Provisional Agenda Item No. 4

THE DEVELOPMENT OF
OFFICIAL STATISTICS IN GHANA

Note prepared by the Ghana Delegation
OFFICE OF THE GOVERNMENT STATISTICIAN

THE DEVELOPMENT OF
OFFICIAL STATISTICS IN GHANA

Based on a paper read by the Acting Government Statistician at the Annual General Meeting of the Economic Society of Ghana 7th June, 1959.
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INTRODUCTION

The object of this paper is to describe the functions of the Ghana Government's statistical service and to give some indication of how it may be developed to meet the requirements in respect of information for administrative and planning purposes in the future. The paper is not directly concerned with statistics which may be produced and published by organisations other than the statistical service.

2. The Office of the Government Statistician operates as a service under the Ministry of Finance and is the organisation responsible for the preparation of official statistics in Ghana.

3. The Office was established in 1948 and during the last 11 years it has performed a function of growing importance, but its development has been relatively slow. With the economic development of Ghana there is now an increasing awareness of the value of statistics and the time has come when the expansion of the statistical services must be considered.

4. The provision of these services is dependent on the resources available in terms of man-power and funds and on the accessibility of basic statistical material. The availability of professional staff has improved during the past year, although recruitment and training will remain urgent problems for some time to come. There is no doubt, however, that given adequate financial provision, a satisfactory recording of Government activities within the organisations concerned and the co-operation of enterprises and the general public in supplying data, the needs of Ghana in respect of statistical information can be met.

5. The first part of the paper describes the organisation and functions of the Government Statistician's Office at the present time; the second part indicates the principal aspects of the development needed in the future.

ORGANISATION

6. The staff of the statistical organisation at present numbers 291. A little less than two-thirds of these are employed in the Head Office.

7. There are five divisions in the Office: General Statistics, National Income and Planning, Data Processing, Demography and Administration.

8. Of these, General Statistics is the most important. It consists of four sections coming under the general headings of the Private Sector, the Public Sector, External and Internal Trade and Publications.

9. The Demographic Division constitutes a new function of the Office arising from the urgent national need for a new census of population. Following the census this division will meet the continuous requirements in respect of demographic information about the population in the future.
10. The National Income and Planning division co-ordinates the work of the Office. It is responsible for producing an overall picture of the Ghana economy by means of the national income estimates and for developing the sources of information which are needed for this purpose.

11. Data Processing is the means by which information in bulk is mechanically summarised so that it can be presented in statistical form. This division also carries out analysis for Government and other organisations on a service basis.

12. The Administration is responsible not only for the general running of the Office but also for the Economic Library and the supply and maintenance of calculating machines used by Government.

13. A diagramatic representation of the statistical organisation is given on page 3, followed by a table showing the present availability and distribution of staff on page 4.

14. The Office of the Government Statistician is accommodated in three offices in Accra, the Head Office which is divided into two sections, and the temporary Census office. Some temporary accommodation is available to sections of the field organisation which are operating in other parts of the country.

15. Provision has been made in the second Development Plan for the establishment of regional offices in Tamale, Kumasi and Takoradi.

16. Allocation of accommodation in the Accra offices is shown in the diagram on page 5.
Government Statistician

Deputy Govt. Statistician

2. NATL. INCOME EXPERTS

DATA PROCESSING:
Controller

ADMINISTRATION:
S.E.O. (A)

Income Tax

Library

Maintenance

Finance

Stores

Personnel

Registries

Punch Card installation

CENSUS

CENSUS EXPERT

DEMOGRAPHY

GENERAL STATISTICS

NATIONAL INCOME & PLANNING Statistician

Senior Statistic.

N.I. estimates Development of sources

DEMOGRAPHIC STATISTICS

PRIVATE SECTOR

households

STATISTICIAN

PRIVATE SECTOR

PUBLIC SECTOR

EXTERNAL & INTERNAL TRADE

PUBLICATIONS

Statistician

Asst. Statistician

Asst. Statistician

Asst. Statistician

Statistical

Surveys

Product & Stocks

Economic Survey & new pubs.

index of enterprises

General Govt.

Local Govt.

External Trade

Balance of Payments

Prices

Public Corps Banking

Routine Publications & information

typing & Special returns

Special publications

Mailing

Asst. Statistician

Asst. Statistician

Asst. Statistician

Ad hoc census organisation

Births & deaths

Morbidity

N.I. Agri etc.

Index of enterprises

Government Accounts

Labour

Punch card

Page 3

Offices of the government statistician organisation, May 1959

Posts in existing establishment not included above:

2 Assistant Statisticians - 1 Superintendent (Punch card)
### General Statistics

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<td>Executive and senior technical staff</td>
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| (1) Excludes temporary census staff. |
|-------------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
|                                    | Government employees | United Nations experts | Executive and senior technical staff | Clerical and junior technical staff | Total |
| 10                                | - tabulated       | - tabulated       | - tabulated       | - tabulated       | - tabulated       |
LAYOUT OF OFFICE ACCOMMODATION

HEAD OFFICE
Section I

Main- Inc. Printing Typing Store

tax- Tax & Scri- Chart.
ting

Punch Card Install

HEAD OFFICE
Section II

Spe- Prodn. Census Snr. External Trade
cial of Stat Stock External Trade

HEAD OFFICE
Section II

Tel. Ex
Snr. Stat.
Prices

TEMPY. CENSUS OFFICE
(Ring Rd.)

Planning Expert
Geograp. & Typing
Adm.
FUNCTIONS OF THE OFFICE

GENERAL STATISTICS

PRIVATE SECTOR

17. In describing the functions of the Office the General Statistics Division is the primary consideration and we deal first with that section known as the Private Sector. This section is responsible for collecting and processing all information about households and enterprises and it is subdivided according to these two functions.

Households

18. Under the heading of Households comes all the general statistical information relating to the public and the family and other units which constitute the domestic organisation of the community.

19. In 1950 a mobile field organisation was created to provide the means for obtaining this data. The strength of the organisation has gradually increased and there are now rather more than 100 staff employed permanently in the field.

20. The work of the field staff has been based largely on sample surveys designed to investigate household budgets and subsistence consumption, family structure, housing and ownership of other property and agricultural production. Records have also been made of the internal movements of local produce and other goods. It must be made clear, however, that all this work has been in the form of ad hoc investigations and, even though some enquiries have been on a fairly large scale, the information collected, especially about production, has been extremely inadequate for economic analysis and will need to be greatly expanded.

21. At the present time the staff of the field organisation are employed on the collection of market prices, ferry and road checks, temporary work in connection with preparations for the 1960 Census of Population and preliminary operations for an expanded programme of sample surveys.

Enterprises

22. The second sub-division of the Private Sector deals with Enterprises and the principal subjects falling under this heading are the census of enterprises, which covers both production and distribution, labour statistics and production and stocks records. These subjects all involve the collection and processing of information obtained from firms based on permanent premises. For the most part this information is collected by means of postal returns, but some members of the field organisation are now employed on increasing the coverage of the index which controls transmission and receipt of all returns in respect of enterprises.
23. An Index of Enterprises was established a few months ago with the object of co-ordinating the work on all subjects in this group. Previously the census of enterprises, labour statistics and production and stocks returns had been operated as completely separate subjects with their own lists of firms and establishments. Under these conditions there was a wide difference in coverage between the various returns; results were difficult to interpret and there was no ready means of expanding the coverage of the subjects concerned. The Index of Enterprises operates mechanically by means of an Addressograph installation and now contains approximately 3,000 names and addresses. The revision and expansion of the index is taking place continuously.

24. The Census of Enterprises was initiated as a permanent subject in the Office in 1953. During the earlier years of its development a great deal of effort was expended in establishing returns covering the physical and financial activities of the principal firms in each industry. The work at this stage consisted largely of careful scrutiny and correction of individual returns, but the coverage was not sufficient to justify any general consolidation and publication of the material, although considerable use was made of it in assessing economic trends in particular industries. The first attempt at producing an overall summary was carried out towards the end of 1958 and related mainly to the 1957 records. In the case of the 1958 records, which are now being obtained, it has been possible to carry out some revision of the content of the returns and some improvement in the coverage may be achieved. The urgent need now is to consolidate the material obtained in the form of a regular annual analysis.

25. Labour statistics are based on a return submitted in respect of December each year by all firms covered and in addition, quarterly returns are obtained from the larger establishments. The results are already published regularly in the Statistical Reports series and information is supplied to the Ministry of Labour and other users. The 1957 tabulations were completed considerably earlier than in previous years and it is hoped to make a further improvement in respect of the 1958 records with the assistance of Labour Inspectors who are helping to obtain information from establishments more quickly. The returns have been revised and now include a simplified occupational classification.

26. Under Production and Stocks are included miscellaneous items in respect of which information is obtained partly from private firms and partly through official channels. This information appears regularly in the Digest of Statistics or is used in the compilation of national income and other estimates. The greatest need at the present time is for more information on industrial production and the introduction of a quarterly return of production is now being considered.
27. The second section of the General Statistics Division is the Public Sector dealing generally with public finance and covering General and Local Government accounts, public corporations and banking. The sources of information are the Accountant-General's Department, the Ministry of Local Government, other official sources and the banks. An analysis of Government accounts is published in monthly and annual financial statements and further information appears in the Economic Survey and Digest of Statistics.

28. One of the principal tasks of this section is the economic and functional reclassification of government accounts which is now particularly important in view of the establishment of the Budget Bureau within the Ministry of Finance.

29. During recent months work has been concentrated mainly on developing the analysis of Local Government accounts and a detailed statistical report is being issued. Attention is now being turned to improvement of financial statistics relating to general Government and public corporations.

EXTERNAL AND INTERNAL TRADE

30. External and Internal Trade is the third section of the General Statistics Division and includes the processing of all information collected by the Customs and Excise Department, internal prices and balance of payments estimates.

31. The production of the Monthly Trade Accounts and the Annual Trade Report is the largest item of routine work in the Office. In 1954, the analysis of trade statistics was revised to comply with the Standard International Trade Classification. In subsequent years much work was done to improve the quality of the records, but, at the beginning of 1958, the Monthly Trade Accounts were still appearing at irregular intervals. The value of this information to Government and commercial interests depends upon the speed at which it is produced and during the past year efforts have been concentrated on evening out the flow of work and speeding up publication of results. Except in the event of machine breakdown the Trade Account tabulations are now produced regularly approximately eight weeks after the end of the month to which they relate. Printing and distribution does, of course, involve some further time before they are available to the public.

32. In recent months there has been a growing demand for more detailed trade classifications as a result of the efforts to establish new industries in Ghana. Up to the present most of the requirements have been met, but, as these enquiries involve reference to the original Customs documents, it must be realised that only a limited amount of work of this type can be undertaken. An additional tabulator is, however, being brought into operation for general work on trade analysis and this should make it possible to undertake some additional mechanical processing.
33. Internal price statistics at present cover local market prices in the seven main towns and an index of retail prices for Accra. Household Budget surveys have been carried out in Sekondi/Takoradi and in Kumasi and similar indexes will be introduced for these places as soon as possible.

34. Development of the balance of payments estimates has recently been concentrated on obtaining information on private capital transfers. This data was not previously available and has to be obtained from individual firms. With the co-operation of the firms some progress has been made and it is hoped that this will enable increasingly reliable estimates of the balance of capital account to be produced in the future.

PUBLICATIONS

35. The fourth section of the General Statistics Division deals with Publications. In 1958 a small section existed in the Office which was concerned with the production of the Digest of Statistics and returns submitted to the United Nations and other agencies. The production of statistical reports and other material were the responsibility of the individual sections concerned.

36. The increasing volume of publications has now necessitated the co-operation of this work in a separate section in order to maintain consistent quality and to regulate the flow of work to the typing and printing sections.

37. No Economic Survey was produced in respect of 1956 and the Office played only a small part in preparing that in respect of 1957. It has now been possible to resume full responsibility for the production of this document. Work on the 1958 Survey was started at a very much earlier date than in previous years and it is hoped that the report produced will give a more comprehensive account of the Ghana economy.

38. The publications section is also responsible for the routine processing of special returns which include migration, motor vehicle licensing, civil aviation and education statistics, which are published in the Statistical Reports series.

NATIONAL INCOME AND PLANNING

39. In recent years National Income statistics have formed an important part of the work of the Office, but they appear to have had only a limited effect on the development of the subjects which form the principal sources of information for these estimates. A National Income and Planning Division has now been established to meet this requirement.
40. The Office has the two-fold task of collecting, processing and distributing, in appropriate form basic and routine statistics and, secondly, of utilising this information to make estimates in the field of economic statistics including estimates of balance of payments, capital formation, national income, product and expenditure, from which the national accounts can be compiled. The compilation of the national accounts serves as good guide to the optimum development of the work of the Office and may be used as the means of co-ordinating all statistical activities. It is for this reason that national income has been associated with planning in the organisation of the Office.

41. A further diagram is given on page 10 to show how the National Income estimates are served by statistics produced in the various sections of the Office.

DATA PROCESSING

42. The Data Processing Division consists principally of the permanent punch card installation but a small section dealing with processing of income tax statistics is also attached. A separate temporary punch card installation will be used in analysing the results of the 1960 Census of Population.

43. The existing punch card installation utilises two types of equipment between which processing tasks are not interchangeable. For this reason there is some lack of flexibility and it is not always possible to make the fullest use of the processing capacity available. Many of the machines are now very old and arrangements are being made for the replacement of nearly all the existing equipment during the course of the Second Development Plan. All the new machines will use the same type of punch card to ensure maximum flexibility. The equipment will be more modern and faster than that at present in use to provide the additional processing capacity which will be needed as a result of statistical development.

DEMOGRAPHY

44. The operation of principal importance is now the preparation for the Census of Population which is expected to take place in the early part of 1960 and this is the function of the Demographic Division. It involves a large temporary organisation for which staff will be drawn from Government and many other sections of the community. The Census is not, however, discussed in this paper which is concerned with the permanent organisation responsible for the production of official statistics.
ADMINISTRATION

45. The Administrative Division is responsible for the routine work involved in the running of the Office including Registries, Finance, Stores and Personnel. It is also concerned with the Economic Library and the supply and maintenance of calculating machines.

46. The Economic Library provides a general reference service of textbooks, periodicals and economic and statistical publications of other countries for Government and other users. A considerable improvement in the library could be made if the services of a qualified librarian could be secured for a short time to revise the classification system with the object of making books and publications more rapidly accessible.

47. The Office is responsible for the supply and maintenance of calculating machines used by Government. At the present time some 500 machines are maintained by the repair staff of the Office and a further 130 are serviced under contract by the suppliers. With the expansion of Government activities there is an increasing demand for calculating equipment and the maintenance service is being developed to meet future requirements. Additional technical staff have been appointed and are now under training and further additions will be made in the future.

STATISTICAL MATERIAL AVAILABLE

48. The following list indicates the publications of the Office, statistical returns submitted to the United Nations and other organisations and information services provided. It will be appreciated from foregoing sections that this list does not embrace all the activities of the Office.

PUBLICATIONS

External Trade


Monthly Accounts of External Trade and Shipping and Aircraft Movements. (The first publication was in January 1951, continuing the series "Trade Supplement to the Gazette", published by the Government Printing Department prior to 1951).


Monthly Price Bulletin

Commenced December, 1950, ceased October, 1953. The information now appears in the Digest of Statistics.

Digest of Statistics

Quarterly Economic and Statistical Bulletins, Nos. 1, 2 & 3 (published in 1952).

Economic Bulletins, Nos. 1 & 2 (Restricted).

Digest of Statistics (issued quarterly since May, 1953).
Economic Survey


Economic and Statistical Papers

(1) Agricultural Statistical Survey of South East Akim Abukwa 1952-53.
(2) Accra Survey of Household Budgets, 1953.

Other statistical reports, prepared during the period 1950-54, but not issued as regular publications, are as follows:-

- Analysis of Log Volumes (assessment of quantity of timber exports by sampling).
- Survey of Fuel Consumption in Accra.
- Analysis of Physical Measurements of Boys in Institutions.
- Occupational Survey of Tema Village.
- Appendix to 1948 Census Report (covering mainly urban areas).

Statistical Reports


Returns and Information Services

Financial Statements

Information Services

Information is supplied to:
- Government: Ministries and Departments.
- Public Boards and Corporations.
- Other official organisations in Ghana.
- Foreign Government Representatives in Ghana.
- Private firms in Ghana (mainly trade enquiries).
- United Nations, returns for:
  - Statistical Yearbook.
  - Demographic Yearbook.
  - National Accounts questionnaires.
  - F.A.O. questionnaires.
  - Yearbook of Labour Statistics.
- Overseas Governments.
- Overseas Universities and non-Government organisations.
- Encyclopaedias.

DEVELOPMENT OF THE STATISTICAL SERVICES

49. We now turn to a consideration of the future development of the statistical services. In this connection, the essential factors to be borne in mind are the sources from which the required information must be derived. To some extent statistical data is obtainable from existing administrative records and accounts and the development of these records within the organisations concerned can do much to improve the availability of information for planning and other purposes. It must, however, be emphasised that most of the data required to fill the gaps in our statistical knowledge of the economy is not obtainable from these sources. It can be derived only from direct contact with enterprises and the general public and, if adequate statistical coverage of the economy is to be attained, an organisation must be developed to maintain contact with these sources on a permanent and systematic basis.

NATIONAL INCOME AND PLANNING

50. It has already been shown that the National Income and Planning Division is being used as the means of co-ordinating the development of work in all parts of the statistics office. It is therefore convenient to consider future requirements in the context of the national accounts. It must be understood, however, that there will be considerable needs for statistical information which do not fall directly within the scope of these accounts.
51. The construction of good national accounts is of value in connection with the provision of, firstly, a measure of economic progress and secondly, data for administrators and planners concerning the relation of the different domestic sectors; households, enterprises and general government, the relationship of the country with the rest of the world, production, consumption and investment and the relative parts played in production by different industries.

52. There are inadequacies in the national accounts of all countries which do not, however, render them valueless. Their principal function is to give guidance concerning the relative magnitudes and the divisions of the economy and to show the trends resulting from internal development and the relationship of the country with the rest of the world. The objective must, however, be to continuously reduce the extent of errors and inadequacies in order that the national accounts can attain their fullest possible value.

53. Work to this end would appear to be best concentrated in the following directions.

(a) The extension of the survey, programme of the Government Statistician's Office to provide a methodical continuing sample survey, giving information on income and expenditure, both monetary and in kind and other statistical data. This sample survey would cover the whole country and would be the means of filling the very large gap in information about personal consumption.

(b) A thorough review of the census of enterprises with an improvement in the coverage of larger firms, supplemented by sample surveys to give information on the activities of small enterprises now falling outside the scope of the census.

(c) A regular recording at frequent intervals of the production of all existing industries and those which will be developed in the future.

(d) The development of public finance and banking statistics.

54. The additional coverage given by these measures would result in the provision of greatly improved economic statistics. To obtain all the information required implies the development of a permanent regional statistical organisation which is the next consideration.

REGIONAL ORGANISATION

55. It has already been shown that the Office has, at present, a mobile field staff consisting of more than 100 officers. This staff has been utilised on an ad hoc basis to determine the economic characteristics of different sections of the community mainly by means of sample surveys. The arrangement has, however, been a purely temporary one designed to fill the greatest gap in statistical information about the private sector as far as possible with the limited resources available. With the rapid development of the economy the existing means of collecting information from the general public and from smaller enterprises is no longer adequate and a permanent and much larger field organisation must be developed if Government is to get the information it requires for planning and administrative purposes.

56. Provision has been made in the Second Development Plan for the establishment of Regional Statistics Offices in Takoradi, Kumasi and Tamale. The Tamale office will be completed in the
third quarter of 1959. The regional organisation will be based on these offices and on the existing office in Accra.

57. In the initial stages of development the regional offices will operate mainly as collecting centres for information about the private sector, that is, they will be concerned principally with households and enterprises. Later they will form a channel for obtaining information on local government and other activities and, eventually, when professional staff can be posted to the regions they will provide a regional statistical service which is capable of dealing with local problems.

58. It has been emphasised in discussions with Ministries, the University and other organisations concerned with statistical data that the regional service of the Government Statistician's Office is envisaged as a channel for obtaining statistical information of all kinds. It would clearly be uneconomic for other agencies to develop additional field organisations for the collection of information of a statistical nature.

59. This implies the development of a continuing national sample survey similar to that adopted in India which would meet the requirements of all users of statistical information about households and the public in general. With such a survey in operation statistical staff would be stationed in all parts of the country on a permanent basis in place of the existing mobile staff which can only be used for ad hoc inquiries.

60. The basic object of the national sample survey would be to make a continuous record of household consumption and expenditure and agricultural and other production. Additional records would be incorporated from time to time to meet the needs of other government organisations including for example, questions on housing, education, health, nutrition and internal migratory movements. Some of these inquiries would require the attachment of technical staff from the organisations concerned to the permanent survey teams.

61. A national sample survey of this type would be the first of its kind in Africa. It would provide the means for obtaining quickly any type of information which may be recorded in statistical terms concerning the general public.

62. It is expected that the field staff of the Government Statistician's Office will be increased by about 50 officers at the beginning of the next financial year and the programme of survey work on which these officers will be employed in the immediate future is nearing completion. This expansion is not, however, sufficient to meet the current requirements for information or the establishment of a sampling programme on a nationwide basis.

63. It would appear that, with the better availability of Ghanaian professional staff and with the assistance of United Nations experts who are now attached to the statistical organisation, a very much more rapid rate of progress can be achieved than that previously envisaged.

64. The rate at which this development can be achieved depends on the establishment of the regional offices which are part of the second Development Plan. In running these offices as collecting centres for information in their early stages of development, officers in the Statistical Assistant grade will be needed. Some new staff should enter this grade as a result of promotions within the next few months, but additional recruits may have to be found if a rapid development of the regional organisation is to be achieved.
Given the basic staff for the regional offices it would be possible to absorb a further 150 field enumerators in the latter half of 1959-60. This would then provide the basis for the national sample survey which has been described.

ENTREPRISES

65. Information from enterprises will be obtained partly by means of postal returns, as at present and partly by direct contact through the regional organisation. A large staff is not required either in obtaining this information or in its processing. The success in expanding statistics relating to enterprises depends to a large extent on the co-operation of the firms concerned.

66. Some 3,000 enterprises are already covered by current returns and this coverage is steadily increasing. It is desirable that data on industrial production should be obtained and it is hoped that arrangements for these records will be put into operation shortly. A further revision of the returns used in obtaining information from firms is being undertaken and the routine analysis of the returns will be developed.

67. Many organisations including the Ministry of Trade and Industries, the National Research Council and the University are concerned with the activities of enterprises. Up to the present time no comprehensive list of enterprises has been available to these organisations. It is hoped that the Government Statistician's Office will shortly be permitted to undertake the publication at regular intervals of a Directory of Enterprises. Such a directory would consist of a list of names and addresses of firms and establishments classified by type of business. It should meet the needs of those concerned with investigations into business activities and it should also be of value to the firms themselves.

PUBLIC SECTOR

68. The next consideration is the development of information about the Public Sector which, at the present time, is largely of a financial nature.

69. Ghana is now making every effort to promote the economic and social development of the country. In mobilising the resources needed for this purpose, Government transactions are playing and increasingly dominant part in key areas of the economic life. Through their extent and character Government transactions are of major importance in shaping general economic and financial conditions and, as part of the process of development, they affect all branches of economic and social activity.

70. In view of the role and objectives of public finance it is essential that those having to take policy decisions should be able to form a clear picture of the immediate and secondary effects of Government expenditure, methods of raising revenue and the utilization of available balances. Material is needed for analysing past events and for assessing current trends and future requirements.

71. The development of public finance statistics is concerned principally with the ways in which detailed information about government transactions, contained in the accounts of government organisations, can most usefully be summarised and presented in a form which will assist in the task of policy formation.

72. At present government accounts are kept primarily to ensure "accountability" and are not designed to show clearly and conveniently the implications of the transactions involved. Only by examining the existing accounts and regrouping the items according to uniform classifications appropriate for economic analysis is it possible to compile financial statements useful for policy decisions.
73. Firstly, it is necessary that the policy accounts made available to government should be linked with a system of national accounts. By this means the policy maker has a view of the economy as a whole. It enables him to see each sector in relation to the entire economy and places government transactions in their national context. The essential requirements from these accounts are a clear indication of the trend of the draft that Government is making on the material resources of the country, the proportion of Government expenditure going to different uses and the directions in which it is expanding fastest. It is also necessary to assess the influence of Government activity on total income and its distribution and its influence on output and employment and on the volume of cash held by the public. In developing policy accounts on the lines indicated the United Nations standard system will be applied with additional breakdowns to meet the requirements of Ghana.

74. It is to be remembered that the existing budget accounts do not cover all government transactions. This exclusion arises mainly from the desire to give certain bodies, such as, public enterprises, a large measure of financial autonomy and to segregate certain other activities into separate funds. The first object after the reclassification of Central Government accounts will therefore be the additional consolidation of the accounts of those bodies not covered by the central records in order to obtain a comprehensive picture of Government transactions with the private sector and the rest of the world.

75. In tackling these tasks means will become apparent of modifying the existing system of Government accounts and Government financial reporting in order to meet the information requirements for policy making purposes.

76. It is to be pointed out that the economic and functional reclassification of Central Government accounts is based on the information available in the normal official records and the usefulness of the reclassification is therefore dependent on this material. Given the speedy provision of adequate details of Government transactions it will be possible to provide the economic and functional tables needed for planning purposes.

77. A comprehensive review of the public finance information at present being received in the statistics office is now being undertaken and returns and methods of collection are being modified. In addition to the monthly returns the following publications will be prepared.

(a) Central Government Accounts, covering ordinary, extraordinary and development budgets, with functional and economic accounts.

(b) Local Government Finance, covering all Local Authorities. This will be an annual publication and the first issue has now been distributed.

(c) Accounts of Public Sector Enterprises, covering all units included in the budget and corporations such as the Industrial and Agricultural Development Corporations.

(d) Consolidated Public Sector Accounts which will be linked with the national accounts.

(e) A "Budget in Brief" in English and vernacular, explaining what the Government does for the country.
78. It must also be stressed that, for policy purposes, it is important to look beyond the basic monetary costs of government activities to the ultimate purposes which government action is intended to promote. For example, it is not sufficient to know the total expenditure on education and its division between different types of payment. It is necessary to indicate the achievements of this expenditure in concrete terms such as the increase in the number of school rooms, teachers, pupils, etc. Much information of this type is already available, but its consolidation into concrete or real accounts of government activities will come after the revision of existing financial statistics.

79. Banking statistics also forms a subject of growing importance and as soon as the work on the revision of public finance records has been initiated it is proposed to develop, in consultation with the central bank and the university, statistical returns showing the changes in assets and liabilities of the banking system in relation to the rest of the economy.

PUBLICATIONS

80. Published material is the principal means by which the activities of the statistical organisation are made available to the general public and expansion of this material must be given priority.

81. The Office already has a heavy programme of publications which is steadily increasing. Among the new publications being planned, some of which have already been mentioned, are the following.

82. As soon as work on the current Economic Survey is completed it is proposed to introduce a Press Release service which will make available provisional monthly trade figures and other data which do not, at the present time, appear before the Trade Accounts, the Digest of Statistics and other documents are issued.

83. In order to provide the general public and also users of statistics who do not have time to make an examination of the detailed publications with an account of the Ghana economy it is hoped from time to time to produce reports giving basic statistical information largely in diagrammatic form.

84. A publication covering Balance of Payments statistics is in the course of preparation. This will consist of two sections, the first being a summary of the estimates made during the last few years together with a general indication of definitions and methods, while the second will contain a detailed technical description of sources, definitions and methods.

85. Provisional estimates of the national income are being published in the 1958 Economic Survey. These entail a considerable revision of estimates previously given and it is expected that the finalised figures for 1958, together with a detailed explanation of their compilation, will be published towards the end of the year.

86. A detailed account of Local Authority finances is now being issued. Additional publications covering Central Government and public boards and corporations in a similar manner will be produced during the course of the next few months. The proposed form of these publications has already been described in more detail.

87. It has been suggested that the Office should be responsible for the publication of a Directory of Enterprises based on information in the index of enterprises.
88. The production of a Statistical Year Book has been under consideration for some time, but the initial preparation of this document involves a considerable amount of detailed work and it is likely to be some time before it can be produced.

DEMOGRAPHY

89. The final statistical consideration is demography. Following the Census of Population in 1960 there will be an urgent need to maintain up-to-date population estimates and an account of changes in demographic characteristics. After the census a permanent demographic section will be established in the Office. It will probably operate in conjunction with the Registrar-General who is responsible for recording births and deaths and with the Ministry of Health who are concerned with hospital and morbidity statistics generally.

90. The immediate requirement will be to fill the gap in birth and death records which at present cover less than 15% of the total population. No definite plans have yet been made, but it is desirable that additional registration areas should be set up on a sample basis and these will provide information on which population changes can be estimated until such time as the coverage of registration is complete.

91. It is also necessary that information on migratory movements across the land frontiers should be obtained. At the present time migration statistics cover only the arrivals and departures at sea and air ports.

DATA PROCESSING

92. By reason of the fact that the statistics office is closely associated with the processing of bulk data of many kinds it is likely to be concerned with the methods of mechanical processing which will be used in the future.

93. There is a growing awareness in Government and other organisations of the need for rapid and more complete processing of data. It is likely that punch card equipment will meet most requirements during the next few years, but eventually this equipment may be replaced by electronic machines of the computer type.

94. Arrangements are being made for a small working group consisting of representatives of government and other organisations concerned with the analysis of bulk information, to be set up to assess the probable needs of Ghana in respect of processing in the future and to examine the suitability of the equipment available.

RECRUITMENT AND TRAINING

95. In developing the statistical service it is necessary to consider the provision of professional statistical staff who will be needed in the future and the training of staff already in the Office.

96. At the present time, the University College produces economics graduates some of whom may be usefully absorbed in the statistical organisation, but no specialised training in statistics is yet available in Ghana.

97. There is an urgent need, therefore, to make special provision for the training of statistical recruits and it is suggested that the best means of doing this would be to send a number of selected candidates to overseas universities specialising in statistical qualifications immediately on completion of their secondary-school courses. This scheme would also be open to suitably
qualified officers already in Government service.

98. Prompt action in this direction could result in the provision of a number of graduates in statistics in three to four years' time. Allowing for some wastage during the training period the number of students should not be less than six. Interest in statistics as a career can be stimulated by talks given to students by senior staff of the Government Statistician's Office.

99. It would probably be desirable for selected candidates to be sent direct to London for their training. This would avoid the present tendency for students from Ghana to be at some disadvantage in comparison with British students through having to establish themselves in a new college in the middle of their training. This often results at present in the need for prolonging the course by one year.

100. The greater proportion of students trained in this way should take the B.Sc.(Economics) degree with statistics as a special subject, while the remainder would take the B.Sc. (Statistics) degree of London University. This would provide for a satisfactory balance between economic and mathematical statisticians.

101. Economics graduates appointed as Assistant Statisticians must be given more specialised statistical training after joining the Office. This can be done either by means of special courses arranged in conjunction with the University College or by making use of the training facilities offered by United Nations agencies and overseas governments. The possibilities in this direction will be carefully examined, but it must be appreciated that, with the rapid expansion of the work of the Office, it will be difficult to release officers for long periods of training in the immediate future. This factor underlines the importance of obtaining recruits with a specialised statistical background rather than economics graduates.

102. More general training, mainly in the form of appreciation courses and seminars, covering specific subjects, will be introduced for senior and executive staff as soon as possible. The aim will be to extend this training to other grades as the scheme develops. Such training must become an essential feature of the work of the Office as it is only by this means that the fullest use can be made of the man-power available.

RELATIONSHIP WITH OTHER ORGANISATIONS

103. Finally, it is necessary to mention the relationship between the statistics office and other organisations concerned with the use of the data which the office produces. Although a considerable amount of economic analysis in the form of national income, balance of payments and other estimates is undertaken, the principal function of the office is to provide the organisation needed for collecting basic statistical information. To ensure that the best use is made of the material available, it is necessary that a close relationship be established with all principal users of the data.

104. The work of the Office has, for many years, been associated with that of the University College and efforts are now being made to establish a closer co-ordination between these two organisations. The same applies to Government and other agencies concerned with specific subjects for which data can be obtained through the statistics office. Only if the ultimate users of data are continuously in a position to indicate their requirements and discuss methods can the optimum development of the office be achieved and the fullest use be made of the material obtained.
105. The Office of the Government Statistician functions as a
service under the Ministry of Finance and is the organisation respon-
sible for the preparation of official statistics in Ghana. Its develop-
ment must be considered in relation to the probable requirements in
respect of statistical information needed for administrative and plan-
ning purposes in the future. These requirements will increase as the
economic development of the country proceeds and it is now necessary
to consider the expansion of the existing statistical services.

106. Work to this end would appear to be best concentrated
in the following directions:

(a) The extension of the survey programme of the
Government Statistician's Office to Provide a
methodical continuing sample survey covering the
whole country. This would give information on
income and expenditure of households, both monetary
and in kind and would provide the means for obtain-
ing statistical information relating to all sections
of the general public to meet the needs of all users
of this type of data. The present lack of adequate
information about households forms the principal
difficulty in analysing the economic structure of the
country.

(b) The expansion of the coverage of information at
present being obtained from enterprises and a
thorough review of the returns used in collecting
this information. These returns should be supplemented
by sample surveys to give information on the activities
of small enterprises falling outside the scope of the
present returns. In particular it is necessary to
establish regular statistics of all industrial production.

(c) (a) and (b) above, imply the development of a
permanent Regional Statistical Organisation, based
on offices which are being provided during the
Second Development Plan. The speed with which this
organisation can be developed is dependent principally
on the availability of staff and funds.

(d) Development of public finance and banking statistics
in consultation with the Accountant-General, Banks
and other producers of the basic records. This may
involve some amendment to existing accounting and
reporting systems.

(e) The production of new publications covering financial
and general economic statistics, the establishment
of a Press Release Service for early figures and pro-
duction of publications designed to present statis-
tical data in simplified form. There is also the
possibility of undertaking the regular production
of a Directory of Enterprises and eventually a
Statistical Yearbook should be introduced.

(f) The collection of more complete information on pri-
ivate overseas capital transfers and other data
required for balance of payments estimates.

(g) The establishment of a Demographic Division in the
Office, following the 1960 Census of Population,
to meet future requirements in respect of population
statistics.
(h) The renewal of the existing punch card equipment in the Office during the course of the Second Development Plan.

(i) The recruitment of more Ghanaian professional staff and the establishment of training schemes designed to increase productivity in all grades.

(j) The development of a close relationship between the Government Statistician's Office, the University College and other organisations concerned with statistical information, to ensure that the best use is made of the material available and to facilitate the planning of new work.