ECONOMIC RESEARCH BUREAU UNIVERSITY COLLEGE, DAR ES SALAAM

E.R.B. Paper 70.14

SUPSISTENCE ACCOUNTING AND DEVELOPMENT

PLANNING IN AFRICA

by

Kighoma A. Malima

ERB papers are generally written as a basis for discussion. Any views expressed are those of the author. They should not be interpreted as reflecting the views of the Ečonomic Research Bureau or the University College, Dar es Salaam.



SUBSISTENCE ACCOUNTING AND DEVELOPMENT

PLANNING IN AFRICA

Kighoma A. Malima*

1. Introduction

The United Nations Economic Commission for Africa defines subsistence activities as "the production of goods and services which are subsequently found to have been directly used by their producers and not exchanged for money." (14; p.41). Thus, the concept of subsistence production is essentially an ex-post one. It is possible to know how much of the rice produced, for example, is subsistence after both the total rice produced and the marketed surplus have been established.

. The second state of the

and the state of the state souther and the state of

Subsistence activities acquire a special significance when they constitute a sizeable proportion of total domestic production of an economy. And this is the case in most of the African countries we are about to examine. As emphasized by Richard Barckay,, "the relation between the traditional subsistence sector and the modern market economy is a key problem in African economic development and 'the transformation of Africa.' It is obvious, therefore, that the development planner must be supplied with a uniform framework of data including both parts of the economy." (3; pp.80-81).

In addition, various studies of agricultural supply response and agricultural development in the less developed countries have indicated that the growth rate of agricultural production is closely linked to the level of specialization and monetization of the rural areas. That is, in a prodominantly subsistence framework, farmers cannot "take the chance of growing cash crops and of relying on an uncertain market to meet critical food demands" (4; p.541). Thus most farmers prefer to grow cash crops as well as food crops, the latter for the purpose of ensuring a reasonably sufficient food

* Lecturer in Economics, University College, Dar es Salaam, Tanzania.

Interest in this subject was first stimulated by Prof. R. W. Goldsmith of Yale University from whom I had also received a number of comments and encouragement. The paper has also greatly benefited from comments and suggestions by Prof. C. R. Frank, Jr., of Pricenton University. None of these gentlemen are, however, in any way responsible for any remaining errors. - 2 -

supply for their households. Consequently, both quality and quantity of what they produce in cash and food crops alike suffers. The remedy for this problem is seen in specialization in the rural areas as well as acceleration of the monetization process courled with the development of an efficient and dependable system of distributing food and other products. But to device policies and programmes which will rapidly effect these changes, a realistic and accurate assessment of the magnitude of subsistence transactions in the economy is almost a pre-requisite. Hence the need for fairly reliable estimates of subsistence production in the economy.

-1.10-5 Thus, given the fact that agricultural production accounts for a very large proportion of total gross domestic product, what happens in agriculture almost sets the pace for what happens in the rest of the economy. If Agricultural development is hampered by the presence of growth regarding subsistence production, then the rate of growth of the economy as a whole will be adversely affected. One can, therefore, -assert that the development of most less developed countries, African countries included, depends on how fast the process of monetization of the economy is proceeding or, equivalently, on how rapidly subsistence production is shrinking as an important segment of total gross domestic product. Thus $g_{Yt} = \overline{\Phi} (g_{SYt-1}, \dots), where$

and a work of a contract offic Y_t . = - Total gross domestic product at period t; SY_t = total subsistence production in a given country at period t; at period t; $g_{Yt} = \frac{Y_t - Y_{t-1}}{t-1} = the growth rate of total gross$ Denestic product at period t; $-1 - SY_{t-2}$ = the growth rate of total SY t-2 during the previous period subsistence production

So that from the empirical evidence that agricultural and general economic growth depend on the degree of monetization and specialization in a predominantly rural economy, we derive the proposition that the growth rate of the economy is inversely related to the growth rate of subsistence production. The less rapidly subsistence production increases, the more likely will a higher rate of growth for the economy as a whole become possible. Housefamo

It is, however, much more fruitful to look at the above proposition in an interdependent and interacting fashion. That is, a lower rate of growth for subsistence production renders monetization and specialisation and consequently rapid growth of the economy possible, and, of course, vice-versa. There is, therefore, no casuality implied. Farmers will begin to shift systematically from subsistence production to commercial production if the degree of monetization and specialisation together with the distribution system are such as to make the undertaking worthwhile. All that needs to be emphasized is that the growth rate of subsistence production and that of the economy as a whole are inversely related.

3

2. Subsistence Accounting

One would have expected, from the above proposition, the need for subsistence accounting in African countries to be indisputable. This is, however, far from being the case. Not only is unanimity of opinion among the experts in this field almost lacking, but also, and may be as a result, various African countries have different appreciations of the problem.

In the cale of the experts, according to Miss Peter Ady, for example, with "so much of the focus of activity on economic planning designed to increase the degree of specializations, it seems strange that some countries in Africa should be planning to devote so many of their scarce statistical resources to more accurate measurement of this declining component." (3; p.f2). The point which Miss Ady is making is essentially that with the planning and economic policies designed to bring about rapid economic development, subsistence production as a proportion of total gross domestic product will decline pari pasu. There is, therefore, no point in devoting badly needed statistical resources to the measurement of subsistence output with some degree of precision. However, to come to the conclusion which Miss Ady is drawing, namely, subsistence production is a declining component of domestic production, one must have estimates of subsistence activities over time. The more accurate such estimates are the more realistic will be the observations which one can derive from examining such figures. In other words, how would we know that Miss Ady's observations are empirically tenable without reliable estimates of subsistence activities over time? The problem of estimating subsistence production cannot, therefore, be wished away. Nor will the

problem be less intractable by suggesting that subsistence production can be obtained residually from the estimates of total gross domestic product and monetary gross domestic product. For, to get estimates of total gross domestic which are fairly reliable, ways must still be found of estimating subsistence production at least for a number of activities which make up total GDP.

Thus, a number of experts are also convinced that the magnitude of su'siz ence activities in most less developed countries is such that excluding them from the national income figures will be very unrealistic. It would, therefore, follow from this that consistent and simple techniques have to be devised to deal with subistence accounting. According to Miss Phyllis Deáne, "an aggregate which excluded them / subsistence activities / would lose so much of its value as an index of total economic activity that it seems worth while including them in spite of the logical difficulties". (2; p.15).* The United Nations Economic Commission for Africa (UNECA) has also expressed the same view by stressing that the "inclusion of a subsistence, estimate in an income time series allows a more realistic assesment to be made ot the rate of growth of an economy. Without the inclusion of this relatively stagnant element, rates of growth can be much magnified. For three reasons changes in the magnitude of this item will be of special concern to governments as development proceeds:

- (a) in assessing the trends of rural levels of living, ^especially consumption patterns;
 - (b) in evaluating the trends in supply of agricultural production for markets;
- (c) in assessing the impact of migration upon subsistence output." (14; p.41).

Then the UNECA emphasized that a "cardinal point in working out plans and economic policy is to give special priority to improving the statistics required for calculating food production and capital formation in the subsistence sector. When economic accounts are published, the extent to which the estimates are to be considered reliable should be specified." (14; p.41). All these views are in contrast to what has been

* Words in square brackets are mine.

suggested by Miss Ady. The disagreement, if one can use that term, is not only on whether or not to produce subsistence production statistics but also statistics which posess a certain amount of reliability. While it may appear uneconomical to put scarce and badly needed statistical resources into an effort to get accurate figures for subsistence output, the . need for fairly accurate estimates of subsistence production over time must still be faced. The planning of agricultural and general economic development in most African countries require a knowledge of the magnitude of subsistence production in the ' respective. conomies and how this item has been changing over time. For, as Shand puts it, "subsistence production should receive at least as much attention in programmes of research and extension as is given to other (for example, export) crops." (9; p.206). Thus, if national accounts are to be produced at all in countries with a large segment of the total population still engaged in subsistence activities, then subsistence production must be recorded in a separate account in addition to being included in the total gross domestic product.

Given the need for subsistence accounting, consistent techniques have to be devised for estimating subsistence production in Africa. The UNECA appointed a study group to examine the possibilities of adapting the United Nations system of national accounts for use in African countries. As a result, the study group decided that non-monetary or subsistence transactions should be included in the national accounts under a separate account for rural households. These rural households are those, "as opposed to large scale enterprises, engaged in farming, forestry or fishing, located in rural areas (that is those areas outside the limits of towns and cities of a size and nature to be determined by reference to local conditions) ... " (15; p.13). It was also recommended that in the definition of a rural household sector should be included those "rural households whose principal activities are non-primary, if those households rely on their own production of the greater part of their requirements of primary products." (15; p.13).

The following, therefore, was the framework of a rural household account as suggested by the UNECA working groups. (15)

- 5 -

- 1. Consumption Expenditure
 - on goods purchased and consumed by the rural household sector, and
 - 2. on goods and services purchased from other sectors.
- 2. Fixed Capital Formation
 - 1. own account rural construction and hand work, and
 - goods, and services purchased from other sectors
- 3. Increases in stocks of primary goods produced and retained by rural households
- Intermediate goods and services purchased for production from other sectors.
- 5. Factor income paid (wages, rent, interest, dividends)
- 6. Indirect taxes paid to the Government.
- 7. Direct taxes and transfers to the government
- 8. Transfers to other sectors
- 9. Hoarding and/or net lending to other sectors.
- TOTAL DISBURSEMENT

10. Primary commodities sold to other sectors.

11. Primary commodities retained for consumption within the rural household sector

1. for own consumption

2. sold or bartered.

- 12. Rural Household services.
- 13. Other goods and services sold either within or outside the sector.
- 14. Own account rural construction and handwork
- 15. Increases in stock of primary goods produced and retained by the rural households.
- Factor income received (wages, rent, interest, dividends).
- 17. Transfers from other sectors.

TOTAL RECEIPTS

The various items on this account are to be valued as follows: Items 1(1) to be valued at retain price; while items 1(2), 2(2), 4 and 13 to be valued at transaction values. Items 3, 10, 11(1), 11(2) and 15 to be valued at producer (ex-farm prices). Item 12, rural household services is equal to: (a), the difference letween sales revenue to the sector and valuation at producer prices in respect to item 10, and (b) the difference between valuation at retail prices and at producer prices for items 11(1) and 11(2). Obviously not every item In the rural households accoun is subsistence production. On the "uses" side of the account, the items which make up subsistence transactions are l(1), 2(1), and 3. On the "sources" side subsistence items are 11, 12, 14, and 15.

Thus, the rural household account suggested by the UNECA appears to deal adequately with the problem of subsistence accounting. However, the nature of the details in the rural household account requires such an amount of information which is unlikely to be within the reach of the African countries examined. For, not only must extensive rural household surveys be conducted but such surveys need to be carried out at frequent and regular intervals, in order to bring the basic information used for computing subsistence production up-to-date. In the immediate future, therefore, one can only hope that the countries concerned would pick from the UNECA scheme for subsistence accounting, in the first instance, those items which they can afford to do well. But as time goes by and their statistical capability improves, subsistence accounting must be more comprehensive in coverage and more reliable in its estimates.

From the economic point of view, the UNECA rural household account is very close to reality. It does away with the notion of a "subsistence sector" which has the connotation that there is a subsistence sector which is completely untouched by monetary transactions. In actual fact, there "is no pure subsistence sector left in Africa but, instead, a continous gradation in the share of subsistence activities in the production of households." (14; p.41). In most of these countries one finds farmers who, on the one hand, produce food crops, of which they retain some for home use and sell the rest for money, or on the other hand, produce food crops for their home use and other crops which they sell for cash. Thus in the UNECA rua rural household account the emphasis is definitely away from the old notion of "subsistence sector" to that of "subsistence activities". This helps to clear a great deal of misunderstandings. For, subsistence activities are a phenomenon found in developed and less developed countries alike. In both people provide a number of services, domestic painting, gardening, and so on, for themselves. The difference is, thereofre only a matter of degree. In the former countries subsistence activities constitute a negligible proportion of total GNP, while in the latter countries they make up a sizeable portion of total domestic production.

- 7 -

3. Subsistence Accounting in Africa

· Sources:

and the fight of the

Since various African countries have different appreciations of the need for subsistence accounting, the way this magnitude is handled also wries from one country to another. In East Africa, for instance, Tanzania, Kenya, Uganda record subsistence production separately in their national accounts. While in West Africa, Nigeria and Ghana do not record subsistence activities separately but include them in their global estimates of agricultural and total production.

In East Africa, let us first look at the treatment of subsistence activities in Tanzania, Kenya and Uganda for the year 1961 and 1967 for the purpose of inter-temporal and intercountry comparisons.

Subsistence Production

Tanzania	(in million shs.)			1961	1967	
	Agriculture (crop hu	usbandry))	874		
44 M	Livestock products			269		a seco
	Forest products			46		
aran da angla Na sang sang sa	Hunting and fishing	•••	* * 0	63	y .	
	Agriculture, hunting and fishing		5rý •••	in de g	1,608	n na sea s
	Craft industries	•••	4 d 8	120	7.	
de oper service	Owner-occupied dwell	lings			474	da kirist
en de la sectore	Construction		• • •	92	52	
	a gan geersettel a	Total	•••	1,464	2,134	n 1967

Statistical Abstract 1963, Govt. Printer,
Dar es Salaam, Tanzania; The Annual Economic
Survey 1968: A Background to the 1969-70
Budget
Govt. Printer, Dar es Salaam, Tanzania;
The Economic Survey and Annual Plan 1970-71,
Government Printer, Dar es Salaam, Tanzania,
1970.

Kenya	(in million	Shs.)			1961	1967	
	Agriculture		9 4		684	1,704	
	Forestry		•••	•••	62	56	
	Livestock	•••	•••	•••	. 209		
	Fishing and (Fish	Hunting ning)	• 2 •	•••	3	2	
	Building and	l constr	uction	•••		160	
	Water	0 * 0				58	
	Ownership of	f dwelli	ngs			164	
		Tota	1		958	2,144	

Sources: <u>Statistical Abstract 1965</u>, Govt. Printer, Nairobi, Kenya; Economic Survey, 1969, Govt. Printer, Nairobi, Kenya.

Uganda (in million shs.)	1961	1967
	5 m	
Agriculture	••• 797	1,222
Forestry and fishing	108	215
Total	••• 905	1,437

Sources: Statistical Abstract 1965, Govt. Printer, Entebbe, Uganda. Background to the Budget 1969-70, Govt. Printer, Entebbe, Uganda.

In 1961 Tanzania included relatively more items under subsistence production than both Kenya and Uganda. In 1967 however, Kenya included relatively more items under subsistence activities than both Tanzania and Uganda. The activities covered in Uganda's subsistence accounting remained the same in 1967 as they were in 1961, namely, agriculture, forestry and fishing. For Kenya in 1961 the activities included in subsistence production were agriculture, Livestock, forestry, fishing and hunting. In 1967 Kenya's subsistence accounting. included, (in addition to agriculture, forestry, fishing). bu' ding and construction, and ownership of dwellings, but excluded livestock and hunting activities. In Tanzania in 1961 subsistence accounting included agriculture, livestock products, forest products, hunting and fishing, craft industries, and construction. But in 1967 Tanzania combined agriculture, hunting, forestry and fishing instead of separating them.

- 9 -

The item craft industries was deleted and that of owner-occupied dwellings added.

The reduction of coverage of subsistence reporting. though perhaps understandable, is unfortunate. Understandable because the estimates for items like construction, craft industries, etc., were so rough that in most cases the results hardly justified the effort. But unfortunate because the most satisfactory and long-lasting solution to the problem is not to wish it away but to improve the techniques usea. As the exercise of estimating subsistence activities should be carried out regularly and fairly consistently, the people involved would learn through experience how to tackle old problems and in what ways should estimation techniques be modified to meet new problems. Besides, since one would expect the statistical capability to get better as the manpower situation improves, problems which were serious in earlier period should be less intractable in the course of time.

The significance of subsistence production in Tanzania, Kenya and Uganda can only be appreciated by examining the magnitude of subsistence production in these countries in relation to the respective total gross domestic product (GDP) and agricultural production.

TANZANIA	m	1	M	7	AM	TA
	1	1.	rTA	L.	1771	14

		· · · · · · · · · · · · · · · · · · ·	$\label{eq:alpha} \left(\mathbf{x}_{i}, \mathbf{x}_{i}^{T} \right) \stackrel{\mathrm{def}}{=} \left(\mathbf{x}_{i}^{T} \mathbf{x}_{$	and a second second second	
Year	Total GDP	Subsistence Production	Agricultural production	Subsistence/ total GDP	Subsistence/ agriculture
		(in	million shs.)		
1960	3,701	1,248	2,256	33%	55%
1961	3,870	1,346	2,282	34%	58%
1962	4,189	1,493	2,485	35%	60%
1963	5,547	1,536	2,787	27%	55%
1964	4,837	1,413	2,805	29%	50%
1965	4,894	1,353	2,651	27%	51%
1966	6,592	2,062	2,952	31%	69%
1967	6,935	2,134	2,954	30%	72%
1968	•7,326	2,199	3,062	30%	71%
	141.1 2			and the second	

Source: Background to the Budget: An Economic Survey 1966-67 to 1969-70, Govt. Printer, Dar es Salaam, Tanzania. <u>The Economic Survey and Annual Plan, 1970-71</u>, Govt. Printer, Dar es Salaam, Tanzania, 1970. (The 1961 Subsistence figure above because of difference in overage. Also the 1966-68 figures are not comparable with those of previous years because of changes in methods and coverage

· _0 ··

In Tanzania, subsistence production as a proportion of total gross domestic product (GDP) between 1960 and 1968 ranged from 27 per cent to 35 per cent. Thus, in the first place, subsistence activities account for a very sizeable proportion of total GDP in Tanzania. Secondly, over the years subsistence production has been declining relatively, but this decline was rather slow. In terms of agricultural production, subsistence activities in Tanzania also account for a significant proportion. For, the proportion of sugsistence activities in agricultural production during 1960-68 was between 50 and 72 per cent.

KENYA

Year	Total GDP	Subsistence production	Agricultural production	Subsistence/ Total GDP	Subsistence/ agriculture
en en en en El conse	ten di La Novi i n		(in million shs	•)	it he start in
1960	4,510	1,004	1,804	22%	55%
1961	4,494	958	1,734	21%	55%
1962	4,882	1,264	2,061	25%	61%
1963	6,086	1,601	2,328	26%	68%
1964	6,627	1,778	2,507	26%	70%
1965	6,610	1,610	2,206	24%	72%
1966	7,700	1,030	2,770	26%	73%
 1967	8,134	2,143	2,795	26%	7.6%
 1968		2,179	2,847	25%	76%

Source: Statistical Abstract 1966, 1968, 1969.

Government Printer, Nairobi, Kenya.

In Kenya subistence activities as a proportion of total GDP between 1960 and 1968 ranged from 21 per cent to 26 per cent During the same period subsistence production as a proportion of agriculture ranged from 55% to 76%. While intuitively one could accept that Kenya's economy is relatively more monetized than that of Tanzania, the figure for subsistence as a percentage of agriculture appears to be unduly high in Kenya There are two possible explanations for this. First, it is likely that subistence production is grossly under-estimated in Kenya. Second, it is also likely that agricultural production is very much under valued in Kenya. The use of total acreage

11 -

and yields per care data in estimating agricultural production can very easily be misleading if there is under-estimation in both -acreage and yields per acre. The difficulty of obtaining fairly reliable data on total acreage under cultivation and yields per acre for each and every crop cannot be over-emphasized. It would therefore appear that Kenya's economy could not be more monetized and at the same time its agriculture very much less monetized that the economy and agriculture of Tanzania, respectively. In addition, agricultural production in Kenya appears to be a much smaller proportion of domestic production (GDP) than what is discernable in most of East Africa. Thus, new and fairly reliable estimates of both subsistence activities and total agricultural production in Kenya are overdue. One can see, therefore, why subsistence accounting and national accounting need to be done with great care because they can have far reaching implications for planning and economic policy. In the present context for example, one could easily entertain a higher than realistic level of monetization of Kenya's economy, or a lower than seems plausible degree of monetization of Kenya's agriculture.

Year	Total GDP	Subsistence Production	Agricultural production	Subsistence/ total GDP	Subsistence/ agriculture
1960	3,042	826	1,714	27%	48%
1961	3,128	905	1,771	28%	51%
1962	3,134	975	1,733	31%	56%
1963	3,518	946	1,963	26%	48%
1964	3,902	1,086	2,156	27%	50%
1965	4,468	1,466	2,413	32%	60%
1966	4,675	1,303	2,443	27%	53%
1967	4,962	1,437	2,638	28%	54%
1968	4,992	1,361	2,569	27%	52%

Uganda

Source: Bank of Uganda, Annual Report 1968-69, Kampala, Uganda; Statistical Abstracts 1965, 1968. Govt. Printer, Entebbe, Uganda; Background to the Budget 1969-70, Govt. Printer, Entebbe, Uganda.

요즘 방법은 영화 위에 대해 가격을 두 두었다.

- 12 -

In Uganda subsistence production as a proportion of total gross domestic product ranged from 27 per cent to 32 per cent between 1960 and 1968. Also Uganda's subsistence production as a proportion of total agriculture ranged from 48 per cent to 60 per cent during the 1960-68 period. Thus, in Uganda subsistence activities account for less, as a percentage of total.GDP, than in Tanzania but for nore than is the case in Konya. Horeover the degree of monetization of Uganda's agriculture is relatively the same as that of Tanzania's but higher than that of Kenya's agriculture. However, since the coverage of subsistence transactions is much narrower in Uganda than in both Tanzania and Kenya, one cannot really stress intercountry comparison too much. Moreover, the possible under-estimation of Kenya's subsistence and agricultural activities makes an inter-country comparison even less tenable.

While inter-country comparison of the degree of monetization among the three East African countries is rather difficult, it remains a valid observation that subsistence activities account for a very significant proportion of both total gross donestic product and total agricultural production in each of the three East African countries. Thus, if "planning without facts" is to be minimized, and if increased physical output is to be disentangled from increased monetization, subsistence accounting must be considered as important as any other national income statistics.

In West Africa, and here we can only examine Nigeria and Ghana, subsistence activities are not recorded separately in their respective national accounts. This practice reflects the attitude of the people who undertook the first attempts to construct national income statistics of these two countries. In Nigeria the first national income estimates were made by Prest and Stewart (7). Following Prest and Stewart there came the study made by Jackson and Okigbo (6). Jackson and Okigbo pointed out that, "we have not tried to estimate the contribution of the subsistence sector. Although this problem has been the subject of one or more international conferences in the past two years, we do not feel disturbed by our failure to measure subsistence production. We were at all times conscious of the fact that were it possible for us to demarcate what quantities we could attribute to subsistence production

- 13 -

and what quantities to the market sector, our problem would have been considerably reduced when we came to value agricultural output for our expenditure estimate of value added by trade in this branch of activity. We do not think, however. with our knowledge of staff position in the Federal Office of Statistics, that we could conscientiously recommended that this exercise be undertaken now." (6; p.174). Thus, one of the reasons for not recording subsistence activities separately in Nigerian national accounts in seen to be lack of competent people who can do the job well. The other justification by which Jackson and Okigbo "made no separate estimate of any subsistence activity" was that "the method they used produced global estimates for agriculture (in which the bulk of subsistence activity takes place) and not merely for traded output."* The global estimates for agricultural production are obtained from estimates of total acreage under cultivation multiplied by the yields per acre of the various crops in question. But we all know how unreliable are such estimates for both total acreage and yields per acre. Tn addition, though agriculture accounts for a sizeable proportion of subsistence activities, the use of subsistence agriculture as a proxy for total subsistence production must lead to under-estimation of the magnitude. If indeed the work of estimating subsistence production is made difficult by lack of adequate statistical resources, it is hard for one to appreciate why that of estimating total acreage under cultivation and yields per acre should be any easier.

In Ghana, like Nigeria, the failure to separate subsistence from monetary production also reflects the views of the experts who first estimated the gross national product of Ghana. According to Seers and Ross who made the first attempt of constructing national accounts of Ghana, when "the cash transactions have been more accurately charted, this /subsistence output/ will become the most conspicous gap in economic statistics, it is an important determinant of living standards....that while we do not under-rate

* Federal Statistical Office, The Nigerian National Accounts, Lagos, Nigeria, 1962, p.5.

.

a the ere to the

- 14 -

its importance we do not either attach such immediate urgency to this problem as we do to other statistical tasks." (8; Appendix, p.52).* Thus, we find that up to the present time no effort has been made to record separately how much of the "national pie" is attributed to subsistence activities in Chana.

Like Nigeria, one is made to believe that had the officials in Ghana made an effort to estimate and record separately subsistence activities more statistical information would have been made available. As a result, our understanding of what is happening to the composition of gross domestic product over the years would have been considerably improved. Perhaps Seers and Ross were correct in recommending in 1952 that the problem of estimating subistence production was by no means pressing at the time in comparison with other problems. But that this recommendation might have been one of the factors contributing to the lack of effort in understanding what is actually happening to subsistence activities in Ghana only a few people could doubt. In that context it should be considered, at best, as unfortunate.

4. Conclusion

Thus, looking at what the UNECA s Study Group recommended, on the one hand, and how subsistence accounting is actually done in some African countries, on the other hand the gap is as wide as it can be. Taking into account the differences among countries, one finds that none of the countries examined attempts to estimate subsistence services. In most cases the emphasis is on agriculture, and even in this context the figures given are often very rough, under-estimation being one of the most serious problems.

The difficult but extremely relevant question is that of how should subsistence activities be treated in the national accounts of the respective countries. In attempting to answer this question, one must bear in mind the need for consistent techniques to allow for inter-country as well as inter-temporal comparisons. Thus, in the first place, the UNECA framework provides the most long-lasting solution. But in the short-run countries can only be expected to do what is with in their means. This is acceptable as long as there is some consistency over time and the techniques used and the degrete of coverage are made explicit. One of the merits of the UNIECA

* Words in square brackets are mine.

rural households account is that it is very flexible, and, therefore, can be very easily adjusted to suit local conditions. The various African countries are at different levels of development and also possess different statistical capabilities. Hence, if we have to move from the fact that consistent and relatively comprehensive subsistence accounting is essential to the point that this objective is accomplished, we have to allow for differing circumstances and capabilities. However in this context it would appear somewhat paradoxical that Nigeria and Ghana, which are relatively more advanced and have relatively more statistical resources than the East African countries, have made the least effort in subsistence accounting. Thus, the real problem is not so much of capability as that of an appreciation of the need for subsistence accounting and the determination to do somet ing about it.

In the second place, the actual mechanics of how subsistence accounting should be done so that the result could justify the use of scarce resources for the purpose, is important but largely academic. It is important because unless one can attach some degree of reliability to the estimates of subsistence production the figures will just be token and represent a misuse of badly needed resources. Inaccurate and unreliable figures could be so misleadings as to be worse than no figures at all. It is academic because each country must devise a system which is feasible as well as within the UNECA accounting framework. In general, the basic information for estimation of subsistence activities can be obtained through district by district surveys. But like population censuses, these surveys must be carried out frequently and regularly, preferably at four to five years intervals, to incorporate basic changes and bring the data up-to-date. However, just as the problem of diversity among countries must be faced, that of diversity among the various districts in a country must also be recognized. Taking one village in a district, for instance, and calling it the representative sample of that district is bound to be misleading. In the final analysis, the job of producing decent subsistence figures is too gigantic to be done by the statistical divisions of the respective governments single handedly. Agricultural

- 16 -

officers, co-operative and other officials as well as the rural households themselves must assist. The need for dependable national statistics is a national problem. Thus, various organizations, government bodies and the people themselves must be brought into the task of gathering the basic information. Indeed, with stastical training becoming a standard component of the curricula in most African Universities, the problem will in no time become less insurmountable. What needs to be emphasized, perhaps at the expense of appearing repetitive, is that subsistence and national accounting must be carried out consistently and regularly in order that those who are engaged in the day to day work can acquire the necessary skills and experience.

Finally, the whole problem of subsistence accounting remains, at best, controversial. The countries which have tried to record subsistence activities separately in their national accounts have encountered all sorts of conceptual and practical problems as to render the usefulness of the figures obtained questionable. The countries which have not separated subsistence production from total gross domestic product seem, at least superficially, to have avoided the conceptual and practical problem which the former had to face. But avoiding a problem is not a promising way of tackling it. Few countries have not seen the wisdom of including subsistence activities in the estimates of gross domestic products. In fact, excluding subsistence production as if it never existed introduces more problems than it solves. Thus, the countries which record subsistence activities separately, in addition to including them in the gross domestic product make their figures much more useful not only to economic analysts but also to planners and policy makers. First, the economic analyst is able to deal with monetary gross domestic

- 17 -

product if he chooses not to worry about subsistence production. But even more important he is able to examine changes in the degree of monetization, the structure and composition of gross domestic production over time. Consequently, the economic analysts is in a much better position to assess the prospects of agricultural and general economic transformation. Second, separating subsistence production from the total GDP also assists the planners and economic policy makers alike. For, planning and economic policy making without the requisite and reliable facts can neither be scientific nor serious. Existing production and economic structural conditions must be known before any realistic target about the future can be made. Thus, it would appear that the need for subsistence accounting in Africa has not in any way been overly emphasized.

18

REFERENCES

- 1Ady, P. & M. Courcier, Systems of National Accounting in Africa, O.E.E.C., Paris, 1960
- ²Dean, Phyllis, <u>Colonial Social Accounting</u>, Cambridge University Press, Cambridge, 1953.
- ³International Association for Research in Income and Wealth, <u>African Studies in Income and Wealth</u>, Bowes & Bowes, London, 1963.
- ⁴Krishna, Raj, "Agricultural Price Policy and Economic Development," and comments by Walter P. Falcon, in Herman, M. Southworth & Bruce F. Johnston (eds.), <u>Agricultural Development and Economic Growth</u>, Cornell University Press, Ithaca, New York, 1967
- ⁵Neumark, S.D., "Some Economic Development Problems of African Agriculture," <u>Journal of Farm Economics</u>, Vol.XLI, No.1, February, 1959.
- ⁶Okigbo, P.N.C., <u>Nigerian National Accounts 1950-57</u>, Government Printer, Enugu, Eastern Nigeria, 1962.
- ⁷Prest, A.R. & I.G. Stewart, <u>The National Income of Nigeria 1950-51</u> H.M. Stationery Office, London, 1953.
- ⁸Seers, D. & C.R. Ross, <u>Report on the Financial and Physical</u> <u>Problems of Development in the Gold Coast</u>, Accra, 1952
- ⁹Shand, R.T., "The Development of Trade and Specialisation in primitive Economy," <u>Economic Record</u>, Vol.41, No.94, June 1965
- ¹⁰Statistical Department, Domestic Income and Product in Kenya, Nairobi, 1959.
- 11Central Statistical Bureau, National Accounts of Tanganyika
 1960-62
- ¹²East African Statistical Department, <u>The Gross Domestic Product</u> of Uganda, Entebbe, 1961
- ¹³UN Statistical Office, <u>National Accounting Practices in Sixty</u> <u>Countries</u>, Studies in Methods, Series F, No.11, United Nations, New York, 1964
- ¹⁴UN Economic Commission for Africa, <u>Economic Bulleting for Africa</u>, Vol. I, No.2, June 1961.
- 15 <u>Report on the Working Group on the Adaptation of the United</u> Nations System of National Accounts for Use in Africa, E/CN. 14/221, December 15, 1962.
- ¹⁶Van Akardie, B.& C.R. Frank, Jr., <u>Economic Accounting and</u> <u>Development Planning</u>, Oxford University Press, Nairobi, 1966.



This work is licensed under a Creative Commons Attribution – NonCommercial - NoDerivs 3.0 License.

To view a copy of the license please see: http://creativecommons.org/licenses/by-nc-nd/3.0/

This is a download from the BLDS Digital Library on OpenDocs

http://opendocs.ids.ac.uk/opendocs/

A Digitisation Partnership between Makerere University Library and the British Library for Development Studies



