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AN ANALYSIS OF THE RURAL, NON-FARM ECONOMY
(SMALL-SCALE INDUSTRY, TRADING AND SERVICE ACTIVITIES):
IMPLICATIONS FOR FUTURE RESEARCH

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An Analysis of the Rural Non-Farm Economy
(Small-Scale Industry, Trading and Service Activities);
Implications for Future Research

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1. Introduction

An increasing interest has developed among economists and other planners in the dynamic interrelationships between the urban, high-income areas of African countries and the peasant activities of most African people. Partly through the writing of economists such as Polly Hill, the so-called "indigenous economy" has generated increased interest from those concerned with the problems of equity and labor use in the process of development. In this paper, the existing literature is reviewed in order to understand the nature and characteristics of the indigenous economy particularly as it operates in rural areas. Particular emphasis will be given to the literature which highlights the linkages between (1) farm production activity and non-farm economic activities, such as trading and small-scale industrial production, and (2) urban, large-scale production and the rural economy, including both farm and non-farm activities. Secondly, we review the available literature on rural consumption studies which also provide clues about the linkages between sectors of the economy and changes in the linking relationships. Third, an analysis is made of existing public policy related to the encouragement of that sector. In particular we consider whether or not government action is required, and, if so, the efficiency of the programs which have been implemented. Finally, we are concerned about the methodology that is employed to classify the activities of the rural, non-farm economy.

From the review of the literature the implications for research is developed. In particular, research approaches are analyzed and suggestions are made with respect to the appropriate use of each approach.

II. Literature Review

A. Macro-Economic Linkages

While most of the development literature has focused on large-scale industrial development or on problems of food production relatively little has been written on the economic flows of goods and resources linking the small-scale, non-farm sector, irrespective of its geographical location - urban or rural-to the large-scale or agricultural sectors. Recent exceptions of this general neglect include research by Byerlee (18) and the article by Hymer and Resnick (65) in which the significance of the small-scale sector is analyzed. Byerlee, attempted to analyze some of the implications of agricultural policy change on such macro-economic targets as growth, employment and sectoral income distribution in which the linkages between the 3 sectors were explicitly accounted for. Hymer and Resnick's principle contribution has been to indicate the importance of analyzing the rural household as the primary decision making unit in terms of: (1) resource allocation between agricultural and non-agricultural production, and (2) consumption preferences. Both theoretical frameworks indicate strong linkages between agricultural and non-agricultural activities.¹

There have been 2 main approaches used in empirical research for analyzing the linkages between agricultural and non-agricultural activities. First, studies have been conducted about the marketing system of agricultural goods as well as other goods and services.² Some of these studies, e.g. Goode (53) and Lawson (80 and 81) focus particularly on the institutional aspects of the market such as frequency of operation, location, range of commodities traded, and the special distribution of the markets. Other studies focus primarily on the economic performance of the organization, storage, transportation and distribution systems.³ This approach to

analyzing the linkages between the agricultural and other sectors, focuses on the institutions and their interrelationships in the physical process of moving, storing, trading and distributing goods and services. It minimizes, however, the importance of the human element in the development of sectoral linkages.

The second approach focuses on the decision makers engaged in economic activities. Perhaps the most conceptually useful work to date using this approach has been by Keith Hart (56). All economic activities in which the decision maker is engaged are included in the analysis.⁴ In rural areas such persons or households may be engaged in agricultural production as well as non-farm enterprises such as trading, small scale manufacturing, etc. Most studies of entrepreneurs, however, begin by defining the set of entrepreneurs on the basis of a well defined non-farm organization, rather than by specifying a set of individuals or decision making units and then defining the set of economic activities of those individuals. In addition the linkages, in terms of the volume of economic transactions between the farm and non-farm sectors are not often analyzed.⁵ In some studies, the authors⁶ do incorporate into their analysis or discuss the importance of the extent to which entrepreneurs are engaged in other economic activities. The literature points out four main reasons for the manifested diversification: (a) risk minimization, (b) lack of large markets, (c) problems of large scale organizational control, and (d) the seasonality in labor demand (the last item is important particularly among farmers who engaged in other activities during slack periods on the farm).

B. Characteristics of the Small Scale, Non-Farm Sector

(1) Introduction

In most African Countries, national accounts are disaggregated into two parts: (a) the monetary economy and (b) the subsistence economy. Most of the available data and research has been related to the monetary sector. As government officials

have become increasingly concerned with (a) rapidly increasing populations, (b) inequality in the distribution of income, (c) the lack of employment opportunities, and (d) rural development, there has been an increasing demand for information on the small scale, non-farm sector.

The response to this demand for information has developed along several lines. Several African governments have conducted surveys of the small scale sector or of industries where small scale enterprises predominate.⁷ In some cases, governments have requested the services of an international organization such as ILO or have commissioned a particular research to conduct a survey of small scale enterprises operating both in urban and rural areas.⁸ Finally individual researchers have become interested in exploring this area with less explicit but active interest by governments.⁹ The specific research interest, methodology employed and scope of information obtained on the enterprises surveyed varies but several points can be made with respect to the (1) number, (2) size, (3) sources of credit, (4) number of employees, (5) type of economic goods produced and (6) socio-economic characteristics of the entrepreneurs. An exploration of these points follows in the next section.

(2) A Survey of the Characteristics

The characteristics have been derived primarily from the following sources: (Nypan #96, Kilby #23, Mueller and Zevering #24, Oluwasanmi #99, Uganda #130, Lorenzo #84, Callaway #32. Although the number of studies are somewhat limited, it is evident from those which do exist that there is a substantial number of small entrepreneurs operating in both rural and urban areas. For example, in 1966, Uganda conducted a survey of all retail firms operating in the country.¹⁰ They found that over 21,000 trading licenses were issued in that year, of which 13,800 were retail enterprises. Only 100 of those were employing 10 persons or

more (0.7% of the total number of estimated retail enterprises operating in Uganda in 1966). About 75% of the 13,700 enterprises were located in rural areas and the average number of persons employed per enterprise was around 4.5 persons. In contrast to this figure, Kilby and Callaway have found that the average number of persons employed in various parts of Nigeria was 2.5-3 persons. Similarly in the Mueller and Zevering study (24) in a pilot area in Western Nigeria the estimated average number of persons employed per establishment was less than three and in Lagos in 1965, about five persons per establishment (#23).

A second point is that a substantial number of entrepreneurs in rural areas are part time. The study by Norman (#128), indicates that a substantial number of the farmers in the Zaria area of Nigeria engage in some trading activities during the year. In addition, the very detailed study by Oluwasanmi on Uboma, a small village in Eastern Nigeria, indicated that in the 70 families studied in detail, only 10 males had full time non-farm occupations, and no females were fully employed in non-farm activities. Twenty-one families had males who were engaged in a part time non-farm occupation, such as trading, tailoring, etc. and 15 families had females who were engaged in other part-time occupations, primarily trading and indigenous medicine. Mueller and Zevering (#24), also indicate that a substantial number of the small scale entrepreneurs in Western Nigeria engage in farming activities during some portion of the year.

For purposes of discussion the economic activities of small scale enterprises can be conveniently classified as follows (1) consumption goods, (2) investment and consumer durable goods and (3) services. Given these categories a large proportion of the entrepreneurs are engaged in services, such as trading. Other important service activities include maintenance and repair activities and transport services. With respect to the establishments primarily producing goods the

data reported by Kilby (23), is perhaps the most inclusive. In that study he indicates that tailoring carpentry, leather and metal working are those activities most frequently encountered.¹¹ In addition to these industrial activities, substantial number of individuals are engaged in food processing such as Garri from Cassava.

Nearly all studies report that credit is a problem for small entrepreneurs. Keith Hart reports this for his study in Ghana. Oluwasanmi and Kilby also discuss the problem. Most government credit schemes have failed, partly because of limited funds, and partly because of a general lack of knowledge about the socio-cultural factors affecting the use of credit.¹² Several studies also indicate that the indigenous credit system should be analyzed more fully. In particular, an analysis of voluntary associations, religious organizations, rural savings clubs and similar organizations, would be useful. In West Africa cooperatives have not flourished, although in the East African countries, the cooperative framework has worked well in farming areas. Where it has been established, the institutional framework could possibly be extended to provide credit to small-scale industry in rural areas.

The most useful studies about entrepreneurs and their characteristics have been conducted by Harris, (120), Keith Hart (56), Archibald Callaway (32), and Kilby (23). Of those entrepreneurs studied who are operating a full time enterprise, most have at least a primary education. In addition, the larger enterprises are usually managed by entrepreneurs who have more schooling, with a sizeable number having completed secondary school. most of them are between the ages of 30 and 40 and usually began by first working as a journeyman for some other entrepreneur and saved up money over about a 10 year period prior to launching their present business. However, there is a substantial variation amongst businesses depending upon (1) the type of production or service activity and (2) the size of the initial investment required to enter the business. For example, the necessary

requirements in Nigeria to become a trader or tailor generally requires a relatively small investment of about $\text{£}20$ (pounds) whereas the transport, building or printing industry requires an investment of $\text{£}500$ (pounds) or more. ¹³ Given the difference in initial capital requirements, it is easy to expect the structure of the industry is materially affected.

In terms of wage employment amongst small scale entrepreneurs in rural areas, it should be noted that in the survey conducted in Uganda (#130), the average wage in Kampala was approximately 6 1/2 to 7 times as large as the average wage paid in rural areas. ¹⁴ The wage in the rural areas amongst small-scale retail entrepreneurs was less than the average wage required by minimum wage legislation. The minimum wage in Uganda is 150 shs. per month, and in most small scale enterprises the average wage was about 2/3rds that level i.e. 100 shs. per month.

C. Rural Consumption Studies

Most African governments have conducted surveys of consumption and expenditure by workers employed in urban areas. For example, in the case of Uganda this survey has provided information necessary for the development of the three consumer price indices for Kampala i.e., a high income price index, one for middle income earners, and one for low income earners. In Nigeria, such surveys have been developed for a number of cities in the country. Thus, consumption behavior has been reasonably well documented for wage earners in urban areas and consumer preferences for various commodities have been analyzed. However, such consumer information is unavailable on persons living in rural areas. Perhaps the most important exceptions to this lack of information with regard to consumption and expenditure patterns of rural people is the study conducted by Massell and Parnes in the Fort Portal area of Uganda. ¹⁵ Also in Uganda, a consumption and expenditure analysis was conducted in the rural coffee growing areas of Buganda region. With respect to studies of food consumption, most of the important research has been conducted by nutritionists

or other medical personnel interested in nutritional problems in rural areas. Thus, the section on nutrition and health in the study by Oluwasanmi (#99), contains some of the best information on rural consumption patterns of food which is available on Nigeria.¹⁶

The reason why research on consumption patterns is important, is to use the data to estimate for rural areas (1) income and (2) import elasticities of demand. Without information on these parameters, it is difficult to determine the impact of the agricultural policies on the rural as well as the non-farm and urban sectors of the economy. In addition, it is important to be able to predict how demand patterns may shift given the fact that incomes may rise over time. To date, very little research work has been conducted on these matters.

(c) Public Policy Related to the Small Scale, Non-Farm Sector

Given that a number of difficulties have been encountered by most African countries during the first years of independence in generating rapid economic growth through the implementation of economic policies espoused during the first generation of development plans, many have attempted to develop programs for rural development. Such a policy focus has merit on grounds of (1) equity -- political and economic -- (2) potential employment generation, (3) reduction in migration flows to urban areas, and (4) increasing agricultural output of food and cash crops. Perhaps the most comprehensive set of policies developed by any one African government has been from Tanzania as incorporated in the Arusha Declaration, but there have been other countries which have developed programs designed to improve rural life.¹⁷

In this section the scope of government involvement in promoting rural development in Africa is reviewed. The discussion is subdivided in the following way: (1) the impact of public works and youth employment schemes in rural employment generation; (2) small-scale industrialization policies; (3) entrepreneurial development; (4) improvement in labor market information flows; (5) village and community development;

and (6) direct state intervention into production and marketing activities through the establishment of parastatal bodies.

(1) Public Works and Youth Employment

Although there has not been any large-scale rural public works programs implemented in Sub-Saharan African countries with the primary objective being rural employment, it is useful to briefly analyze the experience obtained in other countries. In particular, the Moroccan, Tunisian, Egyptian, E. Pakistan, Iranian, Indian, and Philippine experiences have been reviewed.¹⁸ Before discussing these programs, however, it must be noted that rural public works programs operate in many subsaharan African countries, often operated by local government administrations. The ILO reports on the experience of several countries programs as they existed in 1965, (66). Nigerian and Tanzanian rural road building projects and other construction projects were analyzed and there was concern about technological change and its impact on labor use. The article pointed out two other common problems: (1) lack of information necessary for the monitoring of the program and (2) the lack of information about the implications of the demand for food resulting from partial payment in kind.¹⁹ and 20.

(a) Public Works Programs

Large scale public employment programs which have been implemented in the above mentioned countries have generally had the following effects. First, there has been a positive employment effect. For example, in the Tunisian Programs well over 90,000 persons every year were hired in the 1966-69 period²¹. Although it is difficult to estimate the total size of the labor force given the likelihood of different age and sex specific labor force participation rates, it can be said that large scale public works programs had a very substantial positive effect on employment. In addition, employment is created more cheaply than is possible in the urban - industrial sector of the economy.^{21a}

Second, public programs have contributed to the development effort by assisting in the construction of a number of infrastructure projects such as roads, schools, government buildings, irrigation projects and large conservation projects. The latter is particularly important in the Tunisian project. In Pakistan, the rural works program concentrated on irrigation schemes, and flood control projects. Such infrastructure investment can not be overlooked and it is a positive contribution of large-scale employment programs.

Finally, mass rural employment schemes are beneficial from the point of view that income is transferred in favor of the low income recipients within a particular country.²² Large scale employment programs may also be necessary when large numbers of individuals have no other employment opportunities particularly where agricultural development has created a "bi-modal agriculture" such that a large number of former peasants have little access to land and other agricultural resources; such programs may be their only alternative.

Large scale public works programs do have some negative aspects to them, however. First of all, the programs are largely "stop-gap" in design. Often, programs were developed when the government realized the potential political explosiveness of the existence of an increasing number of persons who have few alternatives and who have migrated to urban areas. Most projects therefore have been politically inspired without considering the long run implications for increasing employment opportunities. Often, they are partially financed through foreign assistance in the form of surplus food from the United States through the PL-480 Program. Most public works programs therefore are short-run in conception, both from the point of view of the country in which the program operates as well as from the foreign donor country.

A second problem which has been discussed in the literature²³ is the lack of governmental administration and leadership of most large scale public work programs.

Such problems as (1) unnecessary duplication of effort by differing levels of government, (2) the potential of bribery (leading to the development of markets in food crops, particularly where food is included in the remuneration package), and (3) the lack of documentation of (a) the total number of the persons employed, (b) the projects implemented, and (c) the money spent. In addition, often there are leadership problems such that most workers do not understand their role in the national development effort (this latter problem is also characteristic of the Youth Employment Programs discussed below).

A third problem which is common in such programs, is that there is inadequate encouragement of self-initiative amongst the participant workers. One might add a related problem which is a general lack of human improvement programs integrated into the total public works project. Without the development of initiative and skill what does an individual do subsequent to the program being phased out, particularly when the program is short term in scope? Without a human capital improvement component to the public works programs the development of entrepreneur's capacity or marketable skills in other segments of the society or the ability to generate self-employment opportunities at a reasonably high income level, they can be self-defeating in the long-run.

(b) Youth Employment Programs

Related to public works programs discussed above are youth employment programs. Perhaps the most famous program in Africa has been the Workers Brigade in Ghana. Similar activities have been developed in Kenya, Central African Republic, and a number of other countries.²⁴ A related kind of program has been farm settlement schemes

which have been widely discussed in the Nigerian literature.²⁵ In most youth employment programs, there has been an ideological component to the

program as well as the more practical aspects of the program i.e., employment generation. There has also been an educational component to such programs, both in terms of formal education activities such as improved literacy, and practical vocational skills including carpentry and related skills. The primary problem with these programs generally has been (1) - that they cost a great deal to operate,²⁶ (2) the program has generally been poorly administered with very little leadership provided to the program such that implementation is poor and it does not coordinate its activities well with other development projects operating in the country .²⁷ and (3) their highly ideological orientation²⁸. In terms of the goals of increased employment opportunities and equalization of income throughout the country these programs generally have not made a large impact including the Workers Brigade which was the largest program in operation in Africa. The total numbers of persons involved in any particular point in time was no more than 28,000. This figure can be contrasted to the size of any graduating cohort from primary school which in the larger countries in Africa number at least 50,000 children each year.²⁹

(2) Small Scale Industrialization Policies

A particularly useful study has been recently concluded by John deWilde, of the International Bank for Reconstruction and Development on African experience for encouraging small-scale industry.³⁰ In the first volume of his study (28) he summarizes his findings and, in the second volume, he discusses the specific governmental policies used to (a) improve managerial techniques among small scale entrepreneurs, (b) increase credit availability to entrepreneurs, (c) develop the desired infra - structure for increased growth potential and (d) the fiscal and monetary measures which governments may employ to increase indigenous investment in industrial activity. It is not useful to reiterate all of deWilde's findings; however, the sections of his report in which he relates the experiences of Kenya,

Nigeria, Ivory Coast, and Senegal are particularly insightful case studies for understanding the problems and potential successes of government action in encouraging small scale industrial activity. In particular, the sections of deWilde's report in which he discusses management and technical training facilities for African business-ment, and the section on rural industry promotion is particularly useful.³¹ His brief analysis of the Yaba industrial estate in Nigeria which has been one of the most widely publicized experiments for small scale industrialization in Africa, also is instructive.³²

In summary, it must be said that relatively little systematic information is known with respect to the impact of government policy on improving small-scale industrial activity and particularly in rural areas.

3 Entrepreneurial and Managerial Development

Although this subject has been discussed to some extent, in the section on small-scale industrialization policy, it is instructive to point out government action related to entrepreneurial development.³³

Given that entrepreneurial capacity is limited in most African countries, governments have attempted to improve the situation by establishing several types of management training programs. Most of the programs have been designed for persons with rather high levels of education, such that these programs are virtually meaningless to the needs of the small-scale businessman. deWilde suggests that the primary need of such persons is a methodology for financial planning, particularly for the service of debt stocks replenishment or equipment.³⁴

To counteract the problems of the diversity of small-scale industry and that a large proportion of the industry exists in rural areas, there have been several attempts to work with African entrepreneurs by using a program similar to an agricultural extension program. The United Nations Industrial Development Organiza-

tion, UNIDO, in a recent monograph has discussed this type of extension service system for small-scale entrepreneurs.³⁵ In addition, deWilde mentions that there have been several special training facilities established for self-employed Africans. Examples of these programs include the Ford Foundation's Vocational Improvement Centers in Northern Nigeria which were designed to provide specific skills necessary for improving one's trade. Secondly, in Zaire, a management training program for small-scale industry was developed to provide technical expertise to small-scale entrepreneurs. General improvement courses were also provided to such entrepreneurs.³⁶

4. Labor Market Information

Many African governments have introduced employment exchanges particularly in urban areas. Those who sought employment could register. As the number of registered persons available for work grew longer in the early 1960's, several countries developed methods to disseminate labor market information with the hope that such information would alleviate some of the increasing pressure for the urban employment opportunities by reducing migration flows. In Ghana, the Department of Labor started disseminating information through the school system, particularly in secondary schools, as early as 1962, and such interaction between the education system and the Labor Department has developed in other countries, such as Uganda and Kenya. In addition, occupational aspiration studies, which have been conducted by Philip Foster and McQueen and others³⁷ have indicated that when secondary school pupils are provided with realistic appraisals of the employment opportunities they face job choice and preference are affected. In addition, when students were aware of "modern" farming opportunities, substantial number indicated such a preference.³⁸

5 Village and Community Development

Many countries in Africa have employed the rubric of rural development at one

point or another in describing the objectives of a set of development projects or programs which deal with the village or community development. Among other things, rural development schemes have included farmer resettlement schemes, such as the one initiated in the Kenyan Highlands in 1964, and farm settlement schemes developed in the Western region of Nigeria and analyzed by Dupe Olutanbosun.³⁹ The above mentioned Nigerian and the Kenyan programs are examples of programs which use the "package approach", with agricultural extension workers, working with farmers and helping to provide new inputs such as seed and fertilizer, and helping to improve credit availability and perhaps making available tractor services.

Another approach to rural development is by assisting the development of cooperatives. The most important aspect of the cooperative approach is the potential for effectively marketing the production of the small-scale producer. This approach to rural development is potentially effective in increasing economic activity in rural areas through multiplier effects generated by the cooperative's success in marketing the production of its members. Uganda provides one example of relative success in cooperative development, particularly in cash crops, cotton and coffee. The Bugisu coffee cooperative is one well known example. Other cooperatives have been developed in Uganda as well, such as the Kigezi vegetable cooperative which has organized a number of small producers into a competitive marketing organization. High quality produce is maintained throughout the year and it has priced its produce competitively, thus enabling it to acquire large government school and hospital contracts.⁴⁰ The cooperative experience in Uganda however, has not been widely duplicated in other countries.⁴¹

Perhaps the most interesting and potentially unique program of rural development is the Tanzanian Ujamaa Village development program. In 1967, in keeping with the socialistic philosophy of president Nyerere, the country incited the development

of cooperative villages.⁴² Although it is recognized that there are a number of different types of Ujamaa Villages⁴³ such as large-scale settlements, high value, crop villages, former settlement schemes, defence communities, Ujamaa Farms, and Resettlement nomadic resettlement villages, there is a common process and philosophy behind the development and mobilization of each village in which prospective members of the village come together and determine the benefits that they will derive from participating. The government participates on a fairly Ad Hoc basis by providing technical services where it is agreed by the villagers concerned, that such service is necessary for the common good of that particular village.⁴² It is envisioned that the government can employ agricultural production assistance to the villages in the form of improved seeds and other agricultural inputs. In addition, the village will serve as a focal point for the development of social services including non-formal education programs.⁴⁴ Unfortunately at the present time, there have been no systematic published analysis of the Tanzanian experience.

There has, however, been research conducted on community and other rural development programs.⁴⁵ Most of the research has not been sufficiently well integrated. As a result, it has been difficult to determine the employment and output effects of most government action taken to increase agricultural production or to promote small-scale industry in rural areas.

6. "Direct State Intervention in Rural Non-Farm Activities"

In at least two countries, government policy has developed national trading corporations in order to reduce the monopoly power existing among certain traders operating in rural areas. In Kenya and Uganda, where national trading corporations have been established in the last 3 to 5 years, the primary political justification

was to reduce the economic power of the Asian trader who was alleged to have gouged the small rural peasant. In Kenya another reason why the government developed the trading corporation was to increase African participation and increase the efficiency of the distribution network in rural areas. It was envisioned that the corporation with technical services would provide smaller African retailers with technical services. Bucknall in his paper,⁴⁶ however, questions the efficacy of the trading corporation by questioning whether this umbrella organization is needed, particularly when the government has other methods at its disposal for the activities of non-African traders by refusing to grant business licenses. Bucknall in his analysis is generally suspicious of the alleged advantages of government action to improve the distribution of goods and services throughout the country. Another unfortunate example in Africa is the present Ghanaian food distribution experiment by establishing a series of government Kiosks in Accra. Although state intervention may reduce the rate of business failures in distribution, this mechanism is a high price to pay for such protection, in terms of distribution system, efficiency, retail prices and employment opportunities.

III Data Organization and Methodology

In order to develop an analytical framework for empirical field research on small-scale, non-farm rural activities, it is appropriate to review the important empirical studies which have been undertaken to determine the methodology used to organize the resulting data. In particular we will review the study by Hart, (55), Harris (120), Callaway (32), Lobstein (82), Nypan (96), Olayide (141), and Gibbs (143) First, most studies categorize economic activity on an industrial basis as follows: manufacturing services and other enterprises. A methodology which has not been employed but which may prove to be fruitful is to categorize economic activities on

the basis of output characteristics such as consumer goods, investment or consumer durable goods, and services including trading. Hart and Lobstein make the point that economic activities should be also sub-divided into formal and informal income opportunities. According to Professor Olayide as well as the University of Reading and Ghana, (102), it is also important to account for seasonal differences in the activity mix of each member of the household.

Keith Hart's classification system, based on income opportunity type, is perhaps the most interesting conceptually and it should be employed in other research.⁴⁷ The classification system includes **invitations** formal income opportunities such as wages earned in large-scale, public sector activities, to informal income activities of a legitimate nature, (legitimate being determined by the mores of the society) and finally illegitimate, informal income opportunities. A further classification to be incorporated would include **non-economic** activities such as (a) religious ceremonies, (b) (c) weddings, and (d) other related social obligations. In reviewing Keith Hart's contribution a bit further, he suggests that his first classification of formal income opportunities should be divided into the following three categories: (1) Public sector wages, (2) private sector wages, and (3) transfer payments such as pensions, unemployment benefits, and other formal benefits, etc.

Under informal income opportunities of a legitimate nature, activities would be grouped as follows. First there are primary and secondary activities, such as (a) farming, (b) market gardening, (c) building and construction, (d) food processing and (e) self-employed artisan which could be further subdivided per Calloway (32) into (i) leather working, (ii) metal working, (iii) wood working, (iv) cloth working, (v) mechanical repairing and (vi) printing. A second category includes tertiary enterprises requiring relatively large capital investments such as (a) housing,

(b) transport, (c) utilities and (d) commodity speculation. Third, small-scale distribution activities are subdivided into: (a) market operators, (b) street hawkers, (c) caterers of food and drink, (d) bars, (e) portering, and (f) traders. With respect to trading, perhaps the classification that Nypan uses in his article (97) is the most useful. He groups the traders according to the principle commodity traded such as cloth, materials, vegetables, fish, meat, grains, provisions such as tinned food, flour, salt, prepared food, tailors, edible oil, fuel, hardware, native medicine, and others. A fourth group of activities includes other services such as (a) musicians, (b) laundering, (c) shoeshine boys, (d) night soil removers, (e) photographers, and other services, such as rituals, magic, and medicine. The final group, private transfer payment, includes (a) gifts, (b) borrowing and (c) begging. ⁴⁸

Hart considers the third primary activity set i.e., illegitimate informal income opportunities, as being very important in understanding the economic behavior of the slum areas of Accra. He disaggregates these opportunities into two groups; services and transfers. He includes under services, such things as (a) receiving stolen goods, (b) usury, (c) drug pushing, (d) prostitution, (e) smuggling, (f) bribery, (g) corruption, and (h) racketeering. Under transfers he includes (a) petty theft, (b) larceny, (c) embezzlement and (d) gambling. Although illegitimate activities may extend beyond the usual scope of most research projects, it is important to recognize the existence of such activities and the implications such activities have on income redistribution. I suppose that this latter set of activities provides an incentive for concerned researchers to press forward in order to increase legitimate income opportunities and equity in employment and income distribution. The well protected compound of the wealthy has become an all too frequent scene in Africa.

IV. Implications for Future Research

From a review of the literature and discussions with interested researchers, the following approaches for analyzing rural, non-farm economic activities could be usefully employed. The approaches include the following: (1) a study of individuals from a particular geographical area, (2) a study of a village or set of villages, (3) a follow-up study of individuals who have attended a particular educational institution, (4) a study of small-scale enterprises, and (5) a marketing or sectoral study focusing on the linkages between market and producer and producer and sources of raw material.

A. Individual Approach

Perhaps the best examples of studies incorporating the individual approach include (1) Keith Hart's study of the Frafra migratory group from Northern Ghana presently living in Accra slums (55), (2) the study by Callaway on the 225 firms (32) and (3) the study by Harris on Nigerian entrepreneurs (120). In Hart's study, the primary unit of analysis is a set of individuals with particular characteristics; i.e., their unusual entrepreneurial talent, or their ethnic or regional background. The analysis focuses on the economic activities of the group in terms of the extent of wage and modern sector employment, small-scale activities or agricultural activities. This kind of study is particularly useful if it can be employed on a longitudinal basis to determine the reaction mechanism operating when economic opportunities change. This individual approach has also been used on a retrospective basis in the migration study by Harris, Todaro, and Remple in Kenya.^{48a} The primary unit of analysis in that study was the individual and focused on how he and his cohorts moved into active participation in the economic life of the country.

B. Village Approach

In a certain sense, this approach is anthropologic in character in that it studies a particular village. However, because it is concerned about a given community's economic behavior, rather than cultural, religious, or kin (except as such variables affect economic behavior) it has economic validity.⁴⁹ The village approach requires complete survey of existing resources and economic activities before the effect of change can be analyzed. The economic life of a given community is described in detail including the primary and secondary economic activities of each member of the community. Perhaps, one of the best studies of this type is the one conducted by Oluwasanmi, et al. on the Uboma Village in Eastern Nigeria, (99). The activities of this village were described in detail, from the range of activities, the resources used, the percentage of each family member's time used in production activities throughout the entire planting and harvesting season of each crop. The food consumption of each villager was also studied by a medical and nutritional team and the numbers of individuals, particularly those who had acquired some education, who had migrated in search of wage employment opportunities. The extent of cash income returning to the village from the individuals who had migrated were also recorded. The size of each land holding was recorded. Also, inquiry was made with respect to the extent to which trading occurred between areas, either in terms of cash crops such as palm products or food crops sold in urban areas. At the present time, there is a proposed study to focus on the rural economy in the derived savannah zone of Nigeria which will be using the village approach in its analysis.⁵⁰ Such studies conducted on a longitudinal basis would provide a substantial amount of information relative to (1) the economic activities of small-scale entrepreneurs and part-time farmers and (2) the linkages between farm and non-farm activities in rural communities. Researchers and policy makers could also improve their understanding of the operation and importance of informal credit mechanisms and informal employment opportunities

by using this village approach and could evaluate the extent to which they could be employed in rural development programs.

C Follow Up Study Approach

The third methodology has been called the Follow-Up Approach. In particular this type of study has been advocated by persons concerned with human capital development in less developed countries and for analyzing the returns to educational programs. This type of study however, could be equally important in analyzing the entrepreneurial activities of a particular cohort. Also, a follow up study of graduates from high schools or secondary schools could be used to determine the extent to which graduates enter the modern labor force in urban areas or develop careers outside of the modern sector. In addition, planners and government officials would be provided with information about the effectiveness of various educational programs in rural development, even though a particular educational program may not initially be designed with that function in mind.

D. Small-Scale Industry Approach

The fourth approach is the small-scale industrial approach. This approach has been the most common approach used to date. The primary methodology of the approach is to survey all small-scale enterprises in a certain geographical area, and then a sample of particular enterprises is developed for more detailed study about the (1) sales of the enterprise, (2) number of persons employed, (3) equipment used, (4) credit availability and (5) other information regarding the activities of the enterprise. This approach is useful in helping to define the bottlenecks encountered by a particular industry, such as the availability of raw materials or quality personnel. However, this approach has not been particularly useful in improving ones understanding of the development process and particularly the relationships between farm and non-farm activities as both are undergoing change.

E. Intersectoral Linkages Approach

A fifth method or approach could be considered a modification of the small-scale industry approach; however, it is distinctive in the sense that it focuses on the linkages, both backward and forward, which a particular homogeneous set of small-scale businessmen interact within selling their products and in acquiring resources necessary for production. The information which can be provided by analyzing the sources of resource supply and final demand would be useful in developing appropriate industry specific government policy. It would also improve the understanding about the relationships between the agricultural sector as a source of resource supply and the small-scale sector as a source of resource demand and how the two sectors develop simultaneously.

V. Concluding Remarks

Given the increased concern for employment and income distribution effects of the development process, it is imperative that studies of the non-farm sector be developed and implemented without undue delay. Care must be taken however, to carefully define the objectives of the study and then determine the appropriate approach - as discussed in part IV and classification system - Part III to be employed. In addition, it is important that the objectives of the study be reviewed from the perspective of policy considerations. Assuming the review of the conceptualization and design of the study were conducted appropriately, the resulting information would enable policy makers to improve the decision making process so that other than purely output effects could be considered. In addition, if studies were conducted on a longitudinal basis, the dynamic relationships between sectors of the economy could be better understood, both in terms of the flows of goods and services and resources.

FOOTNOTES

1. In a recent paper, David Norman provides empirical evidence to support the importance of this conceptual linkage in a case study of a Village near Zaria in the North Central state of Nigeria. See Norman, D. W., "Dryland Farming Among the Hausa in the North of Nigeria", Rural Economy Research Unit, Ahmadu Bello University, 55 pages, xeroxed, to appear in a forthcoming volume edited by R. D. Stevens, Tradition and Change in Agriculture, #128.
2. Examples of such studies include AID, study team, #46; Good, #53; Jones #76; Lawson, #80 and #81; Nypan, #96.
3. See Jones #76.
4. Studies which have employed this technique include Hart, #55, Norman #128, and Oluwasanmi et al, #99.
5. See the following studies as examples of the above described methodology: Callaway #32, Kilby #23, Harris #120, Morris and Somerset #126, Nypan #96. This methodology is also employed in studies which seek to describe small scale industries. See, for example, Koll #79, Jones #75, Ghana #48, Mueller and Zevering #24, and Weeks and Renny #122.
6. For example, Harris, 120; de Wilde, #28; and Callaway, #129 and 32.
7. For example, see Ghana #48, and Uganda #130. Also, the Nigerian government has conducted at least one pilot survey on its own. SEE #131.
8. See U. A. R., #70, Ghana #102, Western Nigeria #24 and #132 Eastern Nigeria.
9. See the work of Adegboye et al, #2, Nigeria; Sada #26, Lagos, Nigeria; Callaway #32, Ibadan, Nigeria; Good #53, Ankole District, Uganda; Hart, #55 Accra, Ghana; Jones #75, Malaya; Koll, #79, Ibadan, Nigeria; Lawson, #80, Southern Ghana; Loma #83 at Mayulu Village, Congo, Oluwasami, et al., #99, Eastern Region, Nigeria; Sinha, #109, India; Taylor, #111, Coast Providence, Kenya; Harris #120, Nigeria; and Weeks and Renny #122, Zaria, Nigeria.
10. See #130.
11. See page 18 of his book, #23.

12. See No. 99.
13. See Callaway #32.
14. Average labor productivity, as measured by sales or receipts per employee, was 5 times as large in urban areas compared with rural areas. #130.
15. See paper no. 88. In addition paper no.89 by Massell and Heyer is of substantial importance in this regard.
16. See also the food consumption survey conducted for districts in Uganda in 1968. (#136).
17. See Mueller and Zevering #24, Constable #35, Coster, #36 and #37, Ghana #49, Godart #51, Lobstein #82, Thomas #112.
18. See ILO, Africa, #66; ILO, Tunisia, #68; ILO, Iran, #69; ILO, Philippines, #67; Thomas, East Pakistan, #113; Gilbert, East Pakistan, #50; Schwab, Tunisia, #107; Andriamanjara, Morocco, 133; and Guha #52.
19. Lobstein recently discussed these problems as it relates to the development of a rural employment policy in French-speaking African countries. See #82.
20. See the studies on East Pakistan and Tunisia on this point. Gilbert, #50; Schwab, 107; and Thomas, 113.
21. See Andriamanjara #133.
- 21a. See Thomas #113.
22. See Andriamanjara #133.
23. See Thomas #113, and Andriamanjara #133, and Schwab #107.
24. See ILO, "Special Manpower Mobilization Schemes and Youth Programs for Development Purposes", International Labour Review, Vol. 93, No. 1, January 1966. For a survey of the programs in Africa as was in existence in 1965. See also Sheffield and Diejomaoh #135, for a more recent review of new programs.

25. See Olutunbosun, Dupe.
26. For Example see Ghana #49.
- 27.
28. See ILO #146 and Dunlop #137.
29. See Hanson OLC 1971.
30. See #28 and #29.
31. See de Wilde, #29; Part , pp. and Part , pp.
32. de Wilde, #29, Part , pp. In a revised section of this paper, de Wilde's findings will be analyzed and summarized in a more comprehensive manner.
33. Many ideas in section are discussed by de Wilde, No. 28 and 29.
34. page 12, no.28.
35. See no. 115.
- See de Wilde, pp. 42, #28.
37. See Foster, Philip J., Education and Social Change in Ghana, Routledge, 1963; and McQueen, Albert J. "Aspirations and Problems of Nigerian School Leavers", Bulletin, Inter-African Labour Institute, Vol. 12, 1965, pages 35-51.
38. See Dunlop, #137, page 29.
39. See dissertation by Olutunbosun, Dupe.
40. See Scherer #138.

41. The Madagascar Case, cited in Berthelot, #12, may be an exception to the above statement.
42. It must be realized that the experiment in Tanzania is based on six years of major failures by the Tanzanian government and external donors to incorporate a villagization program throughout Tanzania.
43. See article by Griffiths Cunningham, "The Ujamaa Village Movement in Tanzania", Rural Africana, No. 13, Winter 1971. (See also in the same issue an article by Lionel Cliffe.)
44. See the recent OLC Publication on Rural Learning Systems in Tanzania. Overseas Liaison Committee, Tanzania: A Nation-Wide Learning System, Submitted to World Bank and Government of Tanzania, American Council on Education, November 1971.
45. See, for example, studies: (1) #100 by Oluwasanmi, of "package approach" community and agricultural development program; (2) No. 103, a series of discussion papers on research in village development in Southeast Ghana by the University of Ghana and Reading initiated in 1969; (3) see also the work of Professor Sam Olayide briefly referred to in #2.
46. See #17.
47. Dr. Michael Todaro was similarly impressed and used it in a Seminar held at Michigan State University in October, 1971.
48. An understanding of school leaver behavior probably would be enhanced if one were to include the latter set of economic activities in the analysis. See Hutton #63.
- 48a. See Rempel, Henry, Labor Migration into Urban Centers and Urban Unemployment in Kenya, University of Wisconsin, unpublished Ph.D. dissertation, 1970.
49. See Hill No. 58 and No. 59.
50. See Dr. Olayide, #139 for the proposed methodological details.

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