A MINIMUM SYSTEM OF NATIONAL ACCOUNTS FOR USE BY AFRICAN COUNTRIES AND SOME RELATED PROBLEMS[1]

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I. INTRODUCTION

1. The issue of the draft revision of the U.N. System of National Accounts and Supporting Tables represents an important step towards reconciling differences in conceptual approach and definitions for national accounting as interpreted in the I.M.F. Balance of Payments Manual, the O.E.E.C. Standardized System of Accounts and the U.N. System and other related international statistical standards. The revised draft also incorporates a number of minor modifications and improvements designed to maintain or improve international comparability. What it does not do is to take adequate account of the requirements of less developed countries.

2. The object of this paper is to make a practical contribution towards the establishment of a minimum set of accounts for countries in Africa. The suggestions made therein are based on practical considerations as much as theoretical principles. It is in effect an attempt to present what is possibly the highest common denominator for African countries with some form of national accounts, bearing in mind the secondary object of encouraging countries who have not yet embarked on regular national income studies to aim at the compilation of a regular annual series. It is essentially an intermediate step towards the long-term adoption of the U.N. System itself and some suggestions are made on the priorities which might be adopted in moving towards this objective.

3. In the paper reference is made to a number of United Nations documents, brief details of which are given in footnotes. The full title of each document is given in an appendix. For convenience the United Nations System of National Accounts is referred to throughout as S.N.A. Reference is made to the original version, published in 1953, and to the revised draft, published in 1960.

[1] I wish to thank Mr. E. Osborn for helpful discussions during the preparation of this paper and for his assistance in editing the text and tables.

II. THE BASIC PROBLEM

4. The work of the national income statistician in many African countries today is seriously handicapped by an attempt to reconcile two basic requirements in his work. On the one hand there is an urgent need for an adequate and intelligible statistical framework with appropriate and meaningful methods of classification and presentation for domestic use in under-developed countries where, with relatively few exceptions, government officials, educational institutions and the Press are unfamiliar with the principles of national accounting, development planning and general economic planning. On the other hand there is a strong professional urge to adhere to basic principles which have nevertheless been interpreted and applied elsewhere in accordance with a strictly conventional set of rules based on theoretical concepts and official practice in Western Europe and the United States. Unfortunately, but understandably, it is the practice of these more advanced countries which has been accepted, almost without question, by international organizations as the standard form of reporting. For almost ten years the development of a simplified system of national accounts for under-developed countries and the compilation of a manual of methodology have been recommended for consideration, but little of practical value has so far emerged.

5. The cost of this omission, in resources, in those countries in Africa which have attempted to develop a set of national accounts is substantial. Visiting experts are succeeded by visiting experts until official statisticians take over, whilst the latter are also replaced from time to time. Each individual has endeavoured to apply his competent knowledge of basic principles to the peculiar problems of the country in question and what emerges? Within a limited period estimates for a given year can undergo such substantial revision that even the expert may find it difficult to disentangle the threads and it is asking too much of the administrator to expect him to find his way around this labyrinth and arrive at meaningful conclusions.

6. Improvements in statistical knowledge and coverage seldom account for such sweeping changes as have occurred in the magnitude of the principal aggregates, when compiled by competent practitioners. These changes stem in part, and, it is maintained for the most part, from changes in definitions,

demarcation of the boundaries of production, or methods of valuation. Changes of this nature have arisen largely because the present accepted standards for national accounting are quite inadequate in certain respects to meet the needs of countries in which non-monetary transactions play an important role and in which the treatment of certain transactions, of relatively minor importance in an advanced economy but a characteristic feature of a large number of undeveloped economies in Africa, may not always be clear, or for which there is no authoritative treatment.

7. What is required at this stage in the less-developed countries is an extension of the S.N.A. and not only a simplification of it, to take account of some of the special problems facing countries at different levels of economic development. In other words a wider and more flexible system designed, not just to meet the need for international comparability, but even more important, to meet the need for comparability over time for any one country and, also, to take account of the wide differences in the institutional framework and structure of society of countries in all stages of development.

8. It is the object of this paper to suggest a solution to a number of major problems which befog the issue at the preliminary stage of work on national accounts, to suggest some initial priorities, and finally to present a system of national accounts, which has worked in practice. It is not proposed to consider the practical methods which can be used and are, in fact, in everyday use for compiling the actual estimates. The composition of a manual on methodology would be a useful and rewarding enterprise for a group of African statisticians, advised and assisted by one or two practising statisticians from the more experienced countries. What is first required, however, is general agreement on basic definitions, on the delimitation of the production boundary, on methods of valuation and on a system of accounts which can be used as a framework within which all African countries could work.

9. The views which are expressed in this paper are not new or original. With one or two fundamental exceptions there is no intention of developing another variation of the United Nations System of National Accounts or of attempting to depart from the basic principles enumerated therein. On the contrary, it is recommended that, unless a radically new approach

can be proved to have exceptional advantages, the basic principles of the S.N.A. should be generally accepted both in the interests of international comparability and for the advantages to be gained from the pooling of experience of other countries.

III. CONCEPTS AND DEFINITIONS

10. Before considering a minimum framework of accounts for use in African countries it is proposed to examine some of the more important conceptual and definitive problems which frequently handicap the national income statistician in Africa in the early stages of his work.

11. *National, Domestic and Geographical Concepts.* – The main aggregates and accounts can be calculated in terms of the national, the domestic, geographical or territorial income, product or expenditure and even in terms of the taxable nation. What is too seldom made clear in national income studies is that these approaches are not necessarily mutually exclusive. It is too often stated in national income commentaries that 'The accounts of Countries A and B are based on a national concept and the accounts of countries C and D on a domestic concept'. Neither statement is necessarily true for every account nor even a correct statement of the basic approach, since the account may merely be published in the form considered of most use within the country in question. For example, the accounts of the Federation of Rhodesia and Nyasaland in general start with the domestic aggregate and give details of the adjustments to a national aggregate. On the other hand, in the table showing the distributive shares of the national income, income shares have of necessity to be calculated in terms of domestic aggregates as income shares are presented before the transfer of interest and dividends.

12. The geographical product may be defined as the product of all producers within the geographical boundaries of a country, the domestic product as the product of all resident producers, and the national product as the product attributable to factors of production supplied by normal residents.

13. This distinction between the geographical and the domestic product really reflects an improvement in definitions. In the past these two aggregates have tended to be treated as identical and the net factor income involved has either been ignored or included in the domestic product, as convenient.

14. The difference between geographical product and domestic product is, briefly, the addition of the product of resident producers located abroad less the product of non-resident producers located within the geographical boundaries of the country. Resident producers located abroad include ships and aircraft operated abroad by domestic carriers, domestic government agencies and missions abroad and travelling salesmen, whilst non-resident producers within the geographical boundaries of the given country will include ships and aircraft operated by foreign carriers, foreign government agencies and missions, international agencies and travelling salesmen.

15. The difference between the domestic product and the national product is equal to net factor income from the rest of the world, or the factor income of residents embodied in the product of non-residents less the factor income of non-residents embodied in the product of residents.

16. Factor income received from the rest of the world includes factor income received by residents from non-residents operating in the geographical territory. This element of factor income from non-residents, although by definition part of both geographical and national products, does not contribute to the domestic product. In practice, therefore, the omission of estimates of the product of non-resident producers in the geographical territory will affect the accuracy of the definition of geographical and national products, but not that of the domestic product. On the other hand, the omission of estimates of the product of resident producers abroad will affect the accuracy of the domestic and national products, but not that of the geographical product.

17. The importance of the transactions of these agents will vary from country to country and will seldom be altogether insignificant, especially from a balance of payments point of view. In practice, however, it is likely that African countries will find it more convenient to compile their first estimates in terms of the geographical product rather than the domestic product, mainly because the identification and estimation of the transactions of resident producers located abroad and non-resident producers located within the geographical boundary present special practical problems. The minor improvements to be gained, bearing in mind the overall accuracy of the estimates, are, in the early stages, just not worth the time and effort involved.

18. Many countries, and especially those which form part of a customs union, federation or confederation will find it extremely difficult to calculate all aggregates in domestic or in national terms; on the other hand, it may well be that some flows, such as migrant workers' earnings, are of such significance that they should be identified either in the main accounts or in supplementary tables, even where a rest of the world account is not available.

19. African countries may find, therefore, that the geographical aggregate is more precise, possibly more useful, or even more expedient in the light of the work involved in extending the system to a domestic basis as well as a national basis.

20. It is therefore suggested that the relationship between the geographical, domestic and national aggregates should be made explicit in either the main or supplementary tables and that the minimum tables should be permissible in terms of any of these three concepts.

21. *Residence.* – In order to derive the national aggregates it is necessary to estimate factor income received from and paid abroad. The definition of residence, in terms of which such transactions are estimated, is seldom simple to draw up or to apply in practice. Three main categories of factor income may be distinguished. Profits of branches, subsidiaries and associated companies, other investment (portfolio) income, and workers' earnings. In practice there is relatively little difficulty in distinguishing the profits of branches of external companies operating in the country under consideration, and the total of these profits, net of provision for depreciation and tax, should be credited to the parent concern. Similar information can usually be obtained in respect of foreign branches of domestic companies, as these are relatively few in number and usually well known. The identification of domestic subsidiaries and associated companies of foreign parent companies, however, presents a formidable task. The definition of a subsidiary is usually based on (i) the extent of the controlling interest of a parent company in terms of holdings of 50 per cent or more of equity share capital or (ii) control of the composition of the board of directors. The definitions may be extended to include companies where effective control of the management is concentrated in the hands of a single holder, or organized group of holders, by virtue of, say, a holding of 25 per cent or more of equity

capital, the remainder of which is dispersed over a large number of unorganized individual shareholders. The definition of association is even more indeterminate – an associated company is usually defined as one in which an external company has a share-holding which it regards as a business interest or 'trade investment'.

22. Quite apart from the difficulties inherent in the application of such definitions, it is virtually impossible for any country in the early stages of development of a balance of payments and national accounts to investigate the ownership of domestic concerns. This is itself a highly specialized study, and it requires a great deal of information on the ownership and control of domestic companies, which they are strongly opposed to disclosing until they have become accustomed to providing a great deal of less 'confidential' information. It is suggested that whilst recognizing the ultimate objective, the distribution of interest, dividends and profits of domestic companies should be taken as a whole, and classified under portfolio investment income in the balance of payments, until such time as detailed studies can be undertaken for the estimation of the undistributed profits of subsidiaries and associated companies.

23. The identification of other (portfolio) investment income is usually based on direct returns and the information will be available either in whole, or in part, or not at all, depending on the extent to which statistical returns can be obtained from domestic companies.

24. The definition of a resident in the case of individuals is usually simple and determined by the normal place of domicile for a given period, usually of twelve months. In most African countries, however, there is a problem of the expatriate employees, of Civil Servants of metropolitan governments, and even more important that of African migrant workers. The treatment of the first two groups is adequately treated elsewhere. African migrant workers present special problems. They may be and frequently are domiciled for many years in countries in which they are treated as 'de jure' non-residents. Alternatively they may still be subject to tax by their native country on earnings in the country of employment. In either case the normal definition of residence would need to be extended to include workers abroad who may be treated, legally or administratively, as residents of their native territory, irrespective of the period of absence.

25. It is not possible to lay down a simple working rule where the period of domicile in a 'foreign' country is in excess of the conventional twelve months. The collection of tax by the government of the country of 'de jure' residence would serve as a criterion where tax is, in fact, collected on the earnings of residents working in a foreign country, but this will usually depend on the existence of special administrative arrangements. In other cases there may be recognized and approved or official methods of recruitment and repatriation on termination of a contract of two or three years. Unfortunately a large number of the workers affected may not travel under approved arrangements and of these a number may reside more or less permanently in a foreign country with or without 'de jure' recognition.

26. Where this problem exists it would be useful for countries to exchange information on the 'de jure' position of such workers and, where appropriate, data on numbers, average earnings, average expenditure and remittances, etc.

27. The size of movements of migrant workers will usually determine what efforts should be made to deal with this problem, but there is little doubt that in West Africa, the Sudan and Southern Africa the social and economic significance of these movements are such that provision should be made for the economic transactions to be reflected in the national accounts of individual countries on a comparable basis.

28. *Provision for Consumption of Fixed Capital.* – The difficulty of measuring provisions for consumption of fixed capital in advanced countries is well known. In less-developed territories the problem is even more difficult. Mining plays a very important role in a large number of African countries and the practice of mines in providing for depreciation differs significantly from that adopted in any other industry, whilst agriculture is largely in the hands of unincorporated enterprises which seldom make adequate provision for depreciation. Furthermore, income-tax allowances are usually determined in the light of a definite and frequently selective policy for encouraging industry. Reliable estimates of provisions for the consumption of fixed capital are therefore almost entirely out of the question during the early stages of development of national accounting, as the statistical data from which such estimates could be derived on a more objective basis by government statistical offices are not available.

29. In order to improve the accuracy of the estimates of profits for use in the national accounts, some countries may be compelled, at an early stage, to examine and take account of the practice of enterprises in drawing up their accounts and of income-tax authorities in determining taxable income.

30. In Ghana, for example, the income-tax authorities make available statistics of taxable income before capital allowances are deducted and the problem is then mainly one of compiling comparable estimates of profits for the later years for which income-tax statistics are not available.

31. In the Federation of Rhodesia and Nyasaland, however, taxable income is calculated and recorded after approved capital allowances, etc., have been deducted and the problem of estimating capital allowances in order to obtain a more reliable figure of operating profits before the deduction of capital allowances cannot be avoided. In both countries, however, neither capital allowances approved by the income-tax authorities nor the financial provision of enterprises give anything like a reasonable estimate of provision for consumption of fixed capital.

32. International organizations, metropolitan governments and students of African economies, whilst recognizing that reasonable estimates of this aggregate are virtually impossible of achievement in any form until national accounts and statistics of national capital are in general fairly well established, nevertheless imply, in their recommendations and exhortations, that estimates of this aggregate should figure high in the list of priorities. It is suggested, however, that provision for this item should be omitted from the minimum set of accounts.

33. *Non-monetary or Subsistence Transactions.* – In most African countries non-monetary transactions of households in the rural sector play a dominant role and the importance of this element of the domestic product cannot be overstressed, although the actual magnitude of the aggregate value of subsistence output may not, of itself, be of prime importance in policy-making in the short run. For long-term development, however, and for an adequate assessment of the needs of the population, changes in the structure of the economy, and its rates of growth, a great deal needs to be known about the activities of the rural sector.

34. Even in developed countries the treatment of non-monetary transactions is far from satisfactory, since, as economies develop, activities formerly carried out by households

are increasingly performed on a commercial basis and only at this point are they normally included in the national product. As a result measures of growth tend to have an inherent upward bias. For underdeveloped countries adherence to existing principles are not only likely to result in measures subject to some bias, but may well seriously distort any conclusions as to advances in welfare.

35. It is not proposed to attempt to develop in this paper techniques for using national accounts in underdeveloped countries, but it is obvious that any new techniques of special application to countries at varying stages of development will seek to take account of the changing proportion of traded to untraded output and changes in the resources engaged in each type of activity. Studies of this nature might be made in terms of physical flows or more comprehensively in real value terms.

36. It is doubtful whether any criteria for the inclusion of various elements of subsistence production will be entirely satisfactory. From a national accounting point of view it is useful to examine subsistence production under five headings:

(i) Agriculture, forestry and fishing;
(ii) Building, construction and land works by households;
(iii) Processing, storage, transportation and distribution of own primary products;
(iv) Processing of goods purchased;
(v) Other household services.

37. The Report of the Working Group on the Treatment of Non-Monetary (Subsistence) Transactions within the Framework of National Accounts, which was convened by the Economic Commission for Africa in June 1960, recommended that the production of all primary products, whether for sale, auto-consumption or auto-investment, and own account construction, by rural households [1] should be included within the production boundary and considered that statistical resources should not be devoted at this stage to the other elements in the subsistence aggregate such as household services.

[1] 'The rural household sector should comprise all households, as opposed to large-scale enterprises, engaged in farming, forestry or fishing, located in rural areas, that is, areas outside the limits of towns and cities, of a size and nature to be determined by reference to local conditions. The sector would not include rural households whose principal activities are non-primary.' Paragraph 37 of the Report; see Appendix II, item 11.

38. A further extract[1] from the Report reads as follows: 'The Working Group examined the possible methods of valuation in national accounts and noted that a number could be used depending on the purpose to which the accounts were put. It recommends that producer or retail prices should be used, the choice depending on whether the emphasis is on the measurement of product or on welfare comparisons between different sectors of the economy. Furthermore, it considers that where valuation is by means of retail prices the imputed valuation of services[2] should be distinguished.'

39. It is considered by the author that quite apart from the theoretical grounds for valuation at retail prices, examined elsewhere,[3] there are also important practical reasons why the value at retail prices of consumption from own production should be included within the framework of the accounts.

40. In paragraph 34 attention has been drawn to the fact that as economies develop activities formerly carried out by households are increasingly performed on a commercial basis, and that, furthermore, if at this point only they are included in the national product any resulting measures of growth will have an inherent upward bias. A similar criticism applies if production for own consumption valued at producer prices is included in the national product whilst the actual value added by rural households is omitted.

41. As the process of specialization and division of labour develops, the activities of rural households in processing and handling primary produce for own consumption will inevitably be performed to an increasing extent on a commercial basis. In the Federation of Rhodesia and Nyasaland this value added by rural households is estimated at £38 million in 1959 or 7½ per cent of the gross domestic product. If in ten years' time half of this contribution to the domestic product has ceased to be made by rural households, but is then made on a cash basis, is it reasonable to represent that the gross domestic product at constant prices has been increased, on this account alone, by £19 million? In

[1] Paragraph 43 of the report; see Appendix II, item 11.

[2] In this context the 'imputed valuation of services' represents the difference between production for own consumption valued at producer prices (ex farm), excluding increases in stocks, and production for own consumption valued, in its most processed form, at retail prices. The difference in the two aggregates therefore represents an approximation to the value added in the processing, storage, transportation and distribution of own primary products.

[3] See Appendix II, item 12 (Chapter IV).

many other countries in Africa the ratio between non-monetary transactions and the gross domestic product will be very much higher and the conclusions to be drawn even more distorted.

42. For international comparisons, which will be made despite their technical limitations and, much more important, for inter-regional comparisons within the same country, the lack of comparability due to the different stages of development of the exchange economy reached in individual countries or regions will seriously limit the usefulness of any comparisons of growth or welfare.

43. Finally, however good the statistical methods of estimation, it is doubtful whether the boundary between traded and untraded production and/or consumption can ever be precisely estimated in the short run. Statistical resources and methods are not adequate enough to measure reliably on an annual basis the volume of goods which are purchased for cash before consumption and the volume of goods which are consumed from own production, within the rural household. All estimates of this nature would need to be based on field surveys, and experience has shown that for the results to be at all reasonable, information on production, cash sales, cash purchases and consumption of own produce must be made on a day-to-day basis, involving recourse to intensive studies on a relatively small scale rather than large-scale inquiries on a more representative basis. Adequate coverage in the estimates of cash transactions is therefore likely to be conditional on the inclusion of non-monetary transactions and both would need to have a common basis of valuation.

44. It is therefore considered that if estimates of the producer value of production retained for own consumption are to be included within the framework of national accounts, then estimates of the value of consumption at retail prices should also be included.

45. The inclusion within the production boundary of total output of primary commodities valued at producer prices, together with own account rural construction valued at cost is in line with U.N. recommendations. The valuation of consumption from own production at retail prices would also bring within the production boundary the value added by rural households in the processing, storage, transportation and distribution of own primary production.

46. For the groups (iv) and (v) of paragraph 36, which have been omitted, namely the 'processing of goods purchased', and 'other household services', the problems of measurement and valuation, especially where there are no corresponding exchange transactions in these activities, appear to be insurmountable, whilst the theoretical grounds for their inclusion are less clear. It can be maintained that the processing within the household of purchased goods is just as likely to become a commercial activity as the processing of primary produce for own consumption. On the other hand the activities of a rural household, as defined by the Working Group,[1] in the processing of goods purchased, are likely to be relatively small and for purely household use, and probably no larger than the comparable activities of urban households which are excluded from the production boundary. Production which is primarily for sale is already included by definition.

47. For similar reasons it is considered that 'other household services' which would include such activities as 'water carrying', hairdressing, and the remaining intra-household services of the housewife, should be excluded. The main activities of the housewife would be included in the value added by 'rural household services' and any attempt to evaluate the remaining services would involve the inclusion of a large number of para-economic activities with little or no parallel in the exchange economy.

48. It is therefore suggested that,

(i) the output of primary commodities, whether for sale or own consumption, and own account construction, should be included within the production boundary, together with the processing, storage, transportation and distribution of that part of output retained for own consumption;

(ii) the output of primary commodities, whether for sale or own consumption, should be valued at the price obtained by the farmer for that part of output which is sold;

(iii) own account rural construction should be imputed at cost, and

(iv) the value added in processing, storage, transportation and distribution of that part of production retained for own consumption by rural households should be equated with the difference between the valuation at producer

[1] See Appendix II, item 11 (paragraph 37).

prices and the valuation, in processed[2] form, at retail prices.

49. It will be readily accepted that the value added by rural household services in processing, storage, transportation and distribution, evaluated in this way, cannot be attributed to any existing industrial sector and that it should be shown separately throughout the accounts.

50. *Factor Incomes and Transfer Incomes.* – Factor incomes are the remuneration, in the form of employment income, rent, interest and profits, for the services provided by labour, land, capital and entrepreneurship respectively, used in the current production of goods and services. The total of factor incomes measures the factor cost incurred in producing the aggregate output. The national income is thus the total income accruing to factors of production supplied by residents.

51. Other forms of income, for example, retirement pensions, scholarship awards, sickness benefits and private gifts, cannot be regarded as a return for current services to production; they are paid out of factor incomes by means of taxes, medical aid benefits or by gifts and are described as transfer incomes in the hands of the recipients or transfer payments when paid out. Transfer incomes, being a payment out of factor incomes, are not included in the national or domestic income.

52. The S.N.A. provides for the following income shares to be shown separately:

(i) Compensation of employees.
(ii) Income from unincorporated enterprise.
(iii) Income from property, comprising rent, interest and dividends received by households, and corporate transfer payments.
(iv) Savings of corporations.
(v) Direct taxes on corporations.
(vi) Government income from property and entrepreneurship, comprising profits of government enterprise, net rent and interest and dividends.
(vii) *Less:* Interest on public debt.
(viii) *Less:* Interest on consumer debt.

[2] The valuation of consumption at retail prices should be based on the amounts available for consumption, due allowance being made for wastage, loss in processing, etc., in terms of the units of quantity normally purchased on the open market, and not necessarily the most processed form.

53. Interest and dividend payments and corporate transfer payments are seldom readily available from normal sources of information in underdeveloped countries. They require special research, the amounts involved may or may not be significant, and the resulting estimates may be subject to quite large margins of error. Similarly, even when the gross amounts involved are identifiable, there remains the further problem of allocating total receipts and payments within sectors and between sectors, an exercise requiring a detailed statistical analysis of the holders of government debt, and company capital and the nature of personal debt, etc.

54. These particular income payments are susceptible of alternative treatment, either as a factor income or as a transfer income. In the former case the national income would show the separate factor income shares, the share of corporate bodies being the undistributed profits or saving of corporations. In the second case, the whole of the profits of enterprises would be shown as factor income, before the receipt or payment of interest and dividends, the latter being treated as a transfer payment.

55. In this form of presentation the relevant income shares would be as follows:

(i) Compensation of employees.
(ii) Income from unincorporated enterprises.
(iii) Income from property, excluding interest and dividends and other corporate transfer payments.
(iv) Gross operating profits of corporations.
(v) General government income from property and entrepreneurship, excluding interest and dividends.
(vi) *Less:* Net factor income paid to the rest of the world.

56. The basic weakness of this approach is, of course, the implicit allocation to the corporate and general government sectors respectively of that element of household saving which arises from net interest and dividend payments to households. This is unavoidable. On the other hand, the aggregation of national income in this way is definitely simpler and more straightforward where detailed information on interest and dividend payments is not readily available or is incomplete. There is, of course, no reason why the saving of corporations and of households should not be correctly calculated in the

sector appropriation account as the necessary information becomes available.

57. In this approach there is also no need to attempt to allocate the total of public debt interest by recipient, as the payment and receipt of such interest need not be brought into the calculation at all, except in the aggregate of net factor income paid to the rest of the world.

58. It is suggested that this method of presentation should be adopted in the initial stages subject to the qualifications made below.

59. *Consumer Debt Interest and Public Debt Interest.* – Only one country in Africa at present attempts to estimate consumer debt interest and it is suggested that this item be entirely omitted from the accounts in the initial stages.

60. The treatment of public debt interest like a transfer in the S.N.A. gives rise to an inconsistency, since in deriving the national income aggregate public debt interest paid abroad is deducted from domestic product, although public debt interest has been treated as a transfer and has not been included in domestic product.

61. A number of alternative proposals were suggested in the proposals [1] for the revision of S.N.A.:

(*a*) By introducing a category of current international transfers the treatment of interest on the public debt as a transfer could be consistently implemented. A minor modification of this proposal is to treat interest on the public debt 'like' a transfer and maintain a separate category specifically for these transactions. . . . This procedure involves the definition of national income as excluding all public debt interest received, both domestic and foreign.

(*b*) Interest on the public debt could be treated consistently as a payment for a factor service and so included in the national income. The application of this proposal would imply the inclusion of all payments of such interest in general government consumption expenditure, while Account 2, item 2.7 (in the existing S.N.A. tables) would be eliminated.

(*c*) The existing distinction in the accounts (of S.N.A.) between interest paid domestically and interest paid

[1] U.N. document E/CN.3/L.44, paragraph 39; see Appendix II, item 9.

abroad could be preserved and implemented consistently. Interest paid domestically would be specified separately in Account 5 and again as a deduction replacing the present flow 2.7 in Account 2; interest paid abroad, being regarded as a payment for a factor service, would be included as part of general government consumption expenditure.

62. No agreement was reached on any of these proposals, although there was general agreement that interest on the public debt should be treated as a factor payment in the balance of payments and the rest of the world account.

63. What is perhaps of most significance for countries in Africa is that whatever the treatment that is followed, it should ensure that changes in the method of financing development, and especially in financing public enterprises, and changes in the importance of public enterprises, should not lead to interest payments for similar activities being classified initially as a factor payment and subsequently as a non-factor payment.

64. In African countries where the main source of loan funds is external, at least in the early stages of development, debt interest would be treated initially as a factor payment abroad. As government borrowing from domestic sources developed and replaced external funds, at least in part, interest payments on internal debt would be treated, under the present S.N.A. treatment, as a transfer or non-factor service.

65. Again, this implies that the factor service derived from a loan is related to the residence of the holder, which leads to the extraordinary result that from the moment a government security is sold by a resident to a non-resident the loan is to be regarded as providing a service, and not before. Surely, if a loan provides a service, it provides it irrespective of the residence of the lender. Of the other two proposals preference is given to the second, namely that debt interest be treated consistently throughout the accounts as a return for factor services.

66. It is consistent with the general agreement amongst countries that interest on the public debt should be treated as a factor payment in the balance of payments and rest of the world account and accords with the facts of the capital market that a *quid pro quo* is given for the interest.

67. Without, in any way, wishing to legislate on what decision ought to be taken on the appropriate treatment of debt

interest in S.N.A., it is considered that the general nature of public debt in African countries is such that governments obtain a service from their loans.

68. The advocates of the present treatment recognize that, where public debt has been incurred to finance the creation of real assets, an interest charge should be imputed in the cost of government current consumption with a counterpart in government income from property and entrepreneurship and, conceptually, in the social product. To the extent, therefore, that it can be maintained that African countries do not, in general, borrow to finance current expenditure or a deficit, or to finance military expenditure, it would be possible to treat all or the greater part of government borrowing as if it had been embodied in real assets. If, after investigation, this is found to be a reasonable statement of the position it is suggested that all government debt interest whether paid at home or abroad, should be treated as a factor payment.

69. In the amended form of presentation of the relevant income shares suggested in paragraph 55 above, an additional item would be required: 'interest on public debt,' since this would now become a payment for factor services which, at least in the initial stages of national accounting, it would be difficult to allocate between households, corporations and the rest of the world. The total would include the income payment to non-residents corresponding to the adjustment of interest payments included in net factor income paid to the rest of the world, when this element has been identified.

70. *Classification of Transfers.* – In the original version of the S.N.A. all international transfers were treated *for convenience* as capital transfers. Recognizing that there is nevertheless a large volume of current international transfers, provision was made in the revised edition for current and capital transfers to be distinguished.

71. The application of the term 'capital' to any group of 'transfers' is misleading and the distinction between capital and current transfers is not capable of precise definition. Furthermore, the treatment of capital transfers as transactions between capital accounts conflicts with the general practice of governments, enterprises and individuals, who usually charge all transfers to current expenditure, capital transactions being restricted to the creation of assets/liabilities.

72. In the long run, with the development of national balance sheets and the integration of a financial flows analysis into the national accounts, it is more than likely that this purely arbitrary distinction will fall away.

73. In this paper, however, the problem of immediate concern is the development of a simple set of accounts which, whilst adhering to the fundamental principles of national accounting, should take account of the practical problems of compilation.

74. In general, little or no distinction is made between current and capital transfers in the government accounts of a large number of African countries. Governments and enterprises normally treat all payments as charges against current revenue. A major item in a number of British territories is the receipt of Colonial and Development and Welfare grants; these grants are seldom clearly identified in government accounts as current or capital and they are frequently joint projects with recurrent commitments.

75. It has been claimed as a reason for treating international transfers as capital transfers that a considerable part of the international transfers of the private sector are capital transfers. This is extremely difficult to accept as correct in its African context. Even migrants' capital, to which it is assumed that this claim must refer, is used in large part for the finance of current expenditure and the purchase of durable goods, whilst remittances in cash and kind can hardly be treated as other than current transfers.

76. On the grounds that

(i) the distinction between current and capital transfers is arbitrary;
(ii) transfers, whether between domestic sectors or between domestic sectors and the rest of the world, are seldom clearly identifiable as current or capital transfers;
(iii) transfers are, in general, treated as a charge against current revenue, and are seldom if ever brought to account, in normal practice, in a balance sheet; and
(iv) there is a great deal to be gained in simplicity if the identity of 'savings', 'surplus on current account', and 'net investment' is maintained;

it is suggested that all transfers should be treated as current transfers.

77. *Pensions Funds.* – The revised treatment of pension funds, both private and governmental, provides for the inclusion of such funds as part of households and private non-profit institutions sector. Guidance on the practical application of this treatment is urgently needed. The proposal states [1] . . . 'In the case of contributory schemes, the contributions of both employers and employees would be considered part of wages and salaries, and premium payments and pension receipts would not appear explicitly, constituting internal transactions of the households and non-profit institutions sector. Investment income of the funds would appear as part of income from property of households and non-profit institutions, while administration costs would appear as part of private consumption expenditure. In the case of non-contributory schemes the imputed contributions of employers would appear as part of wages and salaries, while the excess of imputed contributions by employers *plus* imputed investment income over actual pension payments *plus* costs of administration would constitute borrowing from the households sector by employers. The magnitude of these imputed contributions would be determined by comparison with the actual contributions paid in the case of schemes with similar pension rights.' This is all very well in theory and it may even be possible in practice to treat government contributory pension schemes for government employees in this way, but how does one set about imputing the contribution of employers and the investment income from non-existent funds in an economy where provision for social security and provident funds is still in its infancy?

78. In the majority of African countries no information whatever is available on private pension funds and it could only be obtained by special enquiries. Even if this obstacle could be overcome in the course of time, there still remains the problem of imputing transactions for non-contributory schemes.

79. All that can be done in the first instance is to include in the household sector the transactions of government and any other known contributory schemes and to treat all other identifiable pension payments as transfers.

80. *Export Duties.* – The distinction between indirect taxes and direct taxes as transfers is derived from the fact that indirect taxes influence relative market prices and have the effect

[1] U.N. document E/CN.3/L.44, paragraph 20; see Appendix II, item 9.

of raising market prices above the factor costs of production, whilst direct taxes influence the distribution of factor incomes.

81. In the case of exports the world market price is, except under monopolistic conditions, determined by the interplay of supply and demand in the world market and not by the domestic government's decision as to the nature and extent of any export duties. Given a world market price an export duty has the same effect as an income tax by transferring part of the net proceeds from producers to government.

82. Whilst the special problem of export duties has been recognized for many years there is still a lack of official or international agreement that export duties should be treated as a direct tax, and it is suggested that official recognition of this principle should be obtained. It should apply only to export duties on commodities which are subject to price determination in the world market.

IV. OTHER RELATED PROBLEMS

83. One of the objects of this paper is to draw attention to problems which need consideration and on which general agreement must be reached before a minimum set of national accounts can usefully be drawn up for use in African countries. Where possible a solution has been suggested, but in the sections of this chapter which deal with government accounts, capital formation, the balance of payments, and national accounts at constant prices, there remain a large number of issues with which it is not possible to deal adequately in the compass of a single paper of this nature. The object in this case has been to examine the problems of more immediate relevance and merely to draw attention to others of a more fundamental nature which should be made the subject of joint consultation and further study in the near future.

84. *Government Accounts.* – One very important aspect of national accounting work, which in Africa has only recently begun to receive the attention it merits, is the economic and functional analysis of government accounts.

85. The importance of the part being played by government in nearly all African countries is beyond question. Government policy may be made effective not only through fiscal and monetary measures, but also through comprehensive development

programmes, the establishment of government enterprises and of public corporations, or by means of participation in private enterprise, in all cases supplemented by an increasing degree of government responsibility, both financial, administrative and regulatory in such fields as education, health and housing. Whilst national accounting needs tend to lend some impetus to the development of an economic analysis of government accounts, this all too often stops at the main accounts of the central government and in relatively few cases has it embraced a functional analysis.

86. The United Nations' Manual for Economic and Functional Classification of Government Transactions gives a very thorough treatment of most aspects of the classification of government accounts and it should prove to be a valuable guide for those countries which envisage a radical reorganization of their government accounts.

87. For African countries, however, the manual has a number of important limitations:

(i) it is too long and detailed;
(ii) it does not give sufficient attention to the practical difficulties of extracting all the detail provided for or indicate the reasons behind provision for so much detail;
(iii) it has tended to establish an optimum analysis to meet a wide range of contingencies rather than to indicate minimum requirements;
(iv) it is designed more from the point of view of a radical reorganization of methods of government accounting and classification than as an alternative classification of existing data;
(v) the imputed transactions incorporated in the classification are likely to give rise to serious practical problems which have not yet been overcome in more advanced territories;
(vi) it tends to overlook the special features of economies based on different economic and social structures;
(vii) insufficient attention is given to the problem of book entries and inter-fund transfers which are an annoying feature of government accounts in many countries in Africa;

(viii) there are a number of departures from S.N.A. in the concept of a government sector and in the classification of expenditure, and

(ix) both the economic and functional classifications require further consideration.

88. More specific points are, briefly:

(i) the manual includes trading and productive activities of government enterprises with general government in the government sector, although the S.N.A. approach is followed in the consolidated current account;

(ii) capital formation by government enterprises is included in general government capital formation, although under separate headings;

(iii) the functional classification provides for the classification of related administrative expenditure in the functional groups and not under the general heading of general administration;

(iv) the classification of pension funds in the household sector does not appear to have been adhered to;

(v) the groups 'other social services' and 'other community services' appear to be too wide and heterogeneous; for example, housing is included in the former, whilst a number of large scale integrated development projects would be classified under the latter;

(vi) the distinction between economic services and community services is a useful one, but it is doubtful whether this will commend itself to many countries;

(vii) the implication that the transactions of general government agencies and even of government enterprises should be converted from a cash basis to an accruals basis appears to ignore completely the practical problems involved.

89. Despite these limitations the manual makes a valuable contribution to the problem of classification of government transactions, but as a practical guide for the use of statisticans working on the subject it possibly presents as many problems as it solves, largely due to its detailed approach and complexity.

90. It is suggested in Chapter V that the general government account should be one of the first priorities in developing a minimum set of national accounts, and the few statisticians

available in Africa to work on this subject cannot afford to disperse their efforts in exploratory studies.

91. Having once adopted a system of classification this should be final, especially in a field where the facts are mainly available. Early agreement on a minimum economic and functional classification is therefore important if resources are not to be wasted.

92. Whilst a number of governments in Africa are about to change or have recently changed their system of accounting primarily to reflect changes in constitutional practice and ministerial responsibility, few, if any, have considered departing from the main principles of accounting already in use. It is therefore suggested that the immediate need is for a statement of principles and a simplified classification based on the fact that the statistician will normally remain responsible for providing the alternative classification.

93. It will be sufficient in this paper to draw attention to:

(i) the need for the general government account to incorporate the activities of ancillary agencies and financially integrated enterprises, such as sinking funds, savings banks, public works organizations, government enterprises, etc., and the innumerable extra-budgetary funds which have been established for specific purposes, if a true account of government activities is to be obtained, and

(ii) the fact that the form in which the consolidation of these accounts is required for national accounting will differ from the form in which government expenditure would be consolidated to obtain an overall analysis capable of showing the impact of government activities on the rest of the economy or of revealing the full nature and extent of government's claims on resources, or the relative share of government expenditure allocated to particular end uses.

94. *Capital Formation.* – The concepts and definitions to be followed in compiling estimates of capital formation are adequately dealt with in the U.N. document 'Concepts and Definitions of Capital Formation', and reference should also be made to the comments on existing practices and the suggestions for improvements contained in the U.N. Memorandum, 'The

Measurement of Gross Domestic Capital Formation in Underdeveloped Countries'.

95. The advantages and disadvantages of the various methods of estimation are examined in some detail and the limitations of the expenditure approach in African countries have been recognized. There is little doubt that for an adequte coverage and classification by industry and for short-period information and forecasts of capital formation in the government sector and more particularly in the 'corporate' private enterprise sector the expenditure approach is essential. On the other hand, it is extremely doubtful whether adequate estimates of total capital formation can be compiled without recourse to estimates based on production and imports in the case of plant, machinery and equipment, and, in the case of construction, to the input of labour and materials. Unfortunately the production approach gives rise to the difficult problem of eliminating expenditure on repairs and maintenance. In this connection it might be useful for African countries to examine the advantages and disadvantages of adopting the gross-gross concept of capital formation, especially in view of the relative absence of adequate maintenance in the strict sense and the extent to which repair work is likely to be of a nature which will extend the life of the asset or raise its productivity.

96. The importance of estimates of agricultural investment and own account construction, especially in the rural sector, is only equalled by the difficulty of compiling such estimates. Even when the importance of this type of capital formation has been recognized the efforts to fill the gap have seldom been successful. There is therefore a real need to develop sample survey and other special techniques in this field.

97. An analysis of capital formation distinguishing import content and domestic production is likely to prove of considerable value as a measure of the success of capital and other development expenditure in expanding productive capacity, and it is suggested that provision for such an analysis should be made in the supplementary tables.

98. *Balance of Payments.* – The balance of payments is usually the source of data for the rest of the world account.

99. The I.M.F. Manual on the Balance of Payments first published in 1950 has now been circulated in a revised form, February 1960. The reconciliation of the former manual and the

S.N.A. has gone a long way to remove many of the minor but annoying inconsistencies of definition and treatment, although a few still remain.

100. There still remain significant differences in structure, especially in connection with factor income, and the rearrangement of information required for the detailed rest of the world account is not always straightforward. On the other hand, the compilation of the capital account in terms of changes in assets and liabilities has certain advantages which could usefully be incorporated in the S.N.A. For example, the financing of capital formation would have a great deal more meaning for purposes of analysis and policy formation if 'net borrowing from abroad' were replaced by (*a*) net change in assets abroad, and (*b*) net change in liabilities to the rest of the world, or net change in investment by the rest of the world. For those countries with substantial external balances subject to quite marked annual changes the aggregate net borrowing from the rest of the world is apt to be misleading, especially as the S.N.A. accounts do not reveal this information at all.

101. The layout of the revised draft manual does not make for easy reference and a number of subjects of special interest in Africa are now omitted or passed over perfunctorily. There is, for example, a minimum reference to the treatment of migrants' effects, remittances and capital. The notes on the tables are also isolated from the individual tables and are not easily referred to.

102. Apart from the limitations of what might be termed the physical presentation of the report the manual does expand on basic definitions in a useful way, but notes to individual items are still not always comprehensive enough to be of value even to those familiar with the general principles.

103. For underdeveloped territories, however, the I.M.F. recommendations are too detailed and the work involved in compiling a balance of payments in accordance with the detailed requirements of the I.M.F. tables is far from commensurate with the value of the detailed information itself and the uses to which it can be put. With recent progress towards a multilateral system of trade and growing convertibility of currencies, a regional classification has also become of much less value. The requirements of real flows analysis, plus details of multilateral settlements and a regional classification, are far beyond

the scope of countries who can only spare one statistician for work on the subject for a very limited period each year.

104. Once again a sense of realism is needed in making recommendations for general use and a very much simplified approach for use in underdeveloped countries is overdue. This subject cannot be examined in this paper, but it should feature high in any statistical programme for the Economic Commission for Africa.

105. *National Accounts at Constant Prices.* – Whilst there is general agreement on the usefulness of constant-price series, it is doubtful whether a fully articulated system of accounts at constant prices is necessary in most African countries and it is certainly not possible for the majority of countries in the immediate future. It is suggested that priority should be given to measuring in constant prices –

(i) capital formation;
(ii) personal consumption;
(iii) consumption from own production by rural households;
(iv) exports and imports, and
(v) the gains or losses from changes in the terms of trade,

in that order. Measurement at constant prices by deflating capital formation, private consumption or consumption from own production with an overall retail or wholesale price index has little point, as there is little or nothing to be gained from a study of the resulting series. The main objective should, it is suggested, be the deflation of individual commodity groups.

106. Until countries have developed their national accounts well beyond the stage of the simplified system envisaged in this paper it is suggested that constant-price series should be restricted to the more important series listed above and that such estimates should be built up from individual commodity series.

107. Constant-prices series are usually presented in terms of a base year and it is not always apparent whether aggregates have, in fact, been calculated directly in terms of the base year or initially in terms of the previous year and subsequently linked to form a series for successive years. Whilst there is a great deal to be said, even in advanced economies, for the second method, in African countries where rapid changes take place in the nature of expenditure, the relative importance of

individual groups, and more especially in the quality of purchases, the second method is almost an essential feature of constant-prices estimates. Mention might also be made of the desirability of presenting both indices of price and of volume as well as actual figures.

108. Once again however, this subject is too wide for detailed consideration in this paper, but it is especially important in connection with studies into which non-monetary transactions enter, and in countries which are subject to quite violent fluctuations in domestic prices.

V. THE CRITERIA FOR A SYSTEM OF ACCOUNTS

109. Priorities and the system of accounts likely to be most suitable will depend for the most part on two criteria: the purpose for which the statistics are compiled and the resources available.

110. In Africa today statistical resources are already strained to their limit not only as a result of inadequate or seriously limited financial budgets but possibly for an even more important reason, inability to obtain experienced statisticians in sufficient numbers to permit the allocation of one or two to national accounting work without seriously interfering with the provision of a basic statistical service. This shortage of trained staff calls for a ruthless excision of unnecessary detail from the minimum accounts and the abandonment of the search for dispensable refinements in definitions and methods comparable with those in use in more favoured countries. The statistician should be encouraged to concentrate on the improvement of estimates of the really important transactions and the filling of important gaps in information.

111. Underdeveloped territories include a wide range of countries in various stages of development, from the simple agricultural or pastoral country producing for domestic consumption and exporting any surplus, with a minimum of processing and a very rudimentary economic structure, to those in which a highly organized market economy may exist alongside a simple rural community.

112. It is not sufficient therefore to say that the techniques developed in more advanced countries have no application in underdeveloped territories. The uses to which national accounts can be put will vary in scope and complexity over the whole

range. What may be true for the Gambia or the Upper Volta is not necessarily true for Algeria, or the Republic of South Africa, although in all countries non-monetary transactions may still play a very important role.

113. Whilst recognizing that there are definite limitations on the extent to which national accounting techniques can be used in the less-developed territories of Africa, there are some countries for which it should be possible to work out a modified application of the more complex techniques.

114. The main purposes of national accounts in African countries may be summarized under two heads: economic planning, including long-term development programmes, and measures of economic growth and of improvement in levels of living. Both heads cover a wide range of possibilities, too wide for detailed examination in this paper, but some of the more obvious uses can be cited:

(i) to provide an analysis of the structure of the economy and a measure of the progress made towards specialization and the division of labour, and, rightly or wrongly, industrialization, as an essential background to the formulation of government policy;

(ii) to provide a measure of the extent to which capital development programmes have succeeded in extending domestic productive capacity, in reducing the dependence on imports, and in diversifying the structure of the economy;

(iii) to provide a framework within which the rival claims on resources by private enterprise, public enterprise, social services, the money economy and the non-monetary economy can be co-ordinated to ensure the maximum utilization of resources in the light of the needs of the population, and in the light of the necessity for increasing revenue to finance the recurrent burden of present social-welfare programmes;

(iv) in economies subject to violent fluctuations in export earnings which give rise to inflationary pressures within the domestic economy, to provide a model within which the fiscal, monetary and other control measures necessary to ensure some degree of economic stability, consistent with continued expansion, can be determined, and evaluated retrospectively;

(v) to provide a general measure of improvement in living standards;

(vi) to provide general measures of growth, a means of determining some, at least, of the more important economic ratios such as the change in the ratio of traded to untraded output, the propensity to consume imports, the export multiplier and in due course, with suitable qualifications, capital-output ratios and the investment multiplier.

115. In development planning in African territories some importance may be attached to macro-economic relationships mentioned in (vi) above, but it is believed that the most reliable and balanced planning will result from detailed studies of sectors in the economy and the sector approach to planning. In this scheme it is essential that high priority should be given to estimates of the non-money rural economy. The so-called subsistence economy is in various stages of transition to a money economy in Africa. It will be found necessary to gear this transition to industrialization, urbanization and population pressures. Without appropriate balance between industrial output, employment and food supplies, particularly in countries with low foreign exchange reserves and low price elasticities of food consumption, inflationary pressures could be generated with serious consequences to employment and a tendency for the substitution of capital for labour in industry, especially where collective bargaining is strong enough to keep in motion constant pressure for increases in wages.

116. These examples of the possible uses of national accounts are by no means exhaustive, but they are possibly the first to which recourse will be made in less-developed countries. It is not implied, however, that the accounts can provide all the answers in economies where the normal economic relationships are in a highly fluid state and the normal techniques of analysis and model building have such limited application. The social accounting approach, nevertheless, does fill a vacuum and does provide a method of thinking and an economic approach to problems, which, although of limited application, nevertheless is likely to assist the administrator to base his decisions on a factual assessment of the overall problem so far as facts are available, and to avoid the pitfalls of mutually inconsistent policies.

117. A system of national accounts designed even to meet these minimum requirements cannot be simplified beyond a certain point, and it might be as well to state here that it is maintained that national income statistics which are designed simply to provide global aggregates calculated in terms of one or more of the possible approaches, that is, income, product or expenditure, are of very limited value indeed except as a first approximation preparatory to further developments. This does not mean that the uses to which aggregate estimates of income, product and expenditure can be put are not valuable, but it is claimed that progress beyond the somewhat rudimentary applications to which the aggregate approach can be put will depend on more detailed studies on the lines of sector accounts. A minimum set of accounts, supplemented by studies of particular sectors, selected for their importance in the economy under consideration, are however almost a *sine qua non* to the successful utilization of national accounts in economic planning or national budgeting. All the sector studies envisaged do not need to form an integral part of a minimum system of accounts nor do they need to be fully articulated in the initial stages; experience and individual need will dictate the extent to which this becomes necessary or advisable.

118. In certain countries it has been possible, and it may be possible in the future for others, to compile Accounts 1 and 2 of the S.N.A. in a suitably modified form on a domestic basis before sector accounts are drawn up and especially before a rest of the world account becomes available. Accounts 1 and 2, suitably modified, meet the needs for those countries which approach the problem from the point of view of expenditure and/or income respectively. A further table should, however, be included in the minimum requirements both to meet the needs of countries compiling estimates on the basis of net product by industries and to meet the needs of all countries interested in the structure of the economy and the relative importance of individual industries.

119. A summary table of this nature is included in the S.N.A. supporting tables, but this form is considered to be of limited value for full use to be made of the available information. Suitably expanded it could, nevertheless, immediately indicate the nature of the approach adopted, and the adequacy of the estimates, and form an immediate common link between those

countries working from the aggregation of net product, as determined by turnover less purchases of goods and services, and those working from the aggregation of incomes.

120. Sufficient has been said in this paper to indicate the very important part played by governments, in almost all African countries, in maintaining some degree of balance in the economy and more especially in initiating and undertaking capital development works both of a social and an economic nature. Even where direct participation in enterprises is less important governments have recognized that they have a clear responsibility to provide the basic economic environment for private industry to develop efficiently, and that the provision of social services, education, health and housing must rank equally high in any system of priorities.

121. It is therefore considered that an account for government should be one of the first pillars of any system of national accounts. The ready availability of the basic data should facilitate this.

122. In giving government the prior place in the development of sector accounts it is not suggested that the information provided should be restricted to the appropriation account. The capital transactions of government are equally important both from the point of view of direct capital formation, financing of other sectors and the sources of government finance, whilst completion of a capital account for government is again a relatively easy objective to set and it will serve to provide a valuable supplement to studies of capital formation.

123. The second priority in the development of supporting accounts, it is suggested, should be the development of an account for capital formation. It has been demonstrated in British territories since 1949 that a great deal of valuable information can be collected without great difficulty. Its importance needs no further emphasis here.

124. It is not to be expected, however, that all countries would be in a position to complete the details of the source of finance at an early stage or until appropriation accounts can be compiled for households, government and corporations and until a rest of the world account is available.

125. The S.N.A. account has, however, very little value for those countries which are not in a position to complete both sides of the account. There are, in addition, certain supple-

mentary details of capital formation which can be of immediate value to a large number of countries; for example, separate details of the capital formation by general government, government enterprises and public corporations, respectively (which can normally be estimated well in advance of a complete sector or industrial analysis), and an analysis of capital formation to distinguish the import content and the output of domestic industry, and changes in their relative importance.

126. For countries relying on the production approach entirely or only to indicate the order of magnitude of total capital formation an analysis by type of asset in more detail than is provided for in S.N.A. is likely to be of some value in itself and also as a framework within which to plan the collection of prices and the compilation of suitable deflation indices.

127. For a number of reasons, both statistical and economic, a set of appropriation accounts are required for households and corporations as well as for general government. It is not clear why the S.N.A. does not provide for the inclusion of a corporate appropriation account within the summary accounts, as it is virtually impossible to calculate certain aggregates in the S.N.A. without completing what is, in effect, a corporate appropriation account. For African countries, in which official marketing organizations play such an important part, there is an additional need for the transactions of public corporations to be given greater importance in the system and as far as possible to be separately identified. This can be done either by compiling a separate appropriation account for public corporations or by distinguishing the transactions of public corporations in a single corporate account. For a complete picture, however, of the operations of public corporations it might be useful to have a separate consolidated operating account and a capital account as well as a separate appropriation account.

128. One of the main obstacles to the development of an appropriation account for households and corporations and of a rest-of-the-world account stems from the institutional framework of certain countries in which the existence of concerns operating in several countries and of transportable assets owned and operated jointly by a number of countries appear to present insuperable difficulties in the short run. The distinction between the profits of corporate and unincorporated enterprises is by no means straightforward for such countries, unless a system of

income-tax and income-tax statistics is in existence. Until the initial distinction can be made the estimation of interest, dividends and profits distributed is virtually impracticable. For those countries which are faced with difficulties of distinguishing the conventional categories of profits, any attempt to compile appropriation accounts for households and corporations and a rest-of-the-world account can only be partially successful, and this problem may have to figure high in any system of priorities.

129. It is probable, however, that such countries would still be in a position to estimate the payment side of the household account even if they could not immediately tackle the income side, and once the work of distinguishing the incomes of corporate and unincorporated enterprises has been undertaken completion of the household account might still prove easier than completion of the rest of the world account and might well prove more useful for the study of immediate problems.

130. Development of a household and non-profit institutions sector account has certain obvious uses for countries endeavouring to increase the scale of capital investment and to command the resources for this purpose.

131. The purchasing power of consumers and the import content of consumption expenditure play an important part in determining the balance of the economy, even more so in some ways than changes in government development programmes or private capital formation by enterprises. The effect of government decisions on taxation and investment, for example, can only be assessed fully if personal income, expenditure, and savings are considered in addition to other savings and total investment.

132. In the long run, also, problems connected with the adequacy of food supplies may need to be measured in money terms. There is no adequate overall nutritional measure which takes into account consumer preferences, even if all the nutritional data and conversion factors are available for a measure in terms of quantities.

133. For almost every economic study of an African economy it is necessary to keep in mind the fact that there are non-monetary transactions as well as monetary transactions and that the importance of the former and the relatively static nature of the forces at work within the non-monetary sector will necessitate separate consideration being given to the impact of eco-

nomic change on each of the two sectors. For this purpose it is desirable that throughout the account the transactions of the rural household sector should be separately identified and for a number of purposes it might be useful to consolidate these into one account for rural households. Again it is not essential that all the components of a rural households sector account should be completed in the early stages of work.

134. The rest of the world account appears to be the final account required to complete the system. Although dealt with last it need not necessarily be the last account to be completed. The choice of priorities will depend on the requirements of this information for policy purposes as well as the statistical difficulties of estimation. Too much importance should not be attached to the failure to complete this account at an early stage, since there is relatively little that governments of underdeveloped countries can do to influence the balance of invisible transactions in the short run. If trade statistics are available, then the balance of visible trade will itself be known, and it is with this balance and with the nature and content of imports that governments are likely to be mainly concerned.

135. The conclusions arrived at above are that –

(i) whilst aggregate estimates of income, product and expenditure are useful in certain rudimentary applications, national accounts are unlikely to be of very much value in economic planning and national budgeting, even in underdeveloped territories, in the absence of supplementary studies of particular sectors;

(ii) whilst the standard (S.N.A.) Accounts 1–6 should all figure in any minimum set of accounts for African countries, the system of accounts alone is not broad enough to meet the needs of countries restricted to a single method of approach, is not complete enough to bring together the minimum information required either for policy formation or to compile the several accounts, and that these accounts are not necessarily of equal priority or, in some cases, of first priority;

(iii) an account showing the domestic product obtained by aggregating net output and/or incomes by industry is of equal importance as Accounts 1 and 2 of S.N.A.;

(iv) the S.N.A. accounts are incomplete without an appropriation account for corporations, especially so in countries where public corporations play an important part in the economy and where estimates of the appropriation of corporate profits present special problems;

(v) a capital account for general government should be relatively straightforward to compile and that the information made available in this way is likely to be of particular importance in studying the forces at work in the economies of African countries;

(vi) in countries where non-monetary transactions play an important role these should be separately identified in the individual accounts and, where possible, brought together into a rural households sector account;

(vii) the S.N.A. Account 3, Domestic Capital Formation, has very little value for countries who are not in a position to complete estimates on the source of finance of capital formation and that supplementary analysis may be of more immediate value.

VI. A MINIMUM SYSTEM OF NATIONAL ACCOUNTS FOR USE BY AFRICAN COUNTRIES

136. In what has gone before the need for a radical simplification and, in some cases, an extension of the principles of S.N.A. has, it is hoped, been amply demonstrated. It may not be an easy task to obtain the agreement of United Nations agencies to some of the suggestions which have been made, but few economists and statisticians with any practical experience of the problems of statistical measurement in Africa will question the need for simplification and the need for agreement on the concepts and definitions, dealt with above, and on the minimum requirements which it is reasonable to expect all countries to attain to. There is no doubt that the view can be taken that it is not necessary to depart in any way from the basic principles of S.N.A. and that where practical difficulties arise in applying these principles some *ad hoc* solution can be found or the problem can be ignored, possibly on the grounds that it is relatively unimportant. Measures such as these, however, provide no solution to the problems of achieving a greater degree of comparability, nor are they likely to assist in the long-term search for improvement in accuracy and reliability. Furthermore, as has been mentioned above, the personnel responsible for the compilation of estimates change from year to year and

the work may be shared; in all cases a recognized and agreed method of dealing with these and other problems is essential if consistency and accuracy are to be obtained in any one year, or in any one country, let alone over all countries in Africa.

137. The minimum system of accounts which are set out in Appendix I represent an attempt to take account of these factors. They should be regarded for the most part as a modification of the U.N. proposals and as an intermediate step towards the ultimate preparation of a system of accounts which can be readily adapted to the S.N.A.

138. With specific exceptions the accounts conform with the basic concepts, definitions and classifications elaborated in the S.N.A. and may be readily extended into the fuller system as reliable estimates can be made for the items which have been eliminated.

139. The system of accounts which it is proposed to amplify here is designed –

(i) to assemble the minimum material required for a general assessment of the progress of the economy and for the analysis of the changes taking place in its structure;
(ii) to form a common basis for reporting national accounting statistics;
(iii) to provide an immediate indication of the concepts and methods of approach which have been used in compiling the statistics;
(iv) to provide a basis for comparison of the estimates compiled by countries at various stages in the development of national accounts, and
(v) to bring within the compass of one set of tables not only the minimum accounts as understood in S.N.A. but also a number of supplementary tables which are almost of equal importance for domestic policy-making.

140. At this point it might be as well to recognize that the presentation of the summary accounts is more likely to lend itself in a number of cases to the form of a table rather than a balanced statement of receipts and payments. The term account has not been used except to identify those tables which substitute for the S.N.A. Accounts.

141. The system consists of twelve tables, including the six accounts of S.N.A. The tables replacing the S.N.A. Accounts are not necessarily fully articulated and the capital reconciliation accounts, as such, of S.N.A. have been dispensed with.

142. Transfers have been treated throughout as transactions between current accounts and the work involved in distinguishing capital transfers has been eliminated. The same treatment has been adopted in the rest of the world account and in the finance of gross capital formation. Government debt interest, whether paid to a resident or a non-resident, has been treated as a factor payment; all other interest, dividends and profits distributed have been treated as transfers except in the case of net payments to the rest of the world. Income from enterprises has been brought together under one heading in the appropriate summary tables to facilitate completion of the tables for those countries not yet in a position to distinguish the separate elements, whilst provision has been made for the separate identification of the non-monetary and other transactions of the rural households sector.

143. The tables comprise:

(i) Domestic Product (S.N.A. Account 1).
(ii) National Income before provision for consumption of fixed capital (S.N.A. Account 2).
(iii) Domestic Product by Industrial Origin.
(iv) Appropriation account of households and private non-profit institutions (S.N.A. Account 4).
(v) Appropriation account of general government (S.N.A. Account 5).
(vi) Capital account of general government.
(vii) Appropriation account of corporations.
(viii) External transactions (Rest of the World (S.N.A. Account 6) expanded).
(ix) Gross domestic fixed capital formation,
  A: by type of asset,
  B: by type of purchase,
  C: by origin.
(x) Domestic capital formation (S.N.A. Account 3).
(xi) Rural households account.
(xii) Composition of private consumption expenditure.

144. The principal adjustments which should be made to the aggregate of transactions for the geographical territory in order to obtain the domestic aggregate have been described in footnotes. They are based on experience in compiling the estimates for the Federation of Rhodesia and Nyasaland and some adjustments may be required in certain countries which have not been adequately provided for in the footnotes. In many countries these adjustments may be unimportant. It is suggested, nevertheless, that it would be desirable, in any system of standard reporting, for specific reference to be made as to the importance of such transactions and the extent to which they have been covered in the estimates. A summary of the relationship between the geographical, domestic and national aggregates is given as a note at the end of Appendix I.

145. In presenting this set of tables, with the footnotes detailing the relationship between the geographical and the domestic aggregates, it is not intended to imply that any country should make a conscious effort to complete its national accounts on the basis of geographical definitions. This would be an undesirable departure from accepted practice and might well complicate or delay the eventual compilation of a rest of the world account. On the other hand, countries which have not completed a rest of the world account and which could go a long way towards completing most of the other tables in geographical terms might well find it useful to present their accounts entirely in such terms ignoring the relatively unimportant flows peculiar to a geographical presentation and even at the expense of not achieving a complete articulation of accounts. These alternative courses should be determined in joint discussions between countries or by individual countries for themselves in the light of their resources and the immediate possibilities for early development and for progress towards estimates based on domestic territory definitions.

APPENDIX I

A SYSTEM OF NATIONAL ACCOUNTS FOR USE BY AFRICAN COUNTRIES

(Drawn up in terms of domestic aggregates)

Table	I	Domestic product (S.N.A. Account 1).
	II	National income before provision for consumption of fixed capital (S.N.A. Account 2).
	III	Domestic product by industrial origin.
	IV	Appropriation account of households and private non-profit institutions (S.N.A. Account 4).
	V	Appropriation account of general government (S.N.A. Account 5).
	VI	Capital account of general government.
	VII	Appropriation account of corporations.
	VIII	Rest of world account (S.N.A. Account 6—expanded).
	IX	A Gross fixed capital formation by type of asset.
		B Gross fixed capital formation by type of purchaser.
		C Gross fixed capital formation by origin.
	X	Domestic capital formation (S.N.A. Account 3).
	XI	Rural households account.
	XII	Composition of private consumption expenditure.

Note on the relationship between geographical, domestic and national aggregates.

TABLE I

Domestic Product [1]

(S.N.A. Account 1)

1.1	Gross domestic product at factor cost	(2.7)	1.4	Consumption from own production of rural households	(4.1)
1.2	Indirect taxes	(5.8)	1.5	Private consumption expenditure	(4.2)
1.3	*Less:* Subsidies	−(5.2)	1.6	General government consumption expenditure including government debt interest	(5.1)
			1.7	Own account rural capital formation	(10.1)
			1.8	Gross domestic fixed capital formation	(10.2)
			1.9	Increase in stocks of rural households	(10.3)
			1.10	Increase in stocks of other sectors	(10.4)
				Expenditure on consumption and gross capital formation	
			1.11	Exports of goods and services	(8.1)
				Expenditure on gross domestic product and imports	
			1.12	*Less:* Imports of goods and services	−(8.4)
	Gross domestic product at market prices			Expenditure on gross domestic product	

[1] The more important adjustments to be made to items of expenditure in terms of the geographical territory in order to obtain the corresponding domestic aggregates are viz.:

Item 1.5 Private consumption expenditure within the geographical territory
Plus: Private consumption expenditure of residents abroad on goods and services
Less: Private consumption expenditure of non-residents on goods and services
Equals: Private consumption expenditure attributable to residents.

Item 1.6 General government consumption expenditure on goods and services excluding expenditure outside the geographical territory
Plus: General government consumption expenditure on goods and services outside the geographical territory
Equals: General government consumption expenditure.

Item 1.10 Increase in stocks of other sectors within the geographical territory
Plus: Increase in stocks held by residents abroad
Less: Increase in stocks held by non-residents within the geographical territory
Equals: Increase in stocks of other sectors, held by residents.

Note – (*a*) The sum of items 1.4–1.10 before adjustment to the domestic aggregate and including general government consumption expenditure by foreign governments within the geographical territory, equals expenditure on consumption and gross capital formation in the domestic market.

(*b*) The sum of items 1.4–1.10 after adjustment to the domestic aggregate equals expenditure on consumption and gross capital formation attributable to residents.

TABLE II

National Income, before provision for consumption of fixed capital [1]

(S.N.A. Account 2)

2.1	Compensation of employees	(4.8)	
2.2	Income of rural households	(4.9)	
2.3	Income from enterprises		
	(i) Unincorporated enterprises	(4.10)	
	(ii) Public corporations	(7.5)*	
	(iii) Private corporations	(7.5)*	
	(iv) Government enterprises	(5.7 (i))	
2.4	Income from property of households and private non-profit institutions (Rent)	(4.11)	
2.5	General government income from property (Rent)	(5.7 (ii))	
2.6	Government debt interest	(5.1 (i))	
2.7	Gross domestic product at facto cost	(1.1)	
2.8	*Less:* Net factor income paid to the rest of the world	–(8.5 Less 8.2)	
	National Income, before provision for consumption of fixed capital		Gross national product at factor cost

[1] The more important adjustments to be made to income payments in terms of the amounts paid within the geographical territory in order to obtain the corresponding domestic aggregate are viz.:

Item 2.1 Compensation of employees within the geographical territory
Less: compensation of non-residents employed by non-residents, if included above
Less: compensation of residents employed by non-residents within the geographical territory
Plus: compensation of residents employed by residents abroad
Plus: compensation of non-residents employed by residents abroad
Equals: compensation of employees paid by residents.

Item 2.3 Income from enterprises within the geographical territory
Less: Factor income of non-resident producers within the geographical territory
Plus: Factor income of resident producers abroad
Equals: Income from enterprises within the domestic territory.

Note. – An asterisk denotes 'part of' item listed.

TABLE III

Gross domestic product by industrial origin [1]

Industry [2]	Gross domestic Product at Market Prices			Indirect taxes Less subsidies	Gross Domestic Product at Factor Cost						
							Gross income of enterprises				
									Corporate		
	Turn-over	Pur-chases	Gross product		Total	Employee income	Total	Unin-corporated	Public	Private	Govern-ment
1 Agriculture, forestry and fishing:											
(*a*) Rural households											
(*b*) Other enterprises											
2 Mining											
3 Manufacturing											
4 Building and construction											
5 Electricity and water											
6 Transport and communications											
7 Distribution											
8 Banking and insurance											
9 Real estate											
10 Ownership of dwellings											
11 Public administration and defence											
12 Rural household services											
13 Other services											
Total:											

[1] The product of all producers within the domestic territory should include the product of resident producers located abroad and exclude the product of all non-resident producers located within the geographical territory. The industries for which there is likely to be a difference between geographical product and domestic product are: building and construction, transport and communications, distribution, public administration and defence and other services.

[2] The industrial breakdown given here is a suggested minimum which can be extended as circumstances require. The classification should conform, nevertheless, with the International Standard Industrial Classification of all Economic Activities or the modified classification adopted in the United Nations' System of National Accounts and Supporting Tables.

TABLE IV

Appropriation Account of Households and Private Non-profit Institutions

(S.N.A. Account 4)

Current Account					
4.1	Consumption from own production of rural households	(1.4)	4.8	Compensation of employees	(2.1)
4.2	Consumption expenditure	(1.5)	4.9	Income of rural households	(2.2)
4.3	Direct taxes	(5.10)	4.10	Income from other unincorporated enterprises[2]	(2.3(i))
4.4	Other transfers to general government	(5.11)	4.11	Income from property (Rent)[2]	(2.4)
4.5	Transfers to rest of world	(8.6)*	4.12	Interest dividends and profits from corporations	(7.2(ii))
4.6	Savings of rural households	(10.5)	4.13	Government debt interest (if identified)	(5.1(i)(a))*
4.7	Savings of other households and private non-profit institutions	(10.6)	4.14	Net factor income received from rest of world	(8.2 Less 8.5)*
			4.15	Transfers from general government	(5.3)
			4.16	Transfers from corporations	(7.3(i))
			4.17	Transfers from rest of world	(8.3)*
	Disposal of income			Income of households and private non-profit institutions	

[1] The more important adjustments to be made to items of expenditure and income in terms of the geographical territory in order to obtain the corresponding domestic aggregates are viz.:

Item 4.2 Private consumption expenditure within the geographical territory
Plus: Private consumption expenditure of residents abroad on goods and services
Less: Private consumption expenditure of non-residents on goods and services within the geographical territory
Equals: Private consumption expenditure attributable to residents.

Item 4.3 Direct taxes paid by residents and non-residents within the geographical territory
Plus: Direct taxes paid to the domestic government by residents abroad
Less: Direct taxes paid to the domestic government by non-residents within the geographical territory
Equals: Direct taxes paid by residents.

Item 4.7 Savings of other households and private non-profit institutions within the geographical territory
Plus: Savings of residents out of factor income earned abroad
Less: Savings of non-residents out of factor income earned within the geographical territory
Equals: Savings of other households and private non-profit institutions attributable to residents.

Item 4.8 Compensation of employees within the geographical territory
Less: Compensation of non-residents employed by non-residents, if included above
Less: Compensation of residents employed by non-residents within the geographical territory
Plus: Compensation of residents employed by residents abroad
Plus: Compensation of non-residents employed by residents abroad
Equals: Compensation of employees by residents.

Item 4.10 Income from other unincorporated enterprise of residents and non-residents within the geographical territory
Plus: Income from other unincorporated enterprise of residents outside the geographical territory
Less: Income from other unincorporated enterprise of non-residents within the geographical territory
Equals: Income from other unincorporated enterprise attributable to residents.

Item 4.11 Income from property (rent) within the geographical territory
Equals income from property (rent) within the domestic territory.

Item 4.14 Net factor income received by residents from non-residents within the geographical territory (i.e. compensation of residents employed by non-residents within the geographical territory less compensation of non-residents employed by residents within the geographical territory)
Plus: Compensation of residents employed by non-residents outside the geographical territory
Less: Compensation of non-residents employed by residents outside the geographical territory
Plus: Rental income of residents outside the geographical territory
Less: Rental income of non-residents within the geographical territory
Plus: Interest and dividends received by residents from non-residents
Less: Interest and dividends paid by residents to non-residents
Equals: Net factor income received from rest of world.

[2]Before provision for consumption of fixed capital.

Note. – An asterisk denotes 'part of' item listed.

TABLE V

Appropriation Account of General Government[1]

(S.N.A. Account 5)

5.1	Consumption expenditure:	(1.6)	5.7	Income from property and entrepreneurship	(2)
	(i) Interest on the public debt	(2.6)		(i) Profits from enterprise, domestic	(2.3(iv))
	(*a*) Paid domestically			(ii) Rents	(2.5)
	(*b*) Paid to rest of world			(iii) Interest and dividends and profits from corporations	(7.2(ii))
	(ii) Purchases of other goods and services			(iv) Interest and dividends and profits from abroad	(8.2)
5.2	Subsidies	(1.3)	5.8	Indirect taxes	(1.2)
5.3	Transfers to households	(4.15)	5.9	Direct taxes of corporations	(7.1)
5.4	Transfers to corporations, n.e.s.	(7.7)	5.10	Direct taxes on households	(4.3)
5.5	Transfers to rest of world	(8.6)*	5.11	Other transfers from households	(4.4)
5.6	Savings[2]	(10.9)	5.12	Other transfers from corporations	(7.3(ii))
			5.13	Transfers from rest of world	(8.3)
	Disposal of current revenue			Current revenue	

[1] The more important adjustments to be made to items of 'disposal of current revenue' and 'current revenue' respectively in terms of geographical territory in order to obtain the corresponding domestic aggregates are viz.:

Item 5.1 General government consumption expenditure on goods and services excluding expenditure outside the geographical territory
Plus: General government consumption expenditure on goods and services outside the geographical territory
Equals: General government consumption expenditure.

Item 5.6 Saving of general government within the geographical territory
Plus: Surplus of current account transactions of general government outside the geographical territory with the rest of the world
Equals: Saving of general government.

Note. – In practice where the rest of the world account is at an early stage of development it may be difficult to distinguish items 5.3, 5.4 and 5.5 respectively; the element of direct tax on non-resident corporations operating in the geographical territory of item 5.13 from item 5.9; and the corresponding element of direct tax on non-resident households within the geographical territory of item 5.13 from item 5.10.

[2] Before provision for consumption of fixed capital.

Note. – An asterisk denotes 'part of' item listed.

TABLE VI

Capital Account of General Government[1]

6.1	Gross domestic fixed capital formation:	(10.2*)	6.6	Saving on current account	(10.9)
	(i) Land		6.7	External borrowings:	(8.10(b)*)
	(ii) Residential buildings			(i) New issues	
	(iii) Other buildings			(ii) Other long-term	
	(iv) Other construction and works			(iii) Short term	
	(v) Vehicles, plant, machinery and equipment				
6.2	Direct investments abroad	(8.10(a)*)	6.8	Internal borrowing:	
6.3	Loans to other sectors:			(i) New Issues	
	(i) Public corporations			(ii) Other long-term	
	(ii) Other enterprises			(iii) Net deposits through post office savings banks	
	(iii) Households and non-profit institutions			(iv) Change in other short-term debt	
6.4	Loan repayments:		6.9	Loan repayments by other sectors	
	(i) External debt	(8.10(b)*)	6.10	Other capital receipts	
	(ii) Internal debt				
6.5	Change in reserves:	(8.9)*			
	(i) External balances				
	(ii) Domestic balances –				
	(*a*) At banks				
	(*b*) Other				
	Disbursements			Receipts	

[1] The purchase or construction of property abroad should be regarded as an investment abroad and not as gross domestic fixed capital formation, actual or imputed rental income being included in investment income received by general government from the rest of the world.

Note. – An asterisk denotes 'part of' item listed.

TABLE VII

Appropriation Account of Corporations [1, 2]

Disposal of income		Income	
7.1 Direct taxes	(5.9)	7.5 Gross operating profits	(2.3)
7.2 Interest, dividends and profits paid:		7.6 Interest, dividends and profits received:	
(i) To households and non-profit institutions	(4.12)	(i) From government on public debt	(5.1(i)(a)*)
(ii) To government	(5.7(iii))	(ii) From the rest of the world	(8.2)*
(iii) To the rest of the world	(8.5)*	7.7 Transfers:	
7.3 Other transfers:		(i) From governments, n.e.s.	(5.4)
(i) To households and non-profit institutions	(4.16)		
(ii) To government	(5.12)		
(iii) To the rest of the world	(8.6)*		
7.4 Saving before provision for consumption of fixed capital	(10.7+10.8)		

[1] A separate account can be compiled for public and private corporations as required.

[2] The more important adjustments to be made to items of income and outlay in terms of the geographical territory to obtain the corresponding domestic aggregates are viz.:

Item 7.1 Direct taxes paid by corporations within the geographical territory
Less: Direct taxes paid by non-resident corporations within the geographical territory
Plus: Direct taxes paid by resident corporations abroad
Equals: Direct taxes paid by resident corporations.

Item 7.3 Other transfers paid by corporations within the geographical territory
Less: Other transfers paid by non-resident corporations within the geographical territory
Plus: Other transfers paid by resident corporations abroad
Equals: Other transfers paid by resident corporations.

Item 7.4 Savings of corporations within the geographical territory
Less: Savings of non-resident corporations within the geographical territory
Plus: Savings of resident corporations above
Equals: Savings attributed to resident corporations.

Item 7.5 Gross operating profits of corporations within the geographical territory
Less: Gross operating profits of non-resident corporations within the geographical territory
Plus: Gross operating profits of resident corporations abroad
Equals: Gross operating profits of resident corporations.

Item 7.6 Nil or negligible.

Note. – An asterisk denotes 'part of' item listed.

TABLE VIII

External Transactions (Rest of the World Account) [1]

(S.N.A. Account 6 — expanded)

8.1	Exports of goods and non-factor services: (1.11) Exports of merchandise f.o.b. *Plus:* Freight and insurance received by residents Plus or minus other adjustments (*a*) Exports, freight and insurance (f.o.b.) (*b*) Transportation n.e.s. (*c*) Passenger fares – (i) Private (ii) Business (*d*) Travel expenditure – (i) Private (ii) Business (*e*) Other non-factor services – (i) Personal consumption of services by non-residents within the geographical territory (ii) Government consumption of services by non-residents within the geographical territory (iii) Other non-factor services	8.4	Imports of goods and non-factor services (1.12) Imports of merchandise c.i.f. *Less:* Freight and insurance paid to residents Plus or minus other adjustments (*a*) Imports, freight and insurance (f.o.b.) (*b*) Transportation n.e.s. (*c*) Passenger fares – (i) Private (ii) Business (*d*) Travel expenditure – (i) Private (ii) Business *e*) Other non-factor services – (i) Personal consumption of services by residents abroad (ii) Government consumption of services abroad (iii) Other non-factor services
8.2	Factor services: (2.8) (*a*) Investment income of households and non-profit institutions (4.14)* (*b*) Investment income of general government (5.7(iv)) (*c*) Investment income of corporations (7.6(ii)) (*d*) Factor income of residents paid by non-resident producers within the geographical territory (4.14)* (*e*) Factor income of residents paid by non-resident producers abroad (4.14)*	8.5	Factor services: (2.8) (*a*) Investment income paid by households and non-profit institutions (4.14) (*b*) Investment income paid by general government (5.1(i)(b)) (*c*) Investment income paid by corporations (7.2(ii)) (*d*) Factor income of non-residents paid by resident producers abroad (4.8)* (*e*) Factor income of non-residents paid by resident producers within the geographical territory (4.8)*
8.3	Transfers from the rest of the world: (*a*) To households and private non-profit institutions (4.17) (*b*) To general government (5.13)	8.6	Transfers to the rest of the world: (*a*) From households and private non-profit institutions (4.5) (*b*) From general government (5.5) (*c*) From corporations (7.3(iii))
		8.7	Surplus of the nation on current account (10.10)
	Current receipts from abroad		Disposal of current receipts
8.8	Surplus of the nation on current account (10.10)	8.9	Net increase in reserves and external balances (10.10(i))
		8.10	Other net lending/borrowing (10.10(ii)) (*a*) Net increase in other assets abroad (*b*) Net increase in liabilities to the rest of the world (*c*) Errors and omissions
	Receipts		Disbursements

[1] The adjustments to be made to merchandise transactions and invisible transactions should be in accordance with the requirements of the Balance of Payments Manual of the I.M.F. The principal items affected have been separately identified.

Note. – An asterisk denotes 'part of' item listed.

TABLE IX

Gross Domestic Fixed Capital Formation

A. By type of asset:

1. Land
2. Buildings and works:
   (i) Residential buildings
   (ii) Non-residential buildings
   (iii) Other construction and works
3. Vehicles, plant, machinery and equipment:
   (*a*) Transport equipment
      (i) Railway transport
      (ii) Road passenger vehicles
      (iii) Commercial vehicles
      (iv) Other transport equipment
   (*b*) Machinery and other equipment
      (i) Agricultural machinery and equipment
      (ii) Mining and road construction machinery
      (iii) Industrial machinery and equipment
      (iv) Telegraph, telephone and radio equipment
      (v) Electrical machinery and equipment
      (vi) Other

Gross domestic fixed capital formation:

B. By type of purchaser:

(*a*) Private enterprises
(*b*) Public corporations
(*c*) Government enterprises
(*d*) General government
Gross domestic fixed capital formation:

C. By origin:	Retained imports c.i.f.	Distribution margins and installation costs on retained imports	Other domestic production	Total
Land Buildings and works Transport equipment Other machinery and equipment				
Gross domestic fixed capital formation:				

TABLE X

Gross domestic capital formation [1]

(S.N.A. Account 3)

10.1 Own account capital formation of rural households (1.7)	10.5 Saving [2] of rural households (4.6)
10.2 Gross domestic fixed capital formation of other sectors (1.8)	10.6 Saving of households and private non-profit institutions (4.7)
10.3 Increase in stocks of rural households (1.9)	10.7 Saving [2] of public corporations (7.4)
10.4 Increase in stocks of other sectors (1.10)	10.8 Saving [2] of private corporations (7.4)
	10.9 Saving [2] of general government (5.6)
	10.10 *Less* surplus of the nation on current account (8.7) (i) Net increase in reserves and other external balances (ii) Other net lending/borrowing from the rest of the world
Gross domestic capital formation	Finance of gross domestic capital formation

[1] The more important adjustments to be made to gross capital formation and saving in terms of the geographical territory in order to obtain the corresponding domestic aggregate are viz.:

Item 10.4 Increase in stocks of other sectors (by residents and non-residents) within the geographical territory
Plus: Increase in stocks held by residents abroad
Less: Increase in stocks held by non-residents within the geographical territory
Equals: increase in stocks held by residents.

Item 10.6 Saving of households and non-profit institutions
Plus: Saving of residents out of factor income earned abroad
Less: Saving of non-residents out of factor income earned within the geographical territory
Equals: Savings of households and non-profit institutions resident in the domestic territory.

Items 10.7 and 10.8 Saving of corporations within the geographical territory
Plus: Saving of resident producers operating outside the geographical territory
Less: Saving of non-resident producers operating inside the geographical territory
Equals: Saving of corporations resident in the domestic territory.

Item 10.9 Saving of general government within the geographical territory
Plus: Surplus of current account transactions of general government outside the geographical territory with the rest of the world
Equals: Saving of general government.

Item 10.10 Surplus of the geographical nation on current account
Plus: Net sale of goods and services to the rest of the world by resident producers abroad
Plus: Net transfers by rest of the world to resident producers abroad
Less: Net sale of goods and services to residents by non-resident producers within the geographical territory
Less: Net transfers by residents to non-resident producers within the geographical territory
Equals: Surplus of the nation on current account.

Note. – In geographical terms the net expenditure of foreign governments on goods and services within the geographical territory would be equivalent to dis-saving and would be offset by actual expenditure so that the contribution to domestic saving would be nil.

[2] Before provisions for the consumption of fixed capital.

TABLE XI

Rural Households

11.1	Sales to other sectors	11.6	Consumption expenditure
11.2	Production for own use including sales and barter within the sector		(i) Produced for own use and purchased and bartered within the sector
	(i) Primary production		(ii) Purchased from other sectors [1]
	(ii) Rural household services	11.7	Fixed capital formation [2]
11.3	Increase in stocks		(i) Produced for own use and purchased and bartered within the sector
11.4	Net factor income from other sectors		(ii) Purchased from other sectors [1]
11.5	Transfers from other sectors	11.8	Increase in stocks [2]
		11.9	Purchases for production from other sectors [1]
		11.10	Net transfers to government
		11.11	Other current payments to other sectors
		11.12	Net capital out-flow to other sectors [1,2]
	Receipts		Disbursements

[1] May be included in item 11.11 in first instance.
[2] Saving of rural households, item 11.7+11.8+11.12.

TABLE XII

Composition of Private Consumption Expenditure Including Consumption From Own Production of Rural Households

	Consumption from own production of rural households (4.1)	Private consumption expenditure (4.2)				Total consumption expenditure
		Retained imports c.i.f.	Distribution margins on retained imports	Other	Total	
1 Food						
(*a*) Bread and cereals						
(*b*) Meat						
(*c*) Fish						
(*d*) Milk, cheese and eggs						
(*e*) Oils and fats						
(*f*) Fruit and vegetables						
(*g*) Sugar, preserves and confectionery						
(*h*) Coffee, tea, cocoa, etc.						
(*i*) Other food						
2 Beverages						
(*a*) Non-alcoholic						
(*b*) Alcoholic						
3 Tobacco						
4 Clothing and other personal effects						
(*a*) Footwear						
(*b*) Clothing other than footwear						
(*c*) Other personal effects						
5 Rent, rates and water charges						
6 Fuel and light						
7 Furniture, furnishings and household equipment						
(*a*) Furniture and furnishings						
(*b*) Household equipment						
8 Household operation						
(*a*) Domestic services						
(*b*) Non-durable household goods						
(*c*) Household services						
9 Personal care and health expenses						
(*a*) Personal care						
(*b*) Health expenses						
10 Transportation and communication						
(*a*) Personal transportation equipment						
(*b*) Operation of personal transportation equipment						
(*c*) Purchased transportation						
(*d*) Communication						
11 Recreation and entertainment						
(*a*) Entertainment						
(*b*) Hotels, restaurants and cafes						
(*c*) Books, newspapers and magazines						
(*d*) Other recreation						
12 Miscellaneous services						
(*a*) Financial services						
(*b*) Education and research						
(*c*) Other services						
13 *Less* value of gifts in kind sent abroad (net)						
Private consumption expenditure in the domestic market:						
14 Expenditure abroad of residents						
15 *Less* expenditure in the country of non-residents						
Consumption expenditure of households and private non-profit institutions:						

Note on the Relationship between the Geographical, Domestic and National Aggregates

Geographical income aggregate: Factor income paid by all producers within the geographical territory
Plus: Factor income paid abroad by residents abroad
Less: Factor income received by residents from non-residents within the geographical territory
Equals: Domestic income aggregate. Factor income paid by residents.

Domestic income aggregate: Factor income paid by residents
Plus: Factor incomes received by residents from non-residents
Less: Factor incomes paid by residents to non-residents
Equals: National income aggregate. Factor income received by normal residents.

Geographical Product aggregate: The product of all producers located within the geographical territory
Plus: Product of resident producers located abroad
Less: Product of non-resident producers located within the geographical territory
Equals: Domestic product aggregate. The product of all resident producers.

Domestic product aggregate: The product of all resident producers
Plus: Product of non-resident producers attributable to factors of production supplied by residents
Less: Product of resident producers attributable to factors of production supplied by non-residents
Equals: National product aggregate. The product attributable to factors of production supplied by normal residents.

Geographical expenditure aggregate: Expenditure within the geographical territory/domestic market
Plus: Expenditure of residents abroad
Less: Expenditure of non-residents within the geographical boundaries, including the value of gifts sent abroad
Equals: Domestic expenditure aggregate. Expenditure on consumption and gross fixed capital formation attributable to residents.

APPENDIX II

REFERENCE DOCUMENTS

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11 *Report of the Working Group on the Treatment of Non-Monetary (Subsistence) Transactions within the Framework of National Accounts,* convened by the Economic Commission for Africa, United Nations Document E/C.N. 14/60.

12 *National Income Statistics and Estimates for the Subsistence Economy in the Federation of Rhodesia and Nyasaland,* Working Paper No. 4 for the Working Group on the Treatment of Non-monetary (Subsistence) Transactions within the Framework of National Accounts, convened by the Economic Commission for Africa.