

HOUSEHOLD AND NATIONAL FOOD SECURITY IN SOUTHERN AFRICA



Edited by

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University of Zimbabwe UZ/MSU Food Research in Southern Africa

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FOREWORD

In 1985 the University of Zimbabwe and Michigan State University initiated a Food Security Research Network for Southern Africa. The objectives of the network are to conduct research that informs policymakers about food security issues and to help strengthen the regional capacity for food policy analysis. The underlying premise of the network is that building excellence in research capacity for national policy analysis comes through experience. In practice, this requires a long-term commitment to analytical capacity building, consistency in funding, and constant interaction between researchers and policymakers.

The network has sponsored four annual conferences for network researchers, policymakers, SADCC officials, and representative of international and donor agencies. The aim of the conference is to share research findings, identify new research themes, and provide an opportunity for policy dialogue between regional researchers, policymakers, and government officials.

The 1988 conference brought together 110 participants who deliberated on 28 papers. In the Official Opening, Vice-Chancellor W.J. Kamba of the University of Zimbabwe highlighted the importance of including health related-issues as a component of food security; and Zimbabwe's Senior Minister of Finance, Economic Planning, and Development B.T.G. Chidzero outlined policy reform priorities for Southern Africa. Subsequent sessions focused on *SADCC's Food Security Programme, the Impact of Market Reform on Food Security, Food Security Policy Options, New Technology to Improve Food Security, Family Food Security Options in Low-Rainfall Areas, Expanding Agricultural Trade in the SADCC Region, Nutrition and Food Security, the Contribution of Small-Scale Rural Enterprises to Employment Generation and Food Security, and the Impact of Irrigation on Food Security.*

A highlight of the 1988 conference was the participation of five nutritionists from Zambia, Zimbabwe, Sweden, and the United States. The presence of the nutritionists stimulated formal and informal discussions on the food access side of the food security equation and drew attention to the need to initiate more research in this area.

A second highlight of the 1988 conference was the attention given to reducing barriers to expanded intraregional trade in the SADCC region. Results presented suggest that there appear to be substantial price and nonprice barriers to expanded trade. Nevertheless, there exist significant opportunities for expanding intraregional trade that can be realized through appropriate government initiatives.

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SMALL-SCALE RURAL ENTERPRISE DEVELOPMENT IN TANZANIA: CURRENT STATUS AND RESEARCH NEEDS

Isaac. J. Minde¹

INTRODUCTION

Given the population growth rate of about 3.4% and the seasonality of agricultural production, particularly in areas where irrigation water is not available, it is unrealistic to expect agriculture to effectively employ the total rural population. Due to national budget constraints, the educational system cannot absorb a significant proportion of the primary school leavers into higher education. Given their youth and lack of capital and skill, they cannot immediately be absorbed in agriculture, even if cultivatable land is available. Thus, the introduction and development of small-scale enterprises alongside farming is a promising strategy for increasing employment and incomes of the rural population.

A nationally-accepted definition of small-scale enterprise (SSE) does not exist. However, this study describes a SSE as an activity performed by a person or a group of people in a rural or urban area characterized by a low degree of organizational skill and a relatively low level of capital--compared to labour--in producing the final product. Part of this description is shared by the Small-Scale Industries Organization (SIDO). The National Bank of Commerce (NBC) uses a financial definition to classify small and large enterprise. According to the bank, a SSE is one which uses US\$300,000 or less for its establishment.

SSE can be classified into urban and rural. Each of the classes can again be divided into formal and informal categories. Although many definitions of urban exists, this paper considers a locality administratively carrying the classification of city, municipality, town, or minor settlement to be urban and the rest to be rural². The informal sector refers to firms that fall outside the system of government benefits and regulations (ILO, 1972).

The Small-Scale Industries Organization (SIDO)³ was established by *Act of Parliament No. 28 of 1973*, following the *Party Policy Guidelines on Small-Scale Industries* issued in 1973 (SIDO, 1984), and the organization started functioning in the first half of 1974. The act stipulates, among many functions, the following:

- o to promote the development of small-scale industries;

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²For an alternative definition of urban, see Liedholm and Mead (1987).

³In this paper, small-scale enterprise and small-scale industry are used interchangeably, although the latter implies some manufacturing.

- o to plan and coordinate activities of small-scale industries;
- o to carry out market research in goods manufactured by small-scale industries;
- o to provide services necessary for, or incidental to, proper development to small-scale industries, parastatal organizations, and other persons engaged in small-scale enterprises; and
- o to carry out research in the development of small-industries and the marketing of their products, including the standard and quality of such products.

SIDCO has been performing its functions largely through a network of regional extension offices throughout the country.

The foregoing discussion indicates that government has recognized the role of small-scale enterprise in Tanzania for some time. However, although SIDO has been in existence for roughly 15 years, careful observation reveals that SIDO deals largely with formal sector firms, in both the urban and rural areas. SIDO assistance tends to support urban factory type enterprises (Table 1 and 2). For example, between 1973 and 1983 SIDO invested T.Shs 103 million (US\$18 million at the 1973 exchange rate) in these industries which employed 21,528 people, and produced goods worth T.Shs. 237.5 million (US\$38 million) (SIDO, 1984).

Table 1. Hire-purchase loans (million T.Shs.) for SIDO in rural and urban areas, Tanzania, 1973 to 1983.

Category	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
Urban	0.000	0.0	2.9	1.7	21.7	40.7	44.3	49.6	52.5	44.70
Rural	0.025	1.3	2.3	1.3	3.5	5.8	9.2	5.9	4.8	9.83
Total	0.025	1.3	5.2	3.0	25.2	45.9	53.5	55.5	57.8	54.53

Source: Adapted from SIDO (1984), Table IV, p.17.

Table 2. Number of industries and structure supported by SIDO, Tanzania, 1973 to 1983.

Type of Industry	Number of projects
Food and food-based	289
Agro-based	139
Clothing and apparel, footwear	261
Building materials	242
Household items	198
Transport and related	35
Hospital/health	12
Educational requirements	52
Total	1,228

Source: Adapted from SIDO (1984).

The informal sector in both the urban and rural areas continues to escape the net of SIDO. These informal enterprises are the very small, invisible, fugitive, sometimes household enterprises. Their products may appear trivial when compared to those from the large-scale manufacturing, but they are important when their employment and income to the individual households is considered.

CURRENT STATUS OF RURAL SMALL-SCALE ENTERPRISES IN TANZANIA

Enterprise types

This paper chiefly addresses small-scale rural enterprises (SSRE). This category, includes the formal type--which, to a large extent, has been dealt with by SIDO--and the informal type, which so far still remains independent.

Various classifications of the existing rural enterprises are possible. The classification could be on the basis of size (number of people or capital investment), type of management, value of output per unit of time, etc. The classification used in this study is based on the nature of the final product. Admittedly, the list, number, or types of small-scale rural enterprises is endless. However, it can be classified into wood processing, clothing, weaving, brewing, and food processing. Other groups are forest-related activities, leather craft, earthworks (brick making, etc.), small retailing, and ivory craft (see Table 3 for detailed product description).

An outstanding feature of these industries is a regional variation, largely because these enterprises use locally available materials. Wood-processing firms, as well as charcoal production, are mostly located where wood is relatively plentiful. Earthworks and weaving are also location specific, being determined by the type of soil and the right vegetation, respectively. With regard to brewing, the type of liquor produced (sorghum, maize, coconut or pineapple) is also a function of the location.

Table 3. Main small-scale rural enterprises, Tanzania.

Group	Activity type	Activity coverage description
I	Wood processing	Carpentry: doors, chairs, stools, tables beds, windows and cupboards.
II	Clothing	Cloth tailoring and garment repair.
III	Weaving	Basket, mats, brooms, hats, handloom weaving, twines from natural fibres (e.g., sisal).
IV	Brewing	Brewing of sorghum, maize, coconut, and pineapple beer.
V	Food processing	Bun, bread, samoosa, grinding grain.
VI	Forest related activities	Charcoal production, fuelwood production, pitsawing.
VII	Leather craft	Belts, shoes, cowhide drums, leather bags.
VIII	Ivory/horn crafts	Bangles, etc.
IX	Earthworks	Pottery and ceramics, brick making.
X	Glassbead crafts	Beads for neck, wrist, and waist.
XI	Small retailing	Small stalls by roadsides selling, salt, dried beans, fruits and vegetables, sardines, and soft drinks.

Thus, the natural environment is critical in determining the kind of small-scale enterprise in a given area.

Characteristics of small-scale rural enterprises

These enterprises are characterized by low use of capital. Most of the labour used in these enterprises comes from the household pool and labour is rarely hired. The enterprises may employ only one member of the household (as in charcoal production), a husband and wife (as in weaving), or a set of family members (as in brewing). Some enterprises are gender specific, while others are performed by both men and women. Charcoal production, wood processing and ivory/horn craft are basically male enterprise. Weaving, brewing, food processing, and small retailing are performed by both men and women, but the degree of involvement of either gender depends on location. Variation in culture and its associated norms and beliefs across the country also has an impact on the division of enterprises between men and women. However, women are generally most active in weaving, pottery brewing, and food-processing activities.

Ownership of SSRE is essentially private (*i.e.*, individual or household owned). Production under cooperative arrangement is looked at by farmers as attracting government action with its attached legislation, taxation, and control. However, operating cooperatively would attract credit from the rural financial markets because of its political appeal.

Evidence from previous research (Minde, 1985) suggests that some of these rural enterprises are being performed by less-advantaged groups, in terms of special skills, education, and age. The more educated will not be found in weaving, producing charcoal, or small-retailing of rural-produced goods. Likewise, particular enterprises seem to be associated with the old, such as brewing, weaving, and pottery making, although exceptions exist.

Capital acts as a barrier to entry in some of the enterprises, such as brewing, food and wood processing, and clothing. One needs sufficient capital to purchase items like sugar for brewing and food processing. Carpentry also demands a high initial capital investment to acquire tools like planes, hammers, bits, etc.

The SSRE products are marketed through three major channels. The first source of demand is rural households for items such as brewed liquor, apparel, foods, and processed wood and woven products. Some are for immediate consumption while others are used as source of inputs. Second, urban demand exists for products from villages close to urban areas, as few products are transported to more distant towns. Some products, like charcoal, serve a very important role in urban areas. For example, available evidence indicates that 95% of the urban families in Tanzania use charcoal as an energy source. There exist no contractual arrangements for marketing, with the exception of a few high cost items, such as beds, chairs, and cupboards. Contracting for these items is necessary because the operators have little capital and if the little capital is locked up in slow-moving items, it may endanger the sustainability of the business. The third channel for these products is tourist demand. Products are sold in markets, ranging from those that are informally organized by individual households on roadsides to those that filter into the Tanzania

Handicraft Marketing Corporation (HANDICO). HANDICO was established in 1977 as a subsidiary of SIDO with the objectives of marketing handicraft products, both domestically and internationally (SIDCO, 1988).

Agriculture and nonfarm activities interface

Several researchers have concluded that the primary objective of farming for smallholders is to obtain sufficient food to carry the family through the year (CIMMYT, 1977; Kanga, 1977). However, farming does not take place every month. Due to the seasonal variation in farming, about 50% of the available family labour is not used in farming and is therefore potentially available for nonfarm jobs. Evidence has also shown that some nonfarm activities are more rewarding than farming (Minde, 1985). But since there is generally a lack of trust in the efficiency and reliability of the food market operations, there is a tendency for every family to grow its own food, particularly grain. Generally, farming operations alternate with nonfarming operations, but this does not necessarily imply that an activity is completely put aside at any particular time. For example, a farmer who is also a carpenter will make less furniture during the peak agricultural season than in the agriculturally trough season.

Although weaving is most intensive in the off-season, it is also pursued as a resting activity at the homestead in the afternoon and evening hours. For some households, farm and nonfarm activities are carried out on a rather equal basis because of the need for money to purchase essential goods and services that are not produced by the household. This is particularly the case for very poor households, who are in greatest need of cash during weeding and near harvest. The support and stability that nonagricultural jobs provide the farming community are important because, short of this, farmers would move to the towns during the off-season to look for jobs which may not be available, resulting in more urban unemployment and consequent instability in farm output.

The policy environment

The government has been promoting SSRE through the founding of SIDO 15 years ago; and subsidiary organizations such as HANDICO and the Small Industries Consultancy and Training Assistance (SICATA).

Numerous policies have been adopted to promote small-scale industries, including (SIDO, 1988):

- o Exemption from income tax, sales tax, and customs duties for industries established in the villages. These exemptions run for two years. However, in practice, the exemptions are limited to village-government administered projects.
- o Exemptions from customs and sales tax of machinery and start-up materials ordered on behalf of SIDO under SIDA, Dutch, and UN agencies assistance programmes. Although it covers a considerable part of the needs of small-scale industries, it does not provide blanket cover to all small-scale industries or SIDO imports.

- o The Bank of Tanzania (Central Bank), when it revised its interest rate in 1978, established an interest rate of 7.5% for rural small-scale industries and 8% for urban small-scale industries. These rates are far below the normal commercial rates of about 30-40%.
- o In 1988, the National Bank of Commerce (NBC) endorsed a "liberalized lending policy to the rural sector (small-scale farmers)". Under this circular, the bank extends financial assistance to firms, not exceeding 85% of the total project investment costs. The other 15% is equity contribution of the borrower (National Bank of Commerce, 1987).
- o The construction of industrial estates in 17 of the 20 regions of the mainland has provided incentives for the establishment of industries. Allocation of shades on a normal rental basis reduces the cost of buildings for the enterprises.
- o SIDO provides various free or subsidized services, such as conducting feasibility studies, assisting in project preparation, helping to obtain finance, and the purchase of raw materials and with training.
- o A hire-purchase scheme, run by SIDO for urban and rural clients, provides funds to purchase machinery with a 10% down payment and 3-7 years repayment period with concessional rate of interest.

Although these efforts appear very impressive, there is a need to look into the kinds of groups that are actually benefiting from these incentives, the bureaucratic elements involved in acquiring the loans, rebates, and services, and to identify ways to minimize these constraints.

CONTRIBUTION OF SMALL-SCALE ENTERPRISES TO FOOD SECURITY

SSRE contributes to improving food security through its impact on the demand side of the food security equation. Food security is broadly a function of food production, availability, accessibility, and utilization within the household. The third factor--access--is a function of income, which determines the effective demand for food by urban and rural households. SSRE have the potential of creating employment, output, and therefore, income.

Formal sector employment and income generation

Small-scale industries covered by the formal sector which, to a large extent, fall under the SIDO programme, include:

- o craft-based units like pottery and ceramics, wood processing, textile, blacksmithy, fibre processing, and carvings. These are either one-person operations, group efforts or artisan cooperatives.
- o very small industries employing less than 10 persons, but not related to crafts, including flour mills, repair workshops; and
- o factory type of industries, employing more than 10 persons and often using power.

Based on SIDO (1988) records, a national census conducted in the end of 1978 revealed that there were 3,978 small-scale industries in Tanzania of which 782 were the factory types. They produced goods worth T.Shs.832 million (US\$1 = T.Shs. 8.2) and employed 52,284 persons. This does not include the handcraft subsector. A subsequent census conducted in June 1981 revealed a total of 4,893 industries of which 1,193 were factory types. Their total production was valued at T.Shs.1,854 million and they employed 103,728 persons. This included 35,000 artisans who produced an estimated T.Shs.165 million of goods. Assuming the same rate of growth, the number of persons employed today can be estimated at 500,000. When part of this value of production is translated into earnings, it is evident that the sector's contribution to effective demand, particularly for food, is significant.

Informal sector employment and income generation

Data on informal sector employment and income are not readily available. In fact, one of the characteristics of the informal sectors is the inadequacy of data. The farm and nonfarm employment study completed in 1985 revealed that in one of the villages, while the available family labour fluctuated from 71-80 mandays per month, labour solely used for nonfarm activities (excluding social aspects) ranged from two mandays in the busiest agricultural months to 15 mandays in the slack agricultural seasons (Minde, 1985). About 20% of the family labour is therefore used in the production of cash-earning nonfarm enterprises in the slack season. Translating this employment into income (Table 4) indicates that average household annual income (enterprisewise) varied from T.Shs.88 for baskets in Kingolwira to T.Shs.7,840 for charcoal production. Average household annual income from nonfarm activities ranged from T.Shs.514 in Doma Village to T.Shs.10,894 in Mangae village.

The importance of family cash income from nonfarm enterprises is also demonstrated when the actual receipts from crop sales are compared with the cash receipts from the nonfarm products (Tables 4 and 5). For example, in Mangae Village cash earned from crop sales equalled only 10% of cash from nonfarm products. Due to the locational specificity of these enterprises, one finds that the trend is reversed in Doma Village, where average household income from nonfarm products is about 30% of receipts from crop sales.

Although most of these families attempt to grow their own food, households need to purchase some of the food items like protein products, cooking oil, and other ingredients from other households and urban areas to supplement the home-produced food. Apart from creating employment, particularly in the off-season, these enterprises are important in their contribution to food security through the income generated from product sales.

CONSTRAINTS ON THE EXPANSION OF SMALL RURAL ENTERPRISES

There are numerous constraints that limit the expansion of small rural enterprises in Tanzania.

Table 4. Average nonfarm income per sample^a household involved by source and location (T.Shs.), Tanzania.

Village:	Kingolwira		Fulwe		Doma		Melela		Mangae	
	No. of household	Average income	No. of household	Average income	No. of household	Average income	No. of household	Average income	No. of household	Average income
Mats	2	144	0	0	6	287	8	1,500	9	2,020
Brewing	1	2,450	5	352	1	4,550	5	3,000	4	6,634
Charcoal	1	1,040	1	6,500	0	0	1	7,840	0	0
Baskets	0	88	0	0	6	277	9	1,929	11	2,240
Carpentry	0	0	1	3,400	0	0	0	0	0	0
Total	4	3,722	7	10,252	13	5,114	23	14,269	24	10,894

^aThe sample size per village was 15.

Source: Adapted from Minde (1985), p.77

Table 5. Average income per household from crop production, Tanzania.

Type	Village					
	Kingolwira	Fulwe	Doma	Langali	Melela	Mangai
Total ^a gross margin	9,596	28,349	7,315	5,664	7,052	2,759
Actual ^b receipts	1,744	3,834	1,519	352	1,457	1,085

^aYield/ha (kg) times price minus variable costs (including hired labour, tractor hire, etc.)

^bQuantity sold times price per kg.

Financial assistance

National financial institutions which extend credit to the small-scale sector are mainly the NBC and the Cooperative and Rural Development Bank (CRDB). Yet, the credit supply remains small because of:

- o a lack of information to the needy about the existence of these facilities;
- o bureaucratic channels that applicants must follow, including the money and time required to push papers through various town-based offices;
- o traditional attitude of bankers which are guided primarily by the consideration of security, rather than by the eligibility of the project; and
- o a lack of adequate necessary technical expertise to prepare loan documents.

Shortage of tools

Hand tools are now produced in machine tool production centres in the country which are under the National Development Corporation (NDC). However, production is far behind the demand. In addition, these tools are not simple enough to meet the requirements of the very small rural enterprises, as the firms mainly produce tools to meet the needs of factory type enterprises.

Shortage of skilled technicians

Training of trainers is necessary to promote small-scale enterprises. A great number of technicians of various job descriptions are needed to meet the demand in both urban and rural areas. Product designers are particularly crucial in the area of product differentiation, which is necessary so small-scale products can compete with those from the large-scale manufacturing sector.

Inadequate infrastructure

Inadequate water supplies, electricity supplies, and roads limit the growth and development of these enterprises. It is partly because of infrastructural underdevelopment that SIDO concentrates its activities in terms of total investment in the urban and peri-urban areas.

Foreign exchange

Although this problem is common to many sectors of the economy, small-scale industries are hit relatively harder because the shortage limits the possibility of importing industrial machinery, spares, and raw materials needed to increase production.

Lack of clear policy on assisting the very small producers

The small-farmer, who does farm work for a few months of the year and later engages in small-scale enterprises--producing baskets, mats, carpentry items, etc.--is not yet effectively reached by the services of formal organs such as SIDO.

Demand for the products

The demand for products produced by small-scale rural enterprises is limited to the rural and the immediate urban areas. For high income groups, these products are out competed by products produced by large-scale manufacturing firms. The main reason for this is because consumers perceive SSRE products to be of poor quality, compared to similar products from the large-scale manufacturing sector. SIDO is often used these days in the business language as a nickname for an inferior product.

RESEARCH AGENDA

Current research

Currently, SIDO is undertaking inadequate research to identify how better management can solve the capacity underutilization problems that affect many of its holdings. SIDO is currently embarking on mapping out the rural sector for rural

industrialization. Apart from these efforts, there are sporadic, one shot, small-scale research projects conducted by staff and students of the two universities--Dar es Salaam and Sokoine--on specific areas of interest, lasting from a few weeks to three months (see for example Bagachwa, 1982). However, these research projects, so far, tend to have an urban bias.

Future research agenda

Given the constraints that now prevail in the rural industry sector and the importance of the sector in providing employment and income to the farm and nonfarm population, a full-scale research agenda to identify areas of improvement for the expansion of the sector is necessary. There exists a need to carry out research along the following lines:

- o Map out the nature and type of SSRE in the regions and attempt to classify them. In doing so, it may be necessary to sample regions because of resource limitations. However, based on previous studies, SSRE are location, gender and even educational-level specific. Therefore, it may be necessary to catch these parameters in the sample.
- o Quantify the importance of these enterprises in terms of the employment and income they generate directly; and the forward and backward linkages that exist between them and other sectors.
- o Identify and characterize enterprises that produce products which have special characteristics and tastes that will make it possible for them to compete favourably with similar products from the large-scale manufacturing sector. This is in recognition of the fact that great room for improvement in diversity exists, particularly in the form of design and embroidery.
- o Identify cost-effective methods to reach the very small enterprise owners so they have direct access to the information about the assistance that is available from SIDO and other government agencies; and assist them to increase their bargaining power in terms of prices and marketing strategies, but at the same time guarding against adverse government intervention. This is in recognition of the fact that despite SIDO's role in assisting rural industrialization, they largely serve the urban and the peri-urban population. The very small farmers are still bypassed.

REFERENCES

- Bagwacha, M.S.C. 1983. *Structure and policy problems of the informal manufacturing sector in Tanzania*. Economics Research Bureau. Paper No. 83/1. University of Dar es Salaam.
- CIMMYT. 1977. *Demonstrations of an interdisciplinary approach for adoptive agricultural research program: the drier areas of Morogoro and Kilosa District*. CIMMYT Eastern African Economics Programme Report 2. Nairobi.

- ILO, 1972. *Employment, income and equity: a strategy for increasing productive employment in Kenya*. ILO, Geneva.
- Kanga, S.N. 1977. An economic assessment of smallholder tobacco project in Tabora Region, Tanzania. Unpublished M.Sc. thesis, University of Dar es Salaam, Morogoro.
- Liedholm, C. and D. Mead. 1987. *Small industries in developing countries: empirical evidence and policy implications*. MSU International Development Paper No. 9. Department of Agricultural Economics, Michigan State University, East Lansing, MI.
- Minde, I.J. 1985. Economic analysis of farm and non-farm employment in Morogoro District, Tanzania. Unpublished Ph.D Thesis, Department of Agricultural Economics, Michigan State University, East Lansing, MI.
- National Bank of Commerce. 1988. *Liberalized lending policy to the rural sector, Circular No. 17/88*. Directorate of Domestic Banking, NBC, Dar es Salaam.
- SIDO. 1984. *Ten years of the Small-Scale Industries Development Organization 1973-1983*. SIDCO, Dar es Salaam.
- , 1988. *Technology for the people through small-scale industries in Tanzania*. SIDO, Dar es Salaam.
- Temu, A.B. 1977. Miombo woodland inventory design: a response to the fuelwood crisis in Tabora. Unpublished Ph.D Thesis, University of Dar es Salaam, Morogoro.



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