

Indigenous Systems of Organizations and the Development of MSMEs in India

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Abstract

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Introduction

Corporatization of retail business has put the micro, small and medium enterprises (MSMEs) in a challenging situation. MSMEs used to treat retail business as their domain of activities, with a little presence of corporate entities in selected products and that, too, through their own sales counters or showrooms or their agents. In general the task of bringing the products of both the corporate and the MSMEs to the final consumers used to be performed by the MSMEs. Now, with the entry of corporate sector in the retail business for a wide range of products, the survival of the MSMEs, including manufacturers, service providers and traders, has been threatened across the board. These MSMEs are thus in dire need of raising their own competitive strength through technology upgrading, innovations, costs reduction, quality control and market promotion. These needs have also long been felt in view of their low productivity and income, and the state has been trying to improve the same. It has adopted a wide range of policies and set up an elaborate structure involving R&D institutions, the Khadi Commission, Handloom Board, SSI Board, NSIC, SIDBI, etc., each trying to promote these enterprises in some way or other. In spite of all these efforts, the MSMEs could improve their conditions only to a very limited extent. There seems to be major flaws in the system of assisting them by the state. It will be argued below that the major drawbacks lie in the difficulties of coordination among different departments, delivery mechanism and the overall approach of the state to development of MSMEs. Nevertheless, their survival stems from the various informal networks, organizations and institutions developed by these entrepreneurial communities over generations reproducing and perfecting the knowledge and

skills of their crafts. It is maintained here that the appropriate state policies and measures to develop MSMEs would be centered on strengthening these networks, organizations and institutions through which the state assistance would be routed.

Since the beginning of planned development, the Indian state has adopted faulty policies whereby the traditional industries have been treated mainly as a residual source of employment, not as a potentially vibrant sector for the future. On the contrary, it has laid greater emphasis on large industries and modern small scale industries (SSIs) that are largely appendages to the former. They tend to use high technology or, at least, mechanized equipment, are highly capital intensive and cause displacement of labour. A sizeable section of these enterprises receive finances at subsidized rates for installation of machines. The remaining SSIs operate as really independent units having no established linkages with the sources of finance and raw materials or with the marketing channels. A large number of items are reserved for the production by the SSI sector over decades. Quite often these SSIs, along with the large industries, compete with the traditional industries. The state, while assisting numerous traditional and small industries, has ignored the indigenous systems of production involving artisans, traders, financiers, etc. that helped them flourish and survive over centuries, and it has attempted to reach directly to the producers and to encourage them to operate independently or through cooperatives and state agencies. But the alternative system of organization promoted by the state could not be as effective as the traditional one. Thus, the former could not take care of the problems of the producers and the latter was discouraged from playing its traditional role. Being on the defensive, these industries have made several innovations in products, techniques and organizations so as to find a niche in the market. Rather than being a progressive sector making frequent innovations with expanding markets, these industries have become more or less inward-looking making innovations just for survival.

The need for promoting non-manufacturing and non-agricultural entrepreneurs such as traders, financiers, shopkeepers, various utility providers, etc., along with manufacturing entrepreneurs was first discussed in detail in the Abid Hussain Committee report which suggested measures for the development of all these enterprises. In mid-2006 the Indian

government passed, *The Micro, Small and Medium Enterprises Development Act, 2006* (MSME Development Act 2006), to facilitate the promotion, development and competitiveness of these enterprises. This was to be done by way of skill development in employees, managers and entrepreneurs, technological upgrades, marketing assistance, infrastructure improvement and cluster development of such enterprises with a view to strengthening backward and forward linkages. The *Act* also addressed policies and practices concerning credit to the micro, small and medium enterprises, urging progressive changes as specified the guidelines or instructions issued by the Reserve Bank. The goal was to the ensure timely and smooth flow of credit to such enterprises in order to enhance the competitiveness of such enterprises (Section 9.1 and 10 of the *Act*). The *Act* explained the details of setting up administrative machinery and promotional infrastructure, classifying various types of enterprises, etc. The *Act* also provided the first-ever legal framework for recognition of the concept of “enterprise,” comprising both manufacturing and services. In line with this *Act*, the state announced special package for the promotion of micro and small enterprises in February 2007. Yet both the *Act* and the policies fail to see the traditional and existing networks, organizations, institutions etc., that integrate artisans, traders, retailers, financiers, input suppliers and a host of other stakeholders into a single synchronized value chain; instead, each participant is treated as an independent entrepreneur and each receives state assistance in a manner formulated by the state. In the alternative, an appropriate policy would take cognizance of the indigenous organizations, the role played by trader, financiers, etc., in the organization to enable the artisan to engage in production, and a suitable policy should be designed to strengthen similar organizations. There seems to be enough scope for redesigning the state policy to match the ground reality and to make it deliverable and cost effective.

In the traditional system of organization in its simpler form, the master trader arranges the raw materials for the producer who manufactures the product and transfers it to the master trader who, in turn, sells the product in the preferred market and realizes the profit and shares it with the producer. In the whole process of organization, there are apparently many unsettled issues; notably, the price at which the master trader sells the raw materials to the producer, the price at which the producer sells the product to the master trader, the time when

the master trader pays the net balance to the producer, whether the master trader undervalues the output and overvalues the raw materials as compared to their respective market prices. Through recurrent transactions over the years, they build up mutual trust and evolve a system of amicably settling the issues so as to make it beneficial to both. Ideally, the producer and the master trader use their respective resources and skills in the most productive way – the producer has skill in manufacturing, but no expertise in marketing, whereas the master trader has access to capital and expertise in marketing and would specialize in buying raw materials and marketing products.

Coase (1937) argues that whether a firm would make a product or would buy it from the market depends on relative costs. If the production cost exceeds the cost of buying (including search cost, negotiation and enforcement costs, and other transaction costs) from the market, then the firm would buy the product from the market, and this defines the boundary of the activities of a firm. Similarly, within the organization, the domain of activities of a participant would be determined by the relative advantages over other participants. In these organizations, relative advantages are well defined and known to every participant.

Coase's logic of defining the boundary of a firm may be extended to determine the boundary between the activities of the producer and master trader. Product innovations are made in consultations between the producer and master trader, where the former looks into the technical feasibility of the new product and the latter looks into the marketability of the product. Under these circumstances, when the state provides assistance to artisans in terms of new design or technique, they would acquire the necessary skills and probably upgrade the craft, but their success in the adoption of the new technique would depend on the ability of the master trader to market the product. Assisting only the producers in isolation from the master traders may improve their technology, craft, financial position or manufacturing skills, but their actual benefit would be considerably reduced due their inability to in successfully market their products, a process that often requires exploring distant locations. Appropriate state intervention therefore requires major changes in its approaches and policies including looking into the functioning of the existing organizations and the conditions of the crafts in different industries and in different areas. This, however, requires a detailed study of

structure of organizations, crafts, skills, etc. This paper provides a broad outline of the types of organizations, their constraints based on empirical studies in selected areas and then suggests possible ways of helping out them.

While section 1 is introductory, section 2 discusses the prevailing organizational structures in these industries defining the rights and responsibilities of the different participants in the organization. Section 3 explores a plausible approach to provide financial assistance, keeping in view the structure of organizations and the nature of their financial constraints so as to reduce the risk. Section 4 analyses the prevailing system of innovations in these industries. As innovation is a complex process and is intricately related to skill development, upgrading the craft, the arrangement of finance and marketing of new products, the overall establishment of a new routine and, more importantly, redefining property rights or redistributing the surplus, state intervention in strengthening the innovation process will be discussed while taking cognizance of these complexities. Section 5 will trace suitable approaches toward policies to promote these industries effectively.

Organizational Structure – Some Empirical Evidence

In traditional and small industries, there exist varieties of organizations as indicated in NSS reports and several studies based on field investigation. The National Sample Survey Organisation (NSSO) is the premier government organization responsible for generating data on regular basis through sample surveys on various social and economic issues. NSSO reports on the Unorganized Manufacturing Sector in India 2000-2001 (Report No 480), the Informal Sector in India 1999-2000 (Report No 459), and the UNIDO report on Chanderi Handloom Cluster (2006), Biswas (2001, 2005), Ramesh (2001) provide evidence of a diversity of organizations in the country. The simplest one is the independent micro or small enterprise in which a self-employed owner alone or along with family members does everything from arranging raw materials and finance, manufacturing the product, and selling it in the market or directly to customers. These are prevalent in traditional industries for which markets are localized. For the traditional industries as well as modern small scale industries, the products are primarily of low value (Biswas 2001).

In a slightly higher form of organization, labourers from outside the family are employed, some kind of wage is paid and the scale of production is a bit larger. In still more complex organizations, many participants are involved and there is a more refined division of labour. Each person or group deals with a part of the process ranging from financing, the procurement of raw materials, design development, raw material processing, the different stages of production, finishing and packaging as well as wholesale and retail marketing. The participants need not be working as employees of a single firm; they can be separate entities having independent establishments but are tied together and pool their respective resources, skills and expertise for a common business objective. There may exist various terms and conditions for their participation adding to the diversity in the forms of organization. Synchronization of the activities of the various participants in these organizations in a routinized manner enables their smooth functioning.

The structure of property rights under these organizations is highly intricate and evolved over time through a process of repeated interchange establishing trust and reciprocity. The same process also defines responsibilities and the level of organizational autonomy. Rights and responsibilities of the respective participants are, however, not formally written or codified. The trader has the responsibility to keep the producers engaged year-round, including the lean season so as to sustain their livelihood. On the other hand, the producers would devote extra time for more production in the peak season so as to take advantage of the high market demand. The freedom of the participants is therefore not unrestricted. Sharing of the surplus between the trader and producers is customarily determined in the same way as their participation and contribution to the production process. Ordinary market principles may not be of much use in determining the distribution. However, the trader-producers' network organization captured here constitutes only a segment of the entire value chain that originates in raw material production and goes through successive stages of value addition involving the producers, traders at different locations, and ultimately ending in the final sale to the consumers mainly by retailers.

Although the participants can operate independently and transact their business through markets rather than being tied to each other through such an organization, the latter in several

situations becomes more advantageous from the point of view of transaction costs than in the former. Of course, there are organizations such as typical firms with hierarchical structures employing large number of workers each performing specified tasks. Coordination of the activities at horizontal and vertical levels is achieved through command and control mechanism. Distribution of different types of organizations would therefore depend on the nature of industry, local conditions, location of markets and some historical factors influencing their evolution (Biswas, 2001, pp. 127-28).

In the Kancheepuram silk weaving in Tamil Nadu, Ramesh (2001) reports the predominance of a particular organizational form called *Thaniyar* system or attached weaving, in which the trader acts as link between the weaving units on the one hand and the inputs and output markets on the other. The weaver is excessively dependent on the private trader for raw material supply and marketing of the produce. Depending on the assessment of market demand the trader provides the design of the *saris* (a kind of long cloth), yarn and *zari* (metallic thread) after preliminary processing to the weavers. For setting the design in the loom for each warp length, the skilled service of a *fashion* master is used, for which the weaver makes the payment. After completing the production, the weaver receives the remuneration on a piece rate basis which is determined prior to weaving. Within this attached weaving, however, there are two different varieties, namely putting out and parallel production. In the case of putting out, the weaving is done in the weaver's cottage using his own loom. In the case of parallel production, the weaving is performed in the work shed where the trader has set up a number of looms. The latter arrangement is more of a capitalist type and gives greater control over the quality and quantity of production. Ramesh (2001, p. 13) has further noted that most of the dealings were done through informal contracts. The system involved a high level of trust and kith-kin linkages, which to a large extent determined the provision of attachment right, payment and redemption of advances and even the piece wage rate. UNIDO's study (2006) on the weaving cluster of Chanderi in Madhya Pradesh revealed two distinct types of organizations that existed in 2002. In the first category, the weaver used his own capital and loom and sold the products to the master weaver/trader or at times (although rarely) directly. Out of 12000 weavers, 20-25 % belonged to this category. They were in a sense semi-independent. The majority of the weavers (60 to

70 per cent) were working as contract-based weavers for the master weavers and traders. This is similar to the putting out system described above. Master weavers combined weaving along with trading. Most of the weavers used to work for the twelve rich traders and forty-five moderately rich master weavers, who provided the raw material and also took the responsibility of marketing the products through traditional private channels.

Based on extensive field work in West Bengal, Biswas (2001) noted all the above mentioned organizations along with some other varieties like community organization, putting out system with intermediaries between the artisan and trader. In the community organization, as observed in conch shell products manufacturing, a number of families (or some of their members) often linked through kinship, neighbourhood and caste affinity, form an informal group in order to organize production. Within such a group, there exists a division of labour as the different parts of the production process require distinct types of skills. Members of the group share limited work opportunities, raw materials, and other resources. In the case of the complex putting out system, when the volume of transactions is large (in the case of *bidi*, a kind of hand made cigarette) or products are of high value and trader is located away from the artisan cluster (in silk and cotton weaving), the trader approaches the artisans through a middleman. In some instances, there exist several tiers of intermediaries between a trader and his artisans. The provision of fixed and working capital to the artisans is made through the following kinds of arrangements: (1) the trader makes available both the fixed and working capital; (2) the trader provides working capital, while the artisan provides fixed capital; (3) the trader provides fixed capital, while the artisan raises the working capital; (4) the artisan is able to arrange both the fixed and working capital; and (5) the working capital is provided by intermediaries. The intermediary is trusted by both the trader and artisan and thus insures against shirking of commitments by either party.

The brief review of recent literature highlights the rich variety of indigenous organizations currently prevailing primarily in the traditional industries across different parts of India. Each variety evolved to suit the conditions of the industry, including local resources, skills and markets; however, the most complex, diverse, flexible and widely prevalent organization is the subcontracting or putting out system.

Recent NSS report (No 459) on the Indian informal sector (in 1999-2000) indicates the widespread existence of the subcontracting system. The informal sector enterprises include all the nonagricultural enterprises in the informal sector carrying out activities of manufacturing, construction, trading, hotels and restaurants, transport, storage and communications, financial intermediaries, real estate, renting and business services, education, health and social work and other community, social and personal services. Around 11% of these enterprises are found to operate on a contract basis. Among the overall informal sector enterprises, however, the percentage share is relatively higher in the rural areas than the urban areas. A separate survey of the NSS on the unorganized manufacturing sector for the year 2000-2001 reveals that the extent of the enterprises operating on a contract basis is much higher than that of the overall informal sector enterprises (NSSO report no.478). About 31% of the unorganized manufacturing enterprises in the country as a whole are working on contract basis. In the urban areas the relevant percentage is even larger, approximately 38% (Table 1a).

Table 1a Percentage distribution of enterprises working on contract separately for unorganized manufacturing and the overall informal sector

Region	Unorganized manufacturing			Overall informal sector		
	OAME	Establishment	All	OAME	Establishment	All
Rural				12.1	12.6	12.1
India	28.0	21.7	27.6			
Urban				9.1	10.5	9.4
India	38.8	35.9	37.9			
All-India	30.7	30.5	30.7	10.9	11.0	10.9

Source: Unorganised Manufacturing Sector in India 2000-2001, (Report No. 478). Informal Sector in India 1999-2000 (Report No 459).

Detailed classifications of the different types of contracts are provided for the entrepreneurs operating from the household premises. Out of the estimated 444.1 lakh enterprises in the informal sector, 159.4 lakh (around 36%) are home-based enterprises (1 lakh equals 100000 and 1 crore equals 100 lakhs). Table 1b shows that 99.5% of the contracting home-based

entrepreneurs operate solely or mainly with the master enterprise/contractor. Among the entrepreneurs operating with the master enterprise/contractor, 95.6% receive raw materials, 22% obtain equipment and 93.3% receive design specifications from the latter. There is also overlapping of these arrangements to a large extent. In fact 89.3% receive both raw materials and design specification, 21.5% received both equipment and raw materials, and 19.8% receive equipment, raw materials and design. All these attached home-based entrepreneurs not only depend on the master entrepreneurs for the inputs but also for the sale of products and the latter specify the product design to the former on the basis of market assessment.

Table 1b Percentage distribution of different types contractual arrangements for the home based enterprises working on contract

Type of contract	Percentage of Enterprise
1. Work mainly or solely for customer	0.5
2. Operate solely or mainly with master enterprise/ contractor	99.5
3. Percentage of (2) received equipment from master enterprise/contractor	22.3
4. Percentage of (2) self-procured equipment	77.7
5. Percentage of (2) received raw materials from master enterprise/ contractor	95.6
6. Percentage of (2) self-procured raw materials	4.4
7. Percentage of (2) for which design was specified by master enterprise/contractor	93.3
8. Percentage of (2) for which design was not specified by master enterprise/contractor	6.7
9. Percentage of (2) self procured equipment but received raw materials from master enterprise/contractor	74.1
10. Percentage of (2) self procured equipment and raw materials	3.6
11. Percentage of (2) received both equipment and raw materials from master enterprise/contractor	21.5
12. Percentage of (2) received equipment, raw materials and design from master enterprise/contractor	19.8
13. Percentage of (2) received raw materials and design from master enterprise/contractor	89.7

Similar disaggregation, however, is not available for the informal sector as a whole, for different economic activities or for the unorganized manufacturing. One may still infer the

wide existence of the subcontracting systems from the other data provided in these reports (as presented in Tables 2, 3 & 4 below). Table 2 shows that 89% of the entrepreneurs in the informal sector have no contract with anyone and are thus independent, and only 7.9% operate solely with master enterprise/contractor. It is also reported in the same table that 90.8% of the contracted entrepreneurs receive raw materials, and 27.2% receive equipment from a master enterprise/contractor. In fact, 86.6% of these entrepreneurs receive design specification from the contractor. In the case of unorganized manufacturing 69.3% of the entrepreneurs operate independently and 24.4% operate exclusively with a master enterprise/contractor, and 94.6% of the contracted enterprises receive raw materials from the contractor and 93% receive design specification. Again Table 3 shows that 6.8% of the enterprises purchase inputs from the master enterprise/contractor, 61.5% from private enterprise and 18.3% from the private individual and household, while 6.6% sell their final product to a master enterprise/contractor, 17.1% to private enterprise and 80.9% to private individuals and households. The informal sector enterprises, however, prefer to stick to only one input supplier as well as one buyer of their final product. Among the manufacturing enterprises, 7.9% purchase inputs from the contractor, 43.4% from the private enterprise and 18.8% to private individuals, while 16.9% sell their products to contractor, 31.1% to private enterprise and 62.6% to private individual.

Table 2

Percentage distribution of enterprises by type of contract, supply of equipment, supply of raw materials and design specification separately for unorganized manufacturing and overall informal sector

Type of contract	Percentage of Enterprise		Percentage of entrepreneurs received design specified by contractor		
	Unorganized manufacturing	Overall sector		Unorganized manufacturing	Overall informal sector
No contract	69.3	89.1	Yes	93.0	86.6
Solely with master enterprise/ contractor	24.4	7.9	No	7.0	13.4
Mainly on contract	2.7	1.3	All *	100	100
Mainly for customer	3.3#	0.8			
Solely for customer		1.0			
All *	100	100			
	Supply of equipment		Supply of raw materials		
Percentage of the contracted enterprise	Unorganized manufacturing	Overall sector		Unorganized manufacturing	Overall informal sector
Self procured	90.0	72.7		5.4	8.4
Supplied by master enterprise/ contractor	7.3	21.0		88.2	82.4
Both	2.6	6.2		6.4	9.3
All *	100	100		100	100

Note: * including cases not responded, and # includes both solely and mainly.

Source: Unorganised Manufacturing Sector in India 2000-2001(Report No. 478), Informal Sector in India 1999-2000 (Report No 459).

Table 3: Percentage distribution of enterprises by agency of purchase of basic inputs/ sale of final product/services

	Purchase of inputs		Sale of final product/services	
	Unorganized manufacturing	Overall informal Sector	Unorganized manufacturing	Overall informal sector
Government	0.7	1.0	0.3	0.3
Cooperative marketing society	0.4	0.7	1.0	0.5
Private enterprise	43.4	61.5	31.1	17.1
Contractor / middleman	7.9	6.8	16.9	6.6
Private individual / household	18.8	18.3	62.6	80.9
Not applicable		2.9		-
Others	4.7	15.4	2.1	2.9

Note: The column total in the case of unorganized manufacturing is less than hundred and implies self procured/produced inputs, and more than 100 in other cases implies overlapping of agencies.

Source: Unorganised Manufacturing Sector in India 2000-2001 (Report No. 478), Informal Sector in India 1999-2000 (Report No 459)

Table 4 shows that 77.9% of the non-agricultural enterprises purchase their inputs from only one agency and 90.5% sell their products to only agency, while 59.3% of the manufacturing enterprises purchase from only one agency and 85.8% sell the product to only one agency. All this indicates the predominance of idiosyncratic or tied transactions between the input suppliers and the entrepreneurs and between the entrepreneurs and the buyers of the product. This kind of dependency may involve credit transactions and possibly indicates a subcontracting system. Along with material and money transactions, the volume of information transacted regarding quality, techniques, design, markets, etc. (although not all are mentioned in the report) is substantial and this is vital for the smooth functioning of the producers.

A correlation analysis has been done to see whether the subcontracting or attached production has any relation to the incidence of unorganized manufacturing. For this exercise, the relevant variables included are the number of unorganized manufacturing enterprises per thousand population, and the percentage of these enterprises operating on contract basis for the major states (based on NSSO, Report No. 478). The correlation coefficient is significantly positive. The coefficient is 0.525, t-value being 2.62 with 18 degrees of freedom. This implies that a positive association with more than a 95% level of confidence. States such as West Bengal, Tamil Nadu, Karnataka, Jammu& Kashmir and Andhra Pradesh witness a high incidence of contracting works ranging from 20% to 57% of the total enterprises, and these states also have high concentrations of the enterprises, varying between 21 and 35 manufacturing enterprises per 1000 population.

Table 4: Percentage of enterprises transact with one or more agency of purchase of basic input/ sale of final product/ services

Number of agency	Agency of purchase		Agency of sale	
	Unorganized manufacturing	Overall informal sector	Unorganized manufacturing	Overall informal sector
No agency	32.5	15.4	-	-
One	59.3	77.9	85.8	90.5
Two or more	8.2	6.7	14.1	9.5

Source: Unorganised Manufacturing Sector in India 2000-2001 (Report No. 478), Informal Sector in India 1999-2000 (Report No 459)

The leading role in the putting out system is generally played by the master entrepreneur who usually possesses working capital and knowledge of and access to markets, and thus has greater power and control over the organization. But, the producer has the skill without which the trader cannot accumulate profit or take advantage of the market or even do business. His responsibility would be to sustain the artisan family through provisioning of assured work opportunities, so that the artisan can concentrate on improving his skill, product quality and design, and make innovations. Thus, none of the parties enjoys unfettered freedom; rather, their freedom is restricted to the extent that reciprocal cooperation and

mutual trust build up through recurrent transactions over years. Opportunistic behaviour on either side would affect the vitality of this kind of organization. Thus, the governance structure in this kind of network organization is more democratic, involving voluntary cooperation and joint decision making as regards quantity, quality, design and timing of production, while in the so-called firm the governance structure is hierarchical and based on command and control mechanism.

The very existence of these organizational forms over several centuries of helping development of many traditional industries despite stiff competition from modern factory-based organizations indicates their resilience and adaptability. Their flexible form can help them adjust to external shocks or changes in the external environment through appropriately modifying their internal structures. Similarly, adjustments are also made to take advantage of situations created by the changes in the external environment such as a rise in market demand, the emergence of new market, demands for new products or designs. These adjustments are nothing but mutations or innovations which will be discussed in section 4.

In traditional industries the problems that entrepreneurs and their organizations currently face are of several different types. The first is competition from SSIs and large industries. SSIs compete through low prices and often inferior products that would, on the one hand, be second-rate compared to the traditional products but, on the other hand, would take away the low-end customers (Unido, 2006). As well, large industries, backed by cheap sources of finance and easy access to different media for promoting their products, which squeeze traditional industries out of the market. The second is the internal competition among entrepreneurs reducing the prices of their own products. The latter kind of competition among more or less similar producers is nevertheless healthy as it improves product quality, rewards product innovations and raises efficiency through cost cutting. Table 5 shows that 17.1% of the informal sector enterprises and 21.3% of manufacturing enterprises face competition from large units. The third is the financial problem. Almost every study on these industries has mentioned this difficulty. The NSS report observed that 41.7% of the informal sector enterprises and 36.1% of the manufacturing enterprises are facing troubles in their operations due to shortage of capital.

Table 5: Percentage distribution of enterprises facing problems

Type of problem	Percentage of enterprise	
	Unorganized manufacturing	Overall informal sector
No specific problem	26.7	29.5
Shortage of capital	36.1	41.7
Lack of lighting facility	7.9	2.4
Problem of power cut	11.4	2.3
Lack of infrastructure facilities	1.8	16.8
Local problem	4.5	18.8
Competition from larger units	21.3	17.1
Non availability of labour	0.4	0.7
Labour problem	0.6	0.8
Raw material/ fuel not available	12.0	3.3
Non-recovery of service charge	4.1	9.1
Others	4.6	5

Note: The sum of the percentage figures in the second column exceeds 100 because of overlapping problems; that is, some enterprises face two or more problems.

Source: Unorganised Manufacturing Sector in India 2000-2001 (Report No. 478), Informal Sector in India 1999-2000 (Report No 459).

Financial Constraints

It is common knowledge that small entrepreneurs experience a shortage of capital. Nearly all the major studies on them have at least a section on the problem of capital constraints. It is not unlikely that the access of the small entrepreneurs to the organized sources of finance, like commercial banks and financial institutions, is very limited due to lack of collateral. On the other hand, their ability to self-finance their businesses is equally restricted. The easy option available to them is to borrow from local moneylenders, input suppliers, contractors, traders, friends and relatives. For cash loans, which are generally taken from moneylenders often without collateral, interests rates are very high depending on the degree of risk in the business and the normal or prevailing return on capital (Biswas, 2003, ch. 5; Biswas and

Deb, 2004). Interest, however, is not charged when loans are basically advances in terms of inputs from input suppliers who may also be marketers with whom and the entrepreneur regularly does business. Although it is doubtful whether NSSO takes cognizance of these kinds of loans or advances, it is an important source of capital, and the advanced amount is adjusted upon the sale of the product. This can also be interpreted as a buy-back arrangement. Although interest is not explicitly charged, one it often happens that the traders overvalue the raw materials and undervalue the finished product, and thus it involves implicit interest. Generally speaking, however, traders are more interested in earning ongoing profits; so, in order to have a competitive edge in the market, it is more important to maintain good business relationships that to make a gain on short-term interest payments. Traders are therefore unlikely to squeeze the producer very hard as that would affect the product quality or their long term relation.

Keeping in view the paucity of capital of the small producers, the state has long attempted to infuse capital into the business sector through various channels like state agencies, cooperative banks and societies, public sector and commercial banks, and other institutional agencies. The estimates provided by the NSS indicate that all the institutional sources together could account for 58% of the total outstanding loans of the nonagricultural informal sector enterprises and 66% of the manufacturing enterprises in the year 1999-2000, as shown in Table 6. The public and commercial banking sector alone accounts for 34.6% of the total loans outstanding in the nonagricultural enterprises and 39.9% of the manufacturing sector, while the cooperative banks and societies share 13.7% of the nonagricultural outstanding loans and 12.8% of the outstanding loans in the manufacturing sector. Moneylenders and friends and relatives account for 13.1% and 16.7% respectively of the total outstanding loan of the nonagricultural enterprises. These figures are, however, lower for the manufacturing enterprises. On the average, outstanding loan per enterprise was estimated to be Rs 6719 for the entire informal sector and Rs 4096 for the manufacturing sector.

Although commercial banks' penetration is relatively higher as compared to other sources of finance, in absolute term it is very low; that is, Rs 2324 outstanding per enterprise in informal sector and Rs 1635 for the manufacturing sector. Moreover, these loans are generally

directed ones as per the stipulation of the government and the RBI and the rate of interest is lower than the market rate. Banks do not even have much choice in the case of priority sector lending. Because of the poor quality of collateral, these banks often cannot recover the loans which ultimately turn into NPA (non-performing assets). Although NPA figures are not investigated by the NSSO, the estimate of the outstanding interest as a percentage of the total loans outstanding is an indicator of the same. In the case of commercial banks, the outstanding interest amount is 17.6% of the total loans outstanding for nonagricultural enterprises and 19.8% for manufacturing enterprises in spite of the interest rates being much lower (See Biswas and Deb, 2004). Similarly, in case of the cooperative banks and societies, the ratio of interest outstanding to loan outstanding is 16.4% for the nonagricultural enterprises and 20.7% for manufacturing enterprises which is much higher than the annual interest rate prevailing in the cooperative sector. RBI estimated that NPAs of the urban cooperative banks varied between 16.1% and 23% between 2001 and 2006. In the case of the long-term structure of the Primary Cooperative Agricultural and Rural Development Banks the NPAs varied between 24.3% and 35.8% during the same period (RBI, 2006). In general, considering the entire institutional lending situation, the interest outstanding on total loans is at higher percentage for the manufacturing enterprises than the overall nonagricultural enterprises. So, interest accumulation to the tune of 17.6% to 19.8% of the total outstanding amount (much more than one year's interest bill for the commercial bank's lending to these enterprises) implies non-repayment of installments. In the case of moneylenders, the relevant ratio varies between 18.2% and 28.2%, which is much lower than the interest rate prevailing in the informal credit market (the interest rate is estimated to be 36% and above – see Biswas, 2003, ch. 5. That means moneylenders are recovering their dues on schedule.

It may also be guessed that the costs of delivering or administering the loans are much higher for the institutional sources than for the moneylenders or friends and relatives. Secondly when moneylenders grant loans they ensure that the money is properly utilized so that they get back the principal along with interest. Further, the moral hazard on the part of the borrower would not arise because the lenders not only have detailed knowledge about the borrowers and can also monitor them. In brief, informal sources of finance involve much less delivery cost and ensure the efficient use of capital vis-à-vis formal sources of finance.

Table 6: Aggregate value of outstanding loans and interests payable in the informal sector including its major component, manufacturing (in Rs '000)

Source agency	Loan outstanding				Interest outstanding				Interest outstanding to total loan outstanding (%)	
	Outstanding amount		Source wise share in total (%)		Outstanding interest		Source wise share in total (%)		Entire sector	Manufacturing
	Entire sector	Manufacturing	Entire sector	Manufacturing	Entire sector	Manufacturing	Entire sector	Manufacturing		
Central & state term lending institutions	2633123	836125	0.9	1.4	510984	193621	1.0	1.9	19.4	23.2
Government	12784956	4263718	4.3	7.3	2670165	927019	5.0	9.1	20.9	21.7
Public sector & commercial banks	103197103	23336578	34.6	39.9	18169360	4626123	34.3	45.3	17.6	19.8
Cooperative banks & societies	40753283	7496266	13.7	12.8	6692097	1549241	12.6	15.2	16.4	20.7
Other institutional agencies	13717885	3092136	4.6	5.3	2544816	595594	4.8	5.8	18.6	19.3
Money lenders	39199880	4806413	13.1	8.2	7147195	1355891	13.5	13.3	18.2	28.2
Business partners	3467461	349096	1.2	0.6	1073210	49481	2.0	0.5	31.0	14.2
Suppliers/contractors	18645624	8257373	6.2	14.1	663623	168363	1.3	1.7	3.6	2.0
Friends and Relatives	49851725	5018357	16.7	8.6	8368957	526462	15.8	5.2	16.8	10.5
Others	14178185	994043	4.8	1.7	5150623	210542	9.7	2.1	36.3	21.2
Total	298429226	58450104	100	100	52991028	10202340	100	100	17.8	17.5

Note: Entire sector refers to the entire nonagricultural informal sector, and manufacturing refers to the informal manufacturing sector, not the unorganized manufacturing sector used in other tables. Break up data on different institutional borrowings are not available for unorganized manufacturing.

Source: Informal Sector in India 1999-2000 (Report No 459).

Risk of Lending by Commercial Banks

The risk may be understood in terms of the economic health of the relevant enterprises. The NSS estimates, as shown in Table 7, indicate that around 63% of the informal sector enterprises as well as manufacturing enterprises have been stagnating over the past three years. Another 10% of nonagricultural enterprises and 12% of the manufacturing enterprises are in fact declining. Only 20% of the former and 16% of the latter are growing. The rate of new entry of entrepreneurs is rather slow, only 7% of these nonagricultural enterprises and

9% of the manufacturing enterprises have entered in the past three years. Although one to one mapping of the loan recipients and stagnating or growing enterprises are not possible from the aggregate data, the very high incidence of stagnation and decline is indicative of the high level of risk involved in lending to these enterprises, even ignoring the intentional defaults. From a probabilistic point of view 10-12% of the loans borrowed by declining enterprises are almost certain to default and a substantial section of the stagnating enterprises comprising 63% of the total are likely to default. The aggregate picture reflects the high risk involved in lending to these enterprises by the commercial banks.

Table 7: Distribution of enterprises by growth status (over last 3 years)

Status of enterprises	Percentage of enterprises	
	Unorganized manufacturing	Overall informal sector
Expanding	15.6	20.2
Stagnant	63.4	62.7
Contracting	12.3	9.7
Operating less than 3 years	8.7	7.3
All*	100	100

Note * including cases not responded.

Source: Unorganised Manufacturing Sector in India 2000-2001 (Report No. 478), Informal Sector in India 1999-2000 (Report No 459).

Although more than 72% of the nonagricultural enterprises are either stagnant or declining, but as much as 30% are reported to be free from any problem (Table 5). Similarly 76% of the unorganized manufacturers are either facing stagnation or declining, but 28% are reported to be free from any problem. The apparent contradiction that emerges is possibly due to their inability to diagnose the real problems, such as whether this is due to competition from large units, to market shrinkage or to failure to synchronize the production cycle with market fluctuation. There are even deeper problems including technological obsolescence, archaic designs, etc., that are not considered by the NSSO when investigating these problems. In any case, financial assistance solves one major problem, and now the entrepreneurs can buy inputs in larger quantities at reasonable rates, produce output at relatively larger quantities and, to an extent, avoid selling their products at low prices. But, many of the products are to be marketed at distant locations, or inputs are to be procured from far off markets (e.g., silk

and fine cotton cloth in some clusters for which the value chain spans over a wider geographical location), or products, designs, techniques, crafts or skills need to be upgraded. Just granting financial assistance without taking care of the other problems of marketing, skills and technology would ultimately raise the financial liability of the entrepreneurs in the long run and add NPAs with which commercial banks are already over burdened.

Nevertheless, the impending need for financial assistance cannot be disregarded. The only way out is that the risks of lending by the commercial banks need to be reduced considerably. Alternative approaches like microfinance or lending through SHGs that would provide mutual insurance have been tried, but the SHGs are not growing. Moreover, SHGs are engaged more in consumption loans than production loans. Further, the actual interest rates paid by the borrowers often exceed those charged by the moneylenders. As already mentioned, the delivery cost or the cost of loan administration, screening and monitoring is much lower for these moneylenders than for the banks, cooperatives and other institutional sources of finance, and the moneylenders assure deployment of loans in the most productive manner and eliminate moral hazards leading to negligible NPA. Channeling the financial assistance of the state and of the formal financial institutions through these moneylenders seems to be much more productive, cost effective and much less risky compared to direct financing or financing through cooperatives and SHGs. The *MSME Development Act 2006* has made statutory requirement for the creation of various funds to help this sector and the RBIs have instructed the commercial banks to raise their lending to this sector by a fifth every year. A large part of this assistance may be routed through the moneylenders; however, effective and almost risk-free financial assistance has to be a part of a much broader programme that would combine financial assistance with skill development, entrepreneurship development, technology upgrades, craft designs and market promotion, among others, depending on the specific requirements in different industries and locations. Therefore, suitable innovations in the delivery mechanism of the state are needed.

Innovations and Development

The development of an industry—whether traditional or modern—is intrinsically related to innovations. The relevant innovations include changes in products, designs and processes and

new sources of raw materials or new inputs. However the system of innovation in the traditional industries is different form that in the modern industries. Generally, modern mass production industries have specialized departments continually engaged in R&D. Once an innovation is made, it is first patented to establish the property right over the innovation and then it is used by the firm for improving its own production process in the case process innovations, and in case of product innovation it goes to the market to convince the potential purchasers of the utility of the new product. In the innovation process the potential users of the product and the workers in the other departments of the firm have little involvement.

Contrarily, in traditional industries, master craftsmen who manufacture the product also makes innovation. Repetition of routine jobs over the years enable them to attain competence and solve problems independently, and ultimately to conceptualize the entire process so as to visualize modifications in tools, equipment, the production process or change in input composition to improve quality of the product, speed up the work or reduce costs and develop new products (Biswas and Raj 1996). Quite often the master craftsman receives the information/demand for possible changes or modification of products and designs and introduction of new products from the consumers/users directly or via traders. This considerably reduces advertisements cost needed for marketing new products since a section of the customers have already expressed their preference for the new products. Some examples of the various kinds of innovations made by master craftsmen are given in Biswas (2005). Artisans, for instance, used to produce bangles using conch shells as raw material in the Bishnupur cluster in West Bengal. At one point, the availability of conch shells was significantly reduced. The artisans then started using scrap pieces of conch to produce exquisite ornaments. The new activity absorbed a third of the workforce engaged in the industry in this cluster. A few highly skilled artisans went further to use coconut shells for the production of bangles and other artwork. They also used mother of pearl to produce high-valued decorative items and ornaments.

Successful initiatives by traders to introduce new equipment leading to advancement in the production process, time saving and improvement in the product quality may be found in the weaving cluster of Chanderi in Madhya Pradesh (UNIDO, 2006). In Chanderi, a traders'

association known as the Silk Club sent a delegation involving some experienced traders and skilled weavers to Varanasi to have a close look at the '4 paddle looms' and '*nal-ferma*' technique. The 4-paddle loom would be useful for enhancing the repeat size of motifs from 4 inch to 8 inch, while '*nal-ferma*' technique would be useful for creating reversible designs. Both these techniques were useful for quickly reproducing ethnic Chanderi designs in a cost-effective manner. With the help of the Club, such looms have been introduced into the cluster, and the skilled weavers quickly adapted to the '*nal-ferma*' technique. Thus, the combined efforts of the traders and artisans to improve the production techniques and the quality of products made it possible to realize the benefit of innovations.

In Fulia, one of the dynamic weaving clusters in West Bengal, traders anticipated the potential demand and asked the weavers to modify designs, blend cotton and silk yarns with synthetics and provided them the necessary raw materials (Biswas, 2005). The weavers, already trained in handling jacquard-type looms, did this quite efficiently. Initially weavers were introduced to Jacquard loom through cooperatives, and the necessary training was organized by the cooperatives. Subsequently, trader-artisan networks took the opportunity by adopting the technology and brought dynamism into the cluster through frequent innovations in products, designs, etc. In fact, they successfully combined designs from other regions with their own to give a better look and improve the quality of their products. Frequent modification of designs was commonly observed in the cluster. Experienced traders sold these products in preferred markets in distant locations. It was also found that the traders financed the installation of jacquard-type looms in the artisans' cottages.

This traditional knowledge and the innovations made by the producers/traders are usually not patentable. Such knowledge and innovations are often the common property of the community and therefore anybody can use them. With the increase in accessibility, producers in other regions can also easily imitate the product/process. The only right that the artisans possess is the registration of their product/brand as Geographical Indication. Although it gives credibility to the product, it does not protect them from imitation. The situation with the traditional industries is that when an innovation is made by a producer, it is not only imitated by other producers in the local community, but also by the producers in other

regions. In order to maintain an edge in the market the producer needs to modify designs or products frequently. Innovation, although ultimately made by the producers, may be viewed as the joint activity of the producers and traders, since the latter often brings new ideas in terms of feedback from their market interactions with the users, arranges raw materials, finances installation of new equipment and markets the new products. Again, the master craftsmen have the responsibility to propagate the knowledge and innovations among community members through apprentice system. The system of innovation, diffusion and competition seems to be beneficial for all the community members, but such dynamism is not commonly observed in most other clusters.

The state has made several attempts to improve the technology used in the traditional industries. The state's R& D institutes like CSIR, with 37 laboratories and 60 extension centers spread all over the country, and the state and central-level departments and promotional bodies like Khadi and Village Industries Commission, Handloom Board, Handicraft Board, Silk Board, Coir Board, etc., have successfully introduced a range of suitable technologies for the upgrading of the traditional industries. But, so far as diffusion of these technologies is concerned, it has achieved a very limited success. The little benefit may be understood from the NSS estimates on unorganized manufacturing which indicate that, out of every thousand enterprises, as many as 947 are reported to have received no assistance in any form from the state, only 36 enterprises receive loans, 6 subsidies, 8 machinery and equipment, 3 training, 4 marketing and another 4 procurement of raw materials, and 3 receive some other assistance from the state. In other words, only 1.1% of the unorganized manufacturers receive technical inputs from the state in the form of machinery, equipment and training that would improve their level of skill, technology and productivity. This indicates the very limited ability of the state to reach the producers with its package of various assistances.

The kind of formal vocational training provided by both the government institutes and private institutes is not properly oriented towards job market requirements and the trainees are not adequately trained to set up their own enterprise. NSSO (2005) noted that the proportion of persons (15-29 years) who received formal vocational training was the highest

among the unemployed. The proportion was around 3% for the employed, 11% for the unemployed and 2% for persons not in the labour force. It was further observed that among persons of age 15-29 years, about only 2% reported having received formal vocational training whereas 8% reported having received informal vocational training.

NSSO defined the vocational training that took place in education and training institutions which followed a structured training programme and led to certificates, diplomas or degrees recognized by State/Central Government, public Sector and other reputable concerns were considered to be formal vocational training. By a structured training programme, it was meant that (i) the training programme had a definite title with prescribed syllabus and curriculum and a specified duration of the training, and (ii) the training had some entry-level eligibility in terms of education and age. In the case of non-formal vocational training, the expertise in a vocation or trade is sometimes acquired by the succeeding generations from the other members of the households, generally the elders, through gradual exposures to such work. The expertise gained through significant 'hands-on' experience enables individuals to become self-employment or makes them employable. Acquisition of such knowledge might also take place from persons other than household members. This indicates the predominance of the traditional system of skill formation as it also provides more practical training and exposure to the business (see Banerjee, 2006).

In brief, the traditional industries have long since been in a state of ill health. They are plagued with obsolete product and technology, often constrained by the shortage capital, face stiff competition from the large industries and SSIs and, recently, the retail chains have added to their misery by diverting their customers. Although the state has created an elaborate structure to assist them in terms of financing, technology upgrading, skill development, marketing and provision of inputs, they hardly reach the target beneficiaries. Whatever technical benefits they receive are often provided without any complementary inputs, making the assistance ineffective. This insufficient and ineffective state assistance follows from the faulty policy of the state and the public system, which was designed to serve primarily the large industries and technically advanced modern small scale industries without any visible effort to modernize the traditional industries. At the same time, it discouraged existing

informal supporting organizations. Nevertheless, these industries have survived and have been making various kinds of innovations to maintain their existence. They derive their strength from the traditional system of organizations that helps finance, technology and design improvements, skill development and product marketing. These innovations are, however, regressive in nature. They barely maintain a niche in the market as required for mere survival, rather than to become a dynamic sector with expanding markets. NSS reports (Nos. 459, 478 and 480) also indicate that a large section of these enterprises do not function throughout the year, and many entrepreneurs combine two or more activities because of limited work opportunities. There is however ample scope to make these industries a vibrant and dynamic sector of the economy through appropriate state policies.

Suitable Policies

State policies on SME development need to acknowledge existing organizational structures and assistances in terms of training, technology and design infusions, financing, provisioning of inputs, marketing, etc, have to be routed through these organizations. Further, assistance should be given in packages, not in a disjointed fashion. For instance, technology or design infusion should be combined with technical training. If it leads to major changes in product, assistance in marketing is probably needed; if the technology is costly, financial assistance is required. The package therefore depends on the conditions of industries and the producers. Technical training programmes run by the various state and private agencies are not adequate for self-employment, as it requires entrepreneurial skill which can best be acquired through business exposure. The field training components like marketing, accounting and transactions with banks are also to be combined with the technical/vocational training. Even for the technical part of the training, there must be practical work on the shop floor and the management/technical expert of the company or craft would certify that the trainee has acquired the relevant skill.

In the case of informal vocational training under master craftsmen, the latter has to be linked backward with local schools so that the trainee can obtain elementary education and also so

that the school children will acquire the craft skills under the craftsman. These craftsmen need to be assigned a much greater role in the development of the crafts. The craftsman can do quality control or certification of the product in the neighbouring areas and for that they have to be empowered. As discussed above, state assistance has to be routed through local organizations; however, it is difficult to identify such organizations and to deal formally with such informal organizations. For that, an alternative is available in these master craftsmen. Since the master craftsman is well known and acceptable to the local artisans and traders or he himself combines trading along with manufacturing, state assistances regarding technology, design, training, finance or marketing may be made under his direction. Similarly, banks may finance the entrepreneurs through the local moneylenders in the form of refinancing. This would reduce the delivery costs and eliminate potential defaulters.

It is not hard to understand that, by using already existing networks involving trade, finance, manufacturing and skill development in the traditional industries, it is possible to introduce a wide and successful range of products and technologies from upgraded crafts to electronic goods and computers chips through providing right kind of training and other assistance in the manner described above. In fact, this would be the most ideal paradigm of development. This, however, requires changes in the mindset of the government. First of all, it has to believe that the traditional artisans and producers are capable of using modern tools and equipment and that the traders are able to market the products. Secondly, the state organizations need not be substitutes for the informal system of training and skill formation, financing, knowledge generation and transfer, and innovation; rather, the former should complement and nurture the latter. For that, the Indian bureaucracy needs to make a lot of innovations in their functioning and at the level of thinking.

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Sources

- Banerjee, P. 2006. "Social networks as platforms for new public-private partnerships in technical and vocational education", *The Innovation Journal: The Public Sector Innovation Journal*, 11(3).
- Biswas, Pradip Kumar and Ashok Raj. 1996. "Skill formation in the indigenous institutions: Cases from India", in Parthasarathi Banerjee and Yoshihiro Sato (eds.) *Skill and technological change: Society and institutions in international perspective*. New Delhi: Har-Anand Publications.
- Biswas, Pradip Kumar. 2001. "Surplus yield and production structure: The case of small-scale rural industries in West Bengal", *Journal of Peasant Studies*, 28(2).
- Biswas, Pradip Kumar. 2003. *Rural industrialisation in West Bengal: Institutions, innovations and growth*. New Delhi: Manak Publishers.
- Biswas, Pradip Kumar. 2005. "Organizational forms, technological change and Income generation: Handloom and conch shell product clusters in West Bengal", in Keshab Das (ed), *Indian industrial clusters*. Aldershot, UK: Ashgate.
- Biswas, Pradip Kumar and Ashis Taru Deb. 2004. "Determinants of NPAs in the Indian public sector banks: A critique of policy reforms", *The ICFAI Journal of Bank Management*, 3(3).
- Coase, R.H. 1937. "The nature of the firm", *Economica*, 4(2).
- Government of India, Ministry of Law and Justice. 2006. "The Micro, Small and Medium Enterprises Development Act, 2006", *The Gazette of India*, June 16, 2006, No.311.
- Government of, Ministry of Small Scale Industries and Agro & Rural Industries. 2007. "Package for promotion of micro and small Enterprises", announced in Lok Sabha, February 27, 2007.
- NSSO. 2001. *Informal sector in India 1999-2000* (Report No 459).
- NSSO. 2002. *Unorganised manufacturing sector in India 2000-2001*(Report No. 478).
- NSSO. 2002a, *Unorganized manufacturing sector in India 2000-2001*(Report No. 480).

NSSO. 2005, *Employment and unemployment situation in India January – June, 2004*
(Report No. 506).

Ramesh, Babu P. 2001. “Organisational structure, labour relations and employment in
Kancheepuram silk weaving”, *NLI Research Studies Series No: 021/2001*,
V.V.Giri National Labour Institute.

RBI. 2006. *Handbook of statistics on the Indian economy, 2005-06*.

UNIDO. 2006. *Cluster development report - Chanderi handloom weaving cluster*. New
Delhi.