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SMALL-SCALE INDUSTRIAL DEVELOPMENT  
Policy and Strategic Issues

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## Policy and Strategic Issues

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### I. Introduction

The objective of this paper is to review and assess the main policy orientations underlying present practices in the field of small-scale industry promotion. Emphasis will be placed on three issues: the conceptual underpinnings of such policies, the effectiveness of existing policy implementation systems and the emerging key policy issues.

Section II examines the justifications underlying the current popularity of small-scale industry (SSI) promotion programmes as well as the variety of approaches to the attainment of policy objectives. Section II analyzes key emerging policy issues in the context of:

- (i) the role of the policy environment,
- (ii) the options for demand- or supply-side intervention,
- (iii) the integration of SSI programmes into national industrialization policies through sectoral-regional frameworks, and
- (iv) the heterogeneity of small-scale units and its impact on policy differentiation.

The major conclusion of the paper is that current practices reveal a paradoxical situation. On one side, a rich mosaic of initiatives have given rise to complex institutional systems for collective action within and outside state structures. On the other, the lack of national policies and the absence of meso and macro conceptual frameworks have created unnecessary risks and constrained feasible strategies. A sharp turn from the current project-focused efforts to a policy approach is required to enable small-scale industries to contribute significantly to development. Two main aspects of this shift are of the utmost importance. First, the feasibility of policy objectives needs to be analyzed from the point of view of industrial as well as

regional development. Second, new areas of intervention need to be created above the firm level and the scaling up of service supply systems must be achieved. Furthermore, explicit national policy frameworks are required to integrate policy reforms, planning interventions and assistance programmes, while the preparation of sectoral and regional guidelines is important to facilitate the articulation of promotion programmes into local-regional development processes. Last, the strengthening of government and non-government institutional capabilities is necessary to achieve more satisfactory levels of policy effectiveness.

## II. Promotion of Small-scale Production: The Evolution of Approaches.

Efforts to promote small scale industries have a relatively long history. In Latin America well-organized programmes existed as early as the mid-fifties. At that time, technical assistance was still rare, but financial programmes had been already created in Mexico, Venezuela and Argentina. These initiatives were followed by Brazil, Chile, and Colombia who launched their own programmes in the sixties, (United Nations, 1969).

A remarkable consensus about objectives and instruments was evident in these early initiatives. They were oriented towards the formation of a layer of modern small-scale manufacturing firms, facilitating the transition from household or handicraft enterprises. Employment creation was an important objective, but efficiency criteria were upheld rigorously. Established to counter the negative discrimination inflicted upon small-scale industries by import-substitution strategies, the programmes were carried out by either state or parastatal agencies.

In Asia, also in the fifties, the Indian government created a very elaborate promotional scheme based on a different rationale and oriented towards slightly different goals (Suri, 1988). Under the influence of Gandhian thinking and belief in the capital-saving characteristic of small-scale production units, India instituted a programme addressed to village and cottage

industries, to be extended later to the modern small-scale industry sector. In contrast to the Latin American approach, the Indian government set out to protect labour-intensive technologies, and khadi, cottage and village industries through a complex system of incentives, subsidies and market reservation regulations intended to stimulate demand. A similar policy approach was tried later in Indonesia and Korea, although on a far smaller scale.

In Africa, programmes oriented towards supporting small-scale industries appeared soon after independence in the mid-sixties; Tanzania and Kenya being among the earliest to adopt these policies. African programmes have emphasized provision of industrial estates and training of entrepreneurs. Kenya and Ghana are examples of the first kind (Child, 1977; World Bank, 1978; Ayree, 1977) while Botswana, Kenya and Ghana organized programmes of the second type (Livingstone, 1982). These programmes were often linked to Africanisation policies in which assistance aimed primarily at transferring businesses to indigenous nationals (Page, 1979).

Over time an impressive list of objectives has inspired the adoption of small scale industries policies. They range from efficient factor utilization, employment generation, innovative industrialization, and entrepreneurial development to the stimulation and democratization of capital formation, regional development, poverty alleviation and environmental friendliness.

1

More recently, the role of small-scale units in present technological change and in the emergence of flexible specialization production networks in industrial countries provides new grounds for innovative policy orientations (Piore and Sabel, 1984; Storper and Walker, 1989; Scott, 1988). From this perspective, efficient small-scale units are considered essential to maximize the externalization of subprocesses, de-integrate complex operations, promote market competition and foster innovation (Petrin and Vahcic, 1987; Scott, 1988; Suárez Villa, 1987; Nijkamp, Alsters and v.d. Mark, 1987; Aydalot, 1987). This is specially the case of Latin America where a

successful re-industrialization process is a key to further development and a long term solution to urban employment problems.

This impressive list of potential virtues matches well the conditions prevailing in developing countries: sluggish growth, capital shortages, high levels of unemployment, enormous rural-urban economic differences, regional inequalities, increasing concentration of capital, and chronic difficulties in the export sector. Hence, it is hardly surprising that small-scale enterprise development has achieved such degree of attention from government and international institutions.

#### II.1. Underlying rationales: Three alternative approaches

The above mentioned expectations about the potential of small-scale production have been generated by three different rationales. The first emerged from the realization of the limits of 'modernization' in achieving social development as well as economic growth. The second set, reminiscent of Schumpeter's ideas, stems from the revived appreciation of management skills and entrepreneurship in development processes. The third, focus on new flexible production systems brought about by recent technological innovations as a means to revitalize stagnant industrialization processes.

#### Unemployment, poverty and the limits of modernization policy

The undisputed supremacy of modernization strategies based on different versions of the Lewis model began to be seriously questioned in the mid-seventies (Lewis, 1954; Fei and Ranis, 1975; Todaro, 1976; Streeten, 1981). By that time, the social implications of this model were severely criticized as it was assumed to perpetuate poverty and social inequalities.

The post-War period saw high and accelerating rates of economic growth and industrialization in most developing countries.<sup>2</sup> Between 1950 and 1975, the annual per capita income



in the developing world had grown at an average of 3.1%,<sup>3</sup> (Hughes and Schilling, 1978; Morawetz, 1977). Characterized by massive investments in large-scale and capital-intensive sectors, this growth, however, had not solved the problems of employment and poverty. By the mid-seventies some 700m people (more than a third of the population of developing countries) continued to live in extreme poverty (World Bank, 1977).

Most of the benefits had accrued to those with access to jobs in modern industries while a sizable proportion of the population continued to depend on low-productivity activities for their survival or remained unemployed for extended periods. Thus, the expected 'trickle-down' effect had not occurred with the speed and intensity predicted in the theories. Moreover, by the mid-seventies it was evident that the dynamic period of employment creation in the manufacturing sector would be exhausted or severely reduced at much lower levels than anticipated (Morawetz, 1977; Hughes and Schilling, 1978; Squire, 1981).

New development strategies prompted by these criticisms rejected the idea that 'unqualified economic growth could necessarily be equated with development'. The new approaches sought to combine economic growth with social equity, associate development with improvement at the bottom of the social scale (Seers, 1969), and redefine the objectives as 'employment creation', 'growth with redistribution' or the 'satisfaction of basic needs' (ILO, 1972; Chenery, et al 1974; Streeten, 1981). Redistribution became a major goal and employment creation was sought to ensure a more equitable development pattern. The new paradigm advocated balanced development as opposed to selective modernization, gradual economic transformation with emphasis on rural development and the adoption of technologies more adequate to the factor endowment of less-developed countries (Stewart, 1972).

The emergence of eloquent advocates of the advantages of 'smallness', best exemplified by Schumacher and the Intermediate Technology Development Group he created, provided considerable support to the new policy proposals (Schumacher,

1973). Their case for developing an economy and society on a more human scale rested upon a complex but strongly interwoven set of arguments (Bromley, 1985). They ranged from the negative consequences of increasing state control, the power of multinationals, wasteful consumerism, inhuman scales and procedures at workplace, to the ecological non-viability of large-scale, capital-intensive technologies.

Applied to poverty-stricken and technologically backward developing countries, these ideas amounted to a definitive challenge to the unqualified notion about the superiority of modern technologies to achieve cheaper and socially more just ways of satisfying basic needs in less-developed countries. (Harper, 1977).<sup>4</sup>

Thus, low-cost, appropriate or intermediate technology using inputs and factors of production in proportions close to the overall endowment of these factors in the economy (Morawetz, 1974; Robinson, 1979; Cooper, 1979) became an important component of most new strategies.<sup>5</sup> In such an economy, assuming products consumed by the poor to be labour intensive (ILO, 1970; Stewart, 1977) and produced by small-scale production, a much greater role would be played by small farmers and small-scale urban producers.

The best strategy for achieving such an 'alternative development', has been a matter of debate (Bhalla, 1976). The static approach, place emphasis on the identification and dissemination of existing labour-intensive options,<sup>6</sup> while the dynamic approach advocates the development of state-of-the-art labour-intensive technologies (Bhalla, 1976).<sup>7</sup>

By the end of the seventies it was widely believed that strategies of this kind would create more total employment since: (i) direct employment for a given level of capital investment would be necessarily higher than in more capital intensive industrialization, and (2) indirect service job creation would be basically unaffected by the scale or composition of the manufacturing sector (World Bank 1978)<sup>8</sup>

Although incorporated into many national plans, the impact of such strategies has been small, (Standing, 1988).

Although overall figures do not exist and partial ones are often doubtful, there is a consensus that the actual amount of jobs created has been modest.<sup>9</sup> The deepening of the economic crisis in the early eighties revived the interest on the small scale sector though with a slightly different emphasis. Under recessive conditions, the support for small-scale and 'informal' activities became part and parcel of policies to sustain the survival strategies of the poor and to reduce the capital costs of employment generation. This focus on 'livelihood strategies' has relegated growth considerations and (economic) efficiency criteria to a secondary position.<sup>10</sup>

Despite this development the earlier concept of efficient 'equitable growth models' has continued to produce new contributions.<sup>11</sup> The concept of 'social articulation' as a condition for equitable growth is built upon the assumedly greater labour intensity of the products consumed by the poor. 'Growth with social articulation' would be self-reinforcing since it would be based on production for the poor and would generate increasing demand for unskilled labour (de Janvry and Sadoulet, 1989; Standaert, 1986).

#### The role of entrepreneurship in development

A second rationale for the development of small-scale enterprises is based on Schumpeterian thinking about the fundamental role of entrepreneurship and management skills in development. The scarcity of both these resources in developing countries highlights the potential role of the small scale sector in two complementary aspects: as a training ground and seedbed for the medium and large-scale sector, and as an efficient user of existing indigenous entrepreneurial and management skills which would otherwise remain unused (Page, 1979).

Research findings about the importance of firms ability to obtain a maximum output from a given set of inputs provide a solid justification for such preoccupations, (Leibenstein, 1966; Farrell, 1957; Kilby, 1962; Kopp, 1981; Meller, 1976; Page, 1979, 1980, 1984). Almost invariably this ability has been found to be

a fundamental source of potential efficiency improvement highlighting the importance of adequate managerial practices <sup>12</sup> (Kilby, 1962; Leibenstein, 1966).

The resurgence of neoconservative thinking in advanced countries has reactualized these Schumpeterian approaches providing new impulse to new types of small-scale industry support programmes. Neoconservatives have a deep appreciation of 'entrepreneurial' behaviour, criticize state intervention and control, praise the virtues of market competition and consider the public sector an inefficient administrator. In advanced countries, neoconservatives embraced the cause of small business for a variety of reasons. Highlighting the role of the small business sector facilitates retrenching by the state of many responsibilities, and especially employment. Simultaneously, broader political support for the new policies is achieved and the power of trade unions representing an opposing ideology is weakened. Promises of less taxation, an end to harassment and provision of supporting services are, first, a natural consequence of the value placed on energetic attitudes, initiative and innovation; and second, an expression of the political imperative for governments to retain the support of the unemployed, the self-employed and micro and small-scale entrepreneurs.

Last, but not least, the neoconservative response to the crisis of capitalistic accumulation which gradually built up during the seventies has also strengthened the case for small-scale industries. From this point of view, favourable attitudes towards small-scale activities were necessary to advance the vertical dis-integration and externalization of production subprocesses required to reduce costs in general, and to circumvent some of the rigidities of official labour markets in particular (Aglietta, 1978).

In sum, a return to a more Schumpeterian interpretation of development, where entrepreneurs play the central role and where the state and bureaucracies must only ensure a 'levelled field', would be socially unacceptable, politically unstable and economically inefficient without a strong small scale sector.

Moreover, the acknowledged innovative attitude of small plants reinforces their appreciation during periods of significant technical change such as the current one (Rothwell and Zegfeld, 1981; Mason and Harrison, 1985).

Attempts to transfer the new paradigm to less-developed countries were already noticeable in the early eighties, with the 'micro-enterprise sector' playing a central role. Redefined in this manner, the former 'informal sector' was conveniently re-interpreted as a 'repressed entrepreneurial reserve' and identified as a key component of development policies. The unleashing of this potential was expected to introduce flexibility into LDC economies and create new perspectives on economic development (De Soto, 1987).

#### Flexible production and Industrialization

The third rationale sustaining the importance of small-scale production derives from the assumed advantages of flexibility in productive organization. The role played by efficient, flexible and reliable small production units in the apparent success of export-promotion approaches in South East Asian countries was recognized some decades ago (Chenery and Taylor, 1968; Balassa, 1980; Kaplinsky, 1983; Chenery and Syrquin, 1986). Policy responses to these ideas focused on the importance of subcontracting for the development of an efficient industrial system, and on the role of small-scale firms in exporting labour-intensive products, (Watanabe, 1983; Mead, 1984).

Similarly, East European countries, concerned over the rigidities created by the bureaucratization of economic activities, high 'entry' and 'exit' barriers, and the incapacity of state socialism to create and operate small plants, have consistently advocated the development of more balanced plant size distributions. (Trumbic, 1985; Petrin and Vahcic, 1987).<sup>13</sup>

Recent technological and organizational breakthroughs have made smaller size plants efficient while also improving the scope for coordination between specialized production units.

Information technology, new management strategies, and the increasing importance of product differentiation have triggered a vast re-structuring of production in advanced economies. Until the seventies western economies were characterized by a nucleus of massive production industries such as cars and transport equipment, durable household consumer goods, capital equipment, etc. (Lipietz, 1982). The new conditions have given rise to more flexible forms of industrial organization strengthening the case for small-scale enterprises. <sup>14</sup>

These new organizations are based on innovative attitudes, multipurpose machines, skilled workers, and new forms of industrial relations, and is characterized by its facility to change process configurations and its extended use of product diversification strategies (Aglietta, 1978; Piore and Sabel, 1984; Storper, 1983; Scott, 1988). Productive units operate in large networks of dense external relationships and develop flexible labour processes. Furthermore, they seek to maximize the externalization of production subprocesses, exhibit a vigorous entrepreneurial behaviour, create sharply competitive markets and activate technological innovation processes. This greater capacity to realize the advantages of agglomeration and scope economies rescues small-scale production from its subsidiary role and make clusters of interrelated small firms an efficient alternative production organization. <sup>15</sup>

On the whole it is evident that the new technologies, product orientations and production organizations are widening the potential role of small-scale production systems. If indeed the development of these alternative forms of organizing industrial production is feasible in developing countries, a strategic breakthrough concerning some major problems confronted by industrialization in those countries may have been achieved.

## II.2 Keeping the Balance: Theories, Expectations and Reality

There is still considerable disagreement about the extent to which small-scale firms are capable of fulfilling the above-

mentioned expectations in developing countries. Many authors contend that such expectations have been created mostly by theoretical speculations or by phenomena observed in advanced countries (Bromley, 1985; Thomas, 1987). Indeed, many of these speculations are fuzzy and hardly backed by empirical evidence while doubts about the transferability of experiences are not always misplaced. As a result, a number of questions have emerged that have yet to be answered satisfactorily:

Are small-scale producers efficient users of resources?

There are two aspects to this question: the potential efficiency gains in preferring small-scale, labour-intensive production systems for the same products, and the overall gains in efficiency achieved by specializing in industries in which small producers predominate and are efficient.

The evidence supporting the superior economic performance of small-scale units in producing the same products in a variety of industries is still far from conclusive. Valid comparisons are not easy since product differentiation remains hidden at least up to the third digit in groupings formed using the standard industrial classification system. In addition, small and large enterprises producing the same products usually have very different degrees of vertical integration, and the overlaying of allocative, technical and scale effects upon observed differences in efficiency does not make it easier to reach firm conclusions.

In general, however, most studies have come up with mixed results or even no significant differences in capital-labour and/or capital-output ratios. Traditional small-scale units use more labour per unit of product but they do not always use less capital per unit of product (Fleming, 1970; Meller, 1975; van Heemst, 1977; White, 1978; Krueger, 1980; Sandesara, 1981; Gold, 1981; Bruch, 1988; Corbo and de Melo, 1983; Page, 1984; Lee, 1986; Little, 1987). In Africa the most important traditional small-scale industries (employing fewer than thirty workers) use more capital per unit of product than medium and large industries, suggesting either the use of separate and

inefficient technologies and/or high levels of technical inefficiency' (Page, 1979).<sup>16</sup> In Latin America, the results obtained by Meller in Chile suggest that firms of various sizes can be efficient, that there is considerable variation by size within industries and that production functions in some industries may be heterothetic (1975). A World Bank study of Colombia found small-scale firms to be efficient even though their performance was not always and not necessarily superior to larger ones (Cortes et al., 1985). Similarly, a study of small shoe producers in Colombia did not provide support for the argument that small-scale enterprises are inherently more efficient. Firms of various sizes were among the most efficient from a total factor productivity point of view while technical inefficiency was judged to be very significant (Uribe-Echevarría, 1985b; Solano, 1990).<sup>17</sup>

Other studies seem to indicate that small-scale producers are rather inefficient users of capital in many branches and that regional variations are of importance at this respect (Vinod, 1973; Miller and Jensen, 1978; Lande, 1978; Carlino, 1979; Van Heemst, 1982; Luger and Evans, 1988; Sasaki, 1988). Some of these regional differences have been observed, for instance, in Colombia (Uribe-Echevarría and Forero, 1986; Pinto and Arango, 1986) and Chile (Roman, 1990).

India has provided another battleground for testing the efficiency claims about modern small-scale industries. In many cases the small scale sector has been found to have lower labour and capital productivity and higher unit operating costs (Hajra, 1965). According to Dhar and Lydall, units employing fewer than fifty workers and using modern machinery utilize more capital per unit of output than do larger factories (1961). In addition, Little provided evidence showing that the most efficient performances could be found in the medium-sized rather than smaller scales of production (1987).

In general it must be concluded that the situation differs between sectors, types of plants and regions. This calls for sectoral and regional rather than a purely scale approach to policy formulation (Uribe-Echevarría, 1987; De Haan, 1989).



In contrast to the efficiency aspect, the specialization approach can hardly be questioned from a theoretical perspective. Indeed, if an economy manages to specialize in industries in which small scales of production are efficient, all major objectives are simultaneously achieved. In such a situation efficiency would be consistent with employment expansion and economic growth in general.

The critical policy issue moves then to the feasibility of such strategies. Developing the necessary sustained and growing demand for products made by such industries may prove a difficult proposition. Export markets, though extensive in theory, are limited by protectionist attitudes in high-wage countries and the difficulties experienced by industries in developing countries in supplying the quantities and qualities demanded. On the other hand, the potential attributed to domestic markets is depended on the validity of the assumptions concerning the impact of shifts in income distribution upon the structure of demand. They will be discussed later, along with the role of small-scale industries in satisfying basic needs and attaining equitable growth.

Are claims about the employment-generation performance  
of small-scale industries realistic?

Small-scale manufacturing uses less capital per job created and can therefore be said to generate more employment for a fixed stock of capital. However, as contended by several authors, a difference must be acknowledged between direct and total employment creation. The issue was raised by Sutcliffe in the early seventies and Latin American research has often found that the creation of indirect jobs by investment in the small scale sector is fairly small compared with the impact of investing in the large-scale industry (Sutcliffe, 1971; Meller, 1978). A similar problem has been raised in connection with service employment, contradicting the conclusions of the World Bank sectoral paper of 1978 (Cooper, 1990).

Recent research has also questioned the assumption about the flexibility of the informal sector to absorb labour. The experience of the recession of the eighties indicates that this flexibility has been overrated (Tokman 1983; Uribe-Echevarría 1989a). Only household enterprises (those not using hired labour) and the self-employed sector absorbed labour those during periods of falling aggregate demand. In contrast, employment in the micro-enterprise sector fluctuates together with production. In turn, production schedules depend upon the balance between the 'positive' substitution effect and the 'negative' contractional effect which accompany recessive periods (Lautier, 1988; Hugon, 1988; Uribe-Echevarría, 1989a). Unfortunately, strong substitution effects capable of offsetting the recessive impact of a falling wage bill in the modern sector and a shrinking demand for intermediate inputs are not very common. Therefore, on many occasions microfirms exhibit a pro-cyclical behaviour which goes against the 'mopping-up' of unemployment expected from them. The utilization of micro-enterprises for anti-cyclical purposes can thus be seriously questioned. Firstly, the subsector using hired labour (the most dynamic one) would require a growing demand to expand employment, contradicting the very rationale of the policy. Secondly, the expansion of self-employment under recession would amount to an income redistribution among the poor, exacerbating income differentials within the society (Uribe-Echevarría, 1989a).

Lastly, the poor quality of the employment generated in these firms is also a cause for concern. A large proportion of small-scale enterprises normally has small operational margins. They can only stay in the market by using cheap labour and avoiding investments in equipment and installations to protect the workers. As a result conditions are appalling in many of them: long hours of work in crowded, unhealthy and insecure conditions and a labour force frequently including a high proportion of women and children (Bromley, 1985).

Do small-scale firms in developing countries have a real potential for entrepreneurship and industrial development?

References to entrepreneurial behaviour are sometimes questioned on the grounds of inaccurate identification of small-scale operators with an entrepreneurial class. Their 'firms', most having fewer than three workers, are considered too small by some authors. From a more substantive point of view, many of these activities can be considered residual and trapped in the production of 'inferior' goods of low income elasticity. While only a minority produces for highly profitable high-income or export markets. Entrepreneurs are poor, have little education and usually not constrained by rules and regulations, some being outrightly illegal. In short, there is a large incidence of 'informality' within the small-scale sector in developing countries and that alone limits the transferability of the experiences of advanced countries (Bromley, 1985). Therefore, Schumpeterian expectations about savings, investment and innovation behaviour may be misplaced, precluding the small-scale sector's seedbed function and its role in making the industrial sector more flexible.

The creation of small-scale firms undoubtedly represents a sizable process of capital formation, but the existing empirical data questions the assumed seedbed role of very small (cottage and village) micro-enterprises in the formation of modern small-scale and medium size enterprises. Liedholm and Porter, quoted by Farbman and Lessik, found in Africa that few enterprises grew naturally from micro to small to medium size. In Nigeria, only 43.7% of small (from eleven to 50 workers) and medium firms grew out of microfirms. The situation was found to be worse in Sierra Leone (30.1%), Rwanda (10.7%) and Botswana (20.0%). Berry has documented the Colombian case where the initial small, rural-based industries played very little, if any, role in later industrialization (Berry, 1987).

The role of small industries in spreading investments over a larger number of owners can also be viewed with scepticism. As noted by de Haan when discussing the case of India, this scope

'is greatly reduced by the practice of large firms or wealthy families of investing in small-scale modern units in order to evade taxation and/or labour legislation' (1989). Last, a high incidence of informality creates scepticism about the reliability of product specifications, delivery schedules, weakens the viability of subcontracting strategies, and reduces the contribution of the sector to achieving more flexibility in production.

Are small-scale industries a key to the satisfaction  
of basic needs and equitable growth?

The conception that small-scale industries can play an important role in development strategies focusing on the satisfaction of basic needs is based on three commonly held assumptions: (1) the products consumed by the poor are more labour intensive; (2) small-scale industries specialize in such products; and (3) they use simple techniques.

There is relatively strong, although incomplete, evidence about the greater labour intensity of basic products consumed by the low-income population (Little, 1987). However, this in itself does not necessarily imply that income redistributions have large total employment impacts. The actual result would depend upon the size of indirect impact and they have often be found to be relatively small, (Cooper, 1990). Attempts to measure possible sub-estimations, though positive, do not allow definite aggregate conclusions to be reached (Morawetz, 1974; Tokman, 1974; House, 1978; Ayree, 1981; Cooper, 1990).

The contention that small-scale industries specialize in producing goods for low-income groups has also been questioned and some empirical evidence lends a degree of credibility to these questions. Small-scale enterprises are an important source of goods for the poor, but many of them neither produce for the poor nor are necessarily labour intensive. As shown in the Indian case, urban small-scale industries often produce either inputs for production or products for the wealthy, (Hashim, 1979). The growth of the small-scale sector, therefore, may not by itself

result in greater availability of, or lower prices for, the necessities of the poor. By the same token, increased consumption by the poor may not translate into higher levels of demand for the products of small-scale industries.

The debate over the income elasticity of demand for the products of small-scale industries, though prolonged, has never been settled conclusively (Hymer and Resnick, 1969; Massel, 1969; ILO, 1972, 1974, 1976; Mellor, 1976; Liedholm and Chuta, 1976; King and Byerlee, 1978; Chuta and Liedholm, 1979; Jhaveri, 1981; Saith, 1989a). However, the available empirical evidence provides some pointers and they are relatively unfavourable. Even in the poorer countries such as Sierra Leone and Bangladesh, the elasticity for the products of small-scale rural manufacturing are relatively low (respectively 0.76 and from 0.29 to 2.0) and certainly lower than those observed for services, housing and transport (King and Byerlee, 1977; BIDS, 1981).

Claims about the potential of small-scale production to reduce regional inequalities must also be qualified. Only rural and village traditional microproducers seem to be in a position to disregard scale and external economies, and their importance reduces rapidly with economic development (Uribe-Echevarría 1989b).<sup>18</sup> As a consequence, changes in the spatial structure of supply are not equivalent to shifts from small to large scales of production.

Not surprisingly, the argument usually shifts to postulating a considerable scope for expansion of rural small industries for quite some time (Anderson, 1982; UNDP et al., 1988). Unfortunately, these assessments may be considered excessively optimistic and mostly the result of ignoring the differences between rural microfirms (household, cottage and village industries) and urban microfirms (the informal sector), (Uribe-Echevarría, 1989b).



Is flexible specialization feasible  
in less-developed countries?

Most of the examples of successful development of flexible specialization in general, and of efficient agglomerations of small-scale producers in particular, are in developed countries, specially in several regions in Western Europe (Cortellese, 1988; Nijkamp, Alsters, and v.d. Mark, 1987; Aydalot, 1987; Giaoutzi, 1987; etc). The situation is far less clear in developing countries. Similar production networks have emerged in the Asian NICs, with Taiwan, Hong Kong and Singapore being good examples and some advances in the externalization of production subprocesses, have been documented in some less developed countries (Méndez, 1989; Portes, Castells, and Benton, 1989). Yet, the capacity to create and develop small and medium production networks independent of large-scale nuclei in LDCs is still unclear and little is known about the conditions to make them viable.

### II.3 Policy Implications

More research is required to produce firm answers to most of these questions and some of them may even have to be reformulated before they can be answered. After discussing the current promotional practices, the III section of this paper makes an attempt to introduce some of these reformulations by introducing a number of new issues such as:

(i) the small scale sector is comprised of different types of units which play quite different roles in industrialization.

(ii) Several of the usual claims about the impact of small-scale industrialization are valid only for some of these types and do not hold equally at all stages of industrial development.

(iii) The potential for efficient development of small-scale industry is also different for various sectors and regions.

(iv) The role of, as well as potential for, small-scale development varies with different national policies in general and industrial and agricultural development policies in particular.

As the next section shows, including these issues is important to changes that need to be introduced in current promotional practices. The most important of them being that:

(1) policies focusing exclusively upon scale considerations may not be the most effective way of approaching the problem;

(2) sectoral and regional analytical frameworks are necessary to establish adequate links with the economic and social environment and to ensure the compatibility of declared objectives with labour markets behaviour, and industrial and regional development processes.

(3) acknowledging the specific requisites associated with different strategic objectives is also crucial for designing successful policies. Poverty alleviation and support for survival strategies regardless of efficiency considerations are certainly feasible but require a sustained flow of subsidies. There is already strong evidence that poverty alleviation programmes devoid of an 'economic efficiency rationale' do not seem to conduce to self-sustained improvement processes and may negatively affect the allocation of resources.<sup>19</sup> Additionally, there is also evidence linking the potential for survival strategies to the anti-cyclical behaviour of specific segments, household industries and self-employment, rather than to the whole of the sector. Developing an efficient complementary small scale sector appears to be a viable proposition provided the overall policy environment is conducive, an efficient service supply system exists, and a selective approach based on the linkages with the agricultural or the large-scale industrial nucleus is adopted. A leading small scale sector, as postulated in flexible specialization models, is still an unassessed proposition in less-developed countries. Critical questions



are the feasibility of the technological restructuring required and the existing barriers in export markets. More scope may exist at the sub-national level but similar questions are still valid.

### III. Intervention Strategies: Trends and Perspectives

#### Defining the Policy Problem

A limited and/or weak small scale sector indicates that entrepreneurs are investing in industries with increasing returns to scale or no technological alternatives, and/or choosing (where such choice exists) more capital-intensive technologies. Therefore, in order to achieve larger/stronger small scale sectors, resources need to be reallocated to industries where economies of scale are of less importance (compositional changes), and/or entrepreneurs have to be directed towards choosing more labour-intensive technologies (structural changes).

The reallocation of resources between industries is essentially the result of changes in their relative factor productivities inducing shifts in both the demand and the supply curves. Structural change, leading to modifications in the size distribution in a given industry producing a single good, is basically determined by supply conditions that originate efficiency gaps in factor utilization between firms of different size.

Both types of entrepreneurial decisions are strongly influenced by the impact of the policy environment on product and factor markets. Policies affecting demand structures, such as effective rates of protection, exchange rates, export taxation, sectoral (agriculture vs industry or urban vs rural) and vertical income distribution, affect the first type of decision and induce compositional changes. Policies affecting the prices and availability of capital, labour and other inputs, in general the relative rentability of different producers and production techniques, influence the second type of decision and induce structural change.

At the same time, the choices open to entrepreneurs may be restricted by the availability of required resources or the accessibility of small producers to them. This may be caused by deficiencies of the institutional delivery systems concerned, the ability of other sectors to control these systems, or by deficiencies in the capacity of the small scale sector to gain access to those resources. In such cases, providing the necessary assistance to correct these deficiencies needs to be regarded a key target of any promotion policy.

Encouraging the expansion of these small-scale producers may therefore take two not necessarily exclusive forms: at the project or programme level, selected beneficiaries may receive assistance to overcome their problems, the project-assistance strategy; or, at the policy level, changes may be introduced within policy or institutional environments to eliminate negative discrimination or impose positive discrimination affecting whole sets of small firms , the policy reform strategy. In principle, both strategies can be pursued independently, but in most cases the success of policy reforms may depend on the effectiveness of assistance delivery, and the latter may be dubious or limited to subsets of small firms within strongly biased policy environments.

The importance of each strategy may vary from case to case, but to the extent that entrepreneurial decisions will be biased by policies falling unevenly on various economic activities, the range and magnitude of the assistance required to counter policy impacts will become wider and larger.

### III.1.1. The Project-Assistance Strategy

Project-assistance strategies are firm centred and supply side oriented. They have been clearly predominant so far and have resulted in a great number of self-contained interventions addressed to specific target populations. Most of these efforts have being carried out in a fragmented manner since comprehensive national strategies to assist small-scale manufacturing firms are still rare in developing countries (CIDA, 1986)

Current delivery systems for this assistance are equally fragmented and rarely coordinated. They have emerged through a historical process in which several layers have overlapped creating an intricate institutional fabric.

Earlier systems, created by the state and oriented towards supporting the modernization of small-scale manufacturing activities have been later flooded by the expansion of the 'private' non-profit sector.<sup>20</sup> Initially, most assistance programmes carried out by non-profit organizations were oriented to poverty alleviation, income redistribution and ultimately to social and political change. Typical of this period was the emphasis upon promoting cooperative systems, workers' enterprises, self-management, a social sector of the economy, a popular economy, etc.

The second wave of non-government institutions was still concerned with poverty, but abandoned some of the reformist intentions. They have concentrated on 'income generation', 'livelihood strategies' and improvement of the situation at and from the grassroots. This deeper involvement of non-government organizations was also stimulated from the supply side by stringent fiscal conditions and the 'discovery' of the efficiency of non-government institutions by bilateral and multilateral development agencies.

The third and most recent, wave is a response to new criteria for development projects stressing efficiency, replicability and effectiveness. The new agencies born out of this orientation seek self-sustainable development. They reject the use of subsidies because they tend to become permanent and are non-affordable in the long run. Most of them still adhere to a short term business approach. However, some have begun to show a greater appreciation of long term objectives and to look at their activities from industrial, national and regional development points of view.

This fragmented, disjointed and decentralized institutional system has both advantages and disadvantages. It has proved to be flexible system capable of adapting rapidly to changing priorities as well as to wider policy challenges posed by

government initiatives. However, many agencies have not been equally successful in transforming their operational practices, planning activities and research interests to meet the new demands. Therefore, the effectiveness of many programmes is still very doubtful and the aspiration of generating long-term, self-sustained and self-reinforcing economic progress remains an elusive goal. There are several reasons for this state of affairs:

- \* A great number of institutions lack professional capacity due to the scarcity of trained personnel.

- \* Learning from experience is still a nascent mechanism, and consequently successes are ignored and failures discreetly buried.

- \* There is little research into, and hence little hard knowledge about, small-scale production development issues.

Furthermore, the gap between the capacity of these systems and the demand for support seems to be growing, a feature which may become critical for the success of the current expansionary phase.

In general the experience accumulated in the application of this strategy indicates that a purely project-assistance focus is insufficient to achieve the massive results required for a significant contribution to employment and income generation (CIDA, 1986). A policy reform strategy seems to be necessary to achieve these objectives.

### III.1.2. The Policy Reform Approach

Highlighting the importance of policy reforms is a relatively recent development and their implementation still a rare occurrence in developing countries. By the mid-eighties, new empirical evidence as well as theoretical developments had re-evaluated the role of the macro, meso and sectoral policy environment in the determination of the magnitude, role and main features of the small scale sector of the economy. Evidence about the discriminatory impact of many policies (Haggblade et al., 1986) and the realization of the cost involved in

counterbalancing them through compensatory programmes have forced a fresh look at the problem.

Firms seek to achieve their objective (maximization of profits, family income, etc.) under the conditions created in product and factor markets by a great variety of policies. Although often conceived separately, these policies interact and their effects are cumulative, influencing the global structure of demand and availability and/or rentability of various possible production technologies (Haggblade, Liedholm and Mead 1986).

Changes in the structure of domestic demand and export markets influence the size and role of the small scale sector through the composition of the output mix, while the availability or profitability of various technologies has a similar impact through processes of intra-industrial structural transformation that modify the roles played by different types (sizes) of enterprises.

Policy prescriptions to create a favourable, or at least neutral, policy environment for small producers are based upon theoretical interpretations of the workings of factor and product markets.

Neoclassical authors suggest that most policy environments in developing countries 'discriminate strongly' against small-scale enterprises through the induction of unfavourable structures in both product and factor markets. In the case of product markets, the income distribution impact of several policies (pricing of industrial and agricultural products, fiscal policy, taxation, etc.), combined with the impact of real protection rates on the prices of competitive goods, penalize the demand for labour-intensive products that lend themselves better to production on small scales.

In the case of factor markets, neoclassical analysts argue that such policy environments create a double price distortion which generates segmented markets for capital and labour. Labour legislation, minimum salary regulations and trade union activities are among the factors affecting labour costs; and subsidies, transaction costs and inaccessibility to official markets are among those affecting capital costs. Large firms

confront high labour and low capital costs, while small-scale, especially 'informal', firms confront low labour and high capital costs. As a consequence of these distortions, decisions are biased towards capital-intensive technologies in the oligopolistic sector and extremely labour-intensive technologies in the small scale sector (Biggs and Oppenheim, 1986). Additionally, zoning and licensing requirements as well as the granting of monopolistic privileges and other discriminatory pressures upon profit rates affect the rentability of different technologies and producers.

Empirical evidence about the existence of such distortions has been actively investigated by numerous authors, but many of the findings are still subject to debate. For instance, many in-depth studies have noticed the existence of wage differentials (Berry and Sabot, 1978; Knight and Sabot, 1980; Mazumdar, 1976; Kanappan, 1983; Squire, 1981; Ingram and Pearson, 1981; Monson, 1981; Chuta and Liedholm, 1985; Carvalho and Haddad, 1981; Nogues, 1980), but several investigations have found that such differentials mostly reflect differences in human capital and are relatively small. This is an important issue since no misallocation of labour resources may be argued in these cases (Watanabe, 1976; Berry and Sabot, 1978; Webb, 1977; Squire, 1981; Steel and Takagi, 1983; Krueger et al., 1983).

Distortions in capital markets seem to be more important. A World Bank study of thirty-four countries in the seventies showed that the real rate of interest was considerably lower (in some cases negative) in official as compared with informal markets (1975). Haggblade, Liedholm and Mead concluded that capital distortions have been significant in many developing countries where import substitution strategies have been pursued, especially when the impacts of taxation, subsidies, accelerated depreciation, exemptions, tariffs, etc., are added (1986). The role played by trade regimes in the distortion of product markets has also been documented. In the Philippines, sectors generating two-thirds of the small-scale production had negative real rates of protection while sectors producing on a large scale had rates between 25% and 500% (Anderson and Khambata, 1981). In Indonesia,

Hiemenz and Bruch found a negative relationship between the importance of small-scale producers and protection rates (1983) while in Malaysia, von Rebenau showed that the average size of plants is bigger in highly protected industries (1976).

To sum up, the evidence seems to point to some segmentation in factor markets, especially capital markets, and strong discrimination against products in the manufacture of which small-scale producers predominate. These features are characteristic of import-substitution strategies in which competition is limited, capital is subsidized, labour costs are high, luxury consumption is stimulated, etc. (Biggs et al., 1986). Neoclassical analysts argue that such policies do not encourage the development of strong small-scale firms since they favour consumption patterns requiring large-scale, capital-intensive plants and induce preferences for capital-intensive technologies, even if efficient more labour-intensive alternatives exist.

Consequently, the neoclassical argument supports policy reforms oriented towards adopting equilibrium prices in factor markets, stimulating domestic and foreign competition, favouring rural industrialization, and establishing realistic exchange rates. Under such policies, small-scale enterprises would benefit in all sectors in which efficient labour-intensive technologies existed and in which economies of scale were not important.

However, these conclusions are dependent on the impact of 'price distortions' on allocative efficiency and the consequences of the latter upon the size distribution of firms and total employment creation. Such consequences depend, in turn, upon alternative assessments of the values of the elasticity of substitution between capital and labour and the relationship between technical and allocative efficiency. The structuralist critique concentrates precisely on these issues. It questions neoclassical assumptions about the production function, especially its assumed continuity. Discontinuous production functions imply the existence of a limited range of substitution of labour for capital, or the lack of efficient alternatives to capital-intensive technologies (Stewart, 1972; Carbonetto, 1986). In addition, the existence of pecuniary or organizational

economies of scale may make efficient allocative decisions technically inefficient, thus generating lower profit margins (Cooper, 1972). Therefore changes in prices influencing technological choices are insufficient to alter the situation in favour of small-scale producers. The redirection of technical progress is essential since it determines the parameters of real choice (Stewart and Ranis, 1989). Empirical evidence, though still inconclusive, seems to point to significant differences among industries, but in general to lower elasticities of substitution than those assumed in conventional neoclassical approaches (Clague, 1969; O'Herlihy, 1972; Pack, 1982; 1987; Page, 1979, 1980, 1984).

The debate over the impact of structural adjustment programmes upon the small scale sector reflects these theoretical differences in a concrete form. The World Bank and the International Monetary Fund have suggested that macroeconomic adjustment packages should automatically favour small-scale producers by re-establishing equilibrium factor prices reflecting national endowments, increasing competition, creating disincentives to reduce luxury consumption, relieving constraints penalizing rural industrialization, increasing the availability of capital for the private sector, etc.

The structuralist response questions the following assumptions on which the reaction of small-scale producers is predicated: relevant flexibility in the substitution of labour for capital, similar economic behaviour (objective function) by all firms and similar accumulation behaviour by large and small firms (Stewart and Ranis, 1989; FitzGerald, 1989). FitzGerald assumes the existence of technological rigidities and characterizes small firms as price takers, using mostly (unpaid) family labour and being survival or family income oriented; on that basis, he concludes that structural adjustment policies may actually have a depressive effect upon the small scale sector (1989).

The debate becomes more complex if explicit reference is made to the impact upon the micro-enterprise sector, given the confusion over its definition and over the notion of the



'informal sector'. As already pointed out by several authors, the actual result is dependent on the aggregation of contradictory effects (Hugon, 1988; Lautier, 1988). For instance, realistic factor prices may imply the transfer of economic activities to either the competitive capitalist or the domestic sector, depending on circumstances (Sen, 1975). Lower salaries and shifts in consumption patterns may benefit micro-enterprises, but the recessive consequences may create larger or smaller negative impacts than the previous ones (Hugon, 1988).

In the final analysis, the evaluation of the impact of structural adjustment programmes on micro-enterprises depends on the relative strength of 'substitution' and 'recessive' effects. In turn, the strength of these effects depends upon the balance of complementarity and flexibility in the 'informal sector', a subject concerning which there are still strong differences of opinion. Lautier, for instance, argues that in the case of Latin America substitution effects may be expected to be small and that reductions in labour costs and flexibility are more important during expansive rather than recessive periods (1988). Dawson's conclusions in the study on Kumasi are in line with this hypothesis. Cornia et al., in contrast, support the thesis that informal economic activities can substitute for formal industrial production under recessive conditions in a number of sectors (1987).

It is obvious that more research is needed into the growth dynamics of small-scale firms, particularly micro-enterprises since they make up a high proportion of the small-scale sector in developing countries. Previous investigations have used mostly static frameworks, often delinked from short-term trends in the economy, and that is a poor basis for estimating behaviour and formulating policies. Differentiating among national policy environments, local/regional factors and subsectors of firms might be necessary to obtain relevant results.



### III.2 A critical policy issue: Demand or supply constraints?

Deciding on the main orientation of policy reforms and assistance requires an assessment of the relative importance of demand versus supply constraints. This is an important question since the answer determines whether the focus of policy reforms or assistance needs to be on product or factor markets. As stated above, current promotional practices have concentrated on easing supply constraints. However, there are very strong indications that what small and micro-entrepreneurs need most is reliable, expanding markets (Teszler, 1989). For instance, evaluations of project results have shown that supply-side interventions are far more effective when applied to expanding local and regional economies (Uribe-Echevarría and Forero, 1985; USAID, 1985) and the great majority of surveys have demonstrated the high priority attached by small-scale and micro-producers to demand constraints. Ignoring of this critical factor has resulted in many industrial estates remaining empty and credit programmes being underutilized (Uribe-Echevarría, 1983).

Strictly speaking, there should be no dividing line between the effects of product and factor markets on firms. Factor costs, accessibility to factors and production efficiency in general are strong determinants of the size of markets that small firms can capture. Similarly, market size is a powerful factor determining the rationale of investments in improved efficiency. To some extent, therefore, supply-side interventions oriented towards changing products and designs, and reducing costs may result in significant increases in market size if demands are assessed correctly. However, this is different from a direct stimulation of the aggregate demand for products typically produced by small-scale units. At the policy reform level, it is often assumed that income redistribution towards the poorest increases the demand for small scale sector products (Teszler, 1989; Chuta and Liedholm, 1979). Although there are many arguments to support such a thesis, the available experience seems to suggest that the impact of progressive redistribution depends quite clearly on the

income levels reached in the economies where such redistribution takes place.

A common way of addressing the demand side has been to advocate the stimulation of rural development, especially small-scale agriculture, in conjunction with off-farm employment (supply-side) programmes (Mellor, 1976; Chuta and Liedholm, 1979; Liedholm and Mead, 1987; Papola, 1986; UNDP et al., 1988). However, the debates over the role of rural industrialization policies is far from settled (Saith, 1989b; Uribe-Echevarría, 1989a, 1989b). It seems incongruous, to say the least, that while proposing rural industrialization as a theme, the advocates themselves acknowledge that rural industries have consistently declined with development (Nanjundan, 1989); that most rural small-scale manufacturing enterprises (cottage- or village-type units) are economically non-viable at factor market prices (Farbman and Lessik, 1989); and that profits, productivity and quality of production increase while consumer prices decrease as the size of plants increases and their location shifts to urban areas (Liedholm and Chuta, 1976). Finally, as de Haan, Sandesara and others have shown in the case of India, rural industrialization policy achievements are far from satisfactory. In the light of these findings, the unqualified assumption linking agricultural growth with rural industrialization appears a bit too strong. This is especially so when recommended policy guidelines also stress the undesirability of protection and positive discrimination, and the virtues of market competition (De Haan, 1989; Sandesara, 1987).

The fact that many developing countries have not yet achieved development levels at which rural industries decrease rapidly is sometimes offered as a justification for the approach. However, it remains to be proved that a demand pull achieved in rural areas, or more generally increased external markets for processed rural products, can be supplied by dispersed rural (cottage/small-scale) industries, at least to a significant degree, without any form of protection. The key question yet to be answered satisfactorily is: Can efficiency and a strong and growing rural small-scale industry sector be achieved

simultaneously? Essentially, is small-scale (cottage and household) industrialization a prescription for development, or for subsistence and coping with the socio-political consequences of stagnation and economic retardation?

Another approach to demand stimulation is market reservation as practised by India and other developing countries. While successful in retaining a high proportion of rural small-scale industries, it has nevertheless been criticized strongly from the point of view of efficiency. The well-known study by Little, Mazumdar and Page that examined the case of several industries concluded that social benefits would have been greater in textiles and sugar without it and that the policy had distorted industrial development in other cases. In general, they found market reservation policies to have reduced competition (both within and among scales of production), distorted firm growth processes and forced large-scale units to adopt a series of strategies, sometimes to cope with the consequences of and sometimes to take advantage of the policy (1987).

A similar approach, followed by countries such as Tanzania and Zambia, consists of government preferential purchase programmes. In such cases governments provide assured markets which may prove important in initial stages. However, as noted by Nanjundan, to be successfully promoted small-scale products must have cost advantages to be able to compete in the market (1989).

Assistance with commercial services could, of course, help overcome the inherent disadvantages suffered by small-scale units in dealing with large markets, which is by far the most prevalent situation at present. However, such efforts have been less successful than might be expected. Externally organized marketing services have not been effective, and cooperative solutions are difficult to organize (Uribe-Echevarría, 1985a; Nanjundan, 1989).

To sum up, there is little doubt that demand constraints vitally affect the development of small-scale industries. Furthermore, it is equally evident that the theory that small-scale enterprises are blocked by lack of access to (or inadequate) resources in the face of existing unsatisfied and/or

potentially rapidly growing demand is not convincing. The policy problem is to what extent demand can be stimulated and what form the efforts in that direction should take.

Advocating income redistribution raises the question of how to attain such a goal. Calls to give priority to agricultural development and to redistribute income in order to achieve this take the problem out of its original framework. The policy proposal becomes one for a different national development strategy acceptable only if proven feasible and superior in its overall performance. Although possibly still viable in some largely rural countries, it is unlikely to be meaningful in many of the more urbanized ones. Protecting small-scale product markets by protecting (labour-intensive) production techniques or creating market reservations has been found to distort industrial development processes and to generate inefficiency. Marketing and commercialization assistance has been considered of only limited help so far. The latter is, however, a potentially fruitful approach as long as an integrated perspective covering products, production techniques and markets is adopted.

The preceding remarks show that the magnitude, role and strength of the small-scale sector are to a large extent a consequence of overall development policies and specific industrialization processes induced by such strategies. In practice this implies that there is only limited room for manoeuvring to change either supply or demand conditions. Therefore the key policy problem may have to be reformulated to involve the integration of small-scale manufacturing into the formulation of development policies in order to identify and resolve policy compatibility problems.

In this approach, demand constraints may have to be accepted as a criterion for selecting sectors and regions with better growth prospects, admitting that although small-scale enterprises can play a large and generalized role in making economic growth more efficient and equitable, only in exceptional situations they can constitute a true 'engine of growth'. Still, small-scale industries may play a survival or subsistence role in many other

cases, for instance in regions that are lagging in development, during recessive cycles and in marginal groups, but some form of protection will then be required. Alternatively, the focus will have to be placed on household or cottage industries, with little impact on total output.

### III.3 Types of enterprise and intervention strategies

The heterogeneity of the small scale sector poses new policy questions: Can all types of small-scale enterprise respond positively to promotional policies? Would each require a specific policy package? Would each need a specific promotional methodology? And, of course, what type of classification would be policy relevant?

The usual dichotomous approach grouping cottage, household and informal enterprises on one side and formal small-scale enterprises on the other, though the most common, is insufficient for an adequate distinction of the policy problems posed by each subsector and can be highly misleading (Uribe-Echevarría, 1989a). A more elaborate proposal (Farbman and Lessik, 1989) distinguishes three subsectors and proposes an equal number of specific approaches:

(i) A survival subsector comprised of the 'poorest of the poor' engaged in economic activities of last resort, whose returns are extremely low. A community development project approach is assumed to be adequate in this case.

(ii) A micro-enterprise subsector made up of firms with up to ten workers. Using traditional technology and serving local markets, these firms are said to correspond to the ILO version of the informal sector, and to be found in rural areas (where they provide approximately 50% of manufacturing employment) and in urban areas. They account for the major part of employment in retailing, services and transportation. An incrementalist strategy leading to the "graduation" as fully mature small scale firms is advocated for microenterprises.

(iii) A small-scale enterprise subsector comprised of larger firms having between ten and fifty workers. The share in employment of this subsector is smaller than that of micro-enterprises though the firms in it are more efficient (Liedholm and Mead, 1987). The so called "business approach" is recommended for the established small scale sector.

Such a classification is still unsatisfactory. The extreme differences in the economic nature of rural and urban micro-enterprises is ignored when they are lumped together. The former type is normally a firm serving a small market and enjoying a special 'monopolistic' position. Protected by transport or marketing costs above those justified by prospective profits, or producing 'inferior goods' for the very-low-income section of the rural population, such firms tend to disappear as market integration and income increase, unless they evolve in response to the new conditions. A key policy question in this case, therefore, is which firms can be expected to evolve positively or under which conditions the number of firms following this path can be maximized.

In contrast, urban micro-enterprises participate in large markets, do not enjoy a monopolistic position and operate in the urban economy in one of two ways, depending on the type of market:

\* Competitive markets: Many small firms operate in highly competitive markets (for intermediate or final consumption) in which firms of different sizes participate. Policy-induced restrictions on competition may, in such cases, constrain small-scale firms.

\* Marginal segments of oligopolistic markets: Some small firms operate in specific residual segments of highly oligopolistic markets. They are tolerated, even welcomed, by large firms because those market segments are of little interest to them or because the existence of small firms facilitates the application of their pricing strategies.

The ways in which firms articulate in the economy need to be taken into account in a policy-relevant classification since



their response to change in economic variables is different. For instance, 'levelling' the policy environment and increasing competition would favour the expansion of competitive firms but might also eliminate most of the firms operating in residual markets. The expected behaviour under recessive or expansionary phases in the economy would also differ. Urban industries would be hit harder, especially those providing inputs or intermediate products to large-scale producers. Furthermore, as suggested in the previous section, the actual response of each type of enterprise to particular policy measures is highly dependent upon location, development levels and orientation of national development processes. In synthesis, a policy-relevant classification must yield categories of firms characterized by specific growth dynamics and similar responses to changes in economic variables. This need has not been met satisfactorily as yet and more research is urgently required.

Similarly, different types of firm require different methods of assistance. The conventionally used three-group classification is certainly more relevant in this case. Survival activities normally have extreme difficulty in gaining access to normal delivery systems and thus require special programmes as well as concessionary terms. Micro-enterprises need to be assisted to gain access to services and resources while more modern small-scale businesses are quite often in a position to benefit from the simple creation of supply institutions.

The content of the required assistance is also different for the three groups. In general, survival activities need expensive support action, including broad integrated programmes that incorporate social infrastructure, low-level educational, training and technical assistance!as well as credit (Ashe, 1985). Experience seems to indicate that micro-enterprises require essentially simple and easily accessible credit schemes, marketing and commercialization services, simple managerial training and sometimes basic technical assistance. However, the importance of each of these components may vary substantially between industries, regions and countries. Micro-enterprises require, then, a more specific approach to assistance, hopefully

based on a local diagnosis (Ashe, 1985; Harper, 1988; Uribe-Echevarría, 1985b; Siebel, 1988; Farbman and Lessik, 1989).

Finally, assistance to small-scale modern units may be better approached through the development of markets for resources and services, given their greater capacity to deal with the problems by themselves and the individualized nature of their needs. Creating viable financial institutions might be far more productive than administering projects, financing access to technical assistance might be more rewarding than offering such services on an institutional basis, etc. (Meyer, 1988).

#### III.4 Promotion of small-scale production, and industrial development policies

The promotion of small-scale industries is currently linked to employment rather than industrial development policies. However, the magnitude and the orientation of the small scale sector make it an integral feature of the industrialization process rather than an independent sector that can be developed arbitrarily. Therefore, achieving specific employment objectives depends upon their compatibility with the process of industrial transformation in which these objectives are pursued.

Unfortunately it is not easy to formulate policies from the industrial development point of view or to analyze the consistency of those formulated from the employment-poverty angle. Most conceptions about the role of small-scale production are based on very broad generalizations which hide more than they reveal. It is common to argue, on the basis of experience in industrialized countries and cross-sectional rather than historical studies, that there is a general and well-defined pattern of change in the size distribution of manufacturing plants along the process. Three stages are often identified (Hoselitz, 1959; Staley and Morse, 1965; Anderson, 1982):

\* Phase 1 is characterized by a dominant household, cottage and handicraft industry sector. Industrial plants are very small, use very simple technologies and serve small markets.

\* Phase 2 sees the emergence of urban, modern small-scale production plants in a number of industries, displacing less-efficient technologies.

\* In Phase 3 large-scale plants develop to the point of dominating industrial production. Some of these large firms evolve from the previous groups.

Small-scale production as a whole constantly decreases in importance with this process, but it is never eliminated and continues to exist in highly industrialized nations such as the United States, Japan, Italy, etc. Anderson applied this framework to the developing countries to find a similar pattern, mostly through cross-sectional comparisons (Anderson, 1982). He noted that the use of highly stylized general relationships between the degree of industrialization and the role of the small-scale sector for policy formulation ignored country variations in the shares of different types of firms, and in the slopes of the changes they underwent over time. Yet these are extremely important in predicting the impact of a policy within a limited time span. These finer variations are associated with the compositional and structural effects of different policy environments. They signal the boundaries for feasible transformations without having to intervene in the policy environment itself. Therefore, an analytical framework relevant to the underlying industrialization process is necessary to specify a realistic contribution from the small-scale sector.

This means- for instance, that subcontracting, a strong source of small-scale enterprise development in countries such as Korea and Taiwan, will remain a limited phenomenon in industrial development processes driven by import-substitution policies. Or that the emergence of autonomous systems of small-scale production, such as those observed in developed countries (notably Italy, USA and Spain), cannot be replicated indiscriminately under the industrial conditions prevailing in developing countries.

Furthermore, the specification of such roles requires an explicit industrial-regional framework since industrialization follows different paths in different regions, depending on the

aggregate features of national processes and particular regional endowment and economic configurations. Subcontracting networks may be the best policy choice in a metropolitan setting but useless in the context of an agrarian region. Similar remarks may be made about inward- as opposed to outward-looking regional industrialization. The former may be adequate in dynamic regions with fair income distributions while the latter may be possible in well-endowed but sparsely-populated regions undergoing agricultural commercialization.

The stage theory outlined above is also at odds with some specific historical and empirical facts. Several studies, notably in Latin America, point to the very small historical role played by cottage and even small plants in the generation of the modern large scale sector (Berry, 1987), and to the evidence that the 'urbanization' of manufacturing has not been accompanied by a proportional shift from cottage and household industries to modern small-scale units. On the contrary, a large 'informal' sector has emerged while urban, modern small-scale plants have played a relatively modest role.

Therefore, a peculiar characteristic of the size distribution of plants in many developing countries is a bimodal distribution of output, and especially of employment, with separate peaks at the very small (one to five workers) and very large (over 100 workers) (Biggs and Oppenheim, 1986). Although similar in size to rural cottage industries, the urban very small firms should not be confused with them, nor should they be assumed to form a homogeneous group. One reason for this is that while rural cottage industries enjoy a local monopoly and produce for a small market, urban very-small-scale units are competitive and produce for large (local) markets. Therefore, in the case of the latter the size of the plants is not an adaptation to market size, nor is it clearly determined by allocative decisions since such firms co-exist with a wide range of different-sized firms producing similar products or close substitutes.

Furthermore, a distinction should be made among the urban very small firms between self-employed or household units using family labour and those using, at least partly, wage-workers. The

former play roles such as those assigned to the 'informal sector' and should therefore be considered to be determined by the supply of labour. This can hardly be said of the second type since recent studies show that its employment level fluctuates with aggregate demand in general and the formal sector total wage bill in particular (López, Sierra, and Henao, 1987; Lautier, 1988; Carbonetto, 1986). This second type is then determined by the demand for labour (Uribe-Echevarría, 1989a; Méndez, 1989).

If such distinctions are introduced, a more complex pattern of industrial evolution emerges. Firstly, cottage and household (rural) industries decline faster than recognized in the previous scheme, especially if industrialization is proceeding rapidly. Secondly, the emergence of the urban very small scale subsector accompanies this process. Initially this is mostly composed of self-employment and household industries prompted by excess urban labour. However, the demand-driven subsector develops rapidly under conditions of sustained economic growth (Ramos, 1984). Informal production is not necessarily a transitional form nor it is equivalent to cottage and household industries. Thirdly, the large scale sector may emerge independently of an earlier development of the small and medium scale sectors.

Lastly, each of these four sub-groups are linked in a different way to structural and cyclical changes: rural cottage/household industries, urban self-employment and household industries, urban micro-enterprises and modern small-scale industries. The strength and relative importance of each of these subsectors and their combined importance in the total industrial system are characteristic of each mode of industrialization. General models are therefore of limited value for policy formulation.

#### IV. Concluding Remarks

The experience of present programmes shows the importance of policy guidelines stressing the need to focus on viable and efficient small-scale industries producing competitive products. Acceptance of this principle does not preclude the need to

support the survival strategies of the urban poor. On some occasions, and for some time in many countries, a substantial role needs to be played by community development programmes, income-generating, and job-maintenance objectives. However, the difference between the two types of policies needs to be clearly kept in mind. In all cases small-scale industrial development policies must be integrated into industrialization policies, ensuring compatibility in order to avoid risks and reduce uncertainty.

The second, and perhaps the most important, conclusion is that the results of interventions in the area of small-scale industrial development can, and must be significantly improved. A key issue is the need to shift from intervention strategies focused on projects to a policy approach. The present lack of explicit national policy frameworks for the promotion of small-scale production can be identified as a serious drawback requiring urgent attention. They are necessary to integrate policy reforms, planning interventions and assistance programmes. The formulation of national policies for small-scale manufacturing is important in order to spell out the commitments of the government in relation to macro- and meso- interventions and provide operational guidelines for assistance programmes.

Breaking out of the until-now dominant 'firm-centred' supply-side approach appears equally relevant. In fact, most of the evidence seems to indicate that the success of promotional efforts is strongly linked to external economies and the characteristics of the policy environment. Policy reforms, especially those stimulating aggregate demand and particular market segments served efficiently by small-scale enterprises, are the most powerful instruments for expanding the role of these enterprises. However, in many cases this may entail a significant shift in development policies that many countries may find hard to accept or difficult to implement. In many cases, the rural industrialization approach underlying these policy prescriptions may be inadequate vis-à-vis the already existing configuration of economic structures. In such cases, demand expansion may therefore be associated with a successful industrial re-

structuring and further industrialization, and with gaining access to larger or new markets through changes in the supply side and in market penetration capacity. A technological policy to increase choice in order to overcome existing rigidities, and the development of effective marketing and commercialization capacity should play a central role in these cases.

The policy environment issue can therefore be more properly defined as one of compatibility between the explicit objectives of the policy towards small-scale industries and the implicit role determined for this sector by the policy environment. Within this framework, assistance programmes must be oriented to expand (create) the necessary conditions for compatibility and to develop strong and adequate (political) lobbying by small producers' in order to achieve the required policy reforms.

The support and promotion of small-scale manufacturing needs to be selective simultaneously along regional and sectoral lines. The selective approach must be extended to the different types of firms comprising the sector, and it should influence the methodologies used in their promotion. This will facilitate the incorporation of small-scale manufacturing in sectoral and regional policies, the adoption of 'supra-firm' interventions and the selection of activities with stronger economic potential.

For these reasons, effective policy models should spell out the relationship between industrial and regional development processes and allot specific roles to each relevant type of enterprise. Such synthesis requires the utilization of dynamic models of industrial transformation to avoid the misleading static criteria currently used.

At the project level, an explicit justification for assistance programmes and projects within the sectoral-regional development dynamics is suggested as the best way of avoiding costly mistakes concerning the development potential of specific activities. The identification of meso-level, demand- or supply-side, (planning) interventions may open up new possibilities to promote spatial clusters of interrelated small enterprises. The role played by economies of agglomeration and specialization in achieving efficiency in small-scale production suggest this may

be an effective strategy but it would require overcoming the firm-centred approaches currently in practice.

Significant results are very difficult to achieve without a sizable and effective assistance delivery system. There is still considerable scope for improving efficiency in the use of available resources. In general, there is a need to increase the degree of self-organization of the system and to improve its articulation with other social institutions and the state. Specific elements requiring attention are: (i) support for the present decentralized system, creation of coordination and information exchange mechanisms and development of a stronger capability for reflection and action; (ii) promotion of further linkages between promotion systems and social and economic sectors at the local and regional levels; and (iii) development of institutional capacity for dialogue among small-scale producers, promotional agencies, public sector policy-makers and international donor institutions.



NOTES

1. Important statements about the potential of small scale industries to achieve such a variety of social and economic objectives can be found in: McClelland, 1961; Staley and Morse, 1965; ILO, 1972, 1974, 1976; Mellor, 1976; Liedholm and Chuta, 1976; King and Byerlee, 1978; World Bank, 1977; Page, 1979; Chuta and Liedholm, 1979; Anderson 1982; Page and Steel, 1984; Harper, 1984; 1988; CIDA, 1986; Young, 1987; Breuer, 1987; Liedholm and Mead, 1987; Farbman and Lessik, 1989.
2. Excluding sub-Saharan Africa and South Asia.
3. 3.4% if China is included
4. One of the expressions of this challenge was admiration for the skills and ingenuity of small-scale operators and for the capacity of the very poor to make a living out of extremely meagre resources (Harper, 1977; van den Bogart, 1977; Meier, 1977).
5. The terms intermediate and appropriate technology denote differences in emphasis rather than nature, and are commonly used interchangeably.
6. On the grounds that they are quite significant and that the development of new technology is costly and normally takes considerable time (Sen, 1975; Bhalla, 1976).
7. Arguing that traditional technologies are insufficiently productive.
8. For instance. the World Bank concluded in its sector policy paper that highly labour-intensive manufacturing employment and large capital-intensive industries generate similar amounts of still more labour-intensive activities in the service sector. (1978).
9. However, the interest in small-scale producers, and above all the 'informal sector', persisted in the theoretical and research fields yielding the enormous literature on the 'informal sector'. Unfortunately, the conceptual problems of the "informal sector" notion led to often to sterile debates. Generalizations, mostly based on static case studies and virtually without reference to the conjunctural aspects of socio-economic contexts, battled each other without achieving much progress (Tokman, 1978; Papola, 1986; Cartaya, 1988; Uribe-Echevarría, 1989a). It is particularly regrettable that no satisfactory answer was given to the critical question raised by Hart in his seminal paper: Are informal economic activities capable of independent growth? (Hart, 1971; Moser, 1985; Tokman, 1987).

10. Born in the rural context, the concept of livelihood strategies regards the household as a unit of production and reproduction. In this unit, the family uses the labour power at its disposal and the available opportunities for monetary and non-monetary income to satisfy its consumption needs. In impoverished conditions the opportunity cost of household resources is very low and their utilization rational even if yielding returns that may be considered inefficient from a wider perspective.

11. Models for equitable growth are those in which redistribution need not be associated with stagnation or economic growth with inequitable distribution,

12. In fact, the potential for efficiency improvements via enhanced technical (managerial) normally appear to be greater than via allocative (price) efficiency.

13. In the case of Eastern Europe existing production organizations are considered inadequate since they leave smaller markets untapped or supply them with inefficient large-scale firms (since scale economies cannot be realized in small or highly diversified markets) and are less flexible in adapting to changes in demand structures (Rothwell and Zegfeld, 1982). Lastly, high market concentration is blamed for preventing the entry of small competitors and depriving industry of its seedbeds.

14. The debate over the future of mass production is obviously far from settled. Some authors have correctly argued that new mass production sectors are being created and that flexibility in mass production will also be made possible by technological improvements that are already taking place.

15. Large firms can also adopt such models, the rigidity of mass production being significantly reduced by the new flexibility created by re-programmable automation. Therefore, flexible specialization is not synonymous with small enterprises.

16. The industries assessed by Page were milling- packing and clothes manufacturing.

17. These included inputs such as the quality of management, access to market information, skills, organization, initiative, etc.

18. Exception made of cases such as Taiwan.

19. An 'economic efficiency' rationale in the sense of its consistency with sectoral, regional, and macro developments.

20. Depending on the specific countries, the main instruments were technical assistance, formation of entrepreneurs and training, and credit. In the case of India, however, the thrust

of the policies was to protect small-scale production systems rather than to modernize them, using instruments such as market reservation, taxation and other forms of subsidies.



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