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Ensuring Rural and Urban Livelihoods

INTRODUCTION

5.1 The dispersed, unorganized and often household-based micro and small enterprises are capital-saving, labour-intensive, and environment-friendly tools of inclusion. In India, they are the largest source of employment after agriculture and are found in both rural as well as urban areas.

5.2 In nearly three decades, the structure of rural employment has not changed much.¹ According to the latest NSS figures (61st Round), agriculture continues to employ 70% of our rural workforce, industry (14.4%), and services (14.8%) make up for the rest. However, in view of the decline in agriculture's contribution to GDP and the near constant proportion of workers dependent on it, there is need for rapid generation of off-farm employment. The chapter on Agriculture deals with diversification within agriculture (to sericulture, horticulture, pisciculture) to expand the scope of off-farm rural livelihoods. The real potential for employment generation, however, rests with the micro and small enterprises (MSEs) sector which comprises weavers, artisans, people

engaged in food processing, hawkers, vendors, and carpenters.

5.3 In developing countries across Asia, small and medium enterprises (SMEs)² (i) make up 80%–90% of all enterprises, (ii) provide over 60% of the private sector jobs, (iii) generate over 30%–40% of total employment, and (iv) contribute about 50% of sales or value added. In India, they constitute³ 95% of all enterprises. Labour productivity⁴ of small-scale industries (SSIs) in India during 1990–98 at the compound growth rate was 8.5% whereas labour productivity of large-scale industries (LSIs) was 7.54%. However, recently in a study of 53 countries done by Fortune Small Business Survey, June 2007 on 'Most and Least Friendly Countries to Small Businesses', India ranked 46th, well behind the other neighbouring Asian countries such as Singapore (5th), Hong Kong (6th), Thailand (15th), Malaysia (28th), etc.

5.4 Inadequate working capital, lack of information to access markets and foreign business opportunities, lack of trained personnel, and obsolete technology are

¹ Male and female employment in industry in rural areas has risen from 8% and 6.7%, respectively, in 1977–78 to 15.5% and 10%, respectively, in 2004–05. Most of the employment in manufacturing is in textiles (4 million), wood products (3.7 million), non-metallic products (3.4 million), food products (3.1 million), tobacco (3.1 million), and wearing apparel 2.8 million) (NSS 2004–05, Report 515). In services, employment in rural areas has risen from 10.5% of male employment and 5.1% of female employment in 1977–78 to 18% and 6.6% respectively in 2004–05.

² Asian Association of Management Organization Report—SMEs in Asian Region: Harnessing the Growth Potential.

³ UNCTAD-2003, OECD-2000, and Country reports.

⁴ Asian Association of Management Organization Report—SMEs in Asian Region.

the major barriers to the growth of MSEs across the world in general and in India in particular.

5.5 Shortage of working capital is widely recognized as the biggest hurdle in the growth of unorganized and organized MSEs. Securing bank credits, difficulties in documentation for bank loans, and lack of collateral security are bigger problems in India than in majority of the other developing countries in Asia. It is estimated that less than 8% of the total bank credit finds its way to the MSE sector.

5.6 Unorganized sector enterprises generally suffer from weak marketing. They need better market infrastructure, professionally organized exhibition of products at the international level, efficient system of supply chain management, brand promotion, and standardization. Efforts are needed to establish better linkages with the industry.

5.7 In post-WTO agenda, domestic markets have been opened up for imports, creating severe competition for the local industries. At the same time, this has created opportunities for the small industries to export products to the developed countries. To gain from this opportunity, however, effort must be made in pushing for greater market access in the developed countries.

5.8 Technology is one of the most critical elements in the growth of the MSE sector. India is ranked at the top⁵ in terms of availability of Science and Engineering personnel; however, MSEs in India are losing their competitive edge in the global markets due to lack of

modern technology. Owing to obsolete technology, the cost of manufacturing is much higher in India compared to the other developing countries in Asia.

5.9 Addressing these problems to ensure a vibrant MSE sector is essential for sustained and inclusive growth.

VILLAGE AND COTTAGE INDUSTRIES, HANDLOOMS, HANDICRAFTS, AND FOOD PROCESSING AND AGRO INDUSTRIES: ENGINES OF SUSTAINED AND INCLUSIVE GROWTH

5.10 The MSE sector provides livelihood, checks rural–urban migration, generates export earnings, and touches upon the lives of the remotest and most marginalized people. The needs, problems, and potential of this sector differ not just with the nature of activity (weaving, building components for big industries, etc.), but also with size, geographical location, and structure (organized/unorganized). The importance of this sector and the vision for it in the Eleventh Plan has been outlined in the chapter on Industries. The untapped domestic and international markets for traditional crafts has been indicated in Box 5.1.

5.11 This sector has been fragmented across various ministries and departments which have often been pitted against each other: powerloom versus handloom, anti-dumping duty on foreign silk yarn to protect interest of silk rearers versus removal of duty for handlooms and powerlooms, interest of petty traders versus greater control for home-based producers—these have been recurring debates. There is a need to move from competitive to complementary relationships by

Box 5.1

Untapped Domestic and International Markets for Traditional Crafts

In the small town of Chamba in Himachal Pradesh, over 500 artisans make sturdy and beautifully designed leather footwear. They sit inside homes or in tiny shops making one pair of *chappals* in approximately two hours. They earn Rs 30 per pair; each pair retails for anything between Rs 100 and Rs 500. At one time, Chamba made footwear for the entire Punjab. Chamba chappals have long been known for their durability and exclusive designs, many of which are now being developed and sold by big footwear manufacturers at exorbitant prices. These chappals have tremendous export potential and can take the domestic market by storm. Yet, in the absence of proper advertising and market linkages, the Chamba artisans are finding it increasingly difficult to make ends meet. Similarly, the bamboo products developed in North East India—in Meghalaya, Tripura, Manipur, Mizoram, even Assam, and Siliguri and Jalpaiguri (both in West Bengal)—have tremendous export potential. The range of products vary from picnic baskets to furniture, dinner sets, and even furnishing material.

⁵ Global Competitive Index—2005; World Economic Forum.

making each sector a resource for the other. Encouraging this symbiotic relationship between different segments of the MSE sector will be the key Eleventh Plan strategy.

5.12 The Eleventh Plan will also move away from looking at certain sub-sectors of MSE as purely rural or urban sectors. Handlooms and handicrafts are often found in towns and cities (Benaras, Murshidabad, Berhampur, Jodhpur, Delhi, Jaipur, etc); powerloom units tend to be concentrated in urban areas but are also found in villages; food processing units and small industries involved in manufacturing of components, dyes, etc., are found in both urban and rural settings. Yet often, the traditional sectors are looked upon as rural livelihoods and the modern enterprises as urban livelihoods. Thus, urban planning that involves demolition of slums and street (flea) markets, widening of streets, or construction of apartments and flyovers fails to take into account the impact on the small and tiny sectors, robbing vendors, petty traders, weavers, artisans, rickshaw pullers, and small entrepreneurs of their source of livelihood. Similarly, rural planning often fails to meet the needs of the non-traditional small industries. In the Eleventh Plan concerted efforts will be made to ensure that the perceived locational distinctions do not hinder the progress of this sector.

5.13 The Eleventh Plan will use a two-pronged approach, focusing on both the lives and livelihoods of the people engaged in the MSE sector. Thus far, we have mostly concentrated on production. In the Eleventh Plan, both production and producer will receive attention as each is dependent on the other. Higher productivity and earnings cannot be achieved if the weaver, artisan, entrepreneur, or worker is starving, diseased, uneducated, and untrained. Similarly, the quality of life of the producer cannot improve until his/her productivity increases.

MSMEs AS INSTRUMENTS OF INCLUSION

NORTH EAST, J&K, AND OTHER DIFFICULT TERRAINS

5.14 Be it the desert sands of Rajasthan, the hills of Himachal Pradesh, North East, and Kashmir, or the

islands of Lakshadweep and Andaman and Nicobar, the MSE sector is often the only source of livelihood in these ecologically fragile regions. According to a study sponsored by the North Eastern Development Finance Corporation Ltd (NEDFI, 2002), the North East accounts for 19.18% of the total number of handicrafts units in India and 21.71% of the artisans. The region also has a huge potential for the development of food processing and knowledge-based small industries. The situation in J&K, Himachal Pradesh, Rajasthan, and Kutch is similar. These areas are, however, also places⁶ where infrastructure facilities are minimal, banking facilities are limited, and connectivity is poor, making access to markets difficult. The flow of credit to the NER is hampered due to adverse topography, problem of land collateralization (traditionally, in many parts of NER, land is owned by the community), lack of awareness about schemes, and poor recovery of loans.

WOMEN

5.15 While a gender-disaggregated, comprehensive database on the sector is not available, there is ample evidence to prove that a majority of women are engaged in the MSEs. In sectors such as handloom, over 60% of the workforce comprises women. Chemical and plastics, food processing, and village industries also employ a large number of women. The proportion of women entrepreneurs is, however, quite low. As per the Third All-India Census (2001–02), only 995141 (9.46%) MSEs are actually managed by women. As against this, in the US, women own 38% of the small enterprises,⁷ which employ more than 50% of the private sector workforce. In countries such as Brazil, Ireland, Spain, and the US, women are creating new enterprises at a faster rate than men (OECD, 2001). The absence of property rights and the concomitant difficulty in accessing credit may be responsible for the low proportion of women entrepreneurs in India. Most women either do job work, assist their family members, or are employed as workers in small-scale units. They face widespread discrimination and exploitation. *Zari* workers, *agarbatti* and *bidi* rollers, embroidery workers make as little as Rs 10 for an eight-hour day. During the Eleventh Plan period, it is essential to

⁶ Scheme for North East Handlooms and Handicrafts.

⁷ Milken Institute, 2000.

provide a social security cover that is sensitive to women's special needs. Equal wages, adequate protection, provision of drinking water, toilets, crèche, and feeding facilities will be ensured in all small units and for every cluster. Women entrepreneurs will be provided easy access to credit and appropriate advisory and mentoring services.

MARGINALIZED GROUPS—SC/ST/MINORITIES

5.16 The MSE sector, especially traditional enterprises, provides livelihood to many marginalized groups. While the sector in general lacks access to marketing and credit, the problem is even more pronounced for people belonging to SC/ST and minorities. The Eleventh Plan, therefore, will introduce social security, training, and health insurance schemes for these vulnerable groups. Efforts will also be made to collect disaggregated data, set targets for credit availability, and ensure access to schemes for the people belonging to these communities.

DIFFERENT SEGMENTS, DIFFERENTIAL NEEDS

HANDLOOMS

5.17 As a metaphor for Indian culture and heritage, handlooms enable 65 lakh persons to earn a living by skilfully blending myths, faiths, symbols, and imagery. Today, the handloom industry directly and indirectly provides livelihood to 124 lakh people,⁸ of which 60% are women, 12% SC, and 20% ST (Ministry of Textiles, 2001). While the exact numbers are not available, a chunk of the handloom weavers belong to minorities.

5.18 Indian handloom products range from coarse cloth to very fine fabrics from a variety of fibres such as cotton, silk, tasar, jute, wool, and synthetic blends. Each region has handcrafted textiles that are unique in design and style. What is woven is, however, inseparable from where and how it is woven, that is from the structure of production. There are independent weavers, weavers organized into co-operatives, and there are those working under master weavers.

Often a combination of production types exists at one time in one area, even within a single household. Yet there is no data reflecting this diverse nature. We do not have updated figures on the number of looms or people. The last Census was carried out in 1995–96.

Current Situation

5.19 With the largest number of handlooms in the world, India produces approximately 6541 million sq m of handloom cloth annually. While the total production of cloth has increased by about 30% between 1996–97 and 2004–05, the production of handloom sector has declined by about 23%. Between 2000 and 2005, the average annual growth rate of handloom production has been 6.99%. This has hit the livelihoods of the handloom weavers. West Bengal, Tamil Nadu, Uttar Pradesh, Andhra Pradesh, Assam, and Manipur are the major handloom States accounting for 75% of handloom weaving in the country. As per the Second Handloom Census, Assam (10.97 lakh), West Bengal (2.22 lakh), and Manipur (2.15 lakh) together accounted for 64% of the handloom units. Almost all handloom production in India is for domestic markets. According to the Directorate General of Handlooms, though handlooms account for 10% of our textile exports, only 1.3% of working looms produce fabric⁹ for export markets. Europe is the largest destination, accounting for nearly half of the total exports in 1999–2000.

5.20 In the terminal year of the Tenth Plan, handloom cloth production was 6541 million sq m with exports at Rs 4605 crore. The Tenth Plan performance is indicated in Table 5.1.

5.21 With the phasing out of quota and the opening up of markets, 'Handloom' cloth and designs are being produced cheaply by mills and powerlooms both in India and in China. As the market is shrinking, weavers are becoming manual labourers or in extreme cases committing suicide. This has led many to label this industry as a sunset sector. This, however, is far from

⁸ India's Handloom Sector—K. Rajendran Nair (Former Development Commissioner for Handlooms).

⁹ Handloom Mark Scheme—A Report on Diagnostic Survey and Business Plan for Handloom Sector in Bihar, submitted to Department of Industries, Government of Bihar by IL&FS.

TABLE 5.1
Performance of Handloom Sector during the Tenth Plan Period

Item	2002–03	2003–04	2004–05	2005–06	2006–07
Cloth production (million sq m)	5980	5493	5722	6108	6541
Employment(lakh persons)	65	65	65	65	65
Export (Rs crore)	na	na	na	na	4605

Source: Office of Development Commissioner (Handlooms), Ministry of Textiles.

the truth. Health- and environment-friendly hand-woven fabrics have a huge international demand and have the potential to generate domestic demand as well.

In the post-Multi-Fibre Agreement era, weavers can capture new markets. Box 5.2 highlights the potential for this sector.

Box 5.2 Hope Looms

Though handloom is regarded by many as a sunset industry, there are enough success stories across the country—Self Employed Women’s Association (SEWA) in Lucknow, Kutch Mahila Samiti in Gujarat, and Dastkar in Andhra which expose this myth and show the way forward for this sector. Maheshwar, a small town of Madhya Pradesh has been weaving for the last 250 years, ever since Rani Ahilyabai Holkar brought the profession to this town and etched a beautiful design palette in stones along the banks of the Narmada. Three decades ago the market for Maheshwari sarees started shrinking and there were less than 25 looms left in the town. Once again the Holkars intervened—this time in the form of REHWA society. Rehwa is another name for the Narmada. Through this society they carried out design interventions, moved from the ‘*nauwari*’ to ‘*chhewari*’ sarees, and organized exhibitions. They provided weavers with work, looms, health facilities, crèches and schools for their children, and even homes. Today, there are about 2500 looms creating poetry with silk and cotton yarn in Maheshwar and they have the potential to install more. The wages have gone up from Rs 9 per saree to Rs 150 per saree. Phalodi, in district Jaisalmer of Rajasthan, traditionally produced *Pattu*—two pieces of cloth woven in local wool, stitched together laterally, and enhanced by an extra weft ornamentation known as *Kashida*. *Pattu* weavers were disorganized and were dependent for sale on the intermediaries and fairs/exhibitions. In 1991, with the help of Urmul Trust, they organized themselves into a registered NGO, the Urmul Marusthali Bunkar Vikas Samiti (UMBVS). Today more than half of the weavers in Phalodi are its members. At the time of registration, a compulsory three-month training is imparted. For every group of 8–15 weavers, a commission-based *Vyavasthapak* (manager) delivers raw materials and designs; monitors quality during weaving; weighs, checks, and delivers products; and makes payments. UMBVS provides raw materials and markets products through fairs and exhibitions, websites, and its own showroom. It has managed to get financial support from banks and new designs from NIFT, NID, etc. Pochampally, a small town in Nalgonda district of Andhra Pradesh, is known for its unique *Ikat* design. About 50% of the population here depends on handlooms. In December 2003, Pochampally became the first traditional Indian craft to get a Geographical Indication (GI) registered. Less than two years later, the proprietors of the GI found that a retailer in Hyderabad was selling sarees produced by a Mumbai-based manufacturer under the false GI of ‘Pochampally’. They immediately filed a case. Both the retailer and the manufacturer accepted the case of infringement and agreed to an out of court settlement. They also gave an undertaking not to sell any products in the name of Pochampally. 13 SHGs of weavers from Chanderi, Madhya Pradesh, have come together to form Chanderi Bunkar Vikas Samiti (CBVS). Quality control is emphasized and a mechanism has been devised to reject products that do not conform to specifications. The groups affiliated to the Samiti are heavily represented by women. The unique selling point (USP) of CBVS is its market linkage to Fab India. The weavers have regular work and they can sell their products to the Samiti and get timely payments. The Samiti has tried to become self-reliant by developing a common facility centre (CFC) for dyeing and a raw-material depot. This raw-material depot takes advantage of the Mill Gate Price Scheme and sells yarn with a 3% mark-up on the procurement price to Samiti members and with a 5% mark-up to non-members. For almost 80 years now, Nalli has monopolized the silk industry in India. From one loom in Kancheepuram and one shop in Chennai’s T-Nagar set up in 1928, the Nallis today have 50 looms under their direct control and another 10000 looms working for them in Kancheepuram, Salem, and Kumbakonam. They have 14 shops including one each in Singapore, San Jose (California), and Toronto (Canada). Nalli manages over 5000 dedicated suppliers and has an annual turnover of Rs 325 crore. It has a range of products from Rs 80 to Rs 50000.

Challenges For the Eleventh Plan

5.22 Many challenges for the handloom sector have already been discussed in the chapter on Industry (see paragraphs 7.1.356 to 370, Chapter 7.1, Volume III). This section looks at some specific issues which will be tackled during the Eleventh Plan to ensure the vibrancy of this sector.

AVAILABILITY OF WORKING CAPITAL

5.23 Though NABARD provides refinance facilities to the State co-operative banks and RRBs for financing requirements of primary and apex weavers' co-operative societies, the service charges levied by these institutions result in the doubling of interest rates for the artisans and societies. Further, most State handloom co-operative societies lift stock and reimburse weavers only on sale of products. This blocks the working capital for the weavers.

AVAILABILITY OF QUALITY RAW MATERIALS:¹⁰

5.24 Despite the setting up of co-operative spinning mills and the hank yarn obligation, yarn shortages and steep prices are continuing problems. As early as in 1995, the gap between the supply and the demand for hank yarn used by the handloom sector was 150 million kg. The use of hank yarn by mills and powerlooms also diverts yarn meant for handlooms. The schemes ensuring availability of hank yarn at reasonable prices, usually only benefit the big weavers or the co-operative sector which covers 20.3% weavers.

TRAINING AND TECHNOLOGY

5.25 The Janata Cloth Scheme de-skilled weavers and we now have two categories of weavers—skilled and semi-skilled. The products manufactured by the latter are easily produced by mills and powerlooms at much cheaper rates. Their market is shrinking and there is little hope for its revival. Reskilling of semi-skilled weavers in handlooms or in any other field and skill upgradation for the skilled weavers are necessary. Currently, weaving has become a profession for the uneducated. People need to take up this profession out of choice, not necessity. Encouraging educated individuals to provide design inputs, marketing, etc., to this sector is a challenge.

MARKETING AND PUBLICITY

5.26 Primary producers have no direct access to either markets or market information. As a result, there is a mismatch between production and market demand. Markets today are created and captured through aggressive publicity campaigns using icons. The challenge in the Eleventh Plan is to create a demand for handloom products by flaunting their unique selling point (USP). Unfortunately, marketing efforts thus far have been limited to organizing buyer–seller meets and holding a few exhibitions where space is often provided to master weavers and *gaddidars*, not poor weavers. The challenge is to encourage market research and product diversification. The latter does not imply a rejection of the traditional designs. It means development of new products using the traditional designs adapted to modern tastes.

INFRASTRUCTURE DEVELOPMENT

5.27 Few clusters have organized dyeing centres with modern facilities such as water softening plants or dyeing chambers. Dyeing is unorganized and marked with low end applications. All this has a significant bearing on the quality of final products and the resultant poor earnings of weavers. It also harms the environment. Electricity, space to keep the looms, yarn banks, dyeing units, roads connecting weavers to markets, water supply, processing and packaging facilities are needed.

ENCOURAGING ORGANIZATION OF WEAVERS

5.28 Organizing weavers into SHGs or cluster committees to increase their bargaining power, enable them to access credit, design and common facilities centres, and undertake collective marketing is an important challenge.

SOCIAL SECURITY

5.29 Provision of a social security net that includes education, skill training, access to health facilities, and insurance is essential. Occupational health centres are needed to treat tuberculosis (TB) and silicosis. Moreover, in places like Varanasi, weavers have incurred huge electricity arrears; paying them off frees the weavers from the cycle of debt.

¹⁰ *The Hindu*, 2005.

BETTER GOVERNANCE

5.30 Major institutions for providing inputs are centralized and hence are unable to reach the dispersed and largely home-based industry. Schemes run by the various Central and State bodies currently operate as silos with little convergence.

OTHER MEASURES

5.31 There are various other challenges during the Eleventh Plan: branding of handloom products, mapping of handloom clusters, development of design banks, and handloom research centres. The priority areas for research in the industry are energy conservation measures, improvement in the quality to boost exports, and providing cheaper and more durable fabrics for internal consumption.

The Way Forward

5.32 Government interventions for revival of handlooms during the Eleventh Plan will focus on two kinds of interventions: policy and programmatic. Policy interventions will include taking decisions on issues such as removal of anti-dumping duty on Chinese silk, specifying the policy on export of cotton yarn, availability of yarn, marketing as a value-added niche product, and preferential procurement by the government institutions. These will be backed by suitable programmatic interventions. For this, many of the existing Tenth Plan schemes such as workshed scheme, health insurance scheme, and *Deen Dayal Hathkargha Protsahan Yojana* (DDHPY) have been suitably restructured. To streamline the operations, various handloom schemes have been clubbed together under four major schemes—Integrated Handloom Cluster Development Scheme, Weavers Welfare Scheme, Marketing and Export Promotion, and Diversified Handloom Development Scheme. In the Eleventh Plan, schemes for the well being of weavers will include (i) Health Insurance Scheme, (ii) Mahatma Gandhi Bunkar Bima Yojana, (iii) Thrift Fund Scheme, (iv) Pension Scheme, and (v) Distress Relief Fund. The insurance schemes not only offer social security but also have a component for education of weavers' children. Under the new pension scheme, weavers aged 60 years or above will be provided Rs 200 every month. The Distress Relief Fund will provide immediate relief to weavers in distress situations and those affected by natural calamities, riots, floods, etc.

5.33 The Integrated Handloom Development Scheme is based on a cluster approach where basic inputs and worksheds are provided, training is imparted, and formation of SHGs is encouraged. In fact, a cluster-based approach would be a major thrust of Eleventh Plan in the case of all the sectors covered and discussed in this chapter. Annexure 5.1 provides a detailed note. Under this scheme, the committees of weavers, supported by an external cluster development agency, will be empowered to decide which interventions need to be carried out. Branding of cluster products, GI registration, and construction of CFC will be carried out. This will not only give greater power to weavers, but will also help in marketing products, quality control, and processing of bigger orders. Under DDHPY, financial assistance for design development, product diversification, publicity, CFCs, market survey, and market incentives will be encouraged. The workshed cum housing scheme will be extended to weavers outside the co-operative fold as well.

5.34 The Marketing Promotion Programme (MPP) will be restructured to focus on brand equity, providing market consultants, doubling market events—expos, melas, etc.—and building promotional websites. Urban *Haats* and market complexes will be set up at important places of tourism and business. Space on rent will be taken up at upcoming malls, marketing complexes, large retailing stores, etc. Private business houses will be requested to earmark outlets for handlooms. Fabric tourism, on the lines of vineyard tourism in France and glass tourism in Italy (Murano glass factories), will be promoted. Special expos will be organized to encourage big retail chains and hotels to use handloom furnishings. Exclusive fashion shows with the participation of National Institute of Fashion Technology (NIFT) and SHGs/co-operatives will be organized to reach the youth in schools and in college festivals. A huge publicity campaign backed by icons will be initiated. At the same time, measures will be taken for protection of traditional designs and patterns under the GI Act. Handloom Mark will be used to popularize handwoven products and guarantee to the buyer that the product being purchased is genuinely handwoven. To attract entrepreneurs and investors into the

Handloom Export Sector, Handloom Export Scheme will be subsumed under MPP. It is expected that exports will grow at 15% per annum and reach Rs 10000 crore by the end of the Eleventh Plan.

5.35 Under the Diversified Design Development Scheme, 20 design studios will be set up in handloom clusters for creating designs based on the client needs. The design studios may be a joint collaboration between the GoI and the industry/Handloom Export Promotion Council (75:25 ratio). A heritage library housing all the traditional designs will also be created. Inputs such as hank yarn will be provided at mill gate price.

5.36 A committee with Managing Director, NABARD as Convenor has suggested (i) cleansing of balance sheets of apex societies and primary societies, (ii) waiver of overdue loans and interest of primary weavers co-operative societies and apex societies, (iii) interest subvention—working capital, and (iv) contribution to Handloom Development and Equity Fund and Credit Guarantee Fund Scheme for handloom weavers. On the basis of this report and the Vaidyanathan Committee report, a Rs 1200 crore package for handlooms has been formulated.

5.37 For schemes to be effective, strengthening of the delivery mechanism with the help of an NGO/voluntary sector is essential. All the schemes will be widely publicized in local and regional languages. A convergence between various schemes for health, nutrition, education, etc., will be ensured. A necessary step in this direction would be a mapping of weavers and artisans. The preservation of the rich handloom heritage can be achieved only through the socio-economic upliftment of the individuals who create the heritage.

HANDICRAFTS

5.38 Like handlooms, this sector also touches upon the lives of the most marginalized and has the potential to transform the economy of difficult areas such as the North East, border States, J&K, desert habitations, etc. It produces a range of items from utility goods to clothing and variety of lifestyle items.

Current Situation

5.39 The performance of handicrafts sub-sector during the Tenth Plan period is given in Table 5.2.

5.40 The current global handicraft market is valued at more than US\$ 400 billion. China accounts for 30% of this and India's share is less than 2%. Over the last 10 years, the average annual rate of growth of our handicraft exports market has been 15%. During the next five years, it is projected to increase by 42% and generate an impressive US\$ 9100 million. The US is the preferred destination for Indian handicrafts, accounting for 29.59% of our total exports. Europe accounted for 33.86% in 2004–05.¹¹

5.41 Despite this, while some crafts such as woodwork, metal work, and carpets are flourishing, others are floundering. Even for the handicrafts that are doing well, increase in exports and demand has not led to a concomitant rise in the income. In places such as Rajsamund (silver *minakari*), Bhopal (zari work), Bhadohi (carpets), and Indore (sequins and embroidery), wages have not changed in the last two decades. In zari, gems, and jewellery units, often women and children are employed due to their deft fingers. The conditions of work are oppressive and workers earn wages as little as Rs 10–15 per day. The profit is taken over by the middlemen and the export houses. As in the case of handlooms, there is no database or mapping of crafts across the country.

TABLE 5.2
Performance of Handicraft Sector during the Tenth Plan Period

Item	2002–03	2003–04	2004–05	2005–06	2006–07	CAGR (%)
Production (Rs crore)	19565	24019	28936	29804	38660	14.5
Employment (lakh persons)	60.16	61.96	63.81	65.72	67.69	2.3
Export (Rs crore)	10934	12768	15616	17277	20963	14.0

Source: Office of Development Commissioner (Handicrafts), Ministry of Textiles.

¹¹ Confederation of Indian Industries (CII).

Challenges

5.42 The distinction between handlooms and handicrafts is often artificial and difficult to understand. For instance carpets, though hand-woven, are counted as handicrafts. This distinction limits the workers' access to schemes and in many cases results in a duplication of efforts. Resolving this will be a principal challenge for the Eleventh Plan. Apart from usual challenges mentioned in paragraphs 5.22 to 5.31, the specific challenges faced by the handicrafts sector are:

TECHNOLOGY UPGRADATION

- Use of old and obsolete technology increases drudgery, impacts on the health of the worker, reduces productivity, and in many cases even affects quality.

IMPACT ON ENVIRONMENT AND HEALTH

- Activities such as printing, metal works, use of dyes, and woodwork seriously impact the environment and the health of the workers. As most units are home-based or small-scale units, they do not have adequate safety arrangements or sewage treatment facilities. Thus, they get caught in non-tariff barriers. The challenge is to ensure occupational health for artisans and to develop simple, cheap technology for treatment of waste and pollution control.

SAFEGUARDING THE INTERESTS OF ARTISANS

- An ongoing debate in the handicrafts sector (particularly in areas such as carpet weaving) is about greater flexibility in labour laws to permit export

houses to expand. The challenge in the Eleventh Plan is to balance productivity gains with the interests of the actual producers, the artisans. A recurring suggestion has been to allow firms some flexibility if the State Governments are willing to provide social security.

QUALITY CONTROL AND STANDARDIZATION

- Lack of standardization procedures and inadequate facilities for testing and certification of raw materials and products impacts the export potential.

The Way Forward

5.43 During the Eleventh Plan, it is proposed to more than double the production of handicrafts (from Rs 43600 crore in 2007–08 to Rs 90412 crore in 2011–12), double the exports (from Rs 23400 crore in 2007–08 to Rs 48522 crore in 2011–12), and create almost 11 lakh additional jobs. Special targets which include export turnover of Rs 500 crore and credit flow of Rs 150 crore have been set for the NER. For this, infrastructure is vital. In order to augment the government resources, schemes will be adopted in the PPP mode. The government will partner with good NGOs to ensure an effective implementation of the schemes and policies and to compile an accurate database of the artisans. In the Eleventh Plan, the existing Tenth Plan schemes have been modified and clubbed into seven schemes to improve the delivery of services and ensure effective and focused implementation. Eleventh Plan Schemes for handicrafts are indicated in Box 5.3.

Box 5.3

Eleventh Plan Schemes—Handicrafts

- **Baba Saheb Ambedkar Hastshilp Yojana:** Revised to a demand driven, needs-based scheme for integrated development of handicraft clusters. Setting up of CFCs and e-Kiosks, publicity, toolkits distribution will be included. Target: 375 new clusters in 322 districts covering four lakh artisans.
- **Design and Technology Upgradation:** Thrust on skill upgradation, new designs, technologies, innovative products, revival of languishing crafts, setting up of Design Bank. Target: 1000 Design Workshops and 400 Integrated Design Projects to benefit 38600 artisans.
- **Marketing Support, Services, and Export Promotion:** This scheme will continue. Target: 1.2 lakh artisans.
- **R&D Scheme:** The scheme includes conducting research studies, all-India census for handicrafts, setting up of six labs, technology development, transfer/adoption of technology.
- **Handicraft Artisans Comprehensive Welfare Scheme:** The scheme includes Bima Yojana and Rajiv Gandhi Shilpi Swasthya Bima Yojana. Target: Two lakh artisans per year for each scheme.
- **Human Resource Development:** Special Handicraft Training Programme (SHTP) implemented during Tenth Plan has been modified. Target: Capacity building of two lakh artisans and stakeholders.
- **Infrastructure Projects** for development of specific need-based infrastructure, building, haats, expo marts, etc.

5.44 To fulfil the commitment towards inclusive growth, at least 10% of all the schemes in the Eleventh Plan will be earmarked for the NER. In addition to this, special schemes will be introduced for women and for people belonging to SC/ST and minority groups. These include: (i) Scheme for skill upgradation under the Guru Shishya Pattern of the Special Handicrafts Training Project (SHTP) for women and artisans belonging to SC/ST community, and (ii) special components will be introduced in all the existing schemes of Office of Development Commissioner (Handicrafts), in association with the Ministry of Minorities Affairs to fulfil specific needs of minority artisans.

POWERLOOMS

5.45 Today, the decentralized powerlooms sector provides employment to 48.60 lakh persons and contributes 62% to the total cloth production in the country.

Current Situation

5.46 As on 31 March 2006, there were approximately 4.30 lakh powerloom units with 19.44 lakh looms. Of this, nearly 3.66 lakh looms employing 9.14 lakh people were in Tamil Nadu alone. The technology level of the powerloom sector varies from obsolete plain looms to high-tech shuttle-less looms. Most looms are old and archaic.

5.47 Not only do powerlooms meet most of the cloth requirement of the country, they also contribute more than 60% of the fabric meant for export. The US, France, Germany, Hong Kong, Italy, etc., are the major markets. Even within the country, the readymade garments and home textiles sectors are heavily dependent on the powerloom sector to meet their fabric requirements. The performance of the powerloom sector during the Tenth Plan are given in Table 5.3.

Challenges

5.48 The major challenge is to look at the powerloom sector as an important segment of the textile industry that can engage in bulk production, especially of everyday necessities. While selling of powerloom cloth as handloom and copying handloom designs on powerlooms will be checked, the poor powerloom weavers will not be penalized for the problems of the handloom industry. In fact, like handloom weavers, many powerloom weavers also suffer from lack of credit, absence of quality raw materials, poor quality dyes, absence of proper market linkages, and exploitation at the hands of the middlemen. Several powerloom weavers come from economically and socially marginalized groups. Fluctuation in yarn prices impacts them equally. The tax on cone yarn affects their profits. The challenges in the Eleventh Plan are:

- Ensuring uninterrupted power supply to powerloom centres and units is a big challenge. Without this, the looms fall silent and the weavers suffer from heavy losses.
- Powerloom weavers suffer from many health problems such as TB, silicosis, hearing impairment. The challenge is to provide occupational health facilities to the weavers and their families. Given the incessant din of the looms, it is essential to eventually move the looms out of homes and into common worksheds.
- Most powerlooms in the country are obsolete and need to be replaced immediately to increase productivity and profits. However, powerloom weavers in places such as Bhiwandi and Malegaon are too poor to benefit from Technology Upgradation Fund Scheme (TUFS) or to finance the upgradation. The challenge is to come up with schemes that enable poor powerloom weavers to upgrade their looms.

TABLE 5.3
Performance of Powerloom Sector during the Tenth Plan Period

Item	2002–03	2003–04	2004–05	2005–06	2006–07	CAGR (%)
Cloth production (million sq m)	25954	26947	28325	30626	33159	5.0
Employment (lakh persons)	42.32	45.92	47.57	48.60	49.76	3.2
Export (Rs crore)	6007.17	6201.72	6302.43	7562.08	na	6.0

Note: Export figures are for textile export including powerloom cloth and cloth used for readymade garments exported.

Source: Ministry of Textiles.

The Way Forward

5.49 It is proposed to increase production of powerloom cloth from 38138 million sq m in 2007–08 to 58437 million sq m and to raise exports to US\$ 56.05 billion by the terminal year of the Eleventh Plan.

5.50 Like in the case of handlooms and handicrafts, two kinds of measures are essential for the powerloom sector. Policy interventions need to deal with issues such as yarn availability and pricing and to resolve the perceived ‘conflict’ between handlooms and powerlooms. Programmatic interventions will focus on research and technology upgradation, promotion of value-added textiles, strengthening of existing infrastructure facilities, creation of design banks and Computer Aided Design (CAD) centres, and easy access to credit and modernized workshed scheme. Here again, the cluster approach will be adopted and common facilities such as yarn depots, dyeing houses, quality testing labs, etc., will be provided. Weavers will be organized into SHGs and will be encouraged to move their looms into common worksheds. Clusters will be supported in setting up mini-power generation plants to ensure uninterrupted power supply. During the Eleventh Plan, cluster development activities will be undertaken in 50 powerloom clusters. Product innovation and diversification will be encouraged and weavers will be included in cluster development committees.

5.51 The TUFs will be modified and continued in the Eleventh Plan. Currently, powerloom units in places such as Sholapur, Surat, and Ichalkaranji are able to draw benefits from TUFs; however, small and weak units in backward clusters such as Malegaon, Burhanpur, and Mau are unable to do so due to their inability to provide collateral guarantees. For them, the National Climatic Data Centre co-operative funding route may be more useful. During the Eleventh Plan period, TUFs will be modified to enable the weak and small powerloom units to take the advantage of this scheme.

5.52 Besides this, a survey of the powerloom sector will be carried out to find out the profile of the people engaged in the sector, as well as the number and the type of looms. New CAD centres will be set up and existing powerloom service centres (PSCs)

will be upgraded. Health insurance schemes that have been announced for BPL workers would be made available to the powerloom workers and their families.

5.53 Presently, there is only one State in the NER where powerlooms exist. In Guwahati (Assam), there are about 2700 conventional looms providing employment to approximately 7000 workers. Most of the looms are engaged in job work, producing acrylic shawls. The feasibility of setting up a new CAD centre in the Guwahati PSC will be examined.

SILK AND SERICULTURE

5.54 India is the only country producing all the four known commercial silks, namely, mulberry, tasar, eri, and muga. It is the second largest producer of raw silk in the world. At present, over 60 lakh families—mostly in the States of Karnataka, Andhra Pradesh, Tamil Nadu, West Bengal, Jammu and Kashmir, and Assam—are involved in this labour-intensive agro-based industry in activities such as food plant cultivation, silkworm rearing, silk reeling, twisting, de-gumming, weaving, dyeing, printing and finishing, and garment manufacturing. Sericulture is at various stages of development in Uttarakhand, Uttar Pradesh, Madhya Pradesh, Chhattisgarh, Orissa, Bihar, and the North East.

5.55 Sericulture in India is a sustainable farm-based economic enterprise that generates a steady stream of income (on average, a net income of up to Rs 45000 annually in about four to five splits, from one acre of irrigated mulberry). A large number of people in sericulture, especially in production of tasar, belong to tribal groups. It is estimated that every hectare of mulberry provides employment to about 16 persons. Besides the weaving industry, sericulture is beneficial to farmers as well. Today, of the 60 lakh people dependent on this industry, 47 lakh are agriculturists.

Current Situation

5.56 China, producing 102560 metric tonnes (81.65%) of raw silk is the largest exporter, whereas India, contributing about 13% of the world’s raw silk production, is the largest consumer. According to the Mysore-based Central Sericulture Research and Training Institute, against an annual requirement of about 25000 metric tonnes of silk, India produces only about

15000 metric tonnes. The rest of the demand is met through imports. In 2006–07, around 9258 tonnes of silk, worth over Rs 600 crore, was imported from China. As a result, cocoon prices crashed and nearly 49000 ha of mulberry crop was uprooted in Karnataka causing a loss of 3000 tonnes to the country's overall silk production.¹² Thus, while productivity of silk has gone up from 16 kg to 85 kg raw silk per ha per year from the Ninth to the Tenth Plan, raw silk production has remained almost static. Against the total production target of 26450 metric tonnes of raw silk per year, achievement was just 15445 metric tonnes by 2005–06 and 16805 metric tonnes by the end of the Tenth Plan period (Table 5.4). This was due to shortfall in mulberry bivoltine raw silk production despite the addition of 17 new components targeting bivoltine production in the Catalytic Development Scheme. The physical achievements during the Tenth Plan are given in Table 5.4.

5.57 Indian silk exports are primarily in the form of finished goods and not silk yarn. Thus Indian exports are largely dependent on the import of quality silk from China. US, United Kingdom (UK), Italy, Germany, and Hong Kong together account for over 55% of India's total export earnings from silk. Estimates say that India requires 120000 metric tonnes of silk to meet the demand in world market. With better infrastructure facilities, the sericulture industry can improve its productivity to 15% as against the current 9%.

Challenges

5.58 The Indian sericulture industry, which provides livelihoods to not just farmers and reelers but also dyers and silk weavers, is currently grappling with many problems similar to those faced by other sectors. However, it faces some specific challenges such as

IMPROVING QUALITY OF SILK

- Indian silk yarn is of poor quality, especially in comparison to that of China. This not only affects our competitiveness in the world market, it also results in a preference for imported yarn in the domestic sector. Though Indian breeds have the potential to produce the same quality of bivoltine silk as China, there has been lack of sufficient thrust on the adoption of improved technologies, strict disease control measures, lack of quality leaf due to insufficient inputs to mulberry garden, use of young age silkworms, appropriate mountages, lack of grading system for cocoons, and quality-based pricing system.

ARRESTING FALL IN PRODUCTION

- The challenge is to initiate area-specific research to improve fertility of the soils, which will ultimately enhance soil productivity, mulberry and non-mulberry host plant leaf and silkworm cocoon production, and arrest decline in area under silk food plants.

MULTIVOLTINE VERSUS BIVOLTINE

- Bivoltine yarn is sturdier and is used by the powerloom industry. Yet only 5% of the silk produced in India is bivoltine because its production requires much more attention and resources. It also yields just two crops in a year, as against the yield of four to six crops by multi-voltine. Since the difference in the selling price of bivoltine and multivoltine silk is not much, farmers do not have any incentive to switch to bivoltine silk yarn production. Insufficient adoption and proliferation of technology packages developed through R&D efforts; no effort to increase the area under mulberry; fragmented and ad hoc approach; non-involvement of private partners in a big way in seed production;

TABLE 5.4
Performance of Sericulture Sector during the Tenth Plan

Item	2002–03	2003–04	2004–05	2005–06	2006–07
Raw silk production (metric tonnes)	14617	13970	14620	15445	16805
Employment (lakh persons)	56.00	56.50	58.00	59.50	60.03
Export (Rs crore)	2294.05	2779.19	2879.56	3194.20	3200.00

Source: Central Silk Board (CSB), Ministry of Textiles.

¹² Indian Silk Industry—Gaurav Doshi.

farming and reeling; non-penetration of the schemes; improper forward and backward linkages; and dumping of cheap Chinese raw silk and fabric are the other factors. The challenge in the Eleventh Plan period is to encourage farmers to move from production of multivoltine silk to bivoltine silk through proper incentives. Yet, care should be taken to ensure that adequate amount of multivoltine is available for the handloom sector to continue production.

ANTI-DUMPING DUTY ON SILK

- There has been a decline in the cultivated area and the raw silk production during 2002–04 due to drought and dumping of Chinese silk at cheap prices. The sericulturists want imports of raw silk to be restricted and the anti-dumping duty on yarn to remain in place. Exporters and weavers, on the other hand, want the anti-dumping duty to be withdrawn so that they get an assured supply of yarn and are able to export more silk products at competitive rates. The challenge is to balance the aspirations of farmers and weavers.

NON-MULBERRY SILK PRODUCTION

- Non-mulberry silk production in the country continues to be unsteady and fluctuates from year to year. With its uniqueness, non-mulberry silk production in India has a great potential for value-added exports.

NEED FOR QUALITY-BASED PRICING

- Reeling sector is an input-dependent activity and its operations are influenced heavily by three factors—cocoon quality, cocoon price, and cocoon supply. However, due to the absence of quality-based price fixation, there has been very little quality control.

The Way Forward

5.59 The CSB has set a target of 26000 tonnes of raw silk production by the year 2011–12 and it has also proposed to:

- Enlarge area under mulberry silkworm food plants to 2.5 lakh ha by adding 0.50 lakh ha. This will produce an additional 6400 metric tonnes of mulberry raw silk.

- Raise national mulberry silk productivity from 85 kg per ha to 100 kg per ha per year.
- To increase production of non-mulberry silks from 125 gm per person per day to 150 gm per person per day.
- Increase employment to 77.04 lakh and exports to Rs 4500 crores.

5.60 To achieve these targets, association of private sector and especially the major agro-based industries in both pre-cocoon and post-cocoon segments, will be encouraged. Medium and small corporate sectors will be supported for the production of cocoons by contract farming through a participatory (not subsidy oriented) approach. R&D in the areas of reeling, twisting, spinning, and blending for all varieties of silk will be carried out and exotic fabrics, which may be used for furnishing, carpets, and other dress material, will be created.

5.61 The reeling sector has seen poor growth during the Tenth Plan. There are around 182000 handlooms and 30000 powerlooms with an average age of 15–20 years. About 20% improvement in productivity in addition to yarn quality can be achieved by upgrading the old machines. Additional production of raw silk to the tune of 7000 metric tonne will feed 80000 handlooms and 20000 powerlooms/shuttle looms. Therefore there is a need to upgrade the handlooms, powerlooms, and wet processing sectors to support non-mulberry reeling/spinning activity to improve the productivity and reduce drudgery.

5.62 Recently, an amendment to the CSB Act by the Parliament was made providing a regulatory mechanism for production and sale of silkworm seed. It ensures: (i) production and sale of seed of authorized races only, (ii) control on unauthorized production and trade, (iii) control and prevention of entry of untried and untested hybrids from other countries likely to be carrying diseases and other unknown risks.

5.63 During the Eleventh Plan period, CSB will implement all schemes of pre- and post-cocoon sectors in the form of clusters. Village Panchayats, reputed voluntary service organizations, rural development

agencies, and financing institutions will be involved in planning from the project formulation stage onwards to facilitate integration of producer groups into the production chain and develop a marketable product within the geographical niche. Large-scale bivoltine seed production; supply of *chawki* worms to all bivoltine farmers; setting up of infrastructure such as rearing house, grainages, and chawki rearing centres (CRCs), and improved rearing appliances will be adopted under the existing Catalytic Development Programme schemes. Extensive training and demonstrations with the active participation of SHGs and expert farmers will be undertaken; linkages between the grainages and CRCs, the farmers, and the reelers will be established. Important policy interventions providing incentives to farmers who undertake bivoltine production will be carried out, but without hurting the handloom sector. The import policy for raw silk will be reviewed periodically, balancing interests of the sericulturists as well as export manufacturers and weavers.

5.64 To meet international standards in quality, large investments in seed production, farming, reeling, and processing are needed. The Eleventh Plan proposes to link large number of small farmers to few large entrepreneurs capable of making huge investments as in the case of castor cultivation, sugarcane cultivation, etc. The Plan also proposes to launch a new scheme for establishment of large bivoltine grainages and to open it to State departments.

5.65 During the Eleventh Plan, efforts will be made to enable networking of various cocoon and silk markets to facilitate availability of real time information on the availability of raw materials and market trends on the Internet. Existing National Informatics Centre (NIC) infrastructure will be utilized and an NIC Cell will be started in CSB on the pattern of other government institutions. Pest and disease forecasting and forewarning system for mulberry and silkworms will be introduced to provide sericulture farmers and the State departments enough time to organize effective management of pests and diseases and minimize the crop losses. This programme will be linked to NRSA, Hyderabad and Indian Meteorological Departments in various States.

5.66 The existing Tenth Plan schemes that are doing well such as the Silk Mark will be continued in the Eleventh Plan.

5.67 The Eleventh Plan interventions will promote inclusive growth for regions and social groups. At least 30% of beneficiaries in all schemes will be women. A women's credit fund will be set up, women-friendly technologies will be developed, and appropriate training will be provided. For other marginalized groups such as SC/ST and minorities, concessions like reducing beneficiary share by 10% of the envisaged contribution will be provided. Special programmes will be taken up in areas dominated by the marginalized groups.

UNORGANIZED WOOL SECTOR

5.68 The wool sector plays an important role in linking the rural economy and shepherds with the small, medium, and large-scale manufacturing units. This sector also has a diverse product portfolio: from textile intermediates to finished textiles, garments, knitwear, blankets, carpets, and a nominal presence in technical textiles. India is the seventh largest producer of raw wool accounting for 1.8% of the world production. In 2003, it had 615 lakh sheep, that is about 4.2% of the world's total sheep population.

5.69 The wool industry is broadly divided between the organized and decentralized sectors. The organized industry comprises: (i) composite mills, (ii) combing units, (iii) worsted and non-worsted spinning units, (iv) knitwear and woven garment units, and (v) machine-made carpet manufacturing units. The decentralized industry is engaged in (i) hosiery and knitting, (ii) powerlooms, (iii) hand-knotted carpets, druggets, and namadahs, and (iv) independent dyeing and processing houses.

Current Situation

5.70 The wool industry currently employs 27.2 lakh people—12 lakh in the organized sector, 12 lakh in sheep rearing and farming, and 3.2 lakh weavers in the carpet sector. The productivity of this sector is low. The world average for wool productivity has been about 3.5 kg per sheep per year, while in India the average is 0.8 kg per sheep per year. The quality of

domestic wool is also coarse and brittle. It is basically carpet grade wool and has an important role in the national economy: it is rural-based (sheep breeding), defence-oriented (blankets and made-ups), and contributes significantly to exports (carpets). About 80% of good quality Indian wool goes into the manufacturing of carpets. Of the remaining, 15% is very coarse grade and 5% is apparel grade but of shorter average fibre length. Rajasthan (44%), J&K (13%), Karnataka (12%) along with Gujarat, Uttar Pradesh, Andhra Pradesh, and Haryana (23%) are the major wool-producing States in the country.

5.71 As the production of fine apparel grade wool is not adequate in the country, a large quantity of wool is imported from Australia, New Zealand, China, Middle East, and other countries. In 2004–05, the total wool consumption at industry level in the country was 135 million kg. Of this, just 55 million kg was domestic wool; rest was imported. Of the total imported 80 million kg of wool, 47 million kg is apparel grade and the rest carpet grade. There has been a consistent increase in the quantity of imported raw wool in the Tenth Plan. But export of woollen items has also shown an increase from Rs 3597.31 crore in 2002–03 to Rs 4969.02 crore in 2005–06. This is mainly on account of the carpet industry which exports 95% of its output. There are 718 woollen units in the organized sector and many more in the small-scale sector. The wool-combing capacity of the sector is around 30 million kg and synthetic fibre combing is 3.57 million kg. Approximately 7228 powerlooms operate in this industry.

5.72 During the Tenth Plan, the Central Wool Development Board (CWDB), Jodhpur, implemented Integrated Wool Improvement Programme for the unorganized wool sector. The various components of the scheme were improvement of wool fibre and breed;

product development; provision of quality-testing centres, provision of CFCs for scouring, drying, carding, design development, product diversification, training, improvement, and development of speciality fibre such as Angora and Pashmina. The CWDB programmes have covered 25.5 lakh sheep and benefited 55091 families upto the end of the Tenth Plan period.

5.73 The CWDB installed wool-testing centres at Bikaner and Beawar in Rajasthan to test the fibre supplied by growers, merchants, and industries. The Board has also implemented two R&D projects, and set up one CFC and two common facility-cum-training centres.

5.74 The growth of the production of woollen items displayed mixed trends during the Tenth Plan. Hand-made carpets recorded the highest growth, but there was nominal annual increase in the production of woollen yarn and worsted yarn production. Despite this, the woollen industry could not achieve the overall targets of wool production due to the fluctuations in the prices of Australian raw wool, lack of promotion, unfavourable climate, change in fashion trends in favour of cotton, lifestyle changes, weak participation by the State Governments, and inadequate infrastructure.

The Way Forward

5.75 The Tenth Plan achievements and targets for the terminal year of the Eleventh Plan are given in Table 5.5. Eleventh Plan Schemes for unorganized wool sector are indicated in Box 5.4.

5.76 During the Eleventh Plan period, the productivity per sheep will be increased from present 0.8 kg per sheep per year to 1.5 kg per sheep per year. During this Plan period, the effort will be to produce good

TABLE 5.5
Tenth Plan Achievements and Eleventh Plan Targets for Wool Sector

Item	Tenth Plan Achievements	Assumed Growth Rate during Eleventh Plan (%)	Terminal Year of Eleventh Plan
Wool production (million kg)	55.00	10	88.50
Employment (lakh persons)	27.00	17	60.00
Export (Rs crore)	5600	13	10000

Source: Central Wool Development Board, Ministry of Textiles.

Box 5.4 Eleventh Plan Schemes

- **Integrated Wool Improvement and Development Programme:** To increase production, ensure breed improvement, health care, marketing of wool, survey and study, training, processing, and strengthening of indigenous varieties of wool, establishing multi-purpose extension centre, etc. Target: 26 lakh new sheep, 26000 rams, and 15 farms, 400 families under Angora and 2400 families under Pashmina Wool Development.
- **Quality Processing of Wool and Woollen Products:** To help in provision of processing facilities with latest technology for improving the quality of yarn and its end products. Target: 14 CRCs and 4 finishing centres.

New Initiatives

- **Social Security Scheme for Insurance of Sheep Breeders** in case of natural as well as accidental death. Target: 93500 shepherds.
- **Sheep Insurance** to cover accidents including fire, flood, famine, storm, etc., and diseases. Target: 24 lakh sheep.

quality carpet wool. The Tenth Plan schemes will be continued after suitable modifications. Two new schemes will also be started—insurance for shepherds as well as insurance for sheep. A revolving fund for procurement of raw wool from shepherds to help them in getting remunerative prices will be set up as a pilot project. The State Governments of Rajasthan and Uttarakhand have already demonstrated good results with similar initiatives. The wool sector needs convergence between various departments such as animal husbandry and rural development. In the Eleventh Plan, a comprehensive policy for pasturelands and commons will be developed.

5.77 One of the major problems with the wool industry has been the virtual absence of a system of grading. This will be taken up on a priority basis in the Eleventh Plan.

5.78 Marketing of wool is critical; it is also a weak link in the sector. There should be project-based assistance with clear identifiable objectives. Processing and finishing of wool products requires huge capital investment for which common infrastructure facilities will be developed with assistance from the government. To improve the breed, there has to be import of high breed germ plasms. Legislative measures would need to be taken up for issues of grazing, routes through forests for migratory sheep. CFCs for finishing carpets and shawls are being set up in the PPP mode. Involvement of industry associations is being obtained with the government support and assistance.

KHADI AND VILLAGE INDUSTRIES (KVI)

5.79 The KVI sector comprises khadi manufacturing and production from village/rural industries spread all over the country. The KVI programmes have now reached over 2.61 lakh villages providing employment opportunities to the rural poor in remote and hilly areas, border, and tribal areas. SCs/STs artisans account for 32% and women for 46% of the total artisans.

Current Situation

5.80 A large part of the employment in the khadi segment is part-time (4.05 lakh part-time and 4.65 lakh full-time). Spinning activity is carried out almost entirely by women, mostly belonging to the disadvantaged sections of the society. KVI institutions provide 'charkhas' to the spinners, usually at their homes and occasionally in common workshops. These institutions are run by the office bearers of the societies. The wage payments are irregular and generally made only after the permanent employees of the society receive their salaries. The sale of khadi products is only through the 'departmental outlets' of either the institutions or those of the Khadi and Village Industries Commission (KVIC) or State KVI boards. The focus is on charity and appealing to the 'goodness of people's hearts', not on the value of the product itself.

5.81 Currently, more than 60 lakh artisans/entrepreneurs in villages are engaged in production/services such as of minerals, leather, bee-keeping, honey, polyvastra, shoe repairing and manufacturing, papad making, food processing, and repairing agricultural implements.

5.82 The NCMP declared that the KVIC (and the programmes implemented through the KVIC) would be 'revamped'. The Expert Committee (EC) set up for this purpose in its report recommended to: (i) make the Commission more professional, like a modern corporate body, (ii) introduce a permanent consultative mechanism at the zonal level, and (iii) include enabling provisions in the law to get the programmes and activities implemented through selected non-governmental professional agencies.

5.83 The performance of KVI sector during the Tenth Plan period is given in Table 5.6.

Challenges

5.84 There is an urgent need to change the mindset towards khadi products; to move away from the welfare approach and publicize their USP—hand-crafted, hand-spun, energy saving, and healthy products. People should buy khadi not as a 'national duty' or 'act of charity' but because it is fashionable, admired the world over, and intrinsically of high value.

5.85 There is a need to rejuvenate the khadi programme and to enlist new khadi institutions by relaxing the restrictions on registration, particularly in general areas. Attempt should be made to revive the defunct/dormant societies under 'D' category. Raw material supply has to be strengthened and the existing infrastructure of six sliver plants expanded to meet raw material requirements. Old charkhas and looms require attention during the Eleventh Plan period. The shortage of working capital needs to be addressed by undertaking credit rating system for khadi institutions. A new scheme for khadi could be devised on the lines of handloom mark/silk mark for promotion and for establishing authenticity of products.

5.86 At the same time, it is necessary to assist traditional village industries by providing necessary loans to adopt modern manufacturing techniques. Village industries have an important role in generating employment at comparatively low cost, especially for socio-economically weaker sections and backward areas. The fund flow to KVI sector from budgetary resources is declining from one plan period to another in terms of percentage. After introduction of the value-added tax (VAT) system, the sales tax exemption enjoyed by village industries has been taken away, thereby affecting their competitiveness. Low quality standards and use of obsolete technology and tools are the most restricting problems for village industries.

The Way Forward

5.87 KVIC recently introduced the 'Product Development, Design Intervention, and Packaging (PRODIP)' scheme to provide incentives for development of new products, designs, and better packaging of both khadi and village industry products. Some designs developed under the scheme are already a big hit and have recorded big sales. The Rural Industries Service Centres (RISC) scheme was started in 2004–05 for establishing CFCs by providing grant up to Rs 5 lakh per RISC. Both these schemes have proved successful and will be carried forward into the Eleventh Plan.

5.88 Similarly, the Scheme of Fund for Regeneration of Traditional Industries (SFURTI) such as khadi, village, and coir industries approved in October 2005 will be continued in the Eleventh Plan. On the basis of the strategy for cluster development, this scheme ensures that the regeneration of employment-intensive industries is made sustainable through empowerment of the enterprises.

5.89 During the Eleventh Plan, 'Khadi' will be registered as a brand name as well as a domain name. New

TABLE 5.6
Performance of the KVI Sector during the Tenth Five Year Plan

Item	2002–03	2003–04	2004–05	2005–06	2006–07
Production (Rs crore)	8569.37	9681.77	10920.43	12383.84	14531.69
Employment (lakh persons)	66.45	71.19	76.78	82.77	88.52
Export (Rs crore)	45.94	52.00	39.08	40.41	52.90

Source: Khadi and Village Industries Commission, Ministry of MSME.

products and new designs will be developed with the help of National Institute of Design (NID) and NIFT. Packaging of khadi products will be improved. A mechanism to ensure the quality of khadi products will be evolved. Advertising campaigns in India and abroad will be carried out to make people aware of khadi and to project it as a fashion statement for the youth. Shops will be opened at all international airports in India and the possibility of marketing KVI products through e-commerce will be explored.

COIR INDUSTRY

5.90 The 150-year old coir industry is mostly concentrated in Kerala, Tamil Nadu, Andhra Pradesh, and Karnataka due to availability of coir husk, a by-product of coconut plantation. It has an annual turnover of Rs 1300 crore with a steady growth rate of 10%. India accounts for 90% of the world's coir production and our coir products are exported to approximately 90 countries across the world. The industry provides livelihood and/or additional income to more than 31.25 lakh people, mostly the disadvantaged sections of the population—SC, ST, and minorities. Women constitute 80% of its workforce.

Current Situation

5.91 The coir industry is highly decentralized, seasonal, and labour intensive. In 2006–07, coir exports amounted to Rs 605.17 crore, well above the Plan target. SFURTI has been taken up in 25 clusters selected in consultation with the principal coir-growing States such as Kerala, Andhra Pradesh, Tamil Nadu, Karnataka, etc.

5.92 The performance of the coir industry during the Tenth Plan period is given in Table 5.7.

Challenges

5.93 Though coir is found in many coastal areas, for historical reasons, coir products are primarily made in

Kerala. There is an urgent need to promote and encourage healthy competition among the coconut-growing States to catalyse State/region—specific innovations for tapping the immense growth and employment potential of this versatile fibre. The challenge in the Eleventh Plan is to develop new market driven products, to explore new markets—both in India and abroad—and, most importantly, to ensure a rational growth of coir industry on the basis of mutual co-operation.

5.94 There has been no comprehensive study to assess the actual global demand for coir products and the demand–supply gap, if any. Though coir industry is capable of producing a range of products, the use of coir products has remained confined to floor-covering material. Apart from this, the sector also faces some specific challenges such as

TARIFF AND NON-TARIFF BARRIERS

- In the international market, the duty applicable on import of coir and coir products ranges between 4% and 35%.

DISEASE

- Production of coir fibre has been affected by disease, which reduces the size of the coconut husk, resulting in low yield and inferior quality fibre.

SCATTERED PRESENCE

- Barring a few natural clusters, the industry is dispersed. Even in these clusters, the industry is not well integrated to take advantage of the development and promotional efforts towards modernization.

TECHNOLOGICAL OBSOLESCENCE

- The method of production has not undergone any significant change. The cost of production has been progressively rising, rendering it non-competitive.

TABLE 5.7
Performance of Coir Industry during the Tenth Plan Period

Item	2002–03	2003–04	2004–05	2005–06	2006–07
Coir fibre production (metric tonnes)	353700	364000	385000	410000	430025
Employment (lakh persons)	5.79	5.86	6.06	6.22	6.40
Export (Rs crore)	352.71	407.50	473.40	508.44	605.17

Source: Coir Board, Ministry of MSME.

MARKETING NEW PRODUCTS

- There is a need to undertake product development in traditional and non-traditional applications. New products that have phenomenal applications, such as rubberized coir, needle felt, geo-textiles, and coir pith, could be promoted to increase the demand for coir.

The Way Forward

5.95 During the Eleventh Plan period, most of the Tenth Plan schemes will be continued to reduce drudgery and increase production and wage levels. A major cluster development project with an approved outlay of Rs 56.8 crore has been taken up, in association with the Department of Industrial Policy and Promotion (DIPP), for the development of coir industries in and around Alappuzha, Kerala, with a Central grant of Rs 42.6 crore.

5.96 It is proposed to increase the level of growth of the industry to 15% and achieve a turnover of Rs 2100 crore by the terminal year of the Plan. Approximately 176250 new jobs will be created in the coir sector during the Eleventh Plan. Of this, 1.41 lakh jobs will be for women.

5.97 In the Eleventh Plan there is a need to focus upon R&D for diversification and popularizing new coir products in the market. Rejuvenation, modernization, and technology upgradation schemes will be introduced in the Eleventh Plan period. Better conversion rate of husk-to-coir products as a result of this scheme will require 50000 additional coir workers. Five mega clusters, one each in Kerala, Tamil Nadu, Andhra Pradesh, Karnataka, and Orissa, with thrust on technology upgradation will be promoted.

FOOD PROCESSING INDUSTRIES

5.98 Traditionally, food processing has been an important part of the rural and semi-urban economy, with pickles, jams, chutneys, and papads being made by women at the household level. As an industry, however, the food processing sector is yet to realize its potential. India currently produces about 50 million tonnes of fruits, about 9% of the world's fruit production, and 90 million tonnes of vegetables, accounting

for 11% of the world's vegetable production. Yet, only about 2% of these fruits and vegetables are processed as against 23% in China, 78% in Philippines, 83% in Malaysia, and 80% in South Africa. Within the country, share of fruits and vegetables processing is less than other products such as milk (35%) and marine products (26%). Lack of processing and storage capacities for fruits and vegetables results in about 35% waste in the annual production, the value being approximately Rs 54000 crore. A progressive and vibrant food processing industry (FPI) fetches more remunerative price for farmers and reduces waste.

Current Situation

5.99 There are three segments in the Indian food-processing industry—household, small, and large. Together they contribute 14% to the manufacturing GDP and employ about 130 lakh people directly and 350 lakh people indirectly. Of this 45.34 lakh people are employed in the MSME segment as indicated in Table 5.8. Then there are vendors, hawkers, people employed by large food processing industries, etc. For an investment of Rs 1 crore in organized and unorganized food processing sector, 140 and 1050 jobs are created, respectively. The multiplier effect of investment in food processing is 2.5 times in comparison to other industrial sectors.

5.100 In sectors such as marine products, cashew processing, and pickle manufacturing, the involvement of women is as high as 90%. Evaluation of schemes implemented by Ministry of Food Processing Industries (MFPI) in NER during the Tenth Plan show that 30% of permanent employment generated due to assistance provided under the programmes/schemes of MFPI was availed by women.

5.101 During the Tenth Plan, the schemes run by the MFPI were primarily for the small and large sectors of the industry. Little was done for the household sector, especially street food vendors who are present in large numbers in various cities (1 lakh in Ahmedabad, 2 lakh in Mumbai, and 1.5 lakh in Kolkata). While physical targets were met in some schemes, others such as food parks faced problems of gross underutilization. Most of the 54 food parks sanctioned since the Eighth Five Year Plan are yet to become operational. Currently only

28 units are running in eight parks. Similarly, though 18 projects were sanctioned under cold chain facilities and five under value-added centres, only four cold storages and two value added centres are currently operational.

5.102 The performance of FPI sector during the Tenth Plan period is given in Table 5.8.

5.103 To provide an impetus to food processing industries (FPIs), a number of policy measures were initiated during the Tenth Plan. Excise duty on fruit and vegetable processing was waived, Income tax holiday was provided, and customs duty reduced on freezer van from 20% to 10%.

5.104 Availability of raw materials for FPIs is a major strength of India. The growing middle-income and upper middle-income groups, increasing health consciousness, growing number of working women, time constraint, convenience, and need for hygienic food have also increased the demand for processed foods. Malls and departmental stores in metros, medium and small towns are providing better forward linkages.

Challenges

5.105 All three segments of the food processing sector face specific challenges. This section deals with the challenges faced by the dispersed small and household sector.

- **Infrastructure Development:** Since deterioration of agricultural produce starts within five hours of harvesting, much higher investments are required in pre-cooling and controlled atmosphere components at the farm level. Cold chain facilities also help in the decentralized distribution of processed food in small and medium-sized towns. Non-availability of adequate power of appropriate voltage is, however, a major hurdle.
- **Investment and Credit Availability:** Estimates indicate that more than 40% of the credit needs of small and marginal farmers are met by the traditional *arhtias* at very high interest rates. Similarly, more than 75% processors rely on informal credit. Development of a secondary market on the basis of financial instruments and negotiable warehouse receipt system is necessary for providing liquidity. The use of warehouse receipts as a financial instrument has not picked up. The Eleventh Plan will see a more secure system of accrediting warehouses so that they can provide certification about quality and quantity of the goods plus credits and standards of the goods stored. The Amendment to the Warehousing Act, pending in the Parliament will be expedited.
- **Year Round Availability of Raw Materials:** Non-availability of agriculture and horticulture surpluses in the required quantity and quality at the appropriate time is a major concern. To ensure the availability of varieties suitable for processing, a

TABLE 5.8
Performance of FPI Sector during the Tenth Plan Period

Item	2002–03	2003–04	2004–05	2005–06	2006–07	CAGR (%)
Production at current price [#] — (Rs crore)	66472.05	76264.13	86128.19	94127.99	104758.54	9.5
MSME sector CSO data						
FPI component of GDP*	45146.00	51846.00	55772.00	59281.00 (Prov.)	na	
Employment (lakh persons)**	38.30	39.97	41.74	43.51	45.34	3.4
Export***(Rs crore)	4727.57	5467.06	6154.77	8634.49	8493.40 (Prov.)	12.4

Note: [#] Data compiled on the basis of the Third Census results of MSME sector and growth rate estimated using Index of Industrial Production (MSME sector).

*Provided by Central Statistical Organization (CSO). These figures would be revised by the MFPI after compiling the data for FPI sector, which includes MSMEs and large industries.

**Estimated on the basis of the Third Census results of MSME sector.

***Agricultural and Processed Food Products Export Development Authority (APEDA) data.

Source: MFPI.

co-ordinated network of research and extension services is required.

- A significant challenge is the limited period of availability of products. Mango is available for three to four months; lychees for fifteen days in a year. Thus, units have to procure maximum crop during harvest time and process it throughout the year. Many units argue for flexibility in hiring, but workers' interests need to be ensured.
- **Creating Markets:** The high cost of transporting agricultural commodities and processed food affects efficiency. The challenge is to establish an integrated, comprehensive but simple system for the movement of commercial transport vehicles to increase efficiency, reduce delays, and make produce available on a timely basis. With rural connectivity, the country should become a single market.
- The complex tax structure and multiplicity of state-level taxes need to be rationalized. VAT should become uniform in all States/UTs. Abolition of all indirect taxes on agricultural/horticulture products could resolve the problem of border taxes.
- Farmers' associations, SHGs, and co-operatives as well as private companies need to be promoted so that they can bargain with the processors and retailers for better price. Realization of the economies of scale in procurement, technology, and market are also better ensured by producer's groups.
- The food supply chain is complex with perishable goods and numerous small stakeholders. Each stakeholder works in a silo. Demand forecasting is totally absent and the farmers try to push what they produce into the market. There is need for data integration, financial flow management, supply-demand matching, collaborative forecasting, information-sharing, and goods movement synchronization through efficient transport scheduling.
- Packaging has become the competitive tool to reach the consumer. Cost of packaging ranges from 10% to 64% of the production costs, and efforts are needed to reduce this.
- The expenditure on R&D is less than 1%. This needs to be enhanced for finding effective technologies for household and small units.
- Standardization is a powerful tool for improving the supply chain efficiency. There are two standards. The first is about content, manufacturing process,

and packaging. The second one deals with logistics and IT systems such as standardization of cartons, pallets, and IT software so that seamless transfer of goods and information is possible. Both these standards need to be enforced so that the demand is not affected by the issue of quality control.

- The increase in world food trade and the advent of the SPS Agreement under the WTO have led to increasing recognition and adoption of food safety measures. Our ability to compete in world markets depends on our compliance with the increasingly stringent food safety standards, especially in view of the breakout of diseases such as Avian Influenza and Bird Flu.

5.106 The household sector of food processing faces another problem. Street vendors are increasingly being removed for urban planning and development. This not only robs many of their livelihoods, but also reduces the access of low-income groups to street food.

The Way Forward

5.107 Integration of the food processing infrastructure from farm to market, providing choice to consumers, assurance about safety and quality of food, setting up a transparent and industry-friendly food authority, and putting in place a transparent system of standards will be the thrust areas during the Eleventh Plan. For this purpose, certain targets have been set, for example: (i) increase the level of processing of perishables such as fruits and vegetables from 6% to 20%, (ii) enhance the value addition in food processing from the present 20% to 35%, and (iii) increase share in global food trade from 1.5% to 3% by 2015. The year-wise physical targets for the Eleventh Plan is given in Table 5.9.

5.108 A paradigm shift is required for the implementation of the various schemes. Management and implementation arrangements in the PPP mode and strong project implementation capabilities will be developed. The scheme for technology upgradation and modernization would be decentralized and operated through nodal banks in place of State nodal agencies to provide back-ended credit-linked subsidy. A new integrated approach would be adopted based on the strategy of (i) better project selection, development,

TABLE 5.9
Year-wise Physical Targets for the Eleventh Plan for FPI
(MSME Manufacturing Units)

Item	2007–08	2008–09	2009–10	2010–11	2011–12	CAGR (%)
Production at current prices (Rs crore)	120472.33	138543.18	159324.65	183223.35	210706.85	12
Employment (lakh persons)	47.61	49.99	52.49	55.11	57.87	4
Export (Rs crore)	11630.00	13185.00	14955.00	16970.00	19270.00	10.7

Source: MFPI.

Box 5.5 From Poverty to Prosperity

Shri Mahila Griha Udyog, the makers of the popular Lijjat Papad, started with a modest loan of Rs 80 and an annual turnover of Rs 6196. This triumphant journey began on 15 March 1959, when seven women inhabitants of South Bombay, without any seed money, gathered on the terrace of a building to prepare papad. Today, Lijjat Papad involves a workforce of more than 40000 women, has an annual turnover of Rs 300 crore, and an annual export of Rs 10 crore. Though Lijjat has achieved huge success, its annual expense on advertisements and promotions is Rs 60 lakh, a mere 0.2% of the total turnover. The co-operative believes in promotion by word of mouth and thus concentrate on cost effectiveness and quality rather than promotion through advertisements. Lijjat has now diversified into other products such as grounded spices, *khakhra*, black pepper powder, detergent powder, and cake, *vadi*, bakery products, etc. Kanjikuzhy GP in Allepuzha district of Kerala was one of the poorest and least-developed Panchayats of the State. Under the leadership of a dynamic woman *pradhan*, the village started vegetable gardens. They began making coir products and processing different varieties of food that they cultivated—*amla*, lime, garlic, ginger, bittergourd, and mango. Today the Panchayat has a turnover of over Rs 2 crore per month by selling its coir products, pickles, jams, squashes, etc. under its own brand. There are over 2000 women SHGs in five villages with a population of 1.6 lakh. Women earn Rs 60 per day as wage and get a share in profits.

and implementation, (ii) decentralized cluster-based development, particularly for creation of infrastructure and fostering linkages with the retail outlets, (iii) industry-led capacity building and upgradation of standards, (iv) an integrated food law and scientific food standards, and (v) strategic intervention with redesigned schemes and strong implementation arrangements.

5.109 The Eleventh Plan will see the development of carefully planned, cluster-based, privately driven food parks; publicly owned and privately managed abattoirs; integrated cold chain facilities and strategic distribution centres (SDCs); cluster-based preservation infrastructure (cold storages, reefer vans, etc.) and irradiation centres; public and private testing and certification labs; and a liberalized wine policy leveraging the agri/horticultural surpluses. Emphasis will be laid on upgrading the quality and hygiene of the street food. National Meat Board, Wine Board, and National Institute of Food Technology and Management will be set up and the Paddy Processing Research

Centre, Thanjavur will be modernized. New markets will be tapped by creating the 'Halal Food Hub', the 'Organic Food Hub', the 'Vegetarian Food Hub', the 'Sea Food Hub' among others.

ELEVENTH PLAN SCHEMES

5.110 The scheme for infrastructure development aims to establish 30 mega food parks (new scheme), 50 abattoirs for modernization, and 30 cold chain infrastructure and value-added centres. The mega food parks would be set up with the objective of: (i) state-of-the-art infrastructure for food processing, (ii) ensuring value addition, (iii) inducting latest technology, (iv) fostering of inter-agency linkages for pooling of resources, and (v) quality assurance through better process control and capacity building. Integrated cold chain and SDCs would be set up in a network of towns in associations with private infrastructure companies. Local bodies would be encouraged to participate in setting up of modern abattoirs with a focus on capacity building and training for hygienic and scientific slaughtering.

5.111 The scheme for technology upgradation, establishment, and modernization of FPI will be decentralized and operated through nodal banks/financial institutions directly in place of State nodal agencies. The target under this scheme is 300–350 food processing units. With effect from 1 April 2007, the Ministry has decentralized the disbursement of grants to the applicants directly from the banks which have appraised their projects and provide term loan/working capital. This has resulted in increasing the outreach of the scheme. The new demand coupled with the outstanding applications implies that there will be greater allocation for this scheme during the Eleventh Plan.

5.112 The scheme for quality assurance, codex standards, and R&D and promotional activities provides financial assistance for total quality management, International Organization for Standardization (ISO) standards, bar coding, quality control labs, strengthening of codex cell, and R&D. The scheme also encourages promotional activities. The existing scheme is proposed to be modified for making it more attractive. Private parties will be encouraged to set up quality control/food testing laboratories. FPI units will be provided inputs for adopting modern practices such as HACCP, good manufacturing practice (GMP), good handling practice, ISO 9000, etc.

5.113 Four thousand programmes will be taken up under the scheme for HRD to provide assistance for skill development, strengthening of technical courses in food processing in universities, Entrepreneurship Development Programmes (EDPs), training centres, etc. Follow-up support would be provided to the trainees of EDPs as well as linkages for availing loans from banks/financial institutions would be provided.

5.114 A new scheme for upgradation of quality of street food will be introduced to provide assistance for upgrading and establishing safe food town/food street in 25 cities. This would play a major role in making available hygienically prepared food to *aam admi* (common man). Industry associations, NGOs, PRIs, municipal bodies, etc., would be involved to ensure safety and good quality of street food with the focus

on value addition to augment the income levels of the food vendors.

5.115 The total projected GBS for the Eleventh Plan for the MFPI is Rs 3564 crore (2006–07 price) and Rs 4031 crore (current price). A matching private sector investment and a leveraging ratio of 2.5 would result in an investment of about Rs 20000 crore in the processing units. This will lead to creation of 28 lakh additional jobs in the organized sector during the Plan period. Further, assuming a reasonable investment turnover ratio of 2, a total investment of Rs 20000 crore would lead to an aggregate turnover of Rs 40000 crore over the Plan period. The income levels of the farmers are also expected to go up by 20% due to better realization, value addition, and integration of the supply chain. During the Plan period, supportive steps will be taken in a number of other sectors which have a direct or indirect impact on the agricultural/horticultural surpluses available for processing. These will include quality of the inputs, research, and institutional support to enable the farmer to generate surpluses, facilitating transportation of produce across State borders, formation of a national market, etc.

5.116 During the Eleventh Plan period, special programmes for capacity building of SCs, STs, minorities, and women will be formulated. Potential entrepreneurs belonging to these groups will be identified, and tailor-made EDPs, skill development programmes, study tours, etc., will be organized. Gender sensitization programmes for stakeholders including extension functionaries and other implementing agencies will be carried out. Training programmes for women will be redesigned to include technology, management, and micro credit and to promote rise of women entrepreneurs. R&D institutions will be encouraged to develop women-friendly technologies for post-harvest handling and processing, especially for drudgery reduction and providing ease of operation. Most importantly, provision of utilities, basic amenities, and crèches for women staff workers will be made mandatory in the infrastructure projects. An increased scale of assistance will be given for all the infrastructure projects to attract investment in the North East.

ANNEXURE 5.1

CLUSTER DEVELOPMENT IN INDIA—TOWARDS A REINVIGORATED CLUSTER APPROACH

Clusters are defined as a sectoral and geographical concentration of enterprises, institutions, service providers, and related regulatory bodies, engaged in the production of homogeneous or inter-related products and faced with common opportunities and threats.

TYOLOGY OF CLUSTERS IN INDIA FROM A POLICY PERSPECTIVE

In India, as per the current estimates, there are over 6600 clusters. Agencies have come up with a range of definitions of clusters by specifying a minimum number of units in a given measured location. However, from a policy perspective, it makes sense to typify cluster by their broad challenges relevant for policy intervention. Accordingly, clusters in India can be classified into three broad categories, namely, (i) high-tech clusters (very few at present) targeting innovation for existence, (ii) traditional manufacturing clusters (around 400 plus) targeting competitiveness and consequent employment, and (iii) low-tech micro enterprise ‘poverty-intensive’ clusters (around 6000) that have both employment as well as poverty implications. Industry/region-wise overview of Indian clusters is indicated in Table A5.1.

A POLICY FRAMEWORK

Activation should be Preferred over Cluster Creation

Cluster-level support is required for both ‘soft’ [e.g., marketing, training, network creation, Business

Development Service provision, benchmarking, productivity improvement areas] as well as ‘hard’ (cluster-specific infrastructure) interventions. Besides, support is also required for programme management for implementing agencies, resource organization, and cluster development executives.

Capacity Building for Creation of Cluster-related Institutional Infrastructure

Develop a cadre of human resources to initiate cluster development. Develop at least 8–10 national and 25–30 regional institutions to support the implementation of cluster-based development initiatives.

Policy institutions should set up cluster cells and either deploy adequately trained personnel or hire expert institutions for continuous monitoring and evaluation.

ACTIONS BY CENTRAL GOVERNMENT

- The National Commission for Enterprises in the Unorganized Sector (NCEUS) has recommended creation of a National Fund for the Unorganized Sector (NAFUS). NAFUS should be a statutory body funded by the Central Government, public sector banks, financial sector institutions, and other government agencies. The functions of the Fund would not be merely to enable better access of credit to farm and non-farm enterprises alone but to enable the unorganized sector to benefit in areas of marketing, technology, skill and entrepreneurship, guidance and counselling, and capacity

TABLE A5.1
Indian Clusters—An Overview

Region	Traditional Manufacturing		Micro Enterprise					
			Handicraft		Handloom		Others	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)
North	123	31.7	716	25.75	140	23.56	698	24.11
East	36	9.28	645	23.19	43	7.24	464	16.02
West	140	36.09	764	27.47	134	22.57	787	27.17
South	89	22.95	502	18.05	214	36.02	858	29.62
North East	0	0	153	5.51	63	10.61	89	3.08
Total	388	100	2780	100	594	100	2896	100

Source: Compiled from DC (Handicrafts), DC (Handlooms), UNIDO, and the Third Census of SSI units, 2001–02.

building. The target group of the Fund should be the micro enterprises, with focus on those below an investment of Rs 0.5 million. These constitute 94% of the small enterprises in the country but receive about 2% of the net bank credit (NBC), despite providing employment to 70 million people and contributing 30% of industrial production. The Fund could ensure convergence among the various institutions and programmes, through refinancing and confidence schemes for the banks.

- The NCEUS has also piloted Growth Poles for the unorganized sector, based on a concept of developing a cluster of clusters in project mode with PPP. The Commission recommends that 25 Growth Poles (one in each State) be supported during the Eleventh Plan with incentives similar to those offered to SEZs.

ACTIONS BY STATE GOVERNMENTS

- State governments and institutions with specific areas of focus may draw up their own criteria to define clusters. In view of the huge employment potential of the services clusters, there is need for identifying such clusters and subsequent interventions in urban, semi-urban, and rural hubs.
- Although the international experience (especially in Italy and China) has been that local governments are the key players in promoting clusters, in India local governments currently lack this capacity. There is need to shift to a pattern of funding and support driven by State Governments.

- Targeting poverty reduction through cluster development calls for addressing the needs of an estimated 6000 clusters. While the handloom and handicrafts clusters are well-defined, micro clusters need to be further documented with respect to their products, marketability, and dispersion. Within those clusters, highest importance needs to be given to the presence of certain social groups such as higher presence of SCs, STs, and minority communities and those having higher involvement of women as entrepreneurs/workers.

ACTIONS BY PRIVATE ACTORS AND INDUSTRY ASSOCIATIONS

The international experience is that for co-operative action to take place within clusters, the enterprises within clusters should have an association. There are about 3000 associations in existence; however, nearly all these associations are for industrial clusters and not for artisanal clusters. In other words, the 400–500 odd industrial clusters are serviced by some 3000 associations, while the artisanal clusters have no more than 100 associations between them. Without such associations, the articulation of the demands and needs of such artisanal clusters is likely to remain inadequate, and the government programmes or cluster development agency efforts may be supply driven, as opposed to being demand driven and responding to the real felt needs of players involved.