

# EMPIRICAL EVIDENCE OF SMALL SCALE INDUSTRIES IN THE THIRD WORLD: AN OVERVIEW OF THE LITERATURE

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Received September 25, 2001

## Summary

There have recently been some noteworthy additions to the concept of the role of small scale industries in developing countries. It also creates some interesting issues about how small industries can contribute to the economic development of these economies rather than mass scale industries. Therefore as we have seen the timely importance of this issue we have analysed the literature on small industries as our main objective of this paper in order to examine the validity of this sector to developing economies.

In general the main objective of almost all development programmes in developing countries was to approximate the level of entitlement and capabilities<sup>1</sup> of poor people in all regions. In order to achieve a well-balanced growth in life style in all regions, great importance is given to the decentralization of industrialization. This is based on the expectation that most small-scale industries are particularly suitable for contributing towards greater social equilibrium through economic conditions both within one region and among several regions. Thus, these types of industries are seen as a suitable institution for overcoming social and economic problems in developing countries.

In our conclusions we have proposed some ideas, which will be useful in developing the small industrial sector rather than summarizing the literature review again.

## 1 Introduction

Today the world is characterized by extremely large income inequalities among the countries (Hayami, 1997). According to the World Bank report (1999) average per capita income per year in 1997 recorded around US \$ 24001 in high-income countries<sup>2</sup>, and only about US \$ 162 of countries at the bottom of the low-income group<sup>3</sup>. In the same year total world population was 5.8 billion, of which the population in high-income countries with a per capita income above US \$ 9656 numbered only 900 million. This 15 per cent share of the world population received nearly 80 per cent of the world's income. About 3 billion people, or about 65 per cent of the world population are in low income countries with a per capita income of below US \$ 712 and entitle to only about 4 per cent of the world's income<sup>4</sup> reflects the feature of the under development.

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<sup>1</sup> An entitlement to something is the right (in terms of money) to have or do it and capabilities to do something you are able to do it. See also A. K. Sen's *Inequality Re-examined*; 1997.

<sup>2</sup> Switzerland (43,060), Japan (38,160), Norway (36,100), Denmark (34,890), Germany (28,280) and United States (29,080).

<sup>3</sup> Mozambique (140), Ethiopia (110), Tanzania (210), Burundi (140) and Malawi (210).

<sup>4</sup> This has estimated according to the UN official standards of US \$ exchange rates.

Income disparity, rural poverty, and unemployment are serious problems facing in many developing countries in the world. Given the increasing inequality in land distribution, these problems are likely to get worsened in the future. In order to improve living conditions in the rural areas, an important strategy is the promotion of rural employment opportunities. In this regard, variety of measures have been adopted and pursued in many countries. Since agriculture is the core of the economic life in rural areas, the development of rural or agro-based industries has been a major component of the agenda for action of many developing countries. The experience of East Asia, for example, illustrates the effectiveness of rural industrialisation programmes in activating rural life and stabilising incomes. In fact, an increasing number of rural and farm households are earning major or supplementary income from non-farm enterprises or rural industries (APO, 1991).

The need for economic development for full employment, equity, poverty alleviation and regional development in the third world cannot be over-emphasised. It is well known that agriculture and service sectors, by themselves, are not in a position to achieve these objectives alone. Beginning of the industrialisation process from an agricultural base, agriculture-industry linkages obviously paramount important. In the context of inadequate development of domestic industrial capital, a broad-based industrial development drive would obviously place a great emphasis on small industrial ventures (Lakshman, et al., 1994).

The governments of most of the developing countries have undertaken various strategies and measures to promote the development of small-scale industries in order to accelerate economic development and achieve the social objectives of their countries. Since their main objective is to create more employment where there is a surplus of labour and the scarcity of capital investment, many countries with growing population, inadequate capital resources, and shortage of needed foreign exchange rely on small industries that use modern capital saving technologies to create gainful employment (Ogawa, 1994).

Small industries have recently emerged as an important research concern in the field of development economics<sup>5</sup>. This heightened interest has paralleled the increased international concern for equity and employment objectives and the growing realisation that the large-scale urban industrialisation of the 1960s generally failed to solve the problems of underemployment and poverty. Moreover, empirical research has begun to demonstrate that small rural manufacturing enterprises have been substantially under reported in official publications and that these smaller firms might be more effective vehicles for meeting a country's growth and equity objectives than their larger scale urban counterparts (Chuta and Carl, 1979). Nevertheless, small-scale industries and businesses are widely recognised as an integral and indispensable component of a nation's economy. This is true for Japan, as it is so for Sri Lanka, Singapore or any developed or developing economy.

For these reasons, governments of developing countries wish to promote export oriented and import substitution small industries. In view of the dynamic role such industries can play in the economies of the developing countries, the Economic and Social Commission for Asia and Pacific (ESCAP) at its forty third session, held in Bangkok in April 1987 in the secretariats pro-

<sup>5</sup> The economics of the less developed countries of Africa, Asia and Latin America, which addresses itself mainly to problems of economic growth, poverty, unemployment and inequality.

gramme recommended that high priority should be accorded to the small industrial sector. Also the report published by the World Bank on Macro Policy Framework for Small Scale Industries (1995) described that the experiences of Asian countries in the past three decades have demonstrated that effective macro and sectoral policies in support of small scale industrial development can succeed not only in boosting industrial and total output and exports, but also accelerating growth in employment and poverty alleviation. It is expected that implementation of an effective policy framework in African countries can bring similar positive results in Asia too, in terms of employment, output growth and alleviation of poverty. Clapham (1985) too, has emphasised that promotion of small scale industries will be more effective in the long term and make a greater contribution to a base for an economic expansion. According to Francks and others (1999), many Asian economies are still agro-based, i.e.; the growth of the overall economy is heavily influenced by the performance of the agricultural sector (Amaratunge and Shiratake, 2001).

## 2 Importance of Research in Small Scale Industries in Sri Lanka

The majority of the population, about 75 per cent live in the rural sector in Sri Lanka. Since their earnings are from the agricultural sector, which is their main income, earning source is barely sufficient and that income is too uncertain (Rathnayake, 1999). Hence, a subsidiary source of income is essential in order to build up the rural agrarian society<sup>6</sup>. The agricultural sector is mostly composed of small plots of lands and the crop production is seasonal. These two factors result in stagnating agricultural development in the country (Thorbeeke and Svejnar, 1987). Further, with the limitations and the weaknesses in the agricultural sector itself the farmers are facing numerous internal shocks as well as external shocks due to the free market economic structure of the country (Athukorala, 1986). Hence, the development of agro-based small-scale industries associated with rural development is of paramount importance as a way of generating a new demand for agriculture in order to uplift the rural sector through expanding the people's entitlements and capabilities (Amaratunge, 2000; Amaratunge and Shiratake, 2001). Such studies can be done only through case studies and in-depth sample surveys rather than analyzing the behavioral characteristics of small industries through secondary data available in the country, which are not adequate for the purpose. However, a research study published by the Institute of Developing Economies in Tokyo (1991) entitled "*Changes in the Industrial Structure and the Role of Small and Medium Industries in Developing Countries: The Case of Sri Lanka*" clearly stated that, unfortunately these type of case studies, which can be seen as the base for the development of the small industrial sector in the country have not yet been carried out in Sri Lanka (see statement below). After ten years (2001) the same author again admitted that still such type of case studies on small-scale industries have not yet been carried out by the researchers in the country [at the special seminar (2001) on "War and Economy in Sri Lanka" held in the Saga National University, Ja-

<sup>6</sup> During the past five decades, Sri Lanka has enjoyed a respectable level of annual economic growth (4.2 %). Unfortunately, the growth rate of the agricultural sector has been significantly lower (2.6 %). The prevailing per capita income of this sector is estimated as 42 per cent lower than the average Sri Lankan per capita income level and 38.5 % lower than the standards of the International Bank for Reconstruction and Development (IBRD). Therefore, it is not surprising that at present majority of the rural population engaged in agricultural practices face severe income constraints.

pan]. Therefore, we believe that case studies on small industries will not only contribute to the academic literature, but also contribute to the economic development of the country through the small industrial sector.

*“Ideally, had detailed case studies been carried out of these more successful firms, very useful insights could have been obtained about preconditions for success in the small and medium scale industrial sector in Sri Lanka. Such case studies, however, have not been carried out”* (Lakshman, 1991 : p.112).

It is possible to develop agro based small industries throughout the island as plenty of agricultural raw materials are available, which can be seen as an important requirement in considering the long run strength of industrialization in Sri Lanka (FAO, 1985). However, this is not true with the large-scale industries and it is a characteristic of the large-scale industries that they are encircled largely within the urban areas (Amaratunge and Shiratake, 1999). Therefore, small-scale agro-based industries can also be used to diminish the imbalance of development in both urban and rural areas. This industrialization is also important as a process in directing the economic development at village level. This process increases the economic strength of the low-income earning groups as well as their economic efficiency, which in turn could be the ultimate objective of any kind of development programme for developing nations (Gandhi<sup>7</sup>, 1946).

### 3 The Importance of Promoting Small Scale Industries

Edward K.Y. Chen, one time the editor of the of the *“Small Industries in Asia’s Export Oriented Growth”* (1986) published by the Asian Productivity Organisation, states that all the countries have to undergo a structural transformation before they can successfully embark on a new phase of export oriented industrialisation based on the export of capital and technology intensive products, just like what Japan did because Japan has proved that a “strong” and viable small industrial sector is necessary for a successful export oriented growth. According to Itoh and Urata (1994) there is evidence showing that the importance of the small industry does not decline as economic development proceeds. In the case of developing countries, there seems to be little doubt that the small industry is a dominant phenomenon and a key factor that, to large extent, shapes both the direction and speed of economic growth. Conventionally the importance of small industry is assessed in terms of its contribution to production, employment, export earnings etc.

In spite of the importance of this topic, there have been analytical or empirical studies of small-scale industries. *“Small and medium industry in an intermediate city”* (1994), conducted by the joint collaboration of Modern Asia Research Centre in Geneva and University of Colombo has explained the following features regarding the above question.

The argument that, those small enterprises can promote productive employment more effectively than large enterprises is widely accepted and based on the following empirically verified propositions.

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<sup>7</sup> Mahatma Gandhi has explained this concept in his project evaluation methodology in rural sector. He named this as “Anthodaya” (development of life style of least poor within the total population).

1. That they are more labour intensive, without necessarily being too costly or unprofitable, thereby making investment costs per job generated in small enterprises are comparatively low<sup>8</sup>.
2. That requirements in initial capital, management and other scarce resources are low and therefore with a little assistance, the unemployment and underemployment<sup>9</sup> can be made to set-up in business on their own on a drive to promote self-employment.
3. Those small enterprises would create more jobs for the unskilled than for the skilled and therefore are worth promoting in any environment where the unskilled form the predominant part of the pool of the unemployment or underemployment labour force.
4. That small firms are more likely to generate indirect employment opportunities than large ones since the latter usually have a much higher propensity to import raw materials and capital goods.

### *Small Industries are Normally Labour Intensive*

Comparative studies of large and small industries, carried out in countries at all stages of development, confirm that small firms employ more labour per unit of capital, and require less capital per unit of output, than do large ones. There are inevitably occasional exceptions, and the differences related to scale may well be exceeded by those relating to the type of activity, but if policy makers are concerned to increase employment opportunities, evidence points conclusively to small scale as a more productive source of employment, per unit of capital invested or product produced (Lal, 1992 ; Lal and others, 1996). More sophisticated entrepreneur may already have a job, and his primary motive for enterprise may be profitable rather than employment. Nevertheless, he is more likely to use a labour intensive technology than the investor in a large business. Apart from his desire, or obligation to provide employment for his extended family, he is unlikely to have access to foreign exchange or to sources of sophisticated imported technology, which tends to be the capital intensive option, or to the institutional sources of capital from which he might obtain the funds to buy such equipment. If he depends on his own capital the total amount will be small, and if he attempts money from informal sources the interest rates will effectively discourage the capital-intensive alternatives. Therefore the scale of the operation of the industry will be limited towards small-scale, labour intensive, flexible and locally made equipment (Harper, 1985).

A study presented by Islam (1987) under the ILO Asian Employment Programme argues that the interest in labour productivity in rural industries emanates mainly from a concern about the returns from employment in such industries and hence, it will be useful to address the question in two stages. (a) Wage rates in various activities need to be examined in order to provide some idea for the returns to wage employment in rural employment. (b) Productivity of labour (measured in terms of value added per worker or per working day) will be used to indicate the upper limit to the returns to labour.

In traditional type of cottage or small-scale industries, hired labour is not an important fea-

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<sup>8</sup> A given volume of investment in the small enterprises sector will usually create more jobs if the investment is made in the services rather than in the manufacturing sector.

<sup>9</sup> A situation in which persons are working less, either daily, weekly, monthly, or seasonally, than they would like to work.

ture. Because, according to the small-scale activities conducted by most of the units in this sector, they can exist with family labour or household labour. However, even in this type of industries, often hiring labour too, may be a significant feature, and that depends upon the objective of the firm, whether profit oriented or subsisting. Data available on Bangladesh, India, Nepal, and Sri Lanka seem to support the hypothesis created by Islam (1987). In Bangladesh, for example activities like black-smithy, carpentry and handloom weaving were found to employ hired labour in substantial proportions (ranking from quarter to over half of the total number of workers). This has also described by Hossain (1987) in his writings about small industries in Bangladesh. In India sample from Uttara Pradesh showed that the use of hired labour was rather low in traditional industries. One survey in Nepal too yielded the similar results. In Sri Lanka studies carried out in 1977 and 1986 showed that the percentage of hired labour in traditional small industries has rapidly decreased by 39 per cent from full time employment and 22 per cent from part time employment during the period (Central Bank various reports).

This information reveals that the developing South Asian countries have the same features in this matter and wage rates would be an important indicator of the returns to a large proportion of their workers.

In the case of labour productivity in small and cottage industries, it is in a very low level according to many studies conducted in this field (Islam, 1987). Bangladesh, India, Nepal, Philippines, Thailand and Sri Lanka exhibit the same character. However low level of labour productivity is not a universal phenomenon in all types of small and cottage industries. In general, non-traditional small industries are found high level of labour productivity. Some of the traditional activities too, achieve reasonable labour productivity levels (Islam, 1987).

According to Chuta and Carl (1979), Onchan (1991), ADB (1994), and World Bank (1997) small-scale rural industries are more labour intensive than large-scale industries. However small-scale industries exhibit a low level of capital output ratio than large-scale industries (Kaldor, 1972 ; Chuta and Carl, 1979 ; World Bank, 1991) and that brings an important issue, viz., the relationship between technology and productivity in small and cottage industries.

Hawitt and others (1992) have identified the importance of upgrading of technology, in order to strengthen up of existing small industries in less developed countries. The ILO also expressed that productivity improvement, expansion and diversification, involve process improvement and the use of better production methods and technologies, and that technology related services are often needed.

### ***Employment for Women***

In spite of the importance of this topic, there have been a few studies on employment for women in small industries. Most of the studies, which are carried out by the ILO, are projects, which promote women employment through small industries in developing countries to overcome the problem of poverty. Women in poor countries, too often remain in rural areas as the hews of wood, drawers of water and bearers of children, and there material responsibilities cut them off from what ever benefits are to be gained from wage employment in the modern sector. Small industrial sector provides a valuable alternative source of income and personal development, whether it in a home based cottage industry or rather a large industry where a mother can conven-

iently travel for a few hours a day when her children are cared for, by an elder sibling or other relative (Harper, 1985). Michael P. Todaro, in his *Economic Development in the Third World* (1985) has emphasised that, virtually in every country there are more women than men at the lower level of income. Because of the dual role of women in the economy creates more poverty burdens. They often work outside as well as at home.

Considering these factors international organisations such as ILO has been doing tremendous work on the development of women based activities through the small and cottage industries. ILO too, focused its mission through the small-scale industries because absorbing women into large scale activities is obviously difficult due to the reasons such as women in general are less educated, have fewer employment opportunities and less paid.

Among Nepal women, entrepreneurship is rather a new phenomenon in formalised activities. Although certain ethnic groups such as Sherpas, Curungs, Thakalis are known to have a tradition of women being involved in small industries, it is only within the last ten years that the concept of women entrepreneurship has progressively gained some acceptance in the overall dominant majority in the Nepalese society (Islam and Shreshtha, 1987).

The contribution of industry to national income in Nepal was about 6 per cent and small cottage industrial contribution was about 4 per cent (Census, 1991). ILO mission in Nepal has stated that, the major industrial development targets could be achieved through the establishment of small-scale industries in the country.

In many countries and under certain circumstances in Sri Lanka self-employment has been hailed as the panacea for unemployment or for integrating women in development into the overall development process. However, cottage industries were traditionally perceived to be an economic activity undertaken largely by home based units and family itself is often the production unit, women tend to be active participants in gender segregated tasks, as well as sharing in mainstream economic activities (Joanne, 1992). However, Osmani (1987) in his work on *The Impact of Economic Liberalisation on the Small-Scale and Rural Industries of Sri Lanka* has clearly stated that before the economic liberalisation, there were about 111,000 handlooms in the country and presently there are only 15,000 looms. Most of the loom operators were the rural women, and the liberalisation has adversely affected in this sector. However, small industries must concentrate to survive under liberalization policies as business units. In this direction undoubtedly small industries must produce low price and high quality goods (Sato, 2000 ; Amaratunge and others: 2001 a).

### ***Agriculture and Small Industry***

The relationship between rural industries and agriculture, in particular, is or could be potentially very strong (Mellor, 1976; Johnston and Kilby, 1975; Todaro, 1985; Islam, 1987; World Bank, 1997, 1998). According to Chuta and Carl (1979), Agricultural growth of a country can be influenced by the rural industries and there by strengthen the balanced growth between these two sectors or dynamic agriculture can also be a precondition for the development in the rural or small scale cottage industries.

In the process of industrialisation in East Asian countries, supply of necessary raw materials to the industrial sector by the agricultural sector is underscored, which created the parallel success

of both these two sectors (Asian Miracle, 1993). However, to supply inputs and other necessities from agriculture, agriculture itself should be strong enough at the very early stage of the economic development process (Todaro, 1985; Hayami and Ruttan, 1991; Bacha, 1995; Hayami, 1997).

In the case of Sri Lanka, the country is basically defined as an agricultural country, the role of small-scale industries has always been emphasised as an integral part of agriculture and industry (Amaratunge and others 2001 b). Within the small industrial sector, the agro-based industrial sector is the largest and food-processing industry accounts for about one third's of its total share (Census, 1997).

China and Taiwan have performed around 3 per cent of continuous average annual rate of growth in agriculture for the period of 40 years before starting industrialisation successfully. In china, the initial impetus for commune<sup>10</sup> and brigade industries came from rapid increase in land productivity which led to a substantial increase in the demand for the products of the so called "five small industries" and other related industries. In that instance, generally the link between agriculture and rural industries was powerful and particularly in the areas where agricultural growth was high, industrial development too performed at high levels (Islam, 1987; Hymer and Resnick, 1969).

Similar results have been found in the studies on *Rural Industrialisation and Agricultural Growth: A Case Study on India (1987)*, and *Rural Industrialisation (1982)*, by observing the close relationship between agricultural growth and performance of the rural industries through different major states in India. According to these studies long-term agricultural growth rate and long-term rural industrial activities have been taken into consideration to conclude the significance of agricultural development in order to build-up a strong rural industrial network. Punjab State ranked first among the other states, which exhibited the performance of the highest, long run agricultural growth rate performance and high spread of rural industrial activities. Madhya State placed the last in the ranking order due to the lowest performance of the agricultural growth.

Relationship between agriculture and industry (small-scale) also stimulate self-sustained industrialisation due to the creation of "forward" and "backward" linkages<sup>11</sup>. Therefore, development of small industrial sector, which specially uses the domestic agricultural inputs, will create adequate demand for agriculture too.

Tambunan (1991) and Beny and Brian (1994) too argue that, in their studies on Indonesia, demand for rural industrial products are closely related to agricultural growth, and that this sector too provides various products for direct consumption and raw materials to meet the demand for agro industries in the sustained economic development process. At this instance, agro industries are generating domestic value added and employment and thereby increase economic productivity (Bollman and Bryden, 1997). Sato (2000), in his article published by the special issue of *Indo-*

<sup>10</sup> Chinese Commune means, a multipurpose political, administrative, and organisational unit covering the full range of economic, social, and administrative activities in a rural community. The people's agricultural communes were the basis of rural development in China during the 1960s and early 1970s. Communal ownership included all the rural land, all means of agricultural production, and commune-owned industries.

<sup>11</sup> As an example Cow-stable industry is the "forward" linkage of both leather industry and the milk by-products industry and bag industry could be stated as one of the "backward" industries of leather industry. In these instances, leather industry acts as both "forward" and "backward" industry.



*nesia's industrialization: economic crisis and beyond*, has clearly stated that small industries are less affected or even well performed in a crisis situation because of their unique factors such as rural based, agro-based, less modern and debt free in comparison with the large scale manufacturing firms. However there are another two groups related to this, crisis and size related argument in the industrial sector. One group of researchers argue that small-scale industries can be more affected than the large firms and the other group argues that there is no relationship between the size and the degree of crisis affected.

With regard to the structure of the small industrial sector in Sri Lanka, one third of the small industries come under the food manufacturing sector, which reflect that even in a crisis situation, (due to the present economic and political unrest in the country) that there is a protection for the rural and agro based small industries (Amaratunge and others, 2001 a<sup>12</sup>). According to Thee (2000), in the economic crisis period in 1998 in Indonesia, all the sub sectors of the manufacturing sector except oil refining, demonstrated a negative growth. The food-manufacturing sector was a less affected sector compared to all the other sub sectors in the manufacturing sector as its features of rural based and agro based.

The relative importance of rural industrial activity as a component of the rural agrarian society is an important issue for the third world, because many developing countries have neglected for planning of the development of the small-scale agro based manufacturing sector, which can easily spread in general agro societies to get the high multiplier effect in the development process.

#### 4 Theoretical Framework

Using J.M.Keynes's macro economic framework on the capital market side (Braithwaite, 1988), we can clearly state that, one of the basic prerequisites for rural industrialisation is the success of agricultural development to increase productivity and income of farmers. Increase in farmer income means increase in consumption with a grater potential for increasing the aggregate demand, savings and capital flow from agriculture to the non-agricultural sector. At the beginning of this process non-agricultural sector consistent with rural agro based small industries (Tambunan, 1991).

The simple Harrod-Domar model can be used to explain the relationship between investment, income and demand to analyse the importance of the agricultural support to make profit and expand the industrial sector at the first stage of rural industrial development. Suppose that agriculture can provide raw materials, food at lowest cost, savings, and investments to develop the non-agricultural sector, as capital stocks are necessary in order to grow new investments representing net additions. In this model there is some direct economic relationship between the size of capital stock including raw materials (K), and total income (Y), or which is known as the capital/output ratio. To build up this model it is assumed that capital/output ratio as "k", and savings ratio as "s". The investment and income will be determined according to this savings ratio, which is mainly created by the agricultural sector in the first phase of industrialization (rural agro based industries). This simple model can be explain as follows :

<sup>12</sup> See for Survival of small-scale industries in a market economy (Amaratunge and others, 2001 b).

1. Savings (S) is some proportion, s, of income (Y). i.e.

$$S = s \cdot Y \quad (1)$$

2. Investment (I) is defined as the change in the capital stock (including raw materials)

K, and can be represented by  $\Delta K$

$$I = \Delta K \quad (2)$$

However, total capital stock, "K" have the direct relationship to income "Y", as expressed by the capital / output ratio, "k", then it can be described as,

$$K / Y = k.$$

OR

$$\Delta K / \Delta Y = k,$$

OR FINALLY,

$$\Delta K = k \Delta Y \quad (2 a)$$

- 3 Finally, since total savings, "S" must equal "I", i. e.

$$S = I \quad (3)$$

$$S = s \cdot Y = k \Delta Y = \Delta K = I \quad (3 a)$$

OR SIMPLY AS,

$$s \cdot Y = k \Delta Y \quad (3 b)$$

BY DIVIDING BOTH SIDES OF THE EQUATION,

$$\Delta Y / Y = s / k \quad (4)$$

Note that the left hand side of the equation (4),  $\Delta Y / Y$ , represents the rate of change in growth of the income. Equation number 4, which is a simplified version of the Harrod-Domar<sup>13</sup> equation, is used to explain the supporting of agriculture to the beginning of industrialisation. This means, the rate of change of income is determined jointly by the savings ratio, and the capital / output ratio.

This framework can be used to understand the development of the rural agro based expansion in an agro-based society. However, the success of the agricultural development too becomes a necessary condition for the development (but not the sufficient condition) of the rural small-scale industries in the third world.

## 5 Conclusions and Proposals

Developing countries are using each and every strategy in order to overcome the high malnutrition and poverty levels. In most of the third world countries including Sri Lanka, the industrial policies are mainly designed to promote large-scale industries. However, the successive governments have realized the fact that the gap between the rural and the urban sectors would not ease off naturally. Therefore to overcome this problem these governments have given a prominent place for the development of the small-scale industries in their recent industrial policies.

As most of the large-scale industries in the third world countries are located in the urban areas, the rural folk are neglected to a greater extent and are relatively less developed. In order to

<sup>13</sup> See M. Todaro (1985) for further details.

have a balanced regional growth the rural sector has to be upgraded. Developing the large-scale industries, which are capital intensive is not the real solution for the massive unemployment problem. Most of the large-scale industries could be foreign investments and raw materials used by these industries are dependents on high imports apart from the locally cheap labour. However, the contribution to the Gross National Product (GNP) as well as labour absorption by these industries cannot be undervalued. The ideal situation to get maximum use of the domestic recourses in order to minimize the national problems could be the promotion of rural industries, which has the common feature of smallness in size compared with large industries.

Marketing channels for the products of small industries in these countries are rather underdeveloped. The problem is accentuated by lack of infrastructure facilities in the rural areas, smallness of enterprises scattered over wide areas and poor financial position of the proprietors. On the one hand some enterprises participate in marketing of their products, due to lack of access to alternative channels. On the other, there is evidence that the use of other channels means, forgoing the large portion of profit margin. Although there are assistance schemes sponsored by the governments of these countries, in order to help these industries as well as to guide to the independent states, each and every small industry need to be strengthened so as to cover the isolated producers scattered all over the country side.

In order to bring out the lessons that can be useful to Sri Lanka, it will be important to study the experience of a country like Japan where small industries are playing a significant role in the economy. It may be useful in this regard attention to the development of infrastructure in small rural towns and market centres. The latter would, on the one hand be more economical than attempting to develop infrastructure all over the countryside, and on the other hand if industries are located in such places, the rural people can benefit from the employment created for them, without having migration from their villages. Such rural towns and market places can also become centres through which other forms of assistance like skill training, extension services, credit facilities etc. Small industries are mainly depending upon household demand, and their products have only a limited market access due to the low average level of income of the rural households. Some products of small industries are inferior goods as they use raw materials and other inputs insufficiently in order to make greater profit. The government institutions can provide advise to the producers about the correct product mixes, and can operate a quality control system. The main constraint appears to be the inability of small industries to satisfy quality, standards and to meet delivery schedules. The subcontracting exchange programme which aims at developing subcontracting relationships between the small and large sector, is not yet effective. It suffers from lack of staff with the required qualifications, and has not enough authority to investigate into subcontracting possibilities. There are some institutions, which even do not have sufficient capacity to execute orders that they could obtain. Besides, there could be certain parts of a product that could be manufactured by a small firm at a cheaper cost and would be advantageous to subcontract the production of such products. State institutions should identify such firms as well as products and should give publicity for such industries, so that small firms could find new outlets for their products. The market access could be provided to these industries by placing restrictions on similar imported products until the industry passes its infant stage. Income tax concessions will also give encouragement for more firms to manufacture these products, since firms for fur-

ther investments in developing market channels could retain a larger share of profits.

Lack of market intelligence, technical and technological problems, and quality control facilities could be listed as some of the other constraints of small industries. At peasant especially in Sri Lanka there is no organized system for the provision of market intelligence, to enable exports to cater to the current tastes in importing countries. Some import markets for small industries have still not been explored. The Export Development Authorities can take steps to introduce the unexplored markets and also for technical problems, technology related agencies could introduce appropriate technology, especially at the stages of raw material processing, quality control, packing and provision of common facility services.

One of the main objectives of developing the small industrial sector is to generate more and more employment opportunities into the developing nations. The employment generation potential of small industries is in itself is not a sufficient argument for their promotion. Equally important in this regard is whether this employment is truly productive, and whether the industries have the capacity to generate a surplus, which is necessary for sustained growth. In the small industrial sector the labour productivity is low, especially in those, which employ a large number of people compared to the capital utilization. Low productivity of employment in this sector can be related to a number of factors, the most important of which is related to technology. Therefore, efforts will be needed to raise the labour productivity in a number of activities, and to make them more efficient so that they can survive increased competition in the domestic market, and take advantages of export opportunities. Both of these will call for the use of improved technology in a number of activities, as it has been mentioned already, that not only the labour productivity is closely linked to the level of technology, new or important products but also require improved technology. On the technological side, the need is three fold: (1) to improve traditional technologies in some crucial processes so as to give them a greater competitive staying power, (2) in relation to new and upgrade products into the small industrial sector, (3) to upgrade their reoriented skills in line with the changes indicated above.

Policies in the field of technology will therefore need to be geared towards the search for better alternatives that already exist, and the development of new technologies appropriate to the requirements of small industrial sector, while this may mean mechanization of selected stages of production, even the use of simple tools and equipment can often raise the productivity of workers and improve the quality of the product as well. This of course would bring the question of trade off raising productivity and generating equipment. It needs to be mentioned here that simple tools and equipment need not always be labour displacing, and hence the threat of a trade off may not be real. An increase in productivity by raising the income of workers, could lead to an increased demand for goods and services and thus create conditions for expansion in various sectors of the economy and the consequent expansion of employment.

The governments of these countries should also take steps in order to supply credit to small industries as well as to the input suppliers of these type of industries in order to raise the domestic value added component. If the suppliers were neglected, due to the shortage of raw materials small entrepreneurs would definitely be in a problem of purchasing imported raw materials. The governments and related credit lending institutions should establish credit systems, which specially consider aspects such as farmer poverty situation, insufficiency of legal assets to obtain

credit etc, in order to have effectiveness in obtaining credit. Especially in Sri Lanka lack of accessibility to the formal credit network is a constraint, which affects a great majority in small rural enterprises. Only a very low percentage applies for obtaining of credit from financial institutions as the majority of the rural entrepreneurs still depend on their own funds and credit borrowings from the informal sector. Another way of providing credit facilities would be for the governments to have an apex body to monitor and co-ordinate the provision of credit facilities to this sector. The apex body can provide refinance to the participating credit institutions for loans to be extended to small industries at concessional rate of interest and it could also undertake to promote this sector. Further the apex body can also raise capital from public and other sources, as development banks do.

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## 第三世界における中小規模産業に関する実証的研究の展開 —文献研究による論点整理と残されている課題—

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平成13年9月25日 受理

### 摘 要

近年、「発展途上国における小規模産業の役割」に関して注目すべき研究成果が報告されている。それらの研究成果には「小規模産業が大規模産業よりもいかに当該諸国の経済発展に貢献できるか」という興味ある論点も含まれている。そこで、本論では、発展途上国経済においてこの小規模産業部門の有効性を検討するため小規模産業に関する諸文献を系統的に分析した。それは、文献整理だけでなく、スリランカの経済発展に係る小規模産業部門に関する研究の重要性にも配慮している。もちろん、それらの研究成果は、概して発展途上国共有の成果でもある。

発展途上国における多くの開発政策の主目的は、当該国全ての地域の貧しい人々がもつ「貧しさから解放されるべき」権利とその潜在的可能性を近づけることにある。全ての地域における生活条件のバランスのとれた成長を成し遂げるには、地方分散的な産業化が重要である。この根拠は、ほとんどの小規模産業が、一つの地域内で、また幾つかの地域間での経済的条件に最も適合して、社会的経済的均衡により大きく役立つものであるという予測においている。つまり、産業の小規模タイプは発展途上国における社会経済的問題を解決するに相応しい業態であるとみられる。