# Small Scale Industries, Employment and Earnings in Developing Countries: Looking Back at Some Debate Issues

## Fidelis P. Mtatifikolo'

#### **Abstract**

This article provides an eclectic overview of the main issues and evidence in the debate of small scale industries, and their role in the economic development of developing countries. The substantive sections of the article deal with concepts and definitions, standard characteristics and trends, and the debate on the main strands characterising the perceived role of these industries.

The following are the major findings and conclusions:

- (a) Small scale industries are a significant component of the industrial sector in many developing countries, and they constitute the bulk of industrial employment because they are relatively more labour intensive and less capital intensive.
- (b) Such industries show significant dispersion to rural areas, and small townships. Employment generated by them in such areas is more pronounced than that in more urbanised areas. Being more dispersed, and providing significant employment, they maximise dissemination of increased income and spatial income equity without the need for explicit government fiscal measures of redistribution.
- (c) Small scale industries are less demanding of skills and capital, and have higher flexibility and adaptability to shocks that affect demand.
- (d) Even as the average size of small scale industries increases as economies grow there is significant evidence of continued coexistence of large and small scale industries. Backward and forward linkages exist too with agriculture and the services sectors. Small scale industries are therefore not necessarily a transitory phase of industrialisation.

## 1. Introduction

The role of small scale industries in the trade and development process has been debated for over thirty years now. The main bias for policy makers and researchers was the capacity for these industries to provide productive employment, and earnings opportunities (UNIDO, 1982; Smyth & Lyberaki, 1988). It was noted, for instance, that even though large scale industries had absorbed large shares of total

<sup>\*</sup> Associate Professor, Economics Department, University of Dar es Salaam, P.O Box 35045, Dar es Salaam, Tanzania

industrial investment, they accounted for small shares of industrial employment in most countries in advanced stages of industrialisation. With increased concern for equity and employment objectives in development programmes, there has grown an increasing realisation that the modern or large scale industrial strategies of previous decades had generally failed to solve problems of inequity, unemployment, and poverty (Liedholm & Mead, 1987; Havnevik, 1986; and Anderson, 1982). Large scale industry was still concentrated in 'metropolitan' areas, and for less developed countries this had aggregated urban influx of labour force from rural areas in search for industrial jobs which were limited by the small absorptive capacity of large scale industry. Unemployment increased as a result of this 'jobs illusion' of large scale industry (UNIDO, 1982; Havnevik, 1986; and Watanabe, 1976).

In contrast, small scale industries accounted for a larger share of official or recorded employment. They were said to be labour intensive on aggregate, and more widely dispersed in areas requiring just a minimum of basic facilities and infrastructure. In even more recent years, with problems afflicting official large scale—especially public sector—industries, small scale industries have been promoted as a way of fostering the private sector's contribution to growth, equity, employment, and poverty alleviation objectives of developing countries (Sandesara, 1969; Nanjundan, 1986). For these and other reasons, small scale industries have been discussed in relation to improving earnings opportunities, larger labour absorption, and regional equity in industrial and overall economic development.

Since the article is just an overview, it cannot claim to exhaust the fine details of the debate on the various strands, and thus its coverage shall also be selective. The five remaining sections will deal with concepts and definitions (Section 2); standard characteristics and trends (Section 3); the debate on the main strands characterising the perceived role of small scale industries (Section 4); and international trade in their products (Section 5). A sum-up is made at the end (Section 6).

The major limitation of this article is its heavy reliance on (rather) old publications. Admittedly, even the recent articles in the *Journal of Small and Medium Enterprises* do not carry this debate in any serious way, leaving empiricism to dominate since the late 1970s. For this reason, we argue, the main issues in this survey of the main debate are still very pertinent, even as they may need some updating in a subsequent exercise.

## 2. Concepts and Definitions

'How small is 'small'?, 'What constitutes 'industry'? These are two questions that have characterised the debate on small scale industries at the level of concepts. There is generally no common agreement on what constitutes a small scale venture in production. Being a relative term 'small' has been defined mainly in relation to specific characteristics of the countries, or specific context under discussion. What is considered small in one country may be designated large in others. A survey of 75 countries conducted in the mid 1970s by Auciello et. al., (1975) showed that over fifty different definitions were being used. No consensus exists yet. Even international agencies' definitions seem to have worked simply to aggravate the confusion. In the late 1970s, the World Bank, for instance, defined small scale firms to include those

with fixed assets (excluding land) valued up to \$250,000 (World Bank, 1978). At the upper limit of such value of assets in the late 1970s, that would constitute medium to large scale firms in many developing countries.

The definition of small scale in most studies has been issue-specific, and 'working definitions' are used to emphasise the context-specific nature of such usage. Several criteria have guided such working definitions. Two categories are important:

- (a) quantitative measures such as assets employed, employees, sales turnover or some combinations of such measures.
- (b) qualitative criteria such as being affordable by the average skills (managerial, financial, production) in the community. Sometimes the ability to disperse to local or small townships and use existing infrastructural facilities in such areas affords a branch of industry being labelled as belonging to 'small scale.'

The most commonly used criterion uses employment level. Its weakness, of course, is that where employment promotion is an explicit programme objective, it is inappropriate. If the upper limit of labour is set at a low level, it will be easy to exclude from 'small' category some enterprises that would generally qualify if employment promotion were not an explicit policy. It has the advantage that—other things being equal—it affords relatively easy counting measure where intercountry comparison can be made (again, after correcting for seasonality and erratic business features).

The second question raised at the beginning of this article related to how an industry is characterised. With regard to small scale industries, some countries and writers impose a lower limit on the size too. This is in view of the fact that there are some important differences in the main features of small scale industries, especially when the upper limit (in employment or asset value) is set 'high enough'. For instance, the World Bank called 'micro' those enterprises with less than 10 workers, and total assets of less than \$20,000. In the Indonesian 1974-75 industrial census, small firms included those employing 5-19; people while 'cottage firms' included those with less than 5 workers, and including those with no paid workers. Other terms used in the literature include 'tiny' (India), 'cottage shops' (Philippines), 'household' or 'dwarf' enterprises. By excluding from small scale categories at the lowest end of the size spectrum (using asset or employment criteria mainly), it is implied that there is some employment or physical capital entry barrier before a firm can be classified 'small'. In Tanzania, small scale industries were vaguely defined in the early 1970s as "any unit whose control is within the capacity of the people, either individually or cooperatively, in terms of capital required or know-how. It includes handicrafts or any organised activity based on the division of labour" (see SIDO Act, and TANU Directive of 1973 in Tanzania Government, 1973 and 1973a).

The reference in relation to international classifications is ISIC 31 to 39 (relating to manufacturing activities) and ISIC 95 (repair of manufactured goods). Most industrial censuses and studies use these classifications even as some cite small scale services and trade as belonging to the broader term small scale 'industries' used in the generic sense.

# 

### 3. Small Scale Industries in LDCs: Characteristics and Trends

Two important strands in the debate on small scale industries have been identified. The first draws mainly from the formal versus informal sector arguments in economic development, emphasising the role of small scale industries as a necessary 'survival sector', especially as it is known to grow larger in periods of economic crises or government repression on enterprise (taxation, controls, regulations, etc).

The second strand links small scale industries to the overall 'evolutionary' process of industrialisation. According to this second strand, small scale industries of the classical type are seen as transitory, and there have even been attempts to characterise the phases they undergo. Thus, following Anderson (1982), when classified according to scale, in the course of industrial growth the composition of manufacturing activities appears to pass through three phases. The first is where household manufacturing is predominant, accounting for at least half of total manufacturing employment. This is followed by the second phase, where small workshops and factories emerge and spread to displace a large part of the former. Large scale production follows in the third phase, displacing most household manufactures, and a significant share of the small factory production. According to this strand, the recorded growth of output and employment in large scale manufacturing results to a large measure from the growth of once small firms through the size structure.

The rest of this section expands on the characteristics and trends noted in developing countries' small scale industrial sectors.

### 3.1 Overall Importance

Many studies which have recorded the relative significance of the small scale industries show that these firms are an important, and frequently dominant, component of the industrial sector in many developing countries. A survey by Liedholm & Mead (1987) indicated that in thirteen of the fourteen countries listed in the survey, small scale firms accounted for more than 50% of total industrial employment. A mean of 71% of all industrial employment was generated by small enterprises. An earlier survey done in 1978 by Banerji, and reported in the Liedholm & Mead (1987) study, showed about 52% for mean small enterprise employment from 21 developing countries in the 1960s.

It has been reported also that most of the employment is concentrated at the smallest end of the size spectrum. In the above study, about two-thirds of manufacturing enterprises in the fourteen countries employed fewer than 10 people. Such firms are particularly critical in lower income countries. Liedholm & Mead (1987) showed that small scale industries accounted for 64% of industrial employment in those countries with lower than \$1,000 per capita income, but generated only about 42% of such employment in those countries where per capita income exceeded \$1,000. They also cited Benerji's (1978) study that revealed a similar pattern in the survey relating to the 1960s.

Small scale industries have also been credited with a large share of manufacturing sector value added. Data for Bangladesh, Burundi, Sierra Leone and Tanzania, among many others, have been documented for different periods. It is reported, for instance, that 50% of total manufacturing GDP in 1977-78 for Bangladesh came from

small scale manufacturing. The corresponding share for Burundi was 64% in 1980, and 43% for Sierra Leone in 1975 (see Liedholm & Mead, 1987). Generally, however, the small scale industries' relative value added contributions are less than their relative employment shares.

### 3.2 Structure, Location and Performance

An important finding about location of small scale industries is that the majority of them are located in rural or semi-urban areas, and they are also well-suited to locate in urban centres. There is typically no clear dividing line between urban and rural areas. The UN defined as rural those communities with less than 20,000 inhabitants. For developing countries, this will generally include small and medium sized 'townships'. Studies that have covered employment by location show that generally employment in small scale rural industries is higher than in urban located small scale enterprises (see Liedholm & Mead, 1987), for references on Sierra Leone, Indonesia, Jamaica, Ghana, India, Zambia, and others). With this feature of significant employment overall and the ability to disperse to remote regions, small scale industries are thus credited with the advantage of maximising the dissemination of increased income without the need for explicit fiscal measures of redistribution; and maximising the geographical dissemination of earnings opportunities.

The overwhelming majority of small scale industries in developing countries are very small (in the range of less than ten persons 'employed'). This has been documented for Sierra Leone, Ghana, Nigeria, Burkina Faso, Bangladesh, and Honduras.

### 3.3 Inputs and Capacity Utilisation

The main input in the majority of small scale industries in developing countries is labour. Proprietors and family workers account for the bulk of employment, with apprenticeship significance varying widely (more pronounced in the more sophisticated of the small industries). Owner-operators play a key role in most small industries, no wonder most such industries are legally organised and registered as sole proprietorship; and even at higher levels, no more than 'partnership'. Such industries are rarely registered as companies or corporations.

Capital input includes rudimentary tools: machines and furniture as the equipment, and fixed assets—mainly buildings and equipment—form the main components. Metal working and light-heavy repair work usually has the most expensive capital stock, with food, beverages, and wearing apparel on the lower end of capital expense (only a sewing machine would constitute the capital stock for a tailor, for instance; or a single set of huge locally made clay pots for a beer brewer in the village!). The main working capital constitutes cash, inventories, and short term securities.

Most capital is raised internally through reinvestment from farm and other returns by the main proprietor or the family, or through informal credit system such as borrowing from the extended family and friends.

The existence of excess capacity in most small scale industries has been documented widely, even though most studies admit that it is difficult to establish it

The state of the s

unambiguously. Casual empiricism points to the flexibility, say, of tailors that allows them to work long hours during peak seasons (e.g., Christmas, and other holiday seasons) when demand for new clothing is higher. Of course one can interpret this in relation to the sector's flexibility to adapt to changing (seasonal, cyclical or erratic) conditions rather than an issue in capacity utilisation *per se*.

## 3.4 Evidence on Linkages and Efficiency

Small scale industries have been credited with backward and forward linkages with other private and public sectors in the domestic economy. Large scale industry and agriculture are two sectors most citer for intimate links with small scale industries. Small scale production of farm equipment—whose designs can change as seasons, terrain, and ecology demand—is one area where small scale industries are well-suited to serve agriculture Evidence from Taiwan, India, Pakistan, Thailand and Japan has been cited extensively (see, for instance, Child & Kaneka ,1975; Caroller, 1975; Kirby & Liedholm, 1986 for examples from these countries). From agriculture, on the other hand, processing, transport, and marketing of agricultural activities are the domain of products of small scale industries (i.e., done at small scale levels, except where large scale standardisation and bulk processing is involved).

The main links between small scale industries and large scale industries have been discussed with reference to subcontracting arrangements. The large firms provide a demand for intermediate goods or components, especially for such products most efficiently produced in small scale industries. These products are later re-sold or used as property of the large scale firm. Evidence in Asia has shown that such arrangements are most prevalent (see Watanabe, 1972, for Korea; Mead, 1982, 1983 for Bangladesh, Thailand, and Indonesia).

Two ways of measuring economic efficiency exist: partial (or specific factor), and total (or multi-factor, sometimes called simply comprehensive) measures. Partial measures link value added or output to single factors at a time. Output-labour and output-capital ratios are such measures. For developing countries where capital is scarce, output-capital ratio is one standard measure of capital productivity used. However, since labour (especially unskilled) is relatively abundant, labour-capital ratio (or its reciprocal) has been used as the measure of partial productivity rather than the conventional output-labour ratio. Comprehensive or total factor productivity measures, on the other hand, are used when all factors included in the analysis are scarce, in which case their shadow value or opportunity cost is supposed to reflect their scarcity value in the economy.

Literature survey shows higher labour intensity at lower levels of the scale spectrum. On average, small industries use less fixed capital per worker than large ones. On the other hand, capital productivity is found to be higher in small scale industries than in the large scale industries, especially in samples from the African continent. In many Asian countries sampled, the opposite has been obtained (Liedholm & Mead, 1987: 69). It points more to higher capital productivity in medium and large scale industries.

Comprehensive efficiency measures have been used to characterise small scale industries' performance. The commonly used index was that of social benefit-cost

ratios. This refers to the ratio of an enterprise's value added, to the cost of its capital and labour, both measured at their shadow prices. The cost of capital and labour used is a weighted average of the enterprise's factor inputs. The benefit-cost ratio thus obtained is interpreted as measuring the total factor productivity. A key finding in the study by Liedholm & Mead (1987) for three countries (Sierra Leone, Honduras, and Jamaica) using data from the mid-1970s for Sierra Leone, and 1979 for Honduras and Jamaica, was that on average small scale industries were found to be more efficient (in the sense of social benefit-cost ratios) than the large scale industries in the most important product categories used: food, wearing and apparel, furniture, shoes, and metal products. This evidence has been corroborated by findings from India (Mehta, 1969; and Sandesara, 1969). Other results have been more mixed: (Ho, 1980; Little et. al., 1987; Page, 1984; and Cortes et. al., 1987), showing that no conclusive evidence exists to judge comprehensive efficiency of small scale industries relative to large scale industries either way.

#### 4. The Debate on Small Scale Industries

In the previous section we have characterised small scale industries, as provided by evidence in the literature, in relation to structural features, location, and performance. The main arguments from the section indicate that small scale industries have been critical (and continue to be that way) in employment generation and distribution, in incomes-earnings, generation and distribution; capital productivity, and total factor efficiency for the majority of developing countries included in samples. This does not mean that many issues relating to the role and functions of small scale industries have been resolved. In fact, since many of the results (even the definition of basic concepts) have been country- or context-specific, the debate has continued unabated.

A brief note at the start of the previous section mentioned two main strands along which the debate has continued: that of the informal-formal sector debate, and that specific to the role small scale industries are supposed to play in the overall process of industrialisation. These general approaches in the debate are expounded further in this section.

## 4.1 Historical Perspective

At the time of political independence, most developing countries decided to undertake industrialisation based on capital intensive large-scale industries. Basic industry was given preference over agriculture and small industries; and heavy industries in basic metals, steel, cement and heavy engineering sprang us fast. The 'successful' experiences of former socialist countries, especially the USSR, were cited as cases that maximised long term rates of economic growth. Where consumer goods production was specifically encouraged, it was for purposes of replacing imports based on the demand already established under the colonial legacy. The latest technology, often the most complex and capital intensive, was adopted. Most of these industries could survive only via heavy subsidies and protection, and many proved inefficient and a drain to national resources. Their employment opportunities were limited on account of high capital intensity, at a time when labour force was increasing as a result of rapid population growth, and massive post-independence labour training and skills-development programmes.

142 1-ReMadifikolo

The experiences of the South-East Asian NICs which opted for industrial strategies based on comparative advantage, and export promotion rather than import substitution, helped to reverse some of the notions of the perceived superiority of industrial strategies based on large scale industries. The NICs started with small scale industries geared to export markets, and then slowly moved into large scale assembly-type industries financed from returns of the former. They are now in heavy industries, exporting whole factories and their related technology, their current (late 1990s) crises notwithstanding.

Until recently, however, small scale industries have been ill-defined in many developing countries to exclude informal activities that have proliferated in periods of crises, and government repression (heavy taxation, regulations, etc) as survival 'occupations' in back alleys of major streets of big cities in these countries. These latter have involved mainly illiterate craftspersons, often working in open air, making furniture, firewood, and charcoal cookers, clothing, etc. The only times official government recognition was made explicit were in relation to tax bases where informal sectors (self employed) were pursued heavily to contribute to tax effort, especially for the local governments. For most cases such informal activities were ignored, regarded at best as a 'necessary evil', and nuisance that spoiled the official and clean images of cities. Today informal sectors are being encouraged by various means, thanks not only to reason and experience, but also to official World Bank and other financiers' recognition and encouraging backing since the late 1970s (see World Bank, 1978).

## 4.2 The Debate Continued: Employment and Earnings Opportunities

We have noted in the previous sections that there is a widely accepted argument that small scale industry—being labour intensive and using relatively simple technology—has the potential of contributing more significantly to employment and earnings. The implied policy implication has been that small industries should be encouraged in the interest of promoting the earnings and employment effects of industrial development.

There are several exceptions to this general rule, and more evidence is being obtained. What is of particular significance in the debate, however, has been the role of policy intervention in periods of prolonged crises like developing countries have faced for over two decades now. Limited ability by governments means not much can be done to actively promote small scale industries. Small industries come and go easily, with little real effect on the total economy by individual firms (exit and entry being easy, and the industries being small and diversified, each of them is atomistic and will not impact heavily on the economy). Large scale industries still account for a much greater proportion of job creation and job loss per unit relative to small industries. The scope for policy intervention which can have real economic effect at a broader scale is thus larger with large scale industries.

The second argument presented to discourage over-reliance on the small scale sector relates to structural changes needed to survive prolonged crises, and remain competitive. It is argued that small scale industries simply 'die out' if crisis is prolonged long enough, and proprietors simply move to other lines of business

(probably small scale too: e.g., from trade to transport, or farm crafts to simple agriculture), especially at the much lower end of the size spectrum. Research has shown that in the crisis of the mid-1970s to mid-1980s, large firms tended to shed labour as part of cost cutting to enhance competitiveness. Small firms that have survived maintained their labour employment stable. This has been interpreted as lack of flexibility on the part of small scale industries. In recovery processes again, it has been large scale industries which have had the largest potential for labour re-

absorption per unit.

Finally, and again at the level of the economy, it is noted that new employment depends on investment, which is, in turn, a function of capital accumulation and profits. Small scale industries generate only small (sometimes undocumented or unknown) surpluses. This restricts investment and job creation. The highest known potential still lies in large scale industries. Government tax revenue, moreover, has relied on incomes, surpluses, and sales from the large scale enterprises; so that even government investment, capital accumulation, and employment generation potential has hinged on the performance of large scale industries more than small scale industries. More recent discussion relating to this continuing debate appears widely in the literature (see, for instance, Smyth & Lyberaki (1988), and Nanjundan, (1986)).

## 5. Small Scale Industries and International Trade

Data on the role of small scale industries in export-import trade are scanty. This is because either exports and imports are listed in the context of 'industry' as a whole, rather than being disaggregated by industrial sizes, or exports and imports of products are mainly uncoordinated (in the sense of formal intermediation like through export houses and the like) and numerous, documentation and consolidation significantly costly. However, evidence obtained from various studies for specific countries shows that where explicit documentation had been possible, small scale industrial exports have been substantial. Most NICs started from export promotion also based on small scale products. Chuta & Liedholm (1985) show that for Sierra Leone, about 20% of total production of the products of 'tie-dye' industry was being exported. For most developing countries the bulk of products of handicrafts are exported.

Studies done in the early 1970s (see Huddle & Ho, cited in Liedholm & Mead, 1987) show that the international market could be a significant source of demand for some types of small scale industrial products. The overall income elasticity of demand is high for such products as wood carving, brassware, and earthenware in the international market.

An important aspect in inhibiting or promoting trade in small scale industrial products relates to trade policies of producing countries. It has been noted that generally small scale industries have had to fight and compete in the world market, while at the same time experiencing negative protection at home. In a study by Anderson & Khambata (1981), it was revealed that sectors which provided over two-thirds of small scale employment had negative rates of effective protection, while large scale enterprises had positive and significant effective protection rates (often in excess of 100%). In Indonesia and Malaysia, documentation in Hiemiz & Bruchm, von

Rabenau, respectively, (cited in Liedholm & Mead, 1987), show similar findings: that is, higher protection for large scale industries.

Special incentives are another trade policy in the export markets. Here again, the evidence shows that encouragement of exports has been given predominantly to large scale industries. For some countries, a minimum export value was required (usually above the average sales turnover of typically small scale industries), before an enterprise could qualify for export registration and export subsidies. Frank et. al., (1978) and Scitovsky (1985) (cited in Liedholm & Mead, 1987) document for Korea, and suggest that it could be because of such discrimination that large scale industries have played a major role in Korea's export boom. In countries where policies have been size-neutral, small scale industrial products have been able to break into export markets and contribute significantly to export performance of such economies. Haggblade et. al., (1986) cite the case of Taiwan as an example.

Even with widespread recognition that small scale industries in developing countries offer considerable potential for exports, no deliberate policies exist to provide support and incentives (and needed protection) to such industries. In particular, with their small size, intermediation has often been considered a necessary facet of such promotion. In recent years, ideas floated by international agencies and centres relate to the possible use of export development companies, or export houses which have worked well in developed countries in the recent past. Trading houses in Canada, and general trading companies in Japan (Sogo-Shoshes), are well documented in the literature. An exploration of trading arrangements and intermediation possibilities at greater length is an urgent agenda for research in this topic.

#### 6. Summary

In this article we have discussed the role of small scale industries in developing countries, noting the many strands in the debate and concepts. A short sum-up of the main revelations are as follows:

- (a) Small scale industries constitute a significant component of the industrial sector in many developing countries. They constitute the bulk of industrial employment. Their structure is such that they are relatively more labour intensive, less capital intensive, and concentrate in the production of light consumer goods and simple tools, as well as in repair and maintenance.
- (b) Most developing countries sampled show significant dispersion of small scale industries to rural areas, and small townships. Employment generated in such areas is more pronounced than that in more urbanised areas (for the small scale industries). Being more dispersed and providing significant employment, they maximise dissemination of increased income and spatial income equity, without the need for explicit government fiscal measures of redistribution. Their enhancement can thus play the role of income and opportunities redistribution.
- (c) Small scale industries are less demanding of skills and capital, and have higher flexibility and adaptability to shocks that affect demand.

export markets, is evidenced.

- (d) Even though small scale industries carry a significant potential for export there is a general lack of explicit policies to facilitate the same. In some instances negative protection and clear bias against their breaking into
- (e) Even as the average size of small scale industries increases as economies grow there is significant evidence of continued coexistence of large and small scale industries even in the most industrialised countries. Backward and forward linkages exist too with agriculture and the services sectors. Small scale industries are therefore not necessarily a transitory phase of industrialisation.

#### References

- Anderson, D. 1982. Small Industry in Developing Countries: A Discussion of the Issues. World Development. Vol. 10; No. 11.
- Anderson, D. & F. Khambata. 1981. Small Enterprise and Development Policy in the Philippines: A Case Study. World Bank Staff Working Articles. No. 468, Washington D.C.: USA
- Auciello, K. et al. 1975. Employment Generation Through Stimulation of Small Industries: An International Compilation of Small Scale Industry Definitions. Atlanta: Georgia Institute of Technology; USA.
- Caroller, M. 1975. Role of Small-Scale Industries in Economic Development. Economic and Political Weekly, Nov. 1st.
- Child, F. & K. Kaneka. 1975. Links to the Green Revolution: A Study of Small Scale Agriculturally Related Industry in the Pakistan Punjab. Economic Development and Cultural Change, Vol 23.
- Chuta, E. & C. Liedholm. 1985. Employment and Growth in Small Scale Industry: New York: St. Martins Press.
- Cortes, M. et al. 1987. Success in Small and Medium Scale Enterprises: The Evidence From Colombia. Baltimore, Maryland: John Hopkins Press.
- Elmsing, A. 1988. Rural Industries and Growth Points: Issues in an On-going Policy Debate in Zimbabwe. Working article Subseries: Zimbabwe Rural and Regional Planning, No. 4, Institute of Social Studies, The Hague. Netherlands.
- Haggblade, S. et al. 1986. The Effect of Policy and Policy Reforms on Non-Agricultural Enterprises and Employment in Developing Countries: A Review of Past Experiences. E.E.P.A. Discussion Articles, No. 1, Cambridge: Harvard Institute for International Development, USA.
- Havnevik, K. 1986. A Resource Overlooked: Crafts and Small Scale Industries in Boesen, J. et al. 1986. Tanzania: Crisis and Struggle for Survival: Scandinavian Institute of African Studies, Uppsala.
- Ho, S. 1980. Small Scale Enterprises in Korea and Taiwan. World Bank Staff Working Articles, No. 384, Washington, DC, USA.



- Kirby, P. & C. Liedholm. 1986. The Role of Non Farm Activities in the Rural Economy. Employment and Enterprise Development Policy Analysis, Discussion Article No. 7. Cambridge. Harvard Institute for International Development. USA.
- Liedholm, C. & D. Mead. 1987. Small Scale Industries in Developing Countries: Empirical Evidence and Policy Implications. MSU International Development Articles, No. 9; Michigan State University. USA.
- Little, I. et al. 1987) Small Manufacturing Enterprises: A Comparative Study of India and Other Countries: New York: Oxford University Press.
- Mead, D. 1982. Subcontracting in Rural Areas of Thailand. MSU International Development Articles. No. 4, Michigan State University. USA.
- 1982 a. Small Industries in Egypt An Exploration of The Economics of Small Furniture Producers. International Journal of Middle East Studies, vol. 14, No. 2.
- 1983. Subcontracting Systems and Assistance Programmes: Opportunities for Intervention.
   MSU International Development Working Article, No. 24, Michigan State University; USA.
- Mehta, B. 1969. Size and Capital Intensity in Indian Industry. Bulletin of Oxford University; Institute of Economics and Statistics.
- Nanjundan, S. 1986. Small and Medium Enterprises: Some Basic Development Issues; UNIDO.
- Page, J. 1984. Firm Size and Technical Efficiency: Application of Production Frontiers to Indian Survey Data. Journal of Development Economics vol. 16, September-October.
- Sandesara, J. 1969. Size and Capital Intensity in Indian Industry. Bulletin of Oxford University Institute of Economics and Statistics; vol. 28.
- Smyth, I. and A. Lyberaki. 1988. Small is Small: The Role and Functions of Small Scale Industries. Institute of Social Studies: *Working Articles*, No. 43. The Hague. Netherlands.
- Tanzania Government. 1973. TANU Directive from the National Executive Committee on the Establishment and Development of Small Scale Industries in Tanzania, Dar es Salaam.
- 1973a. An Act to Establish Small Industries Development Organisation, Act No. 28 of 1973. Dar es Salaam.
- UNIDO. 1982. The Potential For Resource-based Industrial Development in the lest developed Countries. No. 3: The United Republic of Tanzania; Division for Industrial Studies, Vienna, Austria
- Watanabe, S. 1971. Subcontracting, Industrialisation and Employment Creation. *International Labour Review*, Vol. 104 No. 1, 2.
- 1978. Technological Linkages Between Formal and Informal Sectors of Manufacturing Industry. ILO, World Employment Programme.
- 1983. Market Structure, Industrial Organisation and Technological Development: The Case of Japanese Electronics based NC Machine-Tool Industry; ILO, World Employment Programme.
- Wekwete, K. 1987. Growth Centre Policy in Zimbabwe: A focus on District Centres. ISS Working Articles: Subscries-Zimbabwe Rural and Regional Planning. No. 2. The Hague. Netherlands.
- World Bank. 1978. Employment and development in Small Enterprises: Washington, DC, USA.
- World Bank. 1978a. Rural Enterprises and Non Farm Employment, Washington, DC, USA.