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Distr.
GENERAL

E/CN.14/319
E/CN.14/NAC/11
29 December 1965

Original : ENGLISH

ECONOMIC COMMISSION FOR AFRICA

REPORT OF THE WORKING GROUP ON PROBLEMS OF NATIONAL ACCOUNTS IN AFRICA

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REPORT

NATIONAL ACCOUNTS MEETING

I. Introduction

1. The Working Group on Problems of National Accounts in Africa met in Addis Ababa from 9 to 16 December 1964. It was convened at the recommendation of the Third Conference of African Statisticians. Ten experts from African countries and France participated. The list of participants is included as Annex II of this report.

2. The Working Group met primarily to review results of the trials by various African countries to present their available economic data in the format prescribed by the intermediate system of national accounts. The purpose of these trials was to illustrate to what extent the African countries can already apply the intermediate system, which had been recommended for further consideration at the Third Conference of African Statisticians. In addition, the meeting was to provide the experts an opportunity to exchange experience with methods of national accounts estimation actually used and the difficulties encountered. The final purpose was to express views on the adequacy of present national accounts for planning purposes.

3. The Deputy Executive Secretary of the Economic Commission for Africa, Mr. N'Liba N'Guimbous, welcomed the participants with the caution that the important task of determining the usefulness and significance of the estimates included in the draft chapters of the Handbook of National Accounts would be very difficult owing to the variable detail of information about methods of estimating the data.

He hoped that the imminent revision of the United Nations System of National Accounts would include some of the ideas of the intermediate system, which would facilitate the adaptation to African conditions of the revised SNA. Mr. N'Liba further urged the participants to acknowledge the importance of their work for the future of the continent and hoped that they would leave aside narrow national interests while considering technical requirements of common concern. He hoped that recommendations made by the Group would allow many of the present inadequacies in national accounts in African countries to be overcome, thus leading to increased usefulness for planning purposes. His statement is attached as Annex IV.

4. Mr. J.O. Aiyegbusi of Nigeria was elected Chairman of the Working Group and was welcomed to his new functions.

5. The provisional agenda was adopted by the Working Group and is included in this report as Annex I.

6. A list of working papers and background documents available to the Working Group is included as Annex III of this report.

II. General about the experimentation with the intermediate system

7. The Working Group considered a number of draft chapters of the "Handbook of National Accounts for Africa" which were presented before it. These chapters contained the results of the experimentation with the intermediate system recommended by the Third Conference of African Statisticians and earlier meetings. Most of the chapters were based on drafts by consultants, while a few chapters had been written by the secretariat on the basis of available material and country visits.

8. The tables arranged according to the framework of the intermediate system which were shown in each of the country chapters represented adaptations of already existing estimates for 1960 or in some cases for earlier years. No new estimates or revisions of existing estimates had been made directly using the intermediate system.

9. The Group found that in spite of the fact that the tables were adaptations of already existing estimates only, the experimentation clearly indicated that a relatively high degree of international comparability could be achieved among the estimates for the various countries of the region. It was to be expected that national accounts work recently started in a number of African countries, if continued along similar lines, would make possible a progressively higher degree of international comparability. This trend towards the supply of comparable figures by countries whose basic estimates were widely different both conceptually and with regard to methods of estimation was an important consequence of the work with the intermediate system in the region.

10. In the opinion of the Working Group, the experimentation with the intermediate system as embodied in the Handbook chapters had been useful and could be considered as a success, in spite of the reservations because the estimates were adaptations only. It was, however, acknowledged that the usefulness of the Handbook as presented in draft form, as far as a number of the country chapters were concerned, was seriously limited by the fact that the description of methods of estimation were insufficiently detailed. This made impossible an evaluation of the reliability of the estimates shown in these chapters.

11. The Group therefore felt that the draft chapters were not suited for publication in printed form even if a number of improvements should prove possible. On the other hand, a number of the country chapters represented valuable methodological studies which it would be worth while to reproduce in mimeographed form for circulation among interested parties.

12. It was mentioned that some countries had embarked upon new or extended estimates of national accounts according to the intermediate system, which would be completed in the near future. The Group felt that these estimates might represent a better and more valid illustration of the possibilities of achieving internationally comparable national accounts estimates within the region, than the experimentation to adapt existing estimates to the framework of the intermediate system.

13. The Working Group noted with interest the work which was going on to revise and extend the United Nations System of National Accounts (the SNA). It also appreciated the fact that the African countries would be given an early opportunity to discuss the adaptation of the new SNA to the conditions of the region. In this connexion, the Group felt that the estimates according to the intermediate system which would soon be finalized in some African countries might help to indicate the directions an adaptation of the new SNA to the region could take.

14. Although the Group fully appreciated the need to conform to international standards with necessary regional adaptations, it also felt that the present work going on in various African countries to construct national accounts estimates according to the intermediate system served a very useful purpose . For the first time had African countries with very different traditions with regard to national accounts estimation embarked upon estimates which were comparable within the region. There was no reason to believe that a further adaptation within a wider international framework would not be equally possible.

15. The Working Group hoped and expected that the pioneering work undertaken within the region in the national accounts field would be taken into account in formulating the new international standards. It was confident that the African national Accountants would do their best to make a constructive contribution when requested to suggest a regional adaptation of the new SNA.

III. Detailed discussion of the results of the experiment

16. The Working Group agreed that, although the text and tables of the Handbook chapters must of course be considered as an inseparable unity, it would for practical reasons be convenient to consider the results of the experimentation table by table. It was fully appreciated that an examination of the tables alone without a simultaneous detailed examination of the text could lead to approximate conclusions only. On the other hand, an analysis of the tables filled in by the various countries would lead to some discussion of the methods of estimation and to a consideration of the usefulness of the various tables.

17. It was generally agreed that the table entitled "Inventory of human resources" which shows the classification of the labour force by industry and broad occupational group was a useful addition to a system of national accounts. The table fills a need both as an aid in deriving approximate measures of productivity and its variations for the various industries and as a help to man-power planning. It was agreed that miscellaneous sources like registers maintained for purposes of social legislation, special labour force surveys and establishment registers were invaluable in obtaining annual estimates. If annual data could not be obtained, it would still be useful to have this table for bench-mark years, based on population census information.

18. The table on uses and resources by commodity group is one of the most central tables of the intermediate system. It was noted that only two countries could make a distinction of uses between imports and local products, which is of major importance to the planners. It was agreed that in order to achieve a proper allocation of uses by imported and locally produced goods, surveys of mark-ups were required.

The difficulty of obtaining reliable estimates of imports and exports because of smuggling, and the methods of registering imports of land-locked countries by means of road-checks etc. were discussed. There was also some discussion of the difficulties of making reliable estimates of stock-changes. In this connexion it was mentioned that the stocking up of certain export products in periods when they were unsaleable should be considered as a loss rather than as additions to stocks.

19. The abbreviated input-output table (Table 3) which was originally included in the intermediate system with some doubt had been filled in by two thirds of the countries included in the Handbook, in more or less detail. The Group found the table useful both as a help in obtaining estimates of total inputs produced or consumed by the various industries and as a first step towards the development of a full-scale input-output table. However, it was also found that very few countries had been able to show imported and locally produced inputs separately and the Group recommended that this ought to be done whenever possible. It was felt that the table must be used with great caution because of the unavoidable inaccuracies it would contain at the present stage of statistical development of many countries of the region.

20. Table 4 "Production and value added account by industry" is another central table of the intermediate system. Most countries included in the experimentation could fill in this table, at least partly. Although it is more detailed than the present similar tables in the SNA, this table still represents an important link between the intermediate system and the SNA.

21. The rural household account (Table 5) had been filled in by only one country. The Group agreed that although this was a strong

indication that the table is at present too difficult for the countries to fill in, it should still be left in its present form for the countries to experiment on, because the information contained in the table was vital under African conditions. The Working Group considered briefly the problem of defining and valuing services in the rural household sector and found that no internationally agreed standards existed which could help the countries on this point. The Groupe therefore suggested that a special Working Group might be convened at a future date in order to examine the question.

22. The Group found that although only two thirds of the countries included in the experimentation had actually filled in the appropriation account of corporations (Table 6), the countries of the region should, on the whole, have no difficulty in filling in this account.

23. The appropriation account of households and non-profit institutions could, in the opinion of the Working Group, be usefully subdivided by rural and urban households and by non-profit institutions, or by other relevant economic groupings of households (for example African and non-African households). The Group found no particular difficulty in obtaining estimates for the more important non-profit institutions.

24. The Working Group considered that tables 8, 9, 10 and 13, namely Current and capital accounts of government by level of government, Appropriation account of general government, Capital and financing account of general government and Combined economic and functional classification of general government current and capital expenditures were closely related and therefore should be considered together. These tables were all based on the same source of information, namely government budgets and accounts, which had to be reclassified in order to arrive at the items required for the tables. From the results

of the experimentation it appeared that only few countries of the region actually undertake a re-classification of their government accounts, but the Group felt that more countries could supply re-classified figures than had actually done so. The Group found that whereas information for central government was actually readily available, direct investigations were sometimes needed to obtain the information from local authorities. It also pointed out the importance of mechanical equipment as an aid in arriving readily at re-classified figures. It was agreed that separate accounts might be shown for national and foreign administrations, if this was found useful by the countries.

25. Most countries included in the experimentation had filled in tables 11 Consolidated capital account and 12 Rest of the world account. The Group found that the items of table 11 were obtained from other accounts and no separate discussion of the table was therefore necessary. Table 12 was obtained from the balance of payments, and the Group found that the national accountants would always have to be concerned with the details included in the table.

26. Two thirds of the countries included in the experimentation had succeeded in filling in table 14 which shows the composition of private consumption expenditure, in more or less detail. The Group agreed that family consumption surveys were useful in filling in this table and essential in filling in the part of the table which referred to consumption from own production of rural households. In addition, detailed information on mark-ups similar to that needed for table 2 would be required.

27. The Working Group agreed that table 15 Composition of gross domestic fixed capital formation, which had been filled in by 7 countries,

was very important for planning and relatively easy to estimate, except as far as the distribution of gross fixed capital formation by industry of use is concerned. There was agreement that net capital formation would be a very useful concept for planning purposes, but the formidable problems of arriving at economically significant depreciation estimates made it difficult or impossible to obtain net figures in many countries of the region.

28. Table 16 Total uses and resources could be filled in by all countries included in the experiment. The table contains no new information, but represents a re-arrangement of items from other tables. Also table 17 National disposable income by type of income before provision for consumption of fixed capital, which was filled in by five countries, essentially represents a re-arrangement of items from other tables. The Group decided not to re-open the discussion of the controversial concept national disposable income at this stage.

IV. Problems and difficulties of national accounts estimation in Africa

29. The Group then proceeded to item 5 of the agenda and agreed to discuss this item on the basis of the secretariat paper "Some problems of national accounts estimation in African countries" (E/CN.14/CAS.4/NAC/10).

Comprehensive or partial estimates

30. The Group concluded that comprehensive national accounts estimates should be attempted in spite of the difficulties involved in obtaining data. Estimates covering the modern sector alone, although they might have to be given first priority, should therefore never

be considered to be the final aim of the national accountant. The development of estimates for the subsistence sector takes considerable time, and it is therefore necessary to be foresighted and as far as possible prepare such estimates before they are requested by the planners.

Estimates of agricultural production

31. The Working Group considered that both consumption and production surveys would be required in order to obtain annual series of agricultural production statistics. For consumption, these surveys could have the household as their unit of investigation. Where production surveys are concerned, information should be obtained on yield and acreage figures, whatever is the unit of investigation. The production surveys would usually refer to quantities.

32. The Group then considered the problem of agricultural prices. It was agreed that as far as possible prices in nearby markets or prices paid to the producer should be used in valuing agricultural production. Sometimes, there were violent variation in prices paid to producers because of variations in production or supply of agricultural products. The Group felt that in such cases it was very dubious, indeed, whether it would be justified to evaluate consumption from own production at these prices. It was also agreed that no practical purpose would be served in trying to separate transport costs from basic production costs when the farmer uses his own means of transport to bring his produce to the market.

33. The Group thought that estimates of changes in stocks of domestic agricultural products could only be obtained by continuing intensive household surveys. Although figures on stock changes normally would perhaps be small and therefore of limited interest, sometimes considerable

variations in production would lead to correspondingly significant stock changes. It was acknowledged that although estimates on the basis of hides and skins could give an approximate idea of slaughtering of cattle, estimates of changes in livestock could again only be arrived at by special surveys.

Manufacturing

34. The Working Group found that although manufacturing is at present of small importance in most African countries, this might change rapidly and the problems connected with the supply of information about the industry should therefore be given close attention. For large scale enterprises which were limited in number, lists and registers could relatively easily be established and regular information obtained. The Group found that as much as possible data should be obtained on an establishment basis, while information on some items could only be collected from the enterprises.

35. It was the feeling of the Group that the importance of handicrafts was usually exaggerated. Information on urban handicrafts as well as on small-scale industry would have to be collected by periodic surveys.

Imports and exports

36. The Working Group recognized that the classification of imports by consumer goods, intermediate goods and capital goods presented problems for the national accountant, and that established lists of the relative shares of these various items would be useful in splitting many of them. An exchange of experience among countries concerning the way of establishing these shares was recommended.

37. The Group found that the problem of determining government imports was difficult in many African countries, although some countries

did have information on this point. It also considered briefly the problem of durable consumer goods and the implications of considering more of them than was the present practice as capital goods.

Commerce and transport

38. The Group considered that in many countries indirect estimates of the production value of these sectors through mark-ups was the procedure adopted. For planning purposes the two industries should be separated, because in the initial stages of planning some of the most concrete plans referred to transport. The Working Group also discussed the problem of determining directly the production value and value added of road, rail, air, river and coastal transport and found that for some countries in the region special difficulties were encountered in estimating road transport, while rail, air and main coastal transport were the easiest to estimate. Bills of loading were obtained in some countries in order to estimate the product of small-scale coastal transport, while loading capacity, age of vehicles and price per ton-km were taken into account in many countries to estimate the product of lorries, buses and taxis.

39. The way in which direct data on trade could be obtained depended on the economic structure of each country. The licencing of traders helped in identifying them and in obtaining the pertinent information. Otherwise censuses of distribution would be of great help in establishing bench-mark year estimates for the distribution sector.

Government

40. The Group stressed the importance of mechanical equipment in re-classifying government accounts. It also agreed that it should be the Statistical Office that did the actual re-classification

work, since this office was most interested in the re-classified information and therefore could direct the work better than any other organization.

41. The Working Group considered briefly the problem of extracting figures for government enterprises from the account of general government. It found that while the international recommendations were clear on the point of separating general government from government enterprises, there were problems of practical application in numerous cases which would have to be solved by each individual country.

Other services

42. This represented a heterogeneous collection of industries. For some of them information was readily available, like for instance banking. For others, consumptions or production per unit multiplied by the corresponding number of units would have to serve, although this was considered an inadequate measure.

43. The Group found that the question of the production boundary arose here with particular urgency. How far should one go in including various types of services, like, for instance, water carriers, etc.? The need for a special meeting to consider the coverage and valuation of these services was again stressed.

44. The Working Group considered the problem of obtaining separate figures for the industry of tourism. Tourism by non-residents as well as by residents was found to be important in many, if by far not in all African countries. It decided that the present procedure of obtaining estimates of non-resident tourist expenditure from the balance of payments or by multiplying assumed expenditures by estimated

number of tourists was adequate for the non-resident and usually economically most important part of the sector. For the resident part of tourism no definite solution was found, although family living surveys could give a lead.

45. The Group decided that unorganized or traditional commerce ought to be included in the distribution sector rather than under other services. With regard to the treatment of financial intermediaires the Group found that the international recommendations were adequate for the purposes of the region, although it was recognized that country practices might vary and therefore might have to be modified in order to achieve international comparability.

Wages and profits

46. Since some countries of the region build up their estimates of value added as the sum of wages and salaries and profits, and most others also calculate separately wages and salaries the Working Group considered these estimates briefly. It was found that family budget studies, operating accounts of enterprises, special surveys and tax returns were the main sources of figures of wages and salaries, which were on the whole satisfactory.

47. As far as profits were concerned, the Group found that there were difficulties in using company statements since their profit concept differed from that of national accounting. In some countries, satisfactory direct estimates of profits were difficult at the present stage of statistical development.

Estimates at constant prices

48. Although constant price estimates are at present relatively scarce in African countries, the Working Group agreed that such

estimates were very useful for planning purposes. However, the Group found that deflation of balanced accounts, like the account for uses and resources by commodity group, which were used in many African countries presented formidable problems. The only method of deflation which had been found practically possible for such accounts was to apply the same composite price index for all items.

49. The Group agreed that a series for total domestic product at constant prices could best be obtained by deflating the main components of domestic expenditure by means of appropriate price and volume indexes. It recognized that the base year chosen might be important for the movements in the resulting series for total domestic product, particularly in countries where the structure of the economy was subject to rapid changes.

Publication, accuracy and timeliness of the estimates

50. The Working Group agreed that a full analytical description of the estimates combined with as complete notes to tables as possible were indispensable for the users. Even so, it found that the best and most cautious presentation possible could not completely prevent misuse of the figures since many people looked at the tables alone and did not study the text.

51. Tables presented in percentage form were agreed to be useful for purposes of international comparisons, because of the difficulty of finding an exchange rate which corresponds to reality.

52. The Group agreed that it would have been useful to have some criteria for the indication of the accuracy of the various component parts of the estimates in terms of approximate margin of errors. It was, however, found that such criteria would necessarily have to be subjective and no general recommendation could be given on this point.

53. The timeliness of the publication of the estimates was found to be a function of staff resources and the time the basic information became available. The more up-to-date the published estimates were, the more useful they were to the users and this would again strengthen the statisticians in their claim for more resources.

Revisions

54. The Working Group agreed that major revisions of estimates for back years were occasionally necessary because new information became available in censuses or surveys. Also, it was usually necessary to revise the most recent estimates as more complete background information appeared. However, too frequent revisions due solely to changes in concept or because new staff with different ideas were in charge of the estimates should be avoided as far as possible.

V. Planning and national accounts

55. In discussing to what extent the present national accounts estimates were adequate for planning purposes, the Working Group found that there were great differences in the stage to which planning had been developed in the various countries of the region, and no single answer could be given to the question of the adequacy of the present estimates for planning purposes. Therefore, the Working Group felt that a regional meeting of African planners and statisticians would be very useful and recommended that such a meeting be held in the near future.

ANNEX I

AGENDA

1. Opening address
2. Election of the Chairman
3. Adoption of the Agenda
4. Experimentation with the use of the Intermediate System of National Accounts in selected African countries
5. Review of the methods of national accounts estimation actually used in African countries and difficulties encountered
6. The adequacy of the present national accounts for planning purposes
7. Adoption of the report

ANNEX II

ANNEXE II

LIST OF PARTICIPANTS

LISTE DES PARTICIPANTS

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Secretariat/Secretariat	Mr. N'Liba N'Guimbous Deputy Executive Secretary
	Mr. Bahgat El-Tawil Chief, Statistics & Demography Division
	Mr. Hans Th. Pedersen Chief, Statistical Research & Methodology Section
	Mr. W.L. Booker Chief, Statistical Development Section
	Miss P. Culabutan Statistician/Statisticienne
	Mr. Cole A. Statistician/Statisticien

ANNEX III/ANNEXE III

LIST OF DOCUMENTS
LISTE DES DOCUMENTS

E/CN.14/NAC/9	Agenda/Ordre du jour
E/CN.14/NAC/10	Some problems of national accounts in African countries Quelques problèmes relatifs aux évaluations du revenu national dans les pays africains Handbook of national accounts statistics for Africa Manuel sur les statistiques de comptabilite nationale
E/CN.14/221/Rev.1	Report of the Working Group on the adaptations of the United Nations system of national accounts for use in Africa Rapport du Groupe de travail sur l'adaptation du système de comptabilité nationale des Nations Unies à l'usage des pays africains
E/CN.14/60	Report on the Working Group on the treatment of non-monetary (subsistence) transactions within the framework of national accounts Rapport du Groupe de travail sur le traitement des transactions non monétaires (de subsistence) dans le cadre de la comptabilité nationale

ANNEX IV

OPENING SPEECH FOR NATIONAL ACCOUNTS MEETING

Gentlemen,

On behalf of the Executive Secretary and the Secretariat of our Commission, I should like to welcome you to Addis Ababa and to this Working Group on national accounts, which is the fifth working group on various aspects of the subject which has been convened under the auspices of the Economic Commission for Africa. Many of you have participated in one or more of the previous meetings, so that you are well acquainted with the work of the Commission in this field.

The Third Conference of African Statisticians recommended that this working group be convened in order to discuss and evaluate the results of an experimentation with the intermediate system of national accounts in some selected African countries. The results are embodied in nine draft chapters of a "Handbook of national accounts for Africa", which you have before you. You will see there that the amount of data available within the framework of the intermediate system varies considerably from country to country. The additional important task of determining the usefulness and significance of the available data is extremely difficult and is largely dependent on the detail of information available about methods of estimation. Also on this point there are large variations among the various country chapters.

During your discussion of the results of the experimentation with the intermediate system it would be useful to bear in mind that a thorough-going revision of the main international standard in the field, namely the United Nations System of National Accounts

(the SNA) is now under way. An expert group is meeting in New York at this moment in order to undertake the first round of this revision. The proposals they will study for the new and extended SNA contain features which include a number of the central ideas of the intermediate system and there will be an early opportunity for us in Africa to discuss the report of that expert group and the adaptation of the new SNA to our conditions.

The second point that I suggest for your consideration during this meeting is that you should be fully aware of your capacity as experts, and experts in a numerical minority, in view of the immense size of our continent and the multitude of needs and problems, whose solution for the Africa of tomorrow depends on the quality of your efforts and work. This compels us to make a sacrifice in this connexion, to practice self-denial, and recommends each of us not to plead here a national cause, but generously to pool our experience for the benefit of a joint technical objective.

It is also hoped that you will discuss during the week some of the main difficulties actually met in national accounts estimation by African countries to-day and some of the chief lakunae in the estimates. This might lead to important recommendations about the main types of basic statistics which are in most urgent need of development and thus tie in with the efforts to establish integrated programmes of statistical development.

At the same time, the analysis of the existing estimates might lead the group to conclusions about their adequacy for various purposes. Some of the participants may, for instance, have had experience which serves to throw light on the usefulness of the

estimates for social and economic development planning and the group may in this way reach conclusions as to the most urgent improvements needed in order to make the estimates more suitable for various practical purposes.

From what I have said, it is quite clear that you will have many things to discuss and I hope that your deliberations will result in concrete and useful conclusions. I wish you every success in your discussions.