forms is nearing its final stages now. To speed up processing an IBM Punch Card equipment was installed, local officers were trained to man the installation and this they did very successfully. It is regretted to state that government found no further use for this installation and it had to be returned at the conclusion of this census processing.

(b) National Accounts

Late in 1966 the Bureau got the services of a National Accounts Expert under SCAAP. Through his efforts a National Accounting system for Lesotho was started and he produced the first set of National Accounts tables since 1963, when some other expert had made an attempt to set up such a system. The work on National Accounts has been continued by one of the Bureau Statisticians who recently completed a course on National Accounting at the Hague. He is at the moment busy producing detailed tables on Lesotho's National Accounts.

(c) Banking Statistics

Unfortunately the country has only two banks and any statistics collected from these cannot be published except to be circulated among high government officials. Nevertheless these banks have been sufficiently co-operative as to enable the Bureau to collect what bank statistics it could from them.

(d) Trade Statistics

This is in a sense not a new project, but it has been given a different complexion and a different dimension. The method of collecting prices previously employed did not give reliable information, and coverage was very poor and lacking in detail. New forms were designed and I must say the response from those concerned has been encouraging. Because of the absence of border check points as far as trade is concerned, the Bureau had to send officers to the entry points between Lesotho and Republic of South Africa to check on across the border shoppers and collect what information they could.

(e) Census of Production

There is very little production going on in this country since there are no large factories of any description operating in the country, but questionnaires are sent to whatever establishments there are that may produce something or other to give such information as may be required on the forms.

(f) Consumption and Expenditure Survey

In order to assess the consumption and expenditure patterns of the rural sector a survey was launched early in 1967. This survey is still continuing and is expected to last for yet another year. The launching of this survey was greatly assisted by the contribution made towards its planning by Mr. W.L. Booker of ECA.

(g) Agricultural Production Survey

It is possible that by the time this Conference sits a survey on the Agricultural Production of the country will have been launched. Schemes are now afoot for the launching of this project, but the success of this launching will depend on a number of factors which are familiar to all developing countries. The purpose of the survey would be to estimate the crop production of the country in general, and this will be done on a sample basis. It is hoped to extend this survey over a period of about two years and ultimately to tie it up with 1970 round of the Agricultural Censuses.

V. COORDINATION OF STATISTICAL ACTIVITIES

Attempts have been made and are still being made to coordinate the statistical activities of the different ministries. This has proved no simple task as some of the ministries seemed to consider such activities as solely their responsibility. Nevertheless, progress is being made, however slowly. A number of them have been very cooperative in collecting statistical information as part of their routine operations in such a way as will be meaningful to statisticians.

VI. PUBLICATIONS

The Bureau continues to publish an Annual Statistical Bulletin which is a summary report of the statistical activities of the Bureau itself and those of such ministries as do cooperate in supplying required information. There have been further publications on:-

National Accounts,
Trade Statistics and
Census of Production.

A Preliminary Report on the 1966 Population Census has also been issued and the final report is in the stages of preparation.

The following are detailed reports on some of the projects listed in Paragraph 4:-

1966 Population Census:

A population census was conducted during the period 14th to 24th April, 1966. Through the kind cooperation of the Ministry of Education this period was declared a holiday for primary schools thereby setting free the large number of teachers in such schools to assist in the census operation.

The hierarchy of the census field personnel was as follows:

- (a) Census supervisors (60) recruited from middle and senior ranks of the civil service.
- (b) Census assistants (64) recruited largely from high school leavers.
- (c) Census enumerators (1,122) recruited largely from primary school teachers.

The 60 electoral constituencies were used as basic units, each of them being further subdivided into 18 enumeration areas (C.E.A.'s).

Each constituency had a supervisor in charge of field operations. He was supported by one census assistant (two in a few cases). In addition to the constituency enumerators' complement there was one paid reserve who could be called upon in case of emergency. The overall supervision of field operation was under two statisticians at the Bureau of Statistics.

A preliminary population figure was obtained manually from the census schedules and released at the beginning of June. Detailed processing of the schedules was done on IBM equipment acquired on a rental basis specifically for the census exercise. This equipment comprised two punches (one alpha-numeric), two verifiers, one reproducer punch, one sorter and one tabulator with a second tabulator on standby. Tabulation on the five basic machine tables began in September, 1966 and was concluded in July, 1967. The three months of May to July, 1966, were taken up in the training of local personnel in operating and maintaining the machines.

Two parallel procedures were used in the transfer of the raw data from the schedules onto punch cards. Some of the schedules were first precoded and then transferred directly to cards. Others were transferred directly to mark-sense cards which were then run through the 514 Reproducing punch. Both sets of cards were then edited for accuracy in count and listed on the 421 tabulator. The checks being satisfactory at this point the cards were then ready to go through the sorter in readiness for the five basic tabulations referred to in Paragraph 3. Editing of the raw schedules was done concurrently with either the pre-coding or the mark-sensing.

Compilation of the census tables from the basic machine tabulations began in early 1967 and will go on till October approximately. These tables are being released for users as soon as they are ready and before the main census report may be published. Copies of such of the releases as have been published are available on request.

The total enumerated de jure population in 1966 was 968,019 persons of all races. 464,162 of these were males. 503,764 females and 93 persons with sexes not stated. The de facto figure is 852,271 persons of all races made up of 368,223 males, 483,967 females and 81 persons whose sex was not stated. Of the de facto population 1,580 are of European origin.

NATIONAL ACCOUNTS

General Introduction:

August 1966 saw the initiation in the Bureau of Statistics of work on the computation of National Accounts on an annual basis. The requisite material for the production of these accounts was, excepting for the Official sector, in most cases not available. Even for this sector, whatever information could be obtained from Treasury Reports was not all usable; as a result it became necessary to fall back on the individual ministerial/departmental accounts where a breakdown particularly of Government expenditure by type of service could be found. After six months of relentless effort to assemble and process information from all sectors, in February, 1967, the Bureau circulated to Government officials a set of 38 tables.

It was felt that some changes of concept and treatment were necessary; also, subsequent to the original issue of tables, more information came to light and this has been incorporated in the final report which was released in July, 1967.

This achievement was largely due to the assistance given by a SCAAP expert who came to Lesotho for six months specifically to lay a foundation in this field.

Some tables in the report are subject to a wide margin of error and the overall accuracy of each table has been indicated at the foot of the table. Information was collected by means of questionnaires which were sent to all companies, a large number of non-profit making concerns and unincorporated enterprises. The response from companies and non-profit making concerns was, on the whole, satisfactory.

Some of the Problems Encountered:

Unincorporated enterprises proved a rather difficult group to deal with; this was not altogether unexpected because similar problems had been encountered in the collection of trade statistics. Smaller business men do not keep proper records of their business activities; in an attempt to encourage them to do so, officials of the Bureau have addressed meetings of traders or their representatives at which the theme has been the necessity of maintaining proper business records and the submission of returns when required to do so.

Suspensions were prevalent at the beginning and in some sense they were understandable. Statistical enquiries of this nature are relatively new in Lesotho; to people who had had no interference by Government other than taxation purposes, questionnaires which called for fairly detailed information did represent a disruption of the old order which was viewed not only with suspicion but also met some measure of resistance. The enquiry was interpreted by others as a prelude to increased taxation. To a large extent, these suspicions have been cleared.

BALANCE OF PAYMENTS:

The problems of compiling anything like an accurate Balance of Payments account for Lesotho, a land-locked country with no border customs posts are immense; all figures incorporate a considerable degree of estimation and should therefore be treated with utmost caution. All transactions were treated as either receipts or payments; the tables included on the report refer only to current transactions.

Capital transactions representing transfers of money, securities and capital assets were all excluded. This was not a serious omission because capital transactions were relatively few and small in size. A limited amount of information was available relating to the capital transactions of the central government and the corporation sector with the rest of the world, but since it was far from complete, it was thought best to exclude any reference to it in the accounts.

In view of the difficulty of collecting trade statistics in the usual way, imports and exports of merchandise were valued on a variety of bases. Most exports were valued f.o.b. point of dispatch while others were valued f.o.b. the border. On the other hand imports were valued f.o.b. point of dispatch and the carriage, insurance and freight element was derived separately. Adjustments were made by adding the value of services of locally owned transport in carrying exports to the border and deducting the corresponding value of transporting imports from the border to destinations in Lesotho.

PROBLEMS POSED BY COMMON CUSTOMS ON THE TREATMENT
OF CUSTOMS REVENUE:

The fact that Lesotho is in the same customs area with the Republic of South Africa, Botswana and Swaziland poses many serious statistical problems. Formidable difficulties in collecting trade statistics have already been alluded to. The treatment of the share of customs and excise revenue that Lesotho receives from South Africa (a fixed percentage of the total annual customs receipts which in 1965/66 was reduced from 0.88575% to 0.47903% as a result of the revision of the 1910 Customs Agreement) has divided the country's Economists and Statisticians into two schools of thought. Those of the one school believe that these receipts should not be treated as indirect taxes, rather they should be treated as income from abroad. Their contention is based on the usual agreement that customs are included under indirect taxes in moving from factor costs to market prices because they represent the difference between what the

consumers pay for imports and the cost of producing what the country has to export in payment for imports.

Assuming a 10% duty, a country uses R100 home resources to pay for a marginal R100 imports. In this case the consumers will pay R110 for the imports, but that would not affect the cost of these imports to the economy as a whole; the R10 duty being simply a transfer within the economy.

In Lesotho, however, the situation is different. The consumers will pay R110 for imports and of the R10 duty, about R9.5 goes to South African Government and about R0.5 to the Lesotho Government. In other words, the cost to Lesotho economy as a whole is R109.5 and this is roughly the same as the market price of the imports. Because our receipts are not related to our imports, they argue, the inclusion of customs receipts under indirect taxes will not reflect a true picture of what is happening in Lesotho.

The other school of thought maintain that by their very nature these receipts are indirect taxes and should therefore be taken into account when moving from factor costs to market prices. They argue that for as long as Lesotho does not collect customs at her own borders, the problem of determining whether what she now receives, represents an accurate and "true" share of total customs receipts will remain unsolved. On the other hand they do not see why these receipts should be treated as "income from abroad". True, they agree, that in the broad sense of the word they can be regarded as "income", but they are not factor (earned) income and should not be grouped together with earnings of land labour and capital in the Balance of Payments. For the present, while trade figures are still far from accurate, it is not possible to calculate the difference between what would have been collected independently and what was actually received under the percentage agreement. In the tables of National Accounts, the policy followed has been to include these receipts when calculating Gross National Product at market prices (although this is not entirely satisfactory)

and to add a detailed footnote to enable users to exclude the customs share from indirect taxes if they so desire.

BANKING STATISTICS:

In April 1966, the Bureau entered into negotiations with the local banks for the submission of Banking Statistics. Following the compromise agreement reached, the banks now furnished half-yearly as well as bi-monthly information on banking. The half-yearly returns show, among other things, imports and exports of notes and coins (Lesotho uses South African currency) sales and purchases of foreign exchange and travellers' cheques, interest received and paid as well as the prevailing rates of interest. The bi-monthly returns show inward and outward remittances i.e. monies received by banks from abroad and monies paid abroad by banks.

The indirect methods used in collecting trade statistics have already been described as unsatisfactory. It is hoped that in the near future, it might be possible to get from banking statistics the financial counterpart of the physical trade with the rest of the world. In this sense banking figures could be used as a check.

ECONOMIC STATISTICS:

Work on this section can be most easily appreciated if it is broken down into the three headings: Trade, Prices and Production.

As Lesotho has no customs posts, trade figures have to be collected by a variety of indirect methods. The basic figures are obtained from aggregating the replies of all traders in the territory with regard to imports/exports. These returns are made quarterly and also cover certain other elements such as government departments and missions.

Checks where obtainable on certain commodities such as wool, mohair and liquor are used. Throughout the year the main problem has been to obtain precise and complete replies to the return. Eventually, however, the trade statement for 1966 was published in April, 1967. For 1967 the return has been considerably extended and a process of identifying and tracing all traders in Lesotho commenced - a task of immense proportions, which covers entirely virgin territory.

It is also hoped to conduct a study on direction of trade to discover the proportion of our imports/exports which arrive from or depart to countries outside the South African Customs Union Area.

The work of sampling agricultural prices obtainable in Lesotho has until recently been undertaken by the Ministry (nee Department) of Agriculture, but has now been taken over by the Bureau. The only traders who are allowed to deal in agricultural produce are those who hold a General Dealers licence. There are approximately 200 of these in the country, many of which are branches of the several large trading concerns in Lesotho. Each month we collect details of total sales and purchases for each store and the prices obtained both by the trader and the agricultural producer.

The returns are broken down into agro-economic zones and separate figures obtained for prices in the Lowlands, Foothills and Mountains as well as for the whole country. Up to now we have produced a series for the months October, 1966 - April, 1967 for Maize, Wheat, Sorghum, Barley, Peas, Beans, Wool and Mohair, the last two differentiating between the grades as used commercially in Lesotho. The Ministry of Agriculture hopes to introduce a grading system for Maize and Wheat in the near future and we will obviously adapt our questionnaire to take account of this. Over the course of a year we should be in a position to present a complete picture of off-farm sales which should be useful in many parts of government projection and planning.

In the field of prices some tentative thought is being given to the idea of an urban price index. A survey of two of the main urban centres has already been undertaken in connection with other work and could be used as the frame of reference for such a study. However, this still leaves two towns on which survey work would have to be undertaken, and such an index is probably some way off yet.

The census of production for 1965 was sent out in May, 1966 and published in June, 1967. The number of usable replies was 23, and it can be fairly stated that the standard of response was not high. However, it is hoped that a considerable amount of experience has been gained by both sides and that the Census for 1966 will proceed with greater speed and accuracy. This year a question on capital expenditure has been included in an attempt to assess the total capital wealth of industry as well as current expenditure thereon. The potential (mailing) list for the Census this time was over 50.

Taking the section generally the problems are those common to many departments; slow response, inaccurate form-filling and lack of frames of reference. However most of the problems appear to have solutions, towards which we hope we are proceeding.

LESOTHO RURAL HOUSEHOLD CONSUMPTION AND EXPENDITURE SURVEY:

Brief Introduction

A rural household budget survey was launched in February, 1967. The objective of this survey is to provide economic planners and policy makers with the invaluable information on the consumption and expenditure patterns among rural households in Lesotho. Such information is totally lacking at the present moment and only crude estimates can be made of the magnitude of the rural economy's contribution to the national income. This rural economy is largely of a subsistence nature.

Survey Design

The basic plan of the survey is a two-stage sample with survey enumeration areas (S.E.A.'s) as sampling units at the first stage, and households as secondary units. The first stage comprises a complete enumeration of the E.A. population as well as obtaining information on the holdings (fielâs) and income sources of households. In addition information is obtained on the approximate size of annual farm-produce sales for those households engaging in agricultural activity (i.e. crop and livestock farming). This latter is used as a broad base for stratifying farming households by income-size-class for the second stage of the enquiry. The blue print for the design was prepared by W.L. Booker, an E.C.A. expert on household surveys, and the final version was adopted during his visit to Maseru in August, 1966.

Stage 2 of the survey comprises a detailed weekly recording of the budgeting (income and expenditure) of farming households selected from the Stage 1 enumeration. The recording will cover a period of twelve months and completed questionnaires are collected for editing and processing at the end of every month.

The Frame

The sampling frame is the totality of E.A.'s used in the 1966 population census, with the following exceptions:

- (a) Semi-Urban and urban township areas with a total population of + 39,000.
- (b) Institutions with a total population of + 8,500.
- (c) Herdsmen at cattle posts where the location of such cattle posts is far from neighbouring villages i.e. E.A.'s made up exclusively of cattle posts.

The country was first delimited into three main divisions for ease of administration. In each of the three divisions a sample of E.A.'s. was randomly drawn from the above frame such that the workload could be borne by 30 enumerators (a cost restriction).

The sampling frame for stage 2 in any one main division is the totality of farming households in the stage 1 E.A.'s for the particular division. Non-farming households which form ± 8.2 per cent of the total, are excluded from the enquiry.

Sample Size

Area I: In terms of the enumerated population, the Stage 1 sample size for the first main division (Area I) is 12.9 per cent and 13.4 per cent if based on E.A.'s. There were 448 frame E.A.'s of which 60 were sampled in Area I. The population estimate for the 448 frame E.A.'s was 435,468 (1966 census) and the enumerated population in the sample of 60 was 58,074. If there had been no non-response (± 3.9 per cent) the sample size estimate would have been 13.4 per cent when based on the population.

For Stage 2 in Area I, 720 farming households were sampled out of a total of 10,592 such households available for selection. The mean E.A. population for the frame and sample are respectively 973 and 971, and the S.E. for the E.A. mean based on a sample of 60 is 18.4.

Area II: Operations in Area II began during the third week of July, 1967, and at the time of writing this paper stage 1 returns for this area are being processed. Of the 283 frame E.A.'s 51 were sampled. The respective population estimates for the frame and sample are 282,764 and 49,792 (1966 census). This gives a sample size estimate of 18.0 per cent when based on E.A.'s and 17.6 per cent when based on population estimates.

The mean E.A. populations in this area are 994 and 979 respectively for the frame and the sample, whereas the S.E. for the E.A. mean, based on a sample of 51, is 24.0.

Use of the survey as a post-censal check

Initially Stage 1 of the survey was scheduled to begin in Area I during November of 1966, six months after the census count.

This timing was intended for the survey enumeration to act as a check on the census count in the sampled area. Administrative difficulties precluded this however, and survey operations only commenced in February of 1967. Despite this lapse in time, and allowing for the non-response in the survey, it was gratifying to note a very close comparison between the census and survey enumerated populations in each of the 60 Area I E.A.'s. On the average the census figure was always slightly higher than the corresponding survey figure. This would broadly imply an acceptable completeness in census coverage without giving any exact measure at this stage. It will be possible at a later date to give such an estimate of the census coverage as based on survey enumeration.

MAURITIUS

INTRODUCTORY NOTE: The following summary includes developments which have taken place since the Fourth Conference, and reference to any major plans for the immediate future. Normal routine developments are not included.

1. CENSUSES AND SURVEYS

- 1) Census of Industrial Production - The first Census of Industrial Production in Mauritius was taken in 1965 and related to the output of 1964. It covered all establishments that employed 3 or more persons on average. 191 large establishments were contacted by post and 655 others by personal interviews requiring the employment of 14 interviewers. A second census covering the year 1966 is at the planning stage and is scheduled to be taken in December 1967.
- 2) Census of Distribution - The Central Statistical Office is also actively planning its first Census of Distribution to be taken concurrently in December 1967.
- 3) Survey of Employment and Earnings - To make up for the absence of regular and comprehensive statistics on employment and earnings, a bi-annual survey of employment and earnings in large establishments has been initiated in April 1966. Its main purpose is to provide a continuous series of comparable data which will show changes in employment from year to year and from one part of the year to another in various sectors of the economy. The second survey of this series was taken in September 1966 and the third in March 1967.

Employment figures and earnings of workers on daily or piece rates of pay relate to a specific day - the last Thursday of April or September. Earnings of employees on monthly rates of pay relate to the month of April or September.

- 3) Capital Formation - Using new data now available it has been possible to revise and make a better distribution of total Capital Formation estimates into user industries for the period 1958-1965.

4. ECONOMIC PLANNING UNIT

An Economic Planning Unit was set up in 1965. The Central Statistical Office is called upon to feed the Unit with statistical data and analyses. This provides the incentive to improve statistics and to relate them to planning requirements.

5. TRADE

A Customs Adviser of the M.C.A. is at present engaged on transposing the existing Customs tariff to the Brussels Trade Nomenclature. The effective date of implementation of the B.T.N. will be the 1st January 1969.

6. EDUCATION AND AGRICULTURAL STATISTICS

At the end of 1966 two Assistant Statisticians were appointed to devise methods for the collection, analysis and presentation of agricultural and education statistics respectively. It is yet too early to assess the progress made in these fields.

7. PLANS FOR THE IMMEDIATE FUTURE

1. A second census of industrial production
2. A census of distribution
3. Computation of an index of industrial production
4. Computation of an index of wholesale prices
5. A sample survey to provide an index of wages

This bi-annual survey covers sugar plantations harvesting 25 acres or more, plantations, other than sugar cane, cultivating 5 acres or more and non-agricultural establishments employing at least 10 persons on the day of the survey.

- 4) A Socio-economic Sample Survey of Cowkeepers - In 1966 the Central Statistical Office played a major part in a socio-economic sample survey of cowkeepers sponsored by the Nuffield Foundation and planned by the Economist of the Agricultural Marketing Board. It was responsible for a two-stage sample design and the field work during which 750 cowkeepers were contacted by 21 interviewers.

The aim of this survey was to study the economic and social conditions of the cowkeeper in Mauritius. The data obtained will provide the necessary background for the dairy industry's development and for the improvement of living conditions for cowkeepers.

2. DEMOGRAPHY

Projection of the population up to 1987 on various assumptions and an analysis of fertility data collected at the 1962 Population Census have been undertaken.

3. NATIONAL ACCOUNTS

- 1) Gross National Product - The estimates for 1953-1965 have been streamlined and revised in the light of new data obtained. An estimate of expenditure on G.N.P. at constant 1964 prices has been attempted for the same period.
- 2) Balance of Payments - Tables conforming to the instructions contained in Balance of Payment manual of the I.M.F. have been prepared for 1965 and are being prepared for 1966.

N I G E R I A

In the two years following the Fourth Conference in 1965, efforts have been made to carry out the remaining part of the programme of Statistics Development which was embarked upon in 1964. The Aftermath of the political changes in the country since the last Conference has, however, slowed down progress and led to the suspension of certain projects. The Federal Office of Statistics suffered a substantial loss of staff through mass transfers to the Public Service of Eastern Nigeria and the budget approved for the Department has been inadequate for carrying out the programme as originally set out.

Co-ordination of Statistical Activities

The last meeting of the Standing Committee on Statistics - the body charged with responsibility for co-ordinating statistical activities and programmes at the national level - was held in 1965 before the Fourth Conference. It has not been re-convened since then because of the suspension (following the political events of January, 1966) of the National Joint Planning Committee of which the Standing Committee is itself a Sub-Committee. Nevertheless, for a time consultation and collaboration between the Federal Office of Statistics and the State Statistical Departments continued, if only somewhat informally. For example, when the Federal Office of Statistics conducted the Demographic Sample Survey in 1965/66 the State Statistical Departments acted as its agents in the urban areas.

Statistical Organisation

The former Chief Statistician, Dr. B. Ramamurti, left on retirement in November, 1966. Since his departure, the new Organization Chart which he prepared for the Department has been formally inaugurated with some modification. There is now a Statistical Standards Branch which is responsible for all sampling questions. Moreover, the field staff who were formerly attached to several Divisions have been merged into two field organizations one for all

enquiries in urban areas and the other to undertake all rural surveys. They are attached to the Urban Economic Surveys and Rural Economic Surveys respectively. In addition, a new Co-ordination Branch which is responsible for co-ordination work at the Departmental, Federal and National levels, has been created. This Branch will act as the Secretariat of the Standing Committee on Statistics when it begins to function again.

In an effort to improve the timeliness of Statistics, a new Distribution Section was created and attached to the Publications and Intelligence Division and the Division's Printing Section was also expanded.

Relationship between the Government Statistical Services and the Planning Agencies continued to be close. It is worth mentioning that in each Nigerian State the Government Statistical Department and the Planning Agency belong to the same Ministry.

Staff Recruitment and Training

As has earlier been mentioned, the staff position worsened owing to the current political events in the country. In the Federal Office of Statistics, of the total professional and sub-professional establishment of 90 there are 39 vacancies made up of 21 Statisticians and 18 executive class staff. In addition, towards the end of the period, the U.S.A.I.D. technical assistance staff withdrew. It must, however, be mentioned that the mass transfers of staff affected only the Federal Office of Statistics and the Statistical Department of the former Eastern Region - the former as the losers and the latter as the recipients. Apart from the mass transfers already mentioned, the turnover of staff has been high for a variety of other reasons. But a relieving feature of this grim staff situation was the recruitment of three senior expatriate personnel, two of them under U.N. Technical Assistance.

Training

The training programme made some progress during the period despite the staff difficulties already mentioned. During the biennium, 45 Nigerians were trained at the Federal Office of Statistics' Statistical Training School for Statistical Assistants and 19 at the U.N. Statistical Training Centre at Accra, Ghana. In addition a two-year Junior Professional Statistical Course for graduates of the Federal Office of Statistics and the UN Ghana Training Schools was started at Ibadan University as a joint project conducted by the Federal Office of Statistics and the University. The first set of trainees have already graduated from the Course. A number of professional staff were sent abroad for further training while others returned from similar training during the period.

Data Processing

The first computer to be used in a Nigerian Government Statistical Office, an IEM 1401, was installed in the Federal Office of Statistics in December, 1965. The Federal Office of Statistics Computer Centre is gradually developing into the Central Electronic Data Processing Centre for all Government Departments.

Major Statistical Activities During the Biennium

NATIONAL ACCOUNTS:

The estimates of G.D.P. for 1963/64, 1964/65 and Provisional Estimates for 1965/66 were prepared. A start has recently been made with the preparation of estimates of Expenditure on the G.D.P. Furthermore, estimates at constant prices are now based on 1962 instead of 1957 which has been used hitherto.

Other Economic Statistics

The annual Census of Industrial Production continued; so also did the quarterly survey of selected industries. The coverage in both cases is still confined to establishments with ten or more employees.

Demographic and Social Statistics

The processing of the Population Census Data was completed and the first volume of the Census Report relating to Population by Administrative Divisions was produced. The second volume giving the demographic characteristics is expected to be finished by end of September.

A demographic sample survey of the country was carried out but operations in the urban areas were suspended and eventually cancelled following political developments in the country. A Labour Force Survey of Nigeria was conducted. The data collected are still being processed. The Western State Statistical Department conducted a similar but more comprehensive labour survey towards the end of the period.

Sample Surveys

The Rural and Urban Sample Surveys continued on the same lines as in previous years. Detailed plans were made to expand and develop the Ad hoc Urban Consumers' Surveys into a National Urban Economic Sample Survey but these have had to be suspended owing to the political situation in the country. The Rural Economic Survey operations since the Nigerian crisis have been adversely affected both by the loss of staff and of contact between the Lagos Headquarters and the field staff in parts of the country. It was planned that beginning with the 1967/68 operations:

- (a) the number of primary (village) units studied would be increased by 50%;
- (b) the number of resident field staff in each unit would be reduced from two to one; and
- (c) the number of farming households selected from each primary unit would be halved from 30 to 15.

However, owing to the situation in the country only the last plan was carried out.

Preliminary arrangements for Nigeria's participation in the 1970 World Census of Agriculture are being made by the Federal and some of the State Authorities.

SUDAN

A. Census Of Agriculture

In a predominantly agricultural country like the Sudan, reliability of agricultural statistics particularly in respect of area and production of crops is an imperative need for the formulation and assessment, for the promotion of agricultural exports, for assessing the need of imports particularly in a year of poor crops and for many other administrative purposes. Being aware of the drawbacks of the existing state of agricultural statistics and the need for the reliable statistics for purposes of planning, the Government accorded a high place of importance to development of agricultural statistics in the ten-year development plan and allotted a large amount of money for undertake a census of agriculture as a first step towards the improvement of agricultural statistics.

Work Done by the Department Of Statistics.

1. Census of Pump Schemes

Accordingly the Department Of Statistics carried out in 1963/64 a complete census with regard to pump irrigation schemes functioning in five provinces. The purpose of this census was to ascertain the extent of area brought under pump irrigation and consequent crop pattern developed. All data collected had been analysed and all the reports for Blue Nile, Northern, Khartoum, Upper Nile and Kassala Provinces were published during the years 1965/66 and 1966/67 in two volumes, Vol. I giving the consolidated results of the census for all the five provinces together and Vol. II consisting of five parts each dealing with a province. The statistical analyses of data on pilot studies is nearing completion and a report is expected to be brought out during the course of next two months. The field work of the extended sample census would be completed by the end of June 1967. Statistical analyses of data for councils where the field work is over has been started.

2. Rainland Mechanized Crop Product Schemes

The next task was to undertake in 1963/64 a census of rainland mechanized crop production schemes in the two Gedaref Councils of Kassala Province for studying the developing crop pattern as a result of tractorization. The data collected was analysed and the report will be published in the near future.

3. Sample Census Of Agriculture

The Sudan sample census of agriculture follows closely the pattern included in the programme set by FAO for collecting data for the 1960 World Census. The Department, therefore, took in 1964/65 a series of pilot studies for developing a suitable technique for sample census of agriculture, and even while these pilot studies were in progress the Department took steps to extend the sample census in the subsequent year 1965/66 to cover six provinces of the Northern, the Blue Nile, Kassala, Kordofan, Darfur and Khartoum. The sample census of agriculture is designed to supply reliable information on quite a number of items of agriculture economy such as number of holdings and their distribution according to their size, form of tenure, fragmentation, land use, agricultural population, crop areas etc. It has been confined to settled population in exclusion of nomads who raise a good proportion of livestock population.

4. Livestock Census: The livestock census is extremely difficult and raises complicated problems to tackle and require considerable preparatory work in terms of type and pilot studies before any large scale sample survey is undertaken. Steps, however are now being taken to initiate a few type studies for evolving a suitable technique for estimating the number of livestock in possession of nomads. This is proposed to be followed by some intensive pilot studies during 1968/69, the idea being that it should be possible to undertake a country-wide livestock sample census along with the census of land holdings during the 1970 FAO World Agricultural Census. At a suitable opportunity, steps would also be taken to extend the sample census to the three Southern Provinces.

5. Sample Survey To Estimate Yield Crops

The programme of agricultural statistics in the Sudan is apt to be met with considerable difficulties particularly on account of its vastness, widely scattered and thinly populated areas with consequent agricultural pattern and lack of communication facilities. Any large scale sample survey to be simultaneously carried out in different parts of the country will, therefore require a large army of enumerators, their recruitment and programme of training alone will require tremendous efforts on the part of the Department. The programme to determine yield, therefore, has to be gradual and require advance systematic planning. It was with this view that the Department has recently initiated some pilot studies to explore the possibility of using the modern sampling technique for estimating the yield rates of some crops. The first pilot study was carried out on dura and sesame in 1965/66 in one of the councils of the Blue Nile Province. This was followed by an extensive study in the current year by covering seven councils of this province. A pilot study was also carried on wheat in 1965/66 in the pump irrigation schemes of the Northern Province. With this experience a stage has now been reached to carry out province-wide surveys of crop cutting experiment in these two provinces. It is necessary that similar pilot studies are carried out in other provinces before province wide surveys are attempted.

Programme Of Work

For working out a plan of crop estimation surveys, it is necessary to know reliable estimates of crop areas and to have a broad idea about the variability of crop yields in various parts of the country. A proper idea about crop areas and their distribution among various agricultural sectors can only be had after the completion of the statistical analyses of census data. To form an idea about the variability of crop yields, pilot studies will have to be undertaken in one or more councils of each province.

Some estimates of crop areas and their productions are published by the Department Of Agriculture. Except for the production of cotton and crop

areas in the organised sector, these are subjective estimates based more or less on guess work. Immediate attention needs, therefore, to be paid to the remaining principal crops, namely dura, sesame, groundnuts and wheat. These crops cover about 6.2 million feddans of which about one fifth of the area seems to come from the organised sector. It is understood that the Department Of Agriculture frequently organises crop cutting experiments in the Gezira-Managil schemes and mechanised dry farming areas. If this Department could extend its activities to Khashm El Girba scheme and Tokar and Cash deltas and puts its programme of crop cutting experiments on a regular and annual basis, the Department Of Statistics would be in a position to concentrate its activities in the non-organised sector as also in the pump irrigation schemes. On the whole, it seems desirable that the minimum basic object of the sample survey for improving the area and yield statistics should be:

1. To obtain fairly reliable estimates of areas under principal crops and their yield rates at the provincial level and
2. To obtain fairly reliable yield estimates of dura and wheat separately for each of the three important schemes in the organised sector, namely,
 - (1) For the Gezira-Managil and Khashm El Girva schemes
 - (2) For pump irrigation schemes and
 - (3) For mechanised farming schemes

A proper way to achieve this objective will be to expand the work gradually under a five-year scheme for the improvement of area and yield statistics of agricultural crops.

Programme of work during 1967/68

With the present rate of progress of work, it is hoped that a report on pilot studies of sample census will be brought out by June 1967. By this time the field work of the extended census is also expected to be completed. The work of the sample census during 1967/68 will then consist of the statistical analyses of census data and type studies relating to the assessment of livestock numbers with nomads at three or four suitable centres.

The Department would also like to continue the work of the improvement of area and yield statistics initiated in 1965/66.

The work proposed for 1967/68 would be as below,

1. Collection of crop areas from all the pump schemes functioning in the provinces of the Blue Nile, The Northern, and Khartoum.
2. Crop estimation survey on dura in the Blue Nile Province excluding the Gezira-Managil schemes but including the pump irrigation schemes and in pump irrigation schemes of the Northern and Khartoum Provinces.
3. Crop estimation survey on wheat in the pump irrigation schemes of the Blue Nile, the Northern and Khartoum provinces.
4. Pilot studies on crop estimation survey on dura in one council from the western provinces.

B. Household Budget Survey.

1. Pilot Surveys.

Omdurman: The household budget survey in Omdurman was carried out in 1963 at the request of the planning authorities of the Ministry of Finance and Economics. It belongs to a series of three pilot studies of household income and expenditure. The purpose was partly to receive guidance for future work in this field and partly to obtain some statistical information for immediate use. The planners were particularly interested in having estimates of income elasticities for use in forecasting future demand for various goods and services.

Data were collected on certain demographic characteristics, housing condition and income and expenditure of the households. Quantities purchased were recorded for some items of food.

A one-stage stratified sampling method was used, where households with high income were over-represented. About 600 households were selected. The report was published in March 1965.

Income elasticities have been calculated for 44 items or groups of items. The results have been compared with those obtained in the Wadi Halfa survey. Monthly quantities consumed of certain items of food have been calculated. The average price paid per unit of quantity have been compared with prices used in the calculation of the cost of living index.

The various sources of errors have been discussed in the report. The survey results are shown in 30 tables and 23 diagrams.

Gezira-Managil:

The population studies consisted of all households in the rural part of the area. Information has been collected about household composition, housing conditions, livestock and areas under various crops, household expenditure and some data on income.

A stratified two-stage sampling method was used. Eight strata were formed, farmers with ten or more feddans under cotton, farmers with less than 10 feddans under cotton, farm labourers and others in Gezira and the same four groups in Managil. The sample consisted of about 800 households and about 100 in each stratum. The report was published in 1965.

Kadugli:

The purpose of the survey was to study the structure of income and expenditure among the households in this rainland area. The investigation has the character of socio-economic study. The survey is to show the importance of monetary economy in the area, where cotton growing has been introduced. The questionnaire is rather detailed and contains qualitative information in various respects. The report was published in 1966.

2. A country-wide household budget survey

Purpose: A household budget survey meets many demands, and experience shows that the results obtained could be utilized for purposes which were not anticipated at the planning stage. However, it is possible to distinguish certain typical uses of household budget data.

1. To obtain weights for the calculation of a consumer prices index.
2. To estimate the total household consumption in the national accounts.
3. To compare various socio-economic situation.
4. To obtain an idea of the general standard of living.
5. To make historical comparisons. This means that household budget surveys should be repeated periodically to assess the change in the level of living.
6. To make international comparisons i.e. to help analyse the economic development in various parts of the World.

Work done in 1966/67

A household budget survey covering the entire settled population of the six northern provinces of the country has been initiated mainly with a view to studying the consumption pattern of different categories of population. The survey has been designed to yield estimates separately for the urban, semi-urban and rural areas. The detailed picture of consumption patterns will be worked out separately for the above-mentioned three broad categories of households i.e.

- (1) Rural households living in sheikhships
- (2) Urban households living in the 11 major cities and
- (3) Semi-urban households living in the smaller towns.

The broad pattern will also be worked out separately for the provinces. In addition the survey would also provide the requisite basic material for the compilation of consumer price index numbers for the large cities on a scientific basis. (The present series of consumer price index numbers being compiled relate to certain classes of population in the three Towns and are based on the budget studies carried out in 1950. These series require revision taking into account the present consumption patterns. It is expected that the present survey would provide the necessary basis for the revision of the existing series of consumer price index numbers and to

enable the formulation of plans for the construction of such series for the important centres in Sudan.)

The sample consisted of about 9000 households. The detailed technical plans for the survey have been finalised and all arrangements to start the survey have been completed by the middle of April 1967. The supervisory staff consisting of the inspectors, and supervisors have been trained in the detailed procedures of the survey. The field staff have proceeded to their respective provinces towards the end of April 1967. The training programmes for the enumerators, most of whom have been locally recruited in the provinces have been organised at different provincial centres.

The main data on the consumption particulars of the household are to be collected for one full year. The final round of investigation is expected to be completed in all places by the end of June 1968. While the main tabulations which relate to the annual data can be commenced only after the completion of the final round of investigation. Necessary arrangements for the scrutiny and processing of the questionnaires will be made as soon as these questionnaires are received at the H.Q.s.

The actual work of the tabulations will depend on the frequency of reporting of different commodities by the households. On the basis of some preliminary information on this, it is estimated that a total of about 10 million cards will have to be punched and processed to complete the tabulations. It is expected that it would be possible to complete processing of the cards and compilation of the final tables in a period of 12 to 18 months after the completion of the field work.

C. Demographic and Housing Survey of Urban Areas

This scheme was not a part of the social surveys incorporated in the ten-year plan which was originally designed to include household budget surveys. The purpose of this demographic and housing survey was to obtain demographic data of urban areas to replace the obsolete data obtained in the 1955/56 first population census. Because of the fact that twelve years

have passed since the first population census was conducted and preparations for the second population census has not yet started, the demographic and housing survey of the big towns will provide useful information which is necessary for planning purposes in various fields such as health, education, housing policy and town planning in general. It will be very informative to analyse the urban development in various areas and the changes which have taken place since the population census of 1955/56. On the basis of such information, estimates of the future population of the urban areas and of the big towns can be calculated.

The present situation:

This Department has conducted a large scale sample survey of population and housing in about 80 towns. The preparatory work was carried out in the summer of 1964, and the field work started in mid-October the same year. Questionnaires and instructions were tested in the field and a training course was arranged for the field staff.

The investigation covered all towns included in the 1955/56 census of population. In addition other towns with estimated population exceeding 5000 inhabitants were included.

Two different forms of a questionnaire were used. Form 1 contains 'plot' data and 'household' data. The plot data refer to certain information about the sampling unit. This plot is in most cases identical with a rate-paying unit and data is collected about type of house (dwelling, shop, etc.), registration (whether registered or not), house tax paid, area of the plot, number of present persons in the household, number of rooms, occupancy (Uninhabited, owner occupies the whole plot, owner shares the plot, only tenant) and rent paid to owner by tenant living in the plot.

Household data are collected for those households whose heads are living in the selected plots. The following type of information is sought: Number of permanent members, possession of certain durable goods, number of income earners, total income earned members of the household and certain demographic information.

Form 2 contains data about individual members of the household. Questions are asked about the name, relation to head of household, permanent members or visitor sex, marital status, year of in-migration to town, province of in-migration, province of birth, highest school completed school attendance, certain data about births and deaths, nationality, occupation, economic status and income.

The housing data contains information about the type of household, whether the dwelling is owned or rented, number of rooms, floor, wall and roof material, kitchen, servant room, electricity, bathroom, water, type of toilet, house tax and rent paid.

The field work has been carried out by a team consisting of a research officer, supervisors and enumerators. The material, after completion of forms was collected at the H.Q.s. for checking, coding and machine processing.

The investigation includes some 80 towns. The field work has been completed in 1966. The analyses has so far been finalised for 30 towns and final reports were published for some of the towns. It is expected that reports for the remaining towns will be out in 1968.