

AGENCY FOR INTERNATIONAL DEVELOPMENT WASHINGTON, D. C. 20523 BIBLIOGRAPHIC INPUT SHEET	FOR AID USE ONLY
---	-------------------------

1. SUBJECT CLASSIFICATION	A. PRIMARY Economics
	B. SECONDARY General Economics

2. TITLE AND SUBTITLE
Review of Income Distribution Data: Ghana, Kenya, Tanzania and Nigeria

3. AUTHOR(S)
Phillips, Adedotun O.

4. DOCUMENT DATE April 1975	5. NUMBER OF PAGES 43p.	6. ARC NUMBER AFR-339-P558
---------------------------------------	-----------------------------------	--------------------------------------

7. REFERENCE ORGANIZATION NAME AND ADDRESS
**Princeton University
 Woodrow Wilson School
 Princeton, New Jersey 08540**

8. SUPPLEMENTARY NOTES (*Sponsoring Organization, Publishers, Availability*)

9. ABSTRACT

In this paper the author attempts three things in respect to each of the four countries under study. First, existing studies of income distribution will be surveyed. Secondly, there will be an appraisal of data availability for future income distribution studies. Lastly, some indications will be given as to desirable areas of emphasis in future studies of income distribution problems in these countries. The unfortunate yet inevitable conclusions of this exercise are that: (1) to date, studies of income distribution in these countries have been thin on the ground; (2) in the few analyses that exist, size distribution has received very scant attention; (3) data availability is not very encouraging, especially in the two East African countries; (4) in most respects, long time-series data are hard to come by, and where they exist the time span covers less than fifteen years; (5) even though the differences between the traditional and modern sectors are all too visible in these countries, existing statistics are not easily divided along these lines for income distribution purposes; and (6) much of future research activities must be oriented toward generating the required distributional data.

10. CONTROL NUMBER PN-AAB-132	11. PRICE OF DOCUMENT
12. DESCRIPTORS Survey, Data Availability, Problems, Future Research, Analyses, Long Time Series Data, Statistics	13. PROJECT NUMBER 931-17-995-568
	14. CONTRACT NUMBER AID/otr-C-73-237
	15. TYPE OF DOCUMENT Research Study

**Review of Income Distribution Data:
Ghana, Kenya, Tanzania and Nigeria**

by

Adedotun O. Phillips

Research Program in Economic Development

**Woodrow Wilson School
Princeton University
Princeton, New Jersey**

Discussion Paper No. 58

April 1975

**This research was supported by the U.S. Agency for International Development,
under the joint Princeton/Brookings Income Distribution Project.**

In this paper we shall attempt three things in respect to each of the four countries under study. First, existing studies of income distribution will be surveyed. Secondly, there will be an appraisal of data availability for future income distribution studies. Lastly, some indications will be given as to desirable areas of emphasis in future studies of income distribution problems in these countries. The unfortunate yet inevitable conclusions of this exercise are that: (1) to date, studies of income distribution in these countries have been thin on the ground; (2) in the few analyses that exist, size distribution has received very scant attention; (3) data availability is not very encouraging, especially in the two East African countries; (4) in most respects, long time-series data are hard to come by, and where they exist the time span covers less than fifteen years; (5) even though the differences between the traditional and modern sectors are all too visible in these countries, existing statistics are not easily divided along these lines for income distribution purposes; and (6) much of future research activities must be oriented toward generating the required distributional data.

I. GHANA

1. Existing Studies

Existing income distribution studies of Ghana have tended to focus more on the urban/rural (agricultural), regional and minimum wage dimensions of the problem, and scarcely on size distribution.

Perhaps the best examples of the urban/rural studies are those conducted under the aegis of the Institute of Statistical, Social and

2.

Economic Research (ISSER) of the University of Ghana, using household budget surveys.¹ The first study is a pilot survey and it covers only one rural council (the Akwapin Rural Council) and one urban council (the Juaben Urban Council). It found urban incomes of about ₵40 per month higher than rural incomes of about ₵29.² It also found that expenditures are more equally distributed than income in each of the two council areas, but that rural income distributions are less unequal than urban income distributions.

The main study,³ largely confirms the findings of the pilot survey. Using stratified sampling, it covered 364 rural and 358 urban⁴ households in the Eastern Region of Ghana during 1967-68. The interview technique was used and each household was visited six times during each quarter of the year. Apart from the demographic characteristics of each household, the survey sought information on income sources and expenditure patterns as well as the distribution of both. Income and expenditure were defined to include imputed rents and consumption of self-produced crops. Among its several findings, the survey found that urban average monthly income of about ₵38 was slightly higher than the rural income of about ₵33. Rural income distributions were found to be more equal than urban distributions, and expenditures were less unequally distributed than incomes. Although it is based on only one region of Ghana, this study provides to date the most reliable information on urban/rural distributions and differentials in Ghana.

The works of Rourke, B.E. and his collaborators⁵ (although focusing on agricultural incomes, among other characteristics of Ghana agriculture) further indicate the rural/urban bias in studies of income

distribution in Ghana, as well as giving some insights into the regional aspects of the problem.

In Rourke's first paper, a survey was undertaken in 1970 of some 170 agricultural districts. Essentially, the point of interest was a comparison of casual and annual labour in the several regions of Ghana. The study found that annual labour was more common in cocoa districts and casual labor more common in non-cocoa districts, and that average annual cocoa labour income ranged from ¢52 in the Volta Region to ¢72 in Brong Ahafo, not counting benefits in the form of food, clothing and housing. Casual labour on the other hand earns between 40 pesewas⁶ per day plus food or 10 pesewas in the Upper Region and 75 pesewas in the West and East. The study also, importantly, found that in several of the districts surveyed, more than 50 per cent of the farm entrepreneurs earn above ¢500 per annum in cash income, Brong Ahafo and Ashanti regions being best off in this regard, with the Upper and Central Regions the worst. Importantly also, pure subsistence agriculture was found to be absent, thanks to the extensive penetration of traders and market women.

This study is significant for the information it gives on regional differentials, but its usefulness as a source of information on incomes in Ghana is limited because of its narrow focus. This narrowness is also evident in Rourke and Sakyi-Gyinae's paper where some of the results of the survey conducted for Rourke's first study are combined with information from other sources, (e.g., the Statistical Yearbook), to further analyse daily wage rates in the several regions of Ghana. The North-South differential was again highlighted, with modal daily wage rates, including benefits, ranging from 50 pesewas in the Upper

Region to 80 pesewas in the Volta. The daily wage rates of agricultural workers are in most cases less than the minimum national wage of 75 pesewas a day during the year of study. Increases in urban minimum and average wages were found to have been largely eroded by inflation. Thus, if 1960 = 100, real minimum wage in 1969 = 56 and average wage = 75. Again, the evidence is spotty and characterised by lack of time series on urban/rural wages.

It is when the third Rourke study⁷ is combined with the other two that some more useful income information becomes available. This study provides inter alia information on number of days worked. This was combined with the wage information from Rourke and Sakyi-Gyinae's paper to estimate annual agricultural workers' income. Presenting the results of a July-September 1971 survey of a total of 399 farm workers in Kade, Goaso, Tamale and Akuse, Rourke and Obeng estimated that annual farm incomes ranged from about ¢71 to ¢168 per annum. The full-time well-established as well as new migrant workers were at the top of this income range, part-time workers, housewives and traders being at the bottom. However, even the upper limit of this range was still below the minimum wage of ¢234 per annum then prevailing in the government sector.

Apart from providing information on agricultural workers' incomes, Rourke and Obeng's study is significant for its method of income estimation in which the number of days worked is considered the most important determinant of farmworker income. Two limitations however are worth mentioning. First, for information on number of days worked, Rourke and Obeng relied on the memory of the workers. Secondly, it is possible that part-time workers have other sources of income; these are not included in the income estimation.

The other studies focus on rural incomes, concentrating this time on cocoa farms. Beckman⁸ used the purchasing records of the United Ghana Farmers Cooperatives Council to analyse the distribution of the 1963/64 cocoa crop. He covered almost 40,000 farmers comprising a 20 per cent sample of societies in the UGFCC. Distributing the 1963/64 crop by regions, districts, and farmers, he found inter alia that Ashanti and Brong Ahafo regions produced above the average of 57 loads for the country. Moreover, 60 per cent of the farmers produced under 40 loads, constituting 18 per cent of total output, whilst 5 per cent of the farmers produced over 200 loads, constituting 31 per cent of output. Almost two-thirds of farmers producing over 500 loads are in Ashanti and Brong Ahafo regions. The median gross income per farmer ranged from about ₵135 in the Volta to almost ₵260 in Ashanti.

Battarcharya and Potakey⁹ have supplemented the data in Dutta-Roy¹⁰ survey with additional information (on gross returns, production costs, acreage, ratio of non-bearing trees, etc.) from cocoa farmers. It found acreage per household or per capita higher in the urban areas, although urban area farms tended to be younger, with consequent higher proportion of non-bearing trees, and lower (50 per cent) production per acre than rural farms. Higher gross returns in rural areas combine with higher production costs to result in little difference in net return per load as between urban or rural areas.

One distinguishing characteristic of the studies reviewed so far is that they all by and large rely on primary data collected specifically for the study. But there are also a few noteworthy studies based on already published data. Perhaps the most notable of these is

Kodwo Ewusi's 1971 study.¹¹ The study relied principally on the series of Labour Statistics published by the Central Bureau of Statistics, supplementing this source with income tax data on self-employed and cocoa farmer incomes derived in Beckman's study. Covering the period 1956-1968, it analysed employment and income by income groups for the public and private sectors (with industrial breakdowns) as well as by regions, using the Pareto, Gini, Lorenz and Durait curves in places to sharpen the analysis, and specifically deriving the Pareto coefficient, Gini coefficient, Gini Concentration ratio, Standard Deviation of log of income and the coefficient of variation for 1956 and 1968. These several indicators showed a worsened inequality of income distribution over the 1956-68 period. Minimum wage earners suffered a decline in real wages.¹²

Although it constitutes a bold attempt at a comprehensive analysis of income distribution in Ghana, Ewusi's survey suffers from incomplete coverage. Thus, its main data source, the Labour Statistics is known to cover about 60 per cent of wage employment reported in the 1960 census. Moreover, wage employment is estimated to account for less than 25 per cent of GDP. Because of the nature of data used little information is provided on individual or household annual incomes nor on non-wage incomes.

Ewusi rejected the notion that the urban wage earner's income is significantly higher than that of the rural workers. This position is also evident in a second study¹³ in which Ewusi also questioned Isaac's claim¹⁴ that the average rural worker's income is as low as 35% of the national minimum wage. The point of departure in Isaac's assumption of nil savings ratio for rural workers and his not taking account of income transfers from urban to rural areas and of other implicit and

explicit wage adjustments. Isaac's article was essentially a reaction to proposals to raise the minimum wage and he was arguing therein for a policy of wage restraint in order to enhance employment generation, capital formation and curb flights from farming to wage employment.

The urban/rural dimension showed up again in Greenhalgh's 1972 article.¹⁵ Using data from Dutta-Roy's previous survey and applying regression analysis, Greenhalgh attempted to explain income differentials by reference to locality (i.e., urban or rural), occupation, amounts of education and capital. It found inter alia that higher urban incomes (wage and self-employment incomes) tend to be due principally to the greater proportion of educated workers in the urban areas. Urban/rural differentials tend to disappear when the factor of education is taken into account. Also, occupational differentials can be traced to different capital requirements rather than to urban or rural location of activity. The study shows monthly income estimates of about ₦28 per month for illiterate or primary educated employees as against about ₦50 per month for higher school educated employees. Also, whilst the subsistent farmers earns about ₦19 per month, a trader or craftsman earns about ₦35 and the cocoa farmer ₦36.

Another study¹⁶ also uses information from Dutta-Roy's survey and from official published data (especially the 1961-62 National Household Budget Surveys) to look at the rural/income aspect from another angle. The degree of rural/income differentials becomes higher when, for example, people with the same level of education but resident in rural and urban areas are compared. Thus, Knight estimated that a rural farmer with no more than primary education earns about ₦27 a month compared with about ₦36 for an urban wage earner with the same level of education. Additionally,

Knight found that the lowest quartile of both rural and urban households received about 11 per cent of total income but that the highest quartile in urban areas received 46 per cent of total income as against 43 per cent in rural areas. Thus, urban/rural differences tend to be greater at the higher than at the lower income levels.

There are several partially relevant studies but which unfortunately focussed on expenditure patterns rather than on income distribution.¹⁷ All of them still fit the urban/rural mould; but their being used to derive incomes for income distribution analysis depends on assumptions about the savings ratio, and on the significance of other sources of incomes (especially non-wage incomes and the adequacy and reliability of their coverage). It is noteworthy that Davey, which attempted to estimate incomes abandoned the attempt because of, inter alia, difficulties surrounding making these types of assumptions.¹⁸

It will be recalled that Ewusi¹⁹ provided some information on the evolution of real minimum wage over time. His observations on this low income group can be stretched farther back in time by reference to Birmingham's article.²⁰ This study traces over 20 years the increasing impoverishment of daily-rated unskilled labourers in Accra by the phenomenal increases in cost of living, especially of food prices. It was not until about the end of the two decades under reference that wage increases caught up with the cost of living. And, as indicated earlier, Ewusi found that by 1968 the situation had worsened again, so much so that it was worse than in 1939.²¹

No study of income distribution in Ghana will be complete without reference to the famous Mills-Odoi Report,²² especially if interest is focussed on government impact on wage and salary structures and on intra-public service income distributions. The Mills-Odoi report will be

remembered for its inconsistency in decrying monetary awards (as against productivity increases) as instruments for improving standards of living, whilst at the same time arguing that wage and salary levels in the Civil Service should generally be brought up to the levels prevailing in the public corporations and private enterprise.

Lastly, a recent reference work on Ghana provides economic information which could serve as a useful backdrop to income distribution studies of the country.²³

It seems clear from the foregoing that the major focus of existing literature so far has been the rural/urban aspect of the problem, a situation triggered off and encouraged no doubt by Dutta-Roy's Eastern Region study,²⁴ and by the Urban Household Budget Surveys of 1953, 1955, and 1956 and the National Household Budget Survey of 1961 by the Central Bureau of Statistics. Their findings, albeit sketchy and spotty, generally confirm a priori expectations about urban/rural income distribution. In virtually all the studies, time series orientations are absent. With the possible exception of Ewusi's paper, scant attention has been given to size distribution of income.²⁵ All this is perhaps understandable in view of the limitations of existing relevant data, an aspect to which we now turn, with particular reference to size distribution analyses.

2. Data Availability and Limitations

The most important data sources for size distribution analysis are the Labour Statistics, Household Budget Surveys (CBS), and Income Tax Data. We will first examine each of these before indicating other possible data sources.

Labour Statistics (LS)²⁶

The series is published annually; the first issue relates to 1956 and the latest to 1970. Apart from providing information on numbers employed in public and private sectors according to various industrial groupings, the LS gives information on, inter alia, total disbursements or earnings (wages and salaries, plus overtime pay, bonuses, commissions, etc.) to persons in wage and salary employment, on the distribution of African employees by wage or salary rate, as well as indices of monthly earnings and of wage and salary payments per male African employee. The information presented in the LS is obtained from annual and quarterly returns of employment and earnings submitted by all recorded employers under the provisions of the Statistics Law.

The LS is subject to several serious limitations, most important of which is incomplete coverage. Thus, although it ostensibly covers all employers, in fact only employers of ten or more persons are adequately covered. Besides, it covers only those in civilian employment. Even here, persons working in the cocoa farms, African diamond diggers, and domestic employees are excluded. Compared with population census data for 1960 and 1970 the LS probably covers less than 60 per cent of those reported in the census data to be in wage employment, much more so in the latter year. It is clear therefore that the LS series seriously understate total wage and salary payments. And, of course, self-employment incomes are clearly not covered. It is also generally thought that the public sector is much more completely covered than the private sector, although as a result of the Industrial Census, the private sector coverage has improved, especially since 1963.

Apart from incomplete coverage, the LS data relate to income recipients rather than to family units. Thus, for some types of distribution analysis (those focussing on spending capacity), the LS may not be too useful. Also as published, the data are already categorized into wage and salary groups thus making it impossible (without reverting to the original returns) to get a complete ordinal ranking of income units. Hence, the usual distribution analysis by quartiles, quintiles, deciles, etc., is impossible. Although the data relate to total earnings, income in kind (subsidized housing, meals and transport, etc.) is not included. A last limitation is the seasonal bias introduced by the point in time to which the data relate (December of each year). For several reasons, December is not a 'normal' month. First, there usually is an increase in number employed in December to cope with the Christmas rush; secondly, bonuses (often exceeding regular wages) are often paid during the Christmas season; and lastly, most workers are more willing to work overtime during December to increase their earnings to meet the higher monthly expenditure at Christmas time.

Despite these limitations, the LS currently constitutes the best data source for size distribution analysis. Its usefulness can be improved in several ways. It can for example be supplemented by existing surveys of cocoa farmers' incomes, and by income tax statistics on the self-employed. The conversion of income recipients into family units, if required, is virtually impossible unless the heroic assumption is made that each income recipient (especially the males) included in the LS is a household head and estimates of household size and income are based on the findings of existing budget surveys such as Dutta-Roy 's and those conducted by the Central Bureau of Statistics. Attempts

at ordinal ranking of the income recipients can be obtained by consulting the original returns, although this is a difficult task! Desirable as it would be, correction for income in kind is likely to be impossible at this stage of the country's statistical development. Lastly, a sample survey covering months other than December is required to assess the magnitude of the presumed upward bias.

Household Budget Surveys (HBS)

HBS normally will provide data on income distribution among family units. Ghana's Central Bureau of Statistics (CBS) has conducted a series of HBS since 1953 in some important urban areas.²⁷ These urban surveys covered wage-earning households of two to eight persons in the three cities, with the household head earning £50 - £150 per annum (in Accra) and total household wage income of £5 - £15 per month in Sekondi-Takoradi and Kumasi. The surveys covered income and expenditure over a thirty day period.

These urban HBS suffer three important disabilities. They were meant to cover 25 per cent of the households in the cities concerned but actually covered less because many of the households in the sample frame failed to qualify under the specified criteria. Secondly, the results for the cities are not too comparable not only because of different dates but also because the household selection criteria are not altogether the same for the three cities. Thirdly, the surveys relate only to the period of study and hence are not useful for time series analysis of income distribution. Lastly, and perhaps most important, their primary objective is to collect information on consumption patterns needed to derive a set of weights for the cost of living indices. Income

data in the surveys were meant as a check on expenditure information and in several cases the data were so unreliable they were not even used for that purpose.

There was a National Household Budget Survey (NHBS) in 1961/62.²⁸ It covered 18 households selected from some 200 enumeration areas, themselves selected from the 1960 census list of enumeration areas. Apart from expenditure information (which again was its major objective), the NHBS provides information on income in cash and kind. The NHBS, like the urban HBS, is limited in use by coverage incompleteness (a third of the selected rural households were omitted because of inaccessibility), single reference period, and greater bias towards expenditure. An attempt to use it as a basis for national income estimation had to use the expenditure approach.²⁹ Isaac's attempt to estimate income from the NHBS did not use its income data but rather the expenditure data on the assumption of nil savings ratio.³⁰

Generally, government undertaken HBS are not as useful as Dutta-Roy's Eastern Region Survey, which explains the greater reliance on the latter by income distribution analysts. It is noteworthy however that the CBS is currently (1973-74) mounting another NHBS which it is hoped will this time remove the major deficiencies in knowledge about incomes in Ghana.

Income Tax Data

The Annual Reports of the Central Revenue Department have since 1963 included a table or two on the distribution of income of self-employed persons by range of assessable income.³¹ As indicated earlier, these data should come in handy to supplement data on wages and salaries derived from the Labour Statistics. But this will not be without some

difficulty, arising principally from incomplete coverage in terms of number of persons and volume of income, thanks to the greater incidence of tax evasion and avoidance invariably experienced in the income taxation of the self-employed.

The Annual Reports contain no information on the assessable incomes of taxpayers in wage employment. This omission, plus the incomplete coverage of data on self-employed taxpayers, generally render published income tax data a lot less useful for distributional analysis. Other fiscal data such as those on government expenditures and revenues are plentifully available in published forms, albeit, in the aggregates.

Desirable but non-existent data

Ghana's national income accounts are of little use for distributional analysis because of their expenditure approach. The same applies to population census data which have focused on demographic characteristics and contain no data concerning individual or household income and wealth. And the industrial census data focus only on number of establishments, volume of employees, gross output and value added. One exception to all this is the 1970 Ministry of Agriculture Sample Census of Agriculture which provides information on acreage and yield in different areas and could thus be useful in estimating farm incomes. The main census is however still to come.

From all the foregoing, Ghana's income data base would appear to be subject to several serious limitations. In particular, there is a wide gap with respect to self-employed incomes (high or low), although the gap can be bridged in the meantime by a sample survey of self-employed persons. One is tempted to suggest that future research should

focus more on getting up basic income data. If however the National Household Budget Survey currently being put in hand is properly conducted, it should obviate the need for such a fundamental exercise. The practical suggestion to make is therefore to await the results of this survey.

II. KENYA

Much of existing income distribution studies of Kenya in fact exhibit much the same characteristics as Ghana's: paucity and scantiness. Besides, in many of them income distribution analysis comes in more as an inevitable or tangential aspect of the study rather than the primary or major focus. With respect to data availability, however, Kenya fares much better.

1. Existing Studies

Perhaps the most recent and important study of incomes problem in Kenya is the ILO report on employment, incomes and equality in Kenya.³² Although it undertakes a wide-ranging examination of Kenya's economy from several angles, its treatment of income distribution in Kenya constitutes to date perhaps the most comprehensive. Drawing principally on government collected statistics, the report gives information, for example, on size distribution of farms and of small holdings, showing that farms of over 20,000 hectares constitute less than .5% of all the farms but have over 47 per cent of total farm land; and among small holdings, farms of over 10 hectares constitute 7 per cent of all small holdings but have over 34 per cent of total small holdings. Classifying households in Kenya into seven economic groups, it shows that in 1968-70 the topmost

group³³ earn £1,000³⁴ yearly and over compared with, say, £ 20 -£ 60 yearly for workers employed in small holdings and most of those engaged in the informal urban sector. It finds also that about 10 per cent of urban households in 1968-69 had about one-third total urban household incomes against about 50 per cent of urban households owning only about 15 per cent of urban household incomes. Urban-rural differentials are shown up by a comparison of the average annual incomes of several selected groups in urban and rural areas. Thus, for example, the average income of male employees of large farms was £73 in 1969 compared with the urban minimum wage of £106. The report also gives useful information on regional disparities in income and essential services, showing the Central Province best off and the North Eastern Province worst off.

A comprehensive analysis no doubt, but the ILO report suffers from the limitations of the data it draws on and from lack of time series comparison as most of the data relate to the period between 1968 and 1970.

Apart from the ILO report, most other income distribution-related studies have been conducted under the aegis of Nairobi University's Institute of Development Studies or by those who have had associations with the Institute at one time or the other. Studies undertaken by Westlake are noteworthy because of their attempt to assess the impact of one major instrument -- taxation -- on income distribution in Kenya.³⁵ Again relying on published data (in particular the urban budget surveys) he found that the impact of the overall tax system (direct and indirect) tends to be regressive for household income ranges up to Shs. 2,000 per month,³⁶ and tends to become progressive thereafter, thanks to the surtax. Since only 1 per cent of African taxpayers fall in this higher income

group, the tax system can be said to have no redistributive effect as far as 99 per cent of the African population is concerned.³⁷

2. Data Availability

The single most important data source for income distribution analysis is the annual Employment and Earnings surveys conducted by the Central Bureau of Statistics. They give data on employee earnings by, inter alia, industry, occupation, region, race, public and private sectors. The data has been published for the years 1963 to 1971.³⁸ In several respects it is similar to Ghana's Labour Statistics. Essentially it covers only the modern sector (which is defined to mean the entire urban sector), public sector activity outside the urban sector and large-scale enterprise in the rural sector. It covers the public sector, the larger towns and large-scale organized business activity much more adequately, although since 1964 there have been significant improvements in coverage. Except for 1963 when reported earnings cover only wages and salaries, earnings include not just wages and salaries but also overtime, bonuses and all regular cash allowances such as housing allowance, etc. But non-cash incomes are not included. Its derivation of annual earnings should be noted. Thus, employers are requested to provide information on the payments for one month (usually June or July when the survey is usually undertaken) of the major component of earnings and one-twelfth of the total of other payments made during the previous twelve months. The total of these two submissions is then multiplied by twelve to derive the earnings for the year. A comparison of this estimate with actual earnings over a complete twelve-month period suggests underestimation. This contrasts with Ghana's Labour Statistics' earnings data which tend to be overestimated.

In addition to the Employment and Earnings data, another important source are Income Tax data contained in the annual reports of the East African Income Tax Department. The reports inter alia provide data on the total income of employees, individuals (self-employed) and companies, and importantly, on the distribution of employees, individuals and companies by income groups. These data are subject to known limitations of income data contained in income tax statistics, particularly incomplete coverage in terms of total income earners and of total incomes. The data are least reliable for self-employed incomes. And to the extent that married couples are jointly assessed, the number of "persons" involved is understated.

A third important data source are the household budget surveys conducted by the Ministry of Finance and Economic Planning.³⁹ The Nairobi 1957/58 HBS covered a sample of African workers earning less than Shs. 320 per month, while the 1963 survey covered a sample of 324 African middle income workers in the income range of Shs. 350 - Shs. 1,250 per month. The 1968-69 surveys covered a total of 1,146 African households in the three cities and this time covers the broad spectrum of the income range. Unlike Ghana HBSs these surveys were not conducted primarily for the purpose of constructing consumer price indices but to bridge basic data inadequacies for planning purposes. Another advantage of the 1968-69 surveys is that they include estimates of components of income such as income in kind, housing subsidies, transfers, sale of own produce, net business profit, income from casual and regular employment. However, they have a number of disabilities with regards to their use for income distribution analysis. As indicated, they focus only on Africans. The

data are therefore useless for inter-ethnic comparisons, an analysis that is important in the particular context of Kenya. They are also of limited use for poverty analysis since they omit most of the urban shanty areas and tend to concentrate on high income areas, especially in the case of the 1963 and 1968-69 surveys. For example, only about 5 per cent of the sample households for the Nairobi 1968 HBS earn below Shs. 200 a month, a percentage that is probably grossly below the actual situation. Lastly, in the analysis of the survey data by the Ministry, no account is taken of household size. Derivation of per capita income is therefore impossible without reference to the original survey returns.

Apart from the HBSs, a number of useful surveys, also undertaken by the Ministry of Finance and Planning, are worth mentioning, especially for their significance in providing information on agricultural incomes and incomes of rural non-agricultural enterprises, and on incomes in service activities. Thus, the Central Province Agricultural Survey 1963/64 contains information on income distribution among farmers in the area of study. The ministry has also undertaken since 1963 a series of Farm Economic Surveys of large and small farms which yield useful information on farm size, gross output, profit, land utilization, etc. Also, the 1967 and 1969 Survey of Non-agricultural Enterprises in Rural Areas gives some information on employment and self-employment incomes.⁴⁰

3. Conclusion

It would seem then that Kenya's data base offers somewhat favorable conditions for income distribution study. Certainly, the situation is best with respect to employment income in the modern sector of the economy. In addition, attempts at differentiating between the

traditional and modern sectors are more possible thanks to the several surveys by the Ministry of Finance and Planning. Self-employment incomes -- particularly peasant income and incomes from unincorporated enterprises -- constitute the most serious gap. Information on the poverty levels in the urban centres remain virtually non-existent. The Mathare Valley Study⁴¹ is one of the very few known studies of this problem, although it does not deal with poverty level incomes per se.

Graduated Personal Tax data would have been most useful in estimating peasant incomes (and in fact in obtaining income data on the total adult population, since all adult income earners are subject to the tax). Unfortunately, it was controlled by local authorities who hardly keep reliable data on the tax. The tax has now been abolished from January 1974. Perhaps steps should be taken to ensure that the potential wealth of data from the tax is collected and preserved and not lost now that the tax has been abolished. The small farm surveys offer another alternative, through land utilization data, for estimating peasant incomes. Otherwise, small sample surveys can be undertaken to elicit more information on peasant incomes.⁴²

A sample survey may also be what is required to improve income information about the self-employed, information which could be used to improve current income tax data. The self-employed persons included in existing income tax statistics will provide the sampling frame for such exercise. The annual Employment and Earnings survey, according to the relevant law, should actually cover "employees and self-employed persons."⁴³ Accordingly, a long-run improvement in information on the

self-employed would depend on an intensification of the coverage of the surveys by the Central Bureau of Statistics of the Ministry of Finance and Planning.

III. TANZANIA

Of the countries considered in this paper, Tanzania stands out for its elevation of the goal of equity in income distribution to a position of utmost importance as a criterion for project selection and government activities. Three conerstones of Tanzania's development policy -- equity, Ujamaa and Kujitegemea⁴⁴ -- ensure this pre-eminence of income distribution in the development process. Ironically, however, income distribution studies are far fewer for Tanzania than for the countries so far considered. Tanzania's statistical base and limitations are very similar to Kenya's,^{owing} largely to their similar colonial history and close links.

1. Existing Studies

R. H. Green's paper⁴⁵ presented at the Bellagio Conference,⁴⁶ gives the best, albeit sketchy, picture yet of Tanzania's income distribution pattern. Working with little data (and without indicating the source of the few statistics given), the paper claims, for example, that about 30 per cent of farm families have incomes (cash and kind) equal to the urban minimum wage; that the urban-rural differential is probably about 6:1 pre-tax and 5:1 post-tax and that the differential is narrowing compared with pre-1965 period. In the public sector, the maximum gross differential is 25:1, although in post-tax purchasing power terms it is 14:1. In the wage and salary sector, greater equality has been achieved

by raising the bottom and freezing the top. Thus, Tanzania's minimum wage is not only the highest in East Africa but, unlike in these other countries, it is automatically adjusted biannually to account for cost of living changes. On the other hand, salaries above Shs. 15,000⁴⁷ are frozen for between five to ten years. Being essentially a policy-oriented paper⁴⁸, the paper provides a good beginning for a study of the effectiveness of income distribution policies in Tanzania.

Brief references to income distribution in Tanzania (particularly the functional aspects) were made in Rweyemazarrni's book on industrial strategy in Tanzania⁴⁹ which also used the revised National Accounts to analyse the distribution of income earners by income groups in 1969. A few other income distribution-related studies have been conducted under the aegis of the Economic Research Bureau (ERB) of the University of Dar es Salaam.⁵⁰

2. Data Availability

Since there are great similarities between Tanzania and Kenya in the types and condition of data available, we will simply mention the data sources at this stage, indicating where appropriate, significant points of departure. There are the annual Employment and Earnings (E&E) Surveys since 1962. There are also the pre-independence urban Household Budget Surveys of Dar es Salaam, Tanga and Mwanza; the Family Budget Survey of Middle Grade African Civil Servants, 1963; the Household Budget Survey of Wage Earners in Dar es Salaam, 1965; the 1967 Household Budget Survey of the cotton growers in the Lake Regions and the 1969 Household Budget Survey of Tanzania Mainland, which was a country-wide year-long survey.

Both these types of surveys (E&E and HBS) were undertaken and analyzed by the Bureau of Statistics, Dar es Salaam. The same Bureau also carried out the 1961/62 Village Economic Surveys, the 1964 Large Farms Survey, and the 1971 and 1972 Agricultural Census, the report of which is now in preparation. Tanzania is covered in the income tax data contained in the annual reports of the East African Income Tax Department. Lastly, the Ministry of Economic Affairs and Development Planning has produced a voluminous Regional Statistical Abstract, 1968-70, although it is not published.

In addition to the above, a separate volume of the 1967 population census publication series was devoted to analyzing the economic characteristics of the population. Although income is not specifically included in these characteristics, useful data on economically active population, their occupation, education, industry are included, as are farming households by main and secondary agricultural produce. Kenya has no published equivalent of this volume. Another significant difference from Kenya is that Tanzania has significantly revised her series of National Accounts by taking advantage of the results of the 1969 Household Budget Survey. Consequently, tables now exist showing for 1969 distribution of households by income group and by industry, distribution of households by annual cash income group, and distribution of income earners by annual cash income group.⁵¹

Much the same limitations and improvement techniques which apply to Kenya's data base apply to Tanzania's. There is thus no need therefore to repeat them here. It should be noted, however, that the Tanzanian Government is commissioning the Department of Economics of Dar es Salaam University to undertake a comprehensive analysis of income

distribution in the country. An important objective of this exercise is the removal of existing data barriers to a meaningful understanding of income distribution pattern and evolution in Tanzania.

IV. NIGERIA

The general belief in Nigeria is that the rich are getting richer and the poor poorer. Unfortunately, little empirical studies of Nigeria have been undertaken to validate this claim. This may have been due to the preoccupation in Nigeria, with growth problems, and with the not too satisfactory statistical foundation on which such studies could be built.

1. Existing Studies

The University of Ibadan's Department of Economics has in the last four years or so significantly increased in its research activities on income distribution problems in Nigeria. Two of the studies⁵² which have emanated so far from the exercise, present perhaps the most useful picture yet of the situation. Phillips and Teriba took a broad sweep of the problem by examining Nigeria's income differentials from several angles: regional, urban/rural, sectoral, functional, inter-industry, inter-occupation and inter-personal. The data used for this broad-sweep analysis are not only fragmentary, but came from several unrelated sources, are not too reliable and had scanty time-series dimensions. The paper is at best a rough experimental attempt to identify what the broad outlines of the pattern of income distribution in Nigeria look like with a view to highlighting future areas of research emphasis or identifying areas requiring immediate policy measures. Among several findings, the paper

finds, for example, that whilst the old Northern Region accounts for about 46 per cent of Nigeria's GDP against Lagos Territory's 7 per cent, its per capita income is one-sixth that of Lagos. Other socio-economic indicators are shown to reflect this wide inter-regional disparity. Urban/rural average per capita income differential which was of the order 1.8/1 in 1960 is found to have worsened to 2/1 by 1967. Using income tax data for Western Nigeria it found that the bulk, 95 per cent, of income taxpayers in 1967 had an income range below £200⁵³ a year and accounted for 70 per cent of gross income. Those with incomes above 900 a year constitute less than 1 per cent of income earners but account for about 10 per cent of the gross income. The ostensibly progressive personal income tax is found to have no impact on income distribution. Education is found to be an important determinant of inter-personal disparities. Aboyade's study⁵⁴ drew its data from a 1967 survey of household consumer durables expenditure conducted by the Department of Economics. The survey covered a sample of over 1600 households in different parts of the country (excepting the civil-war areas of the East). With the aid of Lorenz and lognormal curves and regression analysis, it found inter alia that whilst an illiterate household head earned on the average about £130 a year, a University graduate-headed household earned an average of over £1,500 a year. It also found that educational attainment, occupational category, household size, urban/rural location and the sex of the household head are the probable critical factors determining the pattern of income distribution.

In another study,⁵⁵ Aboyade argued among other things that production relations determine the pattern of income distribution which in turn determines the character of economic power. On the basis of this argument, he called for measures to enhance the productive capacity of the low-income groups and a de-emphasis of current pressures for immediate increases in the consumption levels of these groups. Aboyade's address is a powerfully written theoretical-philosophical paper with radical policy inferences. It will influence the future course of income distribution research at the Ibadan School of Economics.

Incomes policy in Nigeria to date has focussed primarily on wages and salaries, particularly in the public sector and the urban sector. Understandably therefore, several income distribution-related studies have been directed at wage and salary determination and surrounding problems.⁵⁶ Also each time there is a Wage and Salaries Review Commission (as is conventional in Nigeria when wages and salaries are to be adjusted) there usually occurs several studies of the implications of the change in incomes policy. The latest of such wage and salaries review commission is itself a graphic study of income distribution pattern (especially from the inter-personal and urban/rural dimensions), and of the institutional factors in income distribution in Nigeria.⁵⁷

Distribution in the agricultural sector has received quite some attention with regards to the adverse impact of Marketing Board pricing policy on the incomes of cash crop farmers vis-à-vis other income earners in the economy. For example, Olakampo and Teriba show that when Marketing Board surpluses are combined with export duties and produce purchase tax, the withdrawal from potential producer income ranged from 22 per cent to 32 per cent during 1947 to 1962.⁵⁸ This contrasts with

average urban income tax burden of less than 10 per cent. However, this study and some others⁵⁹ whose findings are broadly similar, were not concerned per se with distributional problems.

Essang, one researcher who did consider distributional problems presented information on the distribution of cocoa earnings at three levels: among cocoa farmers themselves, among individual indigenous licensed buying agents, and between the governments and its agents on the one hand, and cocoa farmers on the other.⁶⁰ With regard to the distribution among cocoa farmers, Essang found that the bottom 38 per cent of the sampled farmers received 8 per cent of cocoa earnings as against the 18 per cent of earnings received by the top 2.5 per cent. As for the distribution among licensed buying agents, the bottom 32 per cent of them received 9 per cent of their earnings whilst the top 6 per cent received 31 per cent of the earnings. Essang draws a number of conclusions from these findings. Perhaps the most important of them is that export booms and increases in producer prices may not necessarily accrue to the majority of the farmers since earnings distribution among them is quite uneven.⁶¹

The proceedings of the 1972 Annual Conference of the Nigerian Economic Society⁶² go beyond just agricultural incomes. They look, inter alia, at agricultural outputs, rural credits, rural industrialization and the impact of fiscal policy on rural areas under the general theme of rural development Nigeria. The proceedings provide a good beginning for comprehensive studies of rural income distributions in Nigeria.

It is clear from this brief review of studies of income distribution in Nigeria that the subject has scarcely begun to be examined in any great length or breadth. Vast opportunities therefore exist for path-breaking research.

2. Data Availability

Perhaps the most promising data source yet for income distribution analysis of Nigeria are the series of household budget surveys (called Urban Consumer Surveys (UCS) in Nigeria) conducted by the Federal Office of Statistics (FOS) since 1953. To date, several towns in Nigeria have been covered by these surveys.⁶³ A number of characteristics of these UCSs are notable. First, the earlier ones, those conducted in the 1950s, covered only low income wage earners with wages of not over £350 a year.⁶⁴ Secondly, those conducted in the 1960s, included not only low income wage-earners but also middle income earners with salaries between £450 and £1,200 a year. Thirdly, those conducted in the 1960s⁶⁵ included self-employed households. Fourthly, the duration of the UCSs has traditionally been twelve months, with each included household being interviewed for a month during the twelve-month period. Fifthly, the concept of income used throughout is the flow of receipts concept in which cash receipts is defined to include basic income, income from subsidiary occupation, rents received, cash gifts, loans raised, loans repayments received, withdrawal of savings, etc. Profits of the petty trading activities of women, however, are not included and the Federal Office of Statistics suspects some income under-estimation on account of this.⁶⁶

Nigeria's UCSs suffer from well-known disabilities of household surveys in developing countries. They do not exist in a continuous series. Several of the towns indicated have been surveyed only once since 1953; the major towns (especially the former regional capitals) have been done twice, although all the towns have been surveyed during the 1960s. Secondly, they cover only a small segment of the economically

active population and the specified income limits are such that they throw no light on the poverty levels nor on farming groups or the rural population. One possible third disability is that the surveys were conducted primarily to derive weights for cost of living indices.

Two favorable aspects of the Nigerian UCSs should be noted. Their inclusion of the self-employed provides a most welcome bridge on information on that elusive group. Secondly, the possibility is enhanced of stringing most of the UCSs (especially those done in the 1960s) together to form a single large body of data, covering all urban areas of the country, by the fact that the set of criteria used in all of them are similar and that the geographical spread of the towns is such that virtually all urban areas of the country are represented.⁶⁷

Next to the UCSs, Nigeria also has had annual Employment and Earnings Surveys since the mid-1950s. Apart from employment data, the surveys provide information on earnings (defined to include wages and salaries, as well as overtime and bonuses but excluding income received-in-kind like subsidized food and housing). However, the earnings data have more or less the same disabilities as Ghana's. They are much more suitable for analysis of average earnings by industry, regions, occupation. In addition, their coverage is limited to establishments employing 10 or more people and, in practice, they much more effectively cover the public sector than the private sector. Moreover, the series exists reliably only from 1956 to 1962. Since then not only have the publications been far behind the date of data collection, but only employment data are emphasized.

Nigeria has little income tax data that is amenable to income distribution analysis. This is principally due to the fact that in Nigeria income tax is a State subject, there being as many income tax systems as there are States in the country.⁶⁸ Most of the States publish no income tax statistics save those which appear in the budget estimates and these focus on revenue yield. The only exceptions are Western and Eastern Nigeria which have published data on the distribution of income taxpayers by assessable incomes for 1962/63 to 1967/68. Since the two States are by no means representative of all the States in Nigeria, these figures cannot be used to generalize on Nigeria.⁶⁹

For data on agricultural incomes, the series in the rural economic surveys could be useful bases for estimation. There was a Rural Consumption Enquiry in 1963/64, and Farm Surveys in 1963/64, Livestock Survey 1963/64, Household Enquiry 1963/64 and 1964/65, Rural Market Prices Enquiry 1966, and Crop Estimation Surveys 1965/66 to 1970/71. This program of rural economic surveys, begun in 1963, is undertaken by the Federal Office of Statistics. The surveys are country-wide and are therefore applicable to regional analysis. Apart from giving demographic data, they provide information on farm size, land utilization, crop yield, and rural market prices.

Nigeria is the weakest of all the four countries considered in this paper with regard to the usefulness of basic data sources like the National Accounts and Population Census. Existing estimates of national income are expenditure-oriented. Functional subdivisions and personal incomes tables are absent. Population census data are the most unsatisfactory. Not only are the aggregates subject to serious question, there

is a total absence of an analysis of the population by economic characteristics. Nigeria also has no published or usable Input/Output tables. There is a blank as far as data on wealth holdings are concerned. The reports of the annual Industrial Surveys conducted by the Federal Office of Statistics, however, do exist from 1962/63 to 1970/71. They yield information on number of establishments, number of employees, gross output, value added and wages and salaries -- all with regional breakdowns. Since Nigeria is a Federation⁷⁰ the various States publish a variety of statistics on their respective States which may not be available through the Federal Office of Statistics and which are by no means similar in several respects. In fact, one of the serious problems of research in Nigeria today is not just the dangers of generalizing, but also of reconciling federally collected and State-collected data. The temptation to focus on one given State in any research activity is very strong.

V. GHANA, KENYA, TANZANIA AND NIGERIA: PROPOSALS FOR FUTURE RESEARCH

Two important criteria for identifying areas of future research activities are data availability (actual and potential) and relevance as far as the subject-country is concerned. The relatively poor data situation indicated throughout this paper would seem to render any useful future research inadvisable and impractical. But the poor data condition by itself constitutes a good case for getting up a vigorous program of future research because of vital concomitant gain from such research activities will be the progressive improvement of the data base.

1. Throughout, we mentioned two areas about which little is known and yet constitute crucial targets of any meaningful income distribution measures: these are the poverty levels and the self-employed (or informal) sector, the former in particular. All the four countries are

similar in this regard and top priority research is required to elicit basic information on these two areas since there can be no pretence that data already exists on them. Identification, measurement and analysis of causes should at this stage be the primary objectives of research on the poverty levels. With regards to the self-employed, income information and the employment-generation potential of the self-employment sector should be the focus of research since it is now being increasingly recognized in these countries that self-employment rather than wage-employment offers the best hope of significantly reducing the unemployment problem. For Nigeria, the UCSs conducted during the 1960s and the rural economic surveys provide the initial data source from which immediate information can be estimated and on which subsequent research can be built. For Kenya, the Survey of Non-Agricultural Enterprises, the Central Province Agricultural Survey and the Small Farm Surveys will serve the same purpose. For Tanzania: the Regional Statistical Abstract, 1968/71, the 1967 Population Census Report,⁷¹ and the 1971-72 Agricultural Census, For Ghana, the ISSER-conducted Eastern Region Surveys, the population census employment and occupation data. Sample surveys will, however, be required in all cases to improve existing, and elicit new, information. It is unlikely, however, that an outside institution can successfully conduct the sort of basic research required on the poverty levels and the informal sector without the support and collaboration of the government statistics organizations in the country concerned.

2. Just what is the 'price' of achieving greater equality in income distribution? What forms does this 'price' take? And how has it changed or will change over time? Is the price bearable? Extremely difficult

(theoretically and empirically) though it is, the whole question of the trade-off between income distribution and other objectives of macro policy in these countries require examination. In the late 1950s and during the 60s these countries pursued economic growth with scant attention to its implications. The current shifting of emphasis to social justice and egalitarianism can be managed better on the basis of a clearer understanding of its implications. This research on trade-off would require the joint effort of other social scientists -- political scientists and sociologists. It also requires a whole range of macro data on income growth, employment, prices, balance of payments, regional balance, and so on. All the four countries publish fairly satisfactory data (except perhaps on employment) on several macro variables in their annual Statistical Yearbook or Abstracts.

3. Budget incidence studies are another important desirable area of future research in all the four countries. Our review of existing literature reveals that this area has hardly been touched in all four countries. In addition to the budget being perhaps the most powerful instrument that can be deliberately used by government for income redistribution, there is also the possibility that the budget can in any case have unintended influence on income distribution. In two of the countries -- Kenya and Nigeria -- there is a strong impression that government budgets have in fact been worsening the pattern of income distribution even though equitable income distribution is an aim of policy. Next perhaps only foreign trade statistics, data on government finance are reliable and plentiful in the four countries concerned. Also as earlier indicated, all four have household budget studies. All of them (particularly Kenya and

Tanzania) also have income data derived from income tax statistics. These data sources will assist the beginnings of more comprehensive incidence studies in the countries.

4. Inflation is perhaps the one potent phenomenon that has brought the poverty problem sharply into the limelight in recent years. Since inflation tends to affect the poor more adversely and hence worsen the distribution pattern, useful research would be to assess the differential impact of inflation on the various income groups, particularly the erosion of the real living standards of the poor. The data sources include the Employment and Earnings Surveys, the Household Budget Surveys and Price Indices data -- all of which are available in the four countries.

Whilst on inflation, it is useful to point out that Ghana in recent years, has had two painful devaluations of the Cedi. In the case of this country, it would be desirable also to examine the distributional impact of the devaluations.

5. Common to all these countries is the lack of comprehensive knowledge on the urban/rural aspects of the problem -- e.g., the income differentials, and urban/rural distribution of amenities. Studies of amenity distribution will help in explaining income differentials and assist in future government plans on the spatial distribution of investments. Additionally, from a measurement point of view, such studies will provide a base against which future developments can be compared. The urban budget studies, rural or farm surveys, the records of public corporations (which in these countries are responsible for amenities such as water, electricity, communications and highways) and the annual Reports of the Ministries of Education and Health provide the initial data sources for this type of exercise.

6. Policy choice, policy design and policy evaluation studies are vital. For countries like Nigeria, and to some extent Kenya, which can be said to be just beginning to fashion egalitarian policies, research on policy choice and design, can be an invaluable aid to stepping in the right direction. The circumstances of each country will determine the appropriate types of policies and their details. Again this is a pluridisciplinary area.

Whilst policy choice and design are not unimportant in Ghana and Tanzania, it would appear that policy evaluation should receive greater emphasis with regards to these two countries. This emphasis is suggested because they have for some years been consciously applying a variety of income distribution-oriented measures. How effective have these measures been? What problems (economic, social, political, technical, institutional, etc.) have they raised? Should they be continued? If so, with what adjustments? Data for this sort of exercise include, but go beyond, the sorts of income distribution-related statistics indicated in this paper. An attempt to evaluate the Ujamaa village programme in Tanzania, for example, may require, in our opinion, some amount of participant observation.

7. Wage (and salaries) relativities research will help to throw light on a particularly serious and sensitive incomes policy problem in these countries, particularly Nigeria and Kenya. To put it simply: in the wages sector, who gets more than whom? Why? and by how much? The wage-earning population (particularly in the public sector) in these countries may constitute a tiny proportion of the economically active population;

it is, however, composed of the most articulate, the most politically conscious, the most modernized and perhaps the most progressive people in the country. On account of this, happenings in the wage-earning sector have a disproportionately wider and greater impact on the economy as a whole. Stability within that sector is a prerequisite for overall development. A crucial determinant of the degree of this stability is wage relativities. The reports of the various commissions of enquiry that have examined salary structures in the public services of these countries are a good starting point for the sort of research being proposed.

8. In two of these countries--Nigeria and Tanzania--comprehensive studies of regional disparities are most desirable--in Nigeria because it is a Federation whose ultimate unity and overall development hangs on inter-State harmony, and in Tanzania because of the deliberate adoption of decentralized development. In Tanzania, the recently compiled Regional Statistical Abstract, and in Nigeria, the States' Development Plans and Progress Reports provide initial data sources for such studies.

FOOTNOTES

- 1/ D. K. Dutta-Roy and S. J. Mabey, Household Budget Survey in Ghana, Technical Publication Series, 2 (Legon: University of Ghana, ISSER, 1968); and, D. K. Dutta-Roy, The Eastern Region Household Budget Survey, Technical Publication Series, 6 (Legon: University of Ghana, ISSER, 1969).
- 2/ ¢ = "Cedi", Ghana's National Currency. ¢1 is about US\$.90.
- 3/ Dutta-Roy, The Eastern Region, op. cit.
- 4/ Centres with over 5,000 inhabitants.
- 5/ B. E. Rourke, Wages and Incomes of Agricultural Workers in Ghana, Technical Publication Series, 13 (Legon: University of Ghana, ISSER, 1971). B. E. Rourke and S. K. Sakyi-Gyinae, "Agricultural and Urban Wage Rates in Ghana", Economic Bulletin of Ghana, 2nd Series, Vol. 2 (1972). B. E. Rourke and F. A. Obeng, "Seasonality in the Employment of Casual Agricultural Labour in Ghana" (Legon: University of Ghana, ISSR, unpublished, 1972).
- 6/ 100 pasewas = ¢ 1
- 7/ Rourke and Obeng, "Seasonality in the Employment", op. cit.
- 8/ B. Beckman, "The Distribution of Cocoa Income, 1961-1965" (Legon: University of Ghana, Department of Economics, Seminar Paper No. 13, 1970).
- 9/ C. G. Battarcharya and P. N. Potakey, A Study of Cocoa Farming and Cocoa Farmers in the Eastern Region of Ghana Using an Integrated Household Survey, Technical Publication Series, 8 (Legon: University of Ghana, ISSER, 1959).
- 10/ Dutta-Roy, The Eastern Region, op. cit.
- 11/ K. Ewusi, The Distribution of Monetary Income in Ghana, Technical Publication Series, 14 (Legon: University of Ghana, ISSER, 1971).
- 12/ In fact, 1968 was worse than 1939; real average wage earning remained almost the same over 1956 to 1968.
- 13/ K. Ewusi, "Economic Objectives and Priorities for Rural Development in Ghana", Ghana Journal of Sociology, (October 1970 - February 1971).
- 14/ J. E. Isaac, "The National Minimum Wage", The Economic Bulletin of Ghana, Vol. 7, (1963).

- 15/ C. Greenhalgh, "Income Differentials in the Eastern Region of Ghana", The Economic Bulletin of Ghana, 2nd Series, Vol. 2, (1972).
- 16/ J. B. Knight, "Measuring Urban-Rural Income Differentials," (Paper presented to the Conference on Urban Unemployment in Africa, Institute of Development Studies, University of Sussex, England, September, 1971).
- 17/ R. Lawson, "The Index of Consumer Prices Relating to Expenditure Patterns of Junior Staff in Legon", The Economic Bulletin of Ghana, Vol. 6, (1962); P. Davey, "Household Budgets in Rural Areas", The Economic Bulletin of Ghana, Vol. 7, (1963); Y. Yannoulis and M. Bostock, "Urban Household Income and Expenditure in Ghana", The Economic Bulletin of Ghana, Vol. 7 (1963); and, K. Ewusi, and S. J. Mabey, Expenditure Patterns of Upper and Middle Income Groups in Ghana: A Case Study of Consumption Patterns of Senior Members at the University of Ghana, Technical Publication Series, 26 (Legon: University of Ghana, ISSER, 1972).
- 18/ Davey, "Household Budgets", op. cit.
- 19/ Ewusi, The Distribution of Monetary Incomes, op. cit.
- 20/ W. Birmingham, "An Index of Real Wages of the Unskilled Labourer in Accra, 1939-59," The Economic Bulletin of Ghana, Vol. 4, (1960).
- 21/ Ewusi, The Distribution of Monetary Incomes, op. cit.
- 22/ Mills-Odoi Commission, Report of Commission on the Structure and Remuneration of the Public Services of Ghana (Accra: Ghana, State Publishing Corporation, 1967).
- 23/ W. Birmingham, I. Neustadt and E. N. Omaboe, (eds.), A Study of Contemporary Ghana, Vol. I: "The Economy of Ghana", (Northwestern University Press, 1966).
- 24/ Dutta-Roy, The Eastern Region Household Budget Survey, op. cit.
- 25/ Ewusi, The Distribution of Monetary Incomes, op. cit.
- 26/ Central Bureau of Statistics, Labour Statistics, (Accra: Ghana, Annual).
- 27/ Central Bureau of Statistics, Household Budget Survey, Accra, 1953; Household Budget Survey, Sekondi-Takoradi, 1955; Household Budget Survey, Kumasi, 1956, (Accra: Ghana).
- 28/ Central Bureau of Statistics, National Household Budget Survey, 1961-1962, (Accra: Ghana).
- 29/ Dutta-Roy, The Eastern Region Household Budget Survey, op. cit.

- 30/ Isaac, "The National Minimum Wage", op. cit.
- 31/ Central Revenue Department, Annual Reports, (Accra: Ghana, Central Government).
- 32/ International Labour Organization, Employment, Income and Equality: A Strategy for Increasing Productive Employment in Kenya (Geneva: I.L.O., 1972), particularly Chapters 1, 3, 5, 16 and Technical Papers 4 and 5.
- 33/ This group includes big farmers, self-employed professionals, high level employees in the "formal" sector.
- 34/ £ is almost equal to US\$3.00. Kenya's currency has not been decimalized, the major unit being the Shilling which is about 15 U.S. cents.
- 35/ M. J. Westlake, Kenya's Extraneous and Irrational System of Personal Income Taxation, and, Kenya's Indirect Tax Structure and the Distribution of Income, Respectively, Institute of Development Studies Staff Papers, 101 and 102, (Nairobi University, 1971). See also his, Tax Evasion, Tax Incidence and the Distribution of Income in Kenya. (Nairobi University, Institute of Development Studies, mimeographed 1971).
- 36/ Sh = Shilling, see above.
- 37/ Without discussing them, we will simply indicate a few of the other existing studies which touch on income distribution problem in Kenya. Some of them focus on incomes policy (more in a prescriptive sense) such as D. P. Ghai's article on incomes policy in Kenya, "Income Policy in Kenya: Need, Criteria and Machinery", The East African Economic Review, New Series, Vol. 4 (June 1968). Others combine incomes policy with its twin problem of unemployment such as E. Rado, "Employment, Incomes Policy, Kenya's New Development Plan", East African Journal (March 1970). L. D. Smith considers the question whether agricultural pricing system is an efficient method of achieving income redistribution in Kenya, Resource Allocation, Income Distribution and Agricultural Pricing Policies in Kenya, Institute of Development Studies Discussion Papers, 85 (Nairobi University, 1969). Unfortunately Smith's paper does not include any data analysis. Others cover not just Kenya but the other East African countries such as D. P. Ghai, Some Aspects of Income Distribution in East Africa (East African Institute of Social Research, EDRP Paper 52, mimeographed). While Ghai looks particularly at racial inequalities, G. E. Johnson found that education is a major determinant of individual earnings, The Determination of Individual Hourly Earnings in Urban Kenya, Institute of Development Studies Discussion Papers, 115, (Nairobi University, 1971). Lastly, it is noted that Kenya too has had a major commission to review the structure and remuneration of the Public Service: Ndegwa Commission, Report on the Structure and Remuneration of the Public Services, (Nairobi, Government Printer, 1971).

- 38/ Central Bureau of Statistics, Employment and Earnings Surveys, (Nairobi: Kenya, yearly since 1963).
- 39/ Ministry of Finance and Economic Planning, Household Budget Survey, Nairobi, 1957-1958; Nairobi, 1963; Nairobi, 1968; Mombasa, 1969; Kisumu, 1969, (Nairobi: Central Government of Kenya).
- 40/ In fact, the Ministry of Finance and Planning has undertaken many surveys such as the ones indicated above, several of them not yet published but nevertheless available for use on request. Some sources of data that are not directly relevant but could be useful include the Input/Output Table for Kenya, (1967); the Annual Census of Industrial Production; Census of Manufacturing, (1961); Industrial Production Surveys of Large-Scale Firms, (1964/1966, and 1968/71), and the Annual Economic Surveys -- all published by the Central Bureau of Statistics, (Nairobi: Ministry of Finance and Planning). There are also the annual reports of the Ministry of Education which will be useful for education and training aspects of the distribution problem. Lastly, there is the unpublished 1971 Survey of Nairobi Households by E. Whitelaw (Nairobi: Institute of Development Studies, Nairobi University). The survey provides some basic socio-economic information on the sample of over 1000 low- to middle-income Africans in Nairobi.
- 41/ House Research and Development Unit, Mathare Valley: A Case Study of Uncontrolled Settlement in Nairobi, (Nairobi University, 1969).
- 42/ It should be mentioned that the Central Bureau of Statistics is soon to commence an integrated rural survey -- the results are not expected to be ready for another two years -- when they do, perhaps they would throw greater light on rural incomes.
- 43/ Central Bureau of Statistics, Employment and Earnings Surveys, op.cit.
- 44/ Ujamaa designs about 7,000 (cooperative or commercial) villages.
- 45/ R. H. Green, Toward Ujamaa and Kujitegemea: Notes on Income Employment Policy in Tanzania (Dar es Salaam: Tanzania, the Treasury, 1973). See also his note, Tanzania, in Hollis Chenery, and others, Redistribution With Growth, (London: Oxford University Press, 1974), pp. 268-73.
- 46/ Bellagio Conference, (Bellagio: Rockefeller Foundation Conference Center, April 1973).
- 47/ Sh= 15 U.S. cents.
- 48/ It reviews no less than fourteen socialist policy instruments currently being used in Tanzania.

- 49/ J.F. Rweyemama, Industrial Strategy and Economic Development in Tanzania, (1973).
- 50/ We indicate some of them here but without reviewing them: P. Westergaard, Farm Surveys of Cashew Producers in Mtwara Region -- Preliminary Results, Economic Research Bureau (ERB) Papers, 68.3; A. Larsen, Variations in Income Among Farming Areas in Sukumaland and Related Policy Implications, ERB Papers, 70.6; A.A. Moody, A Report on Farm Economic Survey of Tea Smallholder in Bukoba District, ERB Papers, 70.8; S.M. Mbilinyi, Estimation of Peasant Farmer's Cost of Production: The Case of Bukoba Robusta Coffee, ERB Papers, 68.1; I. Livingstone, Results of a Rural Survey: The Ownership of Durable Goods in Tanzanian Households and Some Implications for Rural Industry, ERB Papers, 70.1; A.O. Ellman, Progress, Problems and Prospects in Ujamaa Development in Tanzania, ERB Papers, 70.18; and, R.H. Sabot, Education, Income Distribution and Rates of Urban Migration in Tanzania, ERB Papers, 72.6 (University of Dar es Salaam). Westergaard, Larsen, Moody and Mbilinyi's papers are rural and farm-oriented studies. Ellman takes a look at crucial social policy instruments and Sabot looks at the related problems of education, distribution and migration.
- 51/ Apart from the above data sources, it should be noted that Surveys of Industrial Production exist from 1961 to date and Input/Output Tables exist for 1969.
- 52/ A.O. Phillips and O. Teriba, "Income Distribution and National Integration," Nigerian Journal of Economic and Social Studies, Vol. 15, (March 1971); O. Abovade, Incomes Profile, University of Ibadan Inaugural Lectures 1972-73, (Ibadan, 1973).
- 53/ Under Nigeria's decimal currency, the old £= ₦2 (Naira) which is subdivided into 100 "kobo". ₦1 is approximately equal to US \$1.50.
- 54/ Abovade, Incomes Profile, *op. cit.*
- 55/ O. Abovade, Income Structure and Economic Power, Presidential Address, 14th Annual Conference of Nigerian Economic Society, (Ibadan, 1974).
- 56/ An example is J.F. Weeks' study, "Wage Behaviour, Rural-Urban Income and Wage Policy in Nigeria," (Unpublished Ph.D. Dissertation, The University of Michigan, 1968). A more recent example is A.O. Phillips who undertook a critique of wage-salaries determination in Nigeria against the background of a discussion of the theoretical issues involved in wage determination, "Wage-Price Policies in Nigeria," Quarterly Journal of Administration, (April 1973).
- 57/ The Commission's report (usually referred to as the Adebo Report) evolved quite a crop of critical reactions, some of which throw further light on incomes policies in Nigeria. Federal Republic of Nigeria, First Report of the Wages and Salaries Review Commission, 1970; and, Second and Final Report of the Wages and Salaries Review Commission, 1970-71, (Lagos: Federal Ministry of Information, 1970

and 1971 respectively). See Q.B.O. Anthonio, for a critical point of view in which the urban/rural implication of the Adebo Report are reviewed, "Rural-Urban Imbalance in Nigeria and the Adebo Commission Report," Quarterly Journal of Administration, (January 1973).

- 58/ O. Olakampo and O. Teriba, "Fiscal, Monetary and Investment Implications of the Marketing Boards," in H.M.A. Onitiri and Dupe Olatunbosun, (eds.), The Marketing Board System, (University of Ibadan, N.I.S.E.R., 1974).
- 59/ Dupe Olatunbosun, and S.O. Olayide, "Effects of the Marketing Boards on the Output and Incomes of Primary Producers," in Onitiri and Dupe Olatunbosun, The Marketing Board System, op. cit.; H.C. Kriesel, Cocoa Marketing in Nigeria, C.S.N.R.D. Paper No. 21, (Michigan, East Lansing, 1969).
- 60/ S.M. Essang, The Impact of Marketing Boards on The Distribution of Cocoa Earnings in Western Nigeria. Paper presented at a joint NISER/ Department of Economics Seminar, (University of Ibadan, March 1971). See also his unpublished Ph.D. dissertation: "The Distribution of Earnings in the Cocoa Economy of Western Nigeria: Implications for Development," (Michigan State University, 1970). Essang's findings for the third level of distribution are broadly similar to those of Olakampo and Teriba, Dupe Olatunbosun and Olayide, and Kriesel, referred to earlier.
- 61/ Essang, The Impact of Marketing Boards, (op. cit.) focuses on Western Nigeria. Another study of farm income, this time focusing on Northern Nigeria is: Institute of Agricultural Research, Farm Income Levels in Northern Nigeria, Samaru Miscellaneous Paper, (Zaria: Ahmadu Bello University, 1972).
- 62/ Nigerian Economic Society, Rural Development in Nigeria, (Ibadan, 1973).
- 63/ They include Lagos, Ibadan, Kaduna, Kano, Zaria, Benin, Warri, Sapele, Calabar, Port Harcourt, Aba, Ilorin, Oshogbo, Ile Ife, Ilesha, Akure, Ondo, Owo, Sokoto, Gusau and Onitsha.
- 64/ Or £450 a year in the later 1950s.
- 65/ Starting with the Enugu Urban Consumer Survey, 1961-1962.
- 66/ In some of the earlier Urban Consumer Survey, (those undertaken in the 1950s) non cash incomes were included (e.g., credit purchases, free or subsidized housing, gifts of foods, clothing, consumption of own produce etc.).

- 67/ One problem, however, arises because the sampling techniques are not being similar in all cases.
- 68/ A uniform system will be introduced from 1975.
- 69/ There are also the well-known limitations of using income tax data for income distribution analysis, namely incomplete coverage in terms of numbers of income earners and volume of actual incomes, particularly with respect to the self-employed. In this regard, it will be recalled that we indicated earlier that UCSs conducted in the Onitsha, Sokoto/Gusau, and Akure/Ondo/Owo UCSs, the self-employed households included constituted over 60 per cent of the total sample households. Information obtained in these surveys improve the income information on the self-employed and may be used, together with census data, to improve the data from other sources (such as income tax statistics).
- 70/ Currently. Nigeria is a Federation of twelve states.
- 71/ Vol. IV.