Credit Gap Mapping of Select Clusters
Pune Fruits and Vegetables Processing Cluster
Disclaimer

The present document is an attempt to put together relevant information to stimulate thinking and raise basic knowledge of the stakeholders on the credit gap in MSME clusters and methods to bridge the same. Note that this document is neither exhaustive nor complete on the topic of credit gap assessment and suggested products.

The information has been compiled from reliable documented and published references/resources, as cited in the publication and through primary surveys in the identified clusters. Mention of any company, association or product in this document is for informational purposes only and does not constitute a recommendation of any sort by either GIZ or SIDBI. This document is for complementary distribution only.
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Pune Fruits and Vegetables Processing Cluster
Foreword

The Micro Small and Medium Enterprise (MSME) segment plays a significant role in the Indian and global economy. The domain comprising around 30 million units contributes significantly to national GDP (8%), creates employment of about 70 million, 40% of exports and provides bouquet of more than 6000 products. Nevertheless, MSMEs continue to face various gaps in their ecosystem like access to credit, market access, skill development, technology up-gradation, etc. To address the critical issue of adequate, affordable and timely credit for MSMEs, it is very important to arrive at credit requirement and credit gaps in the MSME sector, more so in the MSME clusters.

Small Industries Development Bank of India (SIDBI), being the principal institution for the promotion, finance and development of the MSME sector and Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, an international institution with thrust on Sustainable Economic Development, Energy and MSMEs, have successfully completed the project on estimating the credit gap in select clusters (where SIDBI has been, for past few years undertaking cluster development programme). More importantly, it suggests ways and means in facilitating greater access of credit to MSMEs in these 10 clusters. The objectives of this study are to measure gap in credit supply and demand with respect to selected 10 MSME clusters and develop alternate innovative models or credit delivery channels.

Apart from providing innovative credit delivery channels for these clusters, a number of innovative products based on cluster requirement and sources of credit demand are recommended by the study to ensure strengthening the supply side. These included Financing of Raw Material Procurement, Factoring (or reverse factoring), Pre-approved Collateral-free Equipment Finance Scheme, Up-scaling of Microfinance to cater to Micro Enterprises, Purchase Order Financing, Receivables-linked Bridge Financing for Working Capital Needs, Quality Testing and Registration-linked Financing scheme, Lease Financing, Joint Liability Group (JLG) for MSE lending, etc. Some of these credit delivery models are tried and tested and display scalable potential with regard to their replication.

The outcome of the study has been brought out as an enriched book on “Credit Gap Mapping of Select Clusters”. We hope that the banking fraternity, policy makers and other MSME stakeholders would find it useful to attend to the national priorities of increase in income, employment and global competitiveness.

[S. Muhnot]
Chairman and Managing Director,
Small Industries Development Bank of India
Preface

The micro, small and medium enterprises (MSME) sector employs nearly 60 million workers in India, which is next only to the agriculture sector. MSMEs also account for nearly half of India’s manufacturing output, especially the export oriented output. Undoubtedly, MSMEs play a critical role in furthering the country’s agenda on inclusive growth. However, evidences show that MSMEs in India face various challenges, the most crucial of them being the access to key financial and non-financial services. Moreover, neither the current business climate nor the environment for services encourages the growth of MSMEs.

The MSME Umbrella Programme, being jointly implemented by SIDBI and GIZ, aims at improving the MSME access to demand oriented financial and non-financial services and thereby enhancing their growth and competitiveness. The programme has taken several initiatives to address the issues of access to finance for the ‘missing middle’. One such initiative is the study on the measurement of Gap in Credit Supply & Demand in select MSME clusters in India. The results of the study are being published in this book. The study has taken a very comprehensive approach. It not only measures the credit gap based on the demand and supply, it also presents a systematic analysis of the probable reasons causing the gap. And it elucidates the alternative credit delivery channels and innovative loan products suitable to individual cluster requirements.

We hope that this study would be useful for policy makers, financial institutions and other stakeholders for facilitating enhanced and improved financial services to the MSME sector.

[Manfred Haebig]
Private Sector Development, GIZ India
Credit Gap Mapping of Select Clusters

Programme and Partners

MSME Umbrella Programme

The objective of the Umbrella Programme for Promoting Micro, Small and Medium Enterprises (MSMEs) is to improve the business climate and scope of services that benefit MSMEs. This objective is to be reached through measures in areas of financial and non-financial services. It consists of two components – Component 1 focuses on MSME Financing & Development and component 2 aims at MSME Support Policies and Programmes.

The MSME Financing and Development component is being jointly implemented by Deutsche Gesellschaft für Internatioanle Zusammenarbeit (GIZ) GmbH in co-operation with the Small Industries Development Bank of India (SIDBI). This component aims to further strengthen the success achieved under multi donor MSME Financing and Development Project (MSME-FDP) wherein the World Bank, Department for International Development (DFID), UK and KfW, Germany were other international partners besides GIZ (then GTZ). MSME FDP has been creating an enabling and sustainable environment for the growth and development of competitive MSME sector in India. The progress of the Project had been quite noticeable as it has so far reached out to 1 lakh beneficiaries comprising MSMEs, Bankers, and other stakeholders. The interventions (with thrust on market competitiveness, skill, technology, energy efficiency, environment etc.) were designed to foster competitiveness and sustainability among MSMEs. Current MSME Financing and Development component of MSME Umbrella Programme aims at facilitating improved access to demand-oriented and innovative financial and non financial services and fostering an enabling policy environment for MSMEs. With respect to non-financial services, the Financing and Development component focuses on promoting strategies and implementation of market based generic, embedded and public business development services (BDS) to value chain/ MSME clusters in identified sectors.

In regard to financial services, the Financing and Development component offers training and advisory services to participating banks/ institutions/MFIs aimed at increasing credit and other financial services to regional clusters/value chains of MSMEs.

Small Industries Development Bank of India (SIDBI): SIDBI is the principal Financial Institution for the promotion, financing and development of Micro, Small & Medium Enterprises (MSMEs) in India. SIDBI reaches out to the entire value chain (Micro Finance to Missing Middle to MSMEs) by extending Promotional (SETUP) and Development (STEP UP) support. It addresses the gaps in MSME eco system by offering bouquet of financial support to MSMEs covering (a) Refinance to entire gamut of financial support institutions including banks, State entities, Micro Finance Institutions (MFIs) etc for onward lending to MSMEs (b) Direct assistance in niche areas.

SIDBI is committed to contribute to the expectations on national goals as also Millennium Development Goals (MDGs). It continues to customise its product offerings as also processes so as
to sustainably contribute to emergence of globally compliant competitive Indian MSMEs. SIDBI has
devised a number of schemes catering to the financial and non-financial needs of MSMEs. It has
been a pioneer in institutional solutions by setting up associates/subsidiaries in Venture Capital,
Credit Guarantee for collateral free loans, credit rating, and technology bank and asset
reconstruction. Its international partnership has enabled it to assimilate best practices and adopt it for
Indian MSMEs.

**Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH:** The services
delivered by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH draw on a
wealth of regional and technical expertise and tried and tested management know-how. As a federal
enterprise, we support the German Government in achieving its objectives in the field of
international cooperation for sustainable development. We are also engaged in international
education work around the globe. GIZ currently operates in more than 130 countries worldwide.

**GIZ in India**

Germany has been cooperating with India by providing expertise through GIZ for more than 50
years. To address India's priority of sustainable and inclusive growth, GIZ's joint efforts with the
partners in India currently focus on the following areas:

- Energy- renewable energy and energy efficiency
- Sustainable Urban and Industrial Development
- Natural Resource Management
- Private Sector Development
- Social Protection
- Financial Systems Development
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Study Background and Objectives

GIZ (or ‘the client’), under Micro, Small & Medium Enterprises Financing and Development Project (‘MSME-FDP’ or ‘the project’), desired to undertake a study on Gap in Credit Supply & Demand, and Development of Alternate Modes of Credit Delivery in select MSMEs Clusters (‘the study’). Dun and Bradstreet Information Services India Pvt. Ltd. (‘D&B India’) undertook the aforementioned study.

The World Bank’s parent project, the ‘Multi-Donor & Multi-Activity’ Micro Small and Medium Enterprises Development Project (MSME-FDP) for MSME financing and development became effective on April 4, 2005. SIDBI is the implementing agency for the project supported by international partners - The World Bank, DFID, KfW and GIZ. The Department of Financial Services, Ministry of Finance, Government of India is the nodal agency for the project. The objective of the project has been to improve MSME access to finance and business development services, thereby fostering MSME growth, competitiveness and employment.

As a part of MSME umbrella programme, GIZ and SIDBI aim to provide improved access to financial and non-financial services that are innovative and tailored to suit market needs under the component MSME Financing and Development. In order to improve financial and non-financial services to MSMEs, it is important to understand the current schemes implemented by Banks, and FIs for MSME financing, the finance support structure in the cluster and evaluate the finance need gap. Basis this need gap, the study developed directional inputs to eliminate such gap by proposing alternate financing products and delivery mechanisms for the same. The study aims to facilitate enhanced and improved services to the MSME sector.

Objectives of the Study

- To develop a suitable methodology framework for estimating Credit Gap in any industry cluster across India
- To map the credit demand and supply status, measure the credit gap and reasons for the current status in the select identified clusters (10 clusters in 6 subsectors)
- To suggest tailor made specific financial products, alternate delivery models and institutional mechanism for implementation in the clusters

D&B India identified 10 MSME clusters, in consultation with GIZ, where SIDBI is active under MSME-FDP, basis discussion with GIZ and selection parameters such as size (turnover, employment, etc.) and geographical spread.

The current report provides a summary of project findings, a detailed account of the methodology employed for measuring credit gap and the assessment in the Pune Fruits and Vegetables MSME cluster.
Executive Summary

Indian MSMEs are a diverse and heterogeneous group but broadly face a common set of problems. Longer asset conversion cycles, limited market access, and the relative absence of modern technology and quality control, to name a few, are problems plaguing the sector. Access to finance is often limited due to issues such as the inability to furnish adequate collateral for institutional credit and high interest required to be paid on credit from non-institutional sources. Besides, a majority of MSMEs also self-exclude themselves from the formal financial system as they are unaware of their eligibility for credit from banks. According to the Fourth All India Census of MSMEs (2006-07), mere 11.2% registered enterprises in India have access to loans from formal financial institutions.

Micro and Small Enterprises Face Greater Financial Exclusion

The size of enterprises and the scale of their operations is often also a gauge of the extent of financial exclusion faced by them. Small and, more specifically, micro enterprises (MSEs) typically suffer from greater barriers to institutional credit access, relative to medium enterprises. The credit appraisal processes adopted by lending institutions typically lead to the exclusion of MSEs.

Lending institutions have internal rating models for assessment of project proposals. The risk involved in a project is assessed based on various parameters such as project details (project concept, location, sector type, project strength through DSCR, project IRR, payback period etc.), borrower background, fixed asset information, cash conversion cycle, previous relationship of the bank with borrower, and details of existing and proposed credit facilities.

Due to less favorable conditions existing at MSEs, loan approval either takes longer or gets altogether rejected. Security in the form of collateral, guarantees and fixed assets, are not always available. The cash conversion cycle is generally unfavorable leading to unstable cash flows. This is also compounded by absence of credit ratings, basic financial information and a coherent business plan. Awareness of banking processes and modern technical knowledge is also often found to be lacking.

The current report, therefore, concentrates on the credit gap faced by the Micro and Small enterprises, which has often been described as the ‘missing middle’ on evaluating the status of their access to finance. The financial requirements of MSEs are often considered too large for microfinance institutions to fulfill. At the same time, they cannot be effectively served by applying lending models that pertain to large corporations.
Definition of Credit Gap

Credit gap can be defined as unmet credit requirement of MSEs, over and above the available access to credit from formal institutional sources of finance. The same measures are used by international institutions like IMF and the World Bank.

Non-users of formal financial services amongst MSEs are either involuntarily excluded or voluntarily exclude themselves from the institutional loan market. Involuntary exclusion, as explained above, is due to ineligibility based on loan approval criteria. Amongst MSEs who self-exclude themselves, are those who:

- Currently use informal sources of credit
- Lack awareness of their eligibility for loan from formal sources
- Have no need

The first two categories of MSEs do have a need for credit, which is not being catered to by institutional sources. Hence, the credit requirement of such MSEs would form part of the credit gap.

MSME Clusters under Study and Nature of Data Collection

The credit gap was estimated for 10 MSME clusters, identified by D&B India in consultation with GIZ and SIDBI. The 10 clusters represent all four regions and six sub-industries.

A quantitative questionnaire survey was conducted across the 10 identified clusters. At least 50 MSME respondents (enterprises) were identified for each cluster and well distributed across micro, small, and medium enterprises. The questions in the questionnaire included queries on financial information (such as assets, turnover, profit etc.), nature of credit requirement, and perception/experience with the banking system.

<table>
<thead>
<tr>
<th>Industry</th>
<th>Clusters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering</td>
<td>Faridabad, Coimbatore, Rajkot and Rourkela</td>
</tr>
<tr>
<td>Leather</td>
<td>Kolkata and Chennai</td>
</tr>
<tr>
<td>Fruits &amp; Vegetables Processing</td>
<td>Pune</td>
</tr>
<tr>
<td>Textile and Garments (Knitwear)</td>
<td>Ludhiana</td>
</tr>
<tr>
<td>Dyes and Chemicals</td>
<td>Ahmedabad</td>
</tr>
<tr>
<td>Pharmaceuticals</td>
<td>Hyderabad</td>
</tr>
</tbody>
</table>

The quantitative survey was coupled with qualitative interactions with stakeholders in each of the clusters. This included discussions with District Lead Banks, Industry Associations, District Industries Centers (DICs), SIDBI officials, large enterprises, as well as MSMEs. The objective of the
qualitative interactions was to obtain an understanding of status of institutional credit supply to MSMEs, sources of credit demand, specific credit-related challenges faced by enterprises and to collate ideas on innovative loan products and credit delivery mechanisms.

Credit Demand Estimation

The demand for credit arising from both working capital requirements as well as long-term investment requirements has been estimated. The estimation method for working capital credit requirement broadly follows the method outlined in the Nayak Committee Report (1991). Of the broad contours set for the committee, one of the key requirements was to examine the adequacy of institutional credit for the MSE sector.

In the process of examining the adequacy of institutional credit, the committee, outlined methods for developing credible demand estimates for credit. While the committee stressed on strong quantitative methods for working capital credit estimation, term credit estimation was fairly qualitative in nature. For estimating working capital requirements, the committee suggested the use of the ‘Forecasted Sales Approach’. 25% of the forecasted sales for the enterprises could be considered as requirement for working capital. It was recommended that working capital bank credit could be as much as 80% of the estimated working capital requirements.

Working capital credit demand for the MSME clusters under the current study has been estimated by applying the Nayak Committee method to the cluster turnover estimated on the basis of the cluster survey.

Term Credit requirements have been estimated by applying fixed asset growth forecasts to current ‘Investments in Plant and Machinery’, which in turn has been estimated on the basis of the cluster survey.

D&B India also studied the report prepared by the National Commission for Enterprises in the Unorganized Sector (NCEUS) under the chairmanship of Dr. Arjun K Sengupta. Under this method, the average credit needs of the unorganized units were obtained from a survey. Average credit need was then multiplied by the total number of estimated unorganized units to obtain the Total Credit Demand.

While the commission’s method was most effective for estimating credit requirements of unorganized enterprises (mostly micro proprietary units), extrapolated estimates of credit requirements are prone to outliers in the sample surveyed. Existence of detailed diagnostic studies on the clusters and a detailed survey among a limited but representative sample enabled D&B India to rely on the ‘Forecasted Turnover Approach’ for estimating WC requirements and its own method (explained above) for estimating Term Loan requirements, separately.
Credit Supply Estimation

Scheduled Commercial Banks (SCBs) account for the bulk of the institutional lending to MSMEs, with Non-Banking Financial Corporation’s (NBFCs), Cooperative Banks, State Financial Corporation’s (SFCs) and other Financial Institutions playing a minor role as well. The estimation of credit supply to the MSME clusters under the current study considers lending by the SCBs. Lending by large and dominant Cooperative Banks, SFCs and SIDBI has been added to the total credit supply to clusters where available and where their contribution to the cluster is significant.

The proportion of cluster turnover to state turnover in the same industry is first computed. Thereafter, the ratio is applied to the outstanding lending by SCBs in the state to that particular industry, to arrive at the credit supply estimate to a specific MSME Cluster.

D&B India also contacted various Lead Banks for the identified district clusters under the current study and obtained aggregated credit supply data at district level. The estimates for Credit Supply Outstanding for each cluster computed by D&B India were matched with Lead Bank data on Outstanding Total Advances, Priority Sector Advances and MSE Advances, in order to ensure consistency.

Sources of Credit Demand in the 10 MSME Clusters under Study

Nature of Raw Material Procurement and the Asset Conversion Cycle

Procurement of raw materials takes place in bulk and typically during certain times of the year. Raw-material suppliers, in most cases, need to be paid on the spot. Considering the fact that many primary commodities are prone to market fluctuations, maintaining competitiveness in terms of end-product prices demands that MSEs buy their raw material supplies at reasonable prices, whenever available.

While the raw-material suppliers hardly provide any credit and sell in bulk, realization from sale of end-products in most MSME industries takes place over a longer period. In some cases, the seasonal nature of end-product demand requires that raw-materials are procured and stored for a significant period before they are further processed.

The need for raw-material procurement in large quantities at discrete intervals and the longer asset conversion cycles gives rise to a significant need for working capital among MSEs.

Examples include the:

- Fruit and vegetable procurement at mandis / market yards in the Pune Food Processing cluster
- Knitting and garmenting units in Ludhiana, which are dependent on suppliers of yarn, chemical, accessories and packing materials, fabricating units and distribution networks
• Tanneries in Kolkata and Chennai Leather clusters that have to procure the raw hides and skins from traders / local suppliers who source the skins from across the country

• Procurement of commodities such as pig iron, coke, copper, aluminum, etc. by MSMEs at uncertain prices in engineering clusters from retailers, unlike larger firms who buy in bulk directly from raw material manufacturers at pre-determined prices

**Subcontracting Arrangements**

Contract manufacturing is common in many industrial clusters, especially in the Engineering clusters.

• Micro and small units (many of which are foundries) in the Rajkot Engineering cluster produce sub-assemblies for more organized manufacturers of automobile parts, diesel engine, pump-sets and machine tools in the cluster. Usually, the manufacturers or middlemen purchase their goods directly from their doorsteps

• Large scale industries like Hero Motor Company, New Holland, JCB, Escorts etc. in the Faridabad Light Engineering cluster rely on MSMEs for contract manufacturing. Further, many medium and small auto-ancillary units in the cluster rely on micro-units for activities such as electro-plating

• Micro enterprises in the Coimbatore Engineering Cluster (mainly foundries), act as subcontractors to small and medium enterprises in the business of manufacturing pumps, motor and automobile components

Credit cycles of greater than 30 days and the absence of discipline among large buyers in meeting payment deadlines typically lead to working capital shortages among MSMEs.

**Manpower-related Expenses**

Most MSME clusters across the country employ technologies that are manpower intensive and are plagued by productivity issues and labor issues. Therefore, the requirements of the working capital to make continuous labor payments increase.

Specialized skills required in many MSME clusters are procured at high prices and lead to working capital requirements. This includes payment for services rendered by external GMP consultants in the Hyderabad Pharmaceutical cluster, CNC programmers in engineering clusters and quality consultants in the Pune Food Processing cluster.

**Technology Upgradation and Compliance with Quality and Environmental Norms**

The need for technology upgradation has led to an increase in Term Credit requirements in many MSME clusters. The trend is being driven by the following factors:

• The need for improving productivity and reducing reliance on labor-intensive technologies
Aspiration to access global markets requires greater competitiveness. Besides, adherence to
global quality, safety and environmental standards, has become a pre-requisite for exporting
to many developed countries of the world

- The need to reduce costs of maintaining aging machinery that are faced with frequent
breakdowns

Medium enterprises in the Pune Fruits and Vegetables cluster are exploring newer business models
for technology up-gradation and newer products. Like the pharmaceutical industry in other parts of
the world, Indian pharmaceutical units also intend to increase investments in ensuring Good
Manufacturing Practices (GMP) is followed. This would require investments in setting up Effluent
Treatment Plants (ETP) that typically require large upfront investments. ETPs also need to be
installed in the Dyes and Chemicals cluster in Ahmedabad, if enterprises intend to tap funds from
institutional sources in the future.

**Other Sources of Demand for Credit**

The need for credit can also arise from factors such as unregistered units looking to get registered
and rated, MSME units trying to meet tax payment deadlines, availing services of a Common Facility
Center (such as a Tool Room), availing skill training from a Business Development Services (BDS)
provider, export marketing and associated documentation, etc.

<table>
<thead>
<tr>
<th>Cluster</th>
<th>MSE Credit Gap: Nayak Committee Method - In ₹ Crore</th>
<th>MSE Turnover (Year 2010-11) - In ₹ Crore</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pune</td>
<td>98</td>
<td>846</td>
</tr>
<tr>
<td>Coimbatore</td>
<td>1,231</td>
<td>4,739</td>
</tr>
<tr>
<td>Rajkot</td>
<td>1,248</td>
<td>9,157</td>
</tr>
<tr>
<td>Faridabad</td>
<td>1,989</td>
<td>10,240</td>
</tr>
<tr>
<td>Rourkela</td>
<td>42</td>
<td>316</td>
</tr>
<tr>
<td>Ahmedabad</td>
<td>441</td>
<td>2,730</td>
</tr>
<tr>
<td>Kolkata</td>
<td>121</td>
<td>2,876</td>
</tr>
<tr>
<td>Ludhiana</td>
<td>1,235</td>
<td>11,905</td>
</tr>
<tr>
<td>Chennai</td>
<td>275</td>
<td>3,060</td>
</tr>
<tr>
<td>Hyderabad</td>
<td>105</td>
<td>1,378</td>
</tr>
</tbody>
</table>

*Source: D&B India Estimates*
Recommended Products and Delivery Mechanisms

Financing of Raw Material Procurement

A scheme for financing raw material procurement by banks and financial institutions is recommended for almost all clusters, where raw materials need to be purchased in bulk during certain months of the year and where bulk purchase enables MSEs to benefit from discounted prices. The scheme and its variants would be applicable to the following clusters:

<table>
<thead>
<tr>
<th>Cluster</th>
<th>Potential Implementation Agency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pune Fruits and Vegetables</td>
<td>Agriculture Produce Market Committee</td>
</tr>
<tr>
<td>Ludhiana Knitwear</td>
<td>Knitwear Club / KAMAL / LAKMA</td>
</tr>
<tr>
<td>Rourkela Engineering</td>
<td>Orissa State Industrial Corporation (OSIC)</td>
</tr>
<tr>
<td>Kolkata Leather</td>
<td>Indian Leather Products Association (ILPA) / Central Leather Research Institute</td>
</tr>
<tr>
<td>Chennai Leather</td>
<td>Central Leather Research Institute</td>
</tr>
</tbody>
</table>

The salient features of the proposed raw-material purchase financing scheme are as follows:

- A group of banks catering to the cluster can form a consortium and enter into a common Memorandum of Understanding (MoU) with an implementation agency for the scheme in the cluster.
- The implementation agency has to be an existing integral stakeholder in the raw material procurement process or an agency implementing a cluster-specific government scheme.
- A forecast of annual production of the MSE units and their corresponding annual raw material requirements needs to be prepared. This can be prepared on the basis of inputs from individual MSEs, industry associations (say, Mahratta Chambers of Commerce and Industry – MCCIA in Pune), large sub-contracting industrial buyers (say, Khadims / Sreeleathers in Kolkata), as well as cluster sector-specific research institutions (say, Central Leather Research Institute – CLRI in Chennai).
- The implementation agency would procure the raw material with the MoU banks / FIs financing the purchase. The raw material procured would serve as collateral with the implementation agency serving as the facilitator / guarantor. The industry association could charge a nominal fee for providing this service.
- The implementation agency, effectively, becomes the primary raw material supplier. The discount obtained by acquiring the raw material in bulk may be passed on to the MSEs after deducting a fee towards costs of provision of the service by the implementation agency.
interest charged by the bank for financing the purchase will be the predominant cost of service. For the raw material financing scheme to be economically viable, the costs of service must be less than or equal to the difference in procurement price and sale price to MSEs.

Factoring

Factoring (or reverse factoring) has been recommended in all clusters, where strong inter-linkages and sub-contracting of manufacturing activities exist. Open account sales are the preferred arrangement between larger buyers and smaller sellers in the Rajkot and Coimbatore Engineering Clusters, the Hyderabad Pharmaceutical Cluster and the Kolkata Leather Cluster. Banks should embrace products that enable them to extend working capital finance on an ongoing basis against invoices raised by their clients on their buyers.

Factoring is a method, in which the ‘factor’ (bank / FI offering the service) obtains control over the sales ledger of the client. In effect, the entire receivables management is taken over by the factor and disclosed to the client’s customer (buyer). The offerings of a ‘Factor’ are far more than just the discounting of individual bills by a bank.

As opposed to Cash Credit, under ‘Factoring’, there is scope for flexibility as to quantum of potential funding. The credit line is based on the financial strength of the borrowing client’s debtors, as well as on the borrower’s own financial strength. In many industries, it is observed that the sales do not occur on a uniform basis, but fluctuate from month to month. Hence the predominant system of receivable financing through ‘Cash Credit’ is found to be inappropriate, leading to intermittent over-financing or under-financing. Factoring is more appropriate for MSMEs with potential for rapidly expanding sales and units with unpredictable cash flows and a high proportion of receivables in their working capital cycle.

In cases, where banks are hesitant towards extending Factoring products to cluster units (as the case may be for Kolkata Leather and Hyderabad Pharmaceutical clusters), ‘Reverse Factoring’ can be looked at as an alternative mechanism, where banks purchase accounts receivables only from high-quality buyers. The bank only needs to collect credit information and calculate the credit risk for buyer (in this case a large transparent, internationally accredited firm). In Reverse Factoring, the credit risk is equal to the default risk of the high-quality customer, and not the risky MSME.

Factoring ensures the following benefits for MSEs:

- Improved cash flows
- Fixed assets freed up for collateralization for other credit requirements
- Benefit of sales ledger management
- Increased ability to extend open account terms to clients
- Improved receivable days and current ratio
The use of ‘Factoring’ can be further encouraged if Non-Recourse Factoring is introduced. This would enable the complete elimination of default risk.

Pre-approved Collateral-free Equipment Finance Scheme

MSMEs are often faced with situations when certain equipments need to be acquired urgently, either because the supplier is offering a discount or because the acquisition is required to comply with a norm. Moreover, these enterprises need to acquire a number of small-value equipment that aggregate to significant value through the year. Applying for loans to make these purchases is considered tedious and time-consuming with no certainty of sanction and disbursement. Hence, either unsecured loans are sourced at high interest or working capital credit is employed for the purpose of acquisition of such equipment.

In order to overcome this challenge, under the MSME-FDP, SIDBI along with FSIA (a dominant industry association in the Faridabad Auto Components and Engineering cluster) designed a special scheme. Under the scheme, a collateral-free line of credit up to ₹50 lakh is sanctioned to enterprises, which can avail this facility any time during the year, either in full or in parts, for purchasing equipment. Disbursals are typically made within three days on a pre-approved loan. The association is responsible for processing of application, doing appraisals, recommending limits as per prescribed norms and providing it to SIDBI, as well as verifying the pro-forma invoice, ensuring margin payment, asset value, etc.

Similarly, SIDBI currently has a credit delivery arrangement with the Gujarat State Plastic Manufacturers Association (GSPMA) for meeting the capital expenditure requirements of the member MSME plastic manufacturing units.

Enterprises in the Rajkot and Coimbatore Engineering clusters have significant credit needs arising from a need to upgrade technology. Similarly, enterprises in the Hyderabad Pharmaceutical cluster are under pressure to implement technology-intensive Good Manufacturing Practices (GMP), while units in the Ahmedabad Dyes and Chemicals cluster are expected to invest heavily to comply with state pollution control norms, both of which will involve acquisition of Effluent Treatment equipment.

It is recommended that banks and financial institutions, which are currently catering to the four clusters, can approach the major industry associations to proceed with a MoU that will enable a FSIA-SIDBI type of arrangement.

Up-scaling of Microfinance to Meet Credit Requirements of Micro Enterprises

A number of unorganized micro enterprises in the Coimbatore, Rourkela and Kolkata clusters that carry out sub-contracted work for larger enterprises face a high degree of financial exclusion. Most of these units do not even approach the banks for their requirements with the apprehension of
excessive documentation, site-audits and inspections etc. Many do not have any tangible assets, which could act as collaterals nor any formal work order. Hence banks refuse credit to the cluster.

Given this scenario, up-scaling of micro finance programs in these clusters would prove to a potent method to handle this issue. Microfinance has made significant inroads into Tamil Nadu, Orissa and West Bengal. The total number of microfinance clients in these states (Credit Self Help Group (SHG) members and MFI Client put together) stood at roughly 1.12 crore, 62 lakh and 1.09 crore, respectively in 2011. The various microfinance models have been tried, tested and have met with success, creating an overall conducive environment for microfinance in these states. Microfinance loans in Tamil Nadu, Orissa and West Bengal aggregated to over ₹ 13,000 crore, in 2011, with average loans outstanding per poor household standing at ₹ 22,109, ₹ 7,582 (2010 figure) and ₹ 9,365 respectively.

MFIs that upscale typically target the lower end of the MSME spectrum that have more features in common with their existing microfinance clients, as reflected by the average loan size of micro firms. For micro firms operating on the verge of informality, up-scaling of micro-finance seems to have great potential. MFI active in and around the three clusters can modify their microfinance business models to incorporate MSME operations by taking advantage of their market knowledge and network, and by adapting their microfinance methodologies. The benefits of up-scaling may encourage a transition from an informal to a formal enterprise.

Refinancing (or on-lending) and other support from development finance institutions, such as SIDBI, would be critical for helping MFIs adapt their current lending practices to serve the new clientele, as well as in building the MFIs’ capacity in staff training and information management.

Further, a few issues need to be addressed before up-scaling of MFI can become a sustainable model:

- New Product Development
- Collection Cycle
- Recovery Mechanism
- Capacity Building for MFIs and Borrowers

Typically, MFIs have daily/weekly collection cycle, which calls for modification while serving micro and small manufacturing units. MFIs need to understand the borrower’s business and particularly “Asset Conversion Cycle” and revise its credit collection cycle to suit the needs of borrowers and simultaneously ensure profitability of the lending business model. Suitable loan products and associated attributes (interest rate, tenure, and credit amount) need to be developed keeping in mind the nature of borrowers business. This shall be particularly important because the product and its attributes shall govern the efficacy of collections affecting top-line growth. Further, training would be
needed both for MFIs and borrowing micro units on the business cycle, lending model, and practices adopted to ensure smooth implementation.

Historically, the MFI lending model had been successful despite the high borrowing rate of MFI from Banks. Companies in this space had built a sound base of foot-workers, creating an effective credit delivery and recovery mechanism and with the help of SHG/JLG model, they could cut down on transaction costs. This was a unique differentiator for MFIs compared to banks that did not have such effective mechanisms for credit delivery and reducing transaction costs. However, MFIs charged very high interest rate and allegedly followed coercive credit collection practices to make the lending model economically sustainable and these cast serious doubts on socially driven objective of MFIs. This has led to widespread criticism from different corners and threatened the very existence of MFIs. What followed was Andhra Pradesh Microfinance Institutions (Regulation of Money Lending) Act, 2010 to regulate MFIs in the state and RBI Committee (Malegam Committee) Report on MFI sector detailing issues, concerns, and recommendations on the prevailing ill-effects of the MFI lending and recovery practices. The committee also reviewed the proposed Micro Finance (Development and Regulation) Bill 2010 and recommended few changes to it along with its own set of recommendations on MFI regulation.

Though, the recent MFI regulation in AP, and the more recent draft bill on MFIDR have put the MFI lending model under a scanner, the potential for such model to work effectively does exist.

**Up-scaling MFI Lending – A Success Story under MSME-FDP**

Under the GIZ portion of MSME-FDP, an innovative financial product and delivery model for the upstream apparel supply chain had been worked out in association with a Delhi-based MFI named Satin Creditcare Network Ltd (SCNL). SIDBI had sanctioned a line of credit to SCNL for onward lending to the MSEs in the apparel supply chain. Capacity building support involved:

A. Assistance to design and develop a special credit scheme with the following features:

1. Loan ticket size in the range of ₹ 50,000/- to ₹ 2,00,000/-;
2. Loan to be available for investment in machinery or for work capital needs;
3. Repayment period up-to 2 years;
4. Repayment in fortnightly/monthly installments instead of daily installments depending on cash flow of the borrower;
5. No collateral security;

B. Assistance in HR development for appraising and risk assessment of credit to MEs

C. Interactive sessions were held with apparel supply chain MEs to understand their needs followed by sensitization workshops to motivate them to borrow from SCNL. They were given an orientation course in accounting, finance, quality improvement and marketing after working hours.
The results of pilot intervention (started in late 2008) are as under:

1. SCNL granted loans to 60 MEs. Each ME, on an average, employed 40 workers and therefore this intervention impacted the lives of around 2400 families and around 12000 people at pilot stage.
2. The enterprises financed under the scheme have shown much better financial discipline and have been repaying installments in time with no default.

**Purchase Order Financing**

Enterprises in almost all the MSME clusters under study indicated the absence of appropriate collateral as a reason for their loan applications to be rejected. In some cases, the units were already over leveraged and did not have any collateral based on which they can take fresh loans.

In such a scenario, enterprises can still borrow against the purchase orders placed by their credit worthy buyers. One of the primary requirements for this system to work from the bank’s perspective is for the buyer to furnish a comfort letter to the bank detailing the seller information and credibility. This allows the seller to receive funds far sooner than if it had to wait for the buyer to pay on the invoice and even sooner than if the invoice is discounted. Purchase Order Financing (POF) allows the seller to receive funds even before the goods are shipped and the invoice is issued. The seller procures the raw materials, manufactures the goods and ships the products to the buyer. PoF allows the unit to take on multiple orders and deliver them successfully.

Typically, the seller prepares and submits an invoice directly to the bank and the buyer pays the invoice according to the payment terms, usually directly to the bank. When the bank receives payment on the invoice from the buyer, the bank withholds the amount it advanced to the seller as repayment on the POF loan, and also deducts the agreed amount of interest and fees. The balance is then remitted to the seller.

POF is indeed an effective product for easing working capital shortages where strong linkages exist between large and established buyers and a host of small and medium enterprises that carry out subcontracted work for them.

**Working Capital Term Loan**

Working capital term loans (WCTL) are intended to cover the core (permanent) part of the working capital. Cash credits and overdraft facilities are generally understood to assist enterprises through transitory (fluctuating) part of working capital requirements. While larger enterprises are offered WCTLs, sometimes even carved out of their WC limits, MSMEs do not enjoy the same luxury. It is generally believed that MSMEs possess lower control over their working capital and therefore lack the expertise in managing loan funds intended for meeting working capital requirements.
Most units in the Ludhiana Knitwear cluster do business through buyer-seller meets organized during certain months of the year, where traders from across India come and place orders at a pre-determined price. Based on the orders placed, the units forecast the demand of raw materials and buy the raw material from the yarn suppliers in bulk. Also, most of the units tend to buy raw material in bulk so as to get competitive prices for the same.

While the orders are booked at the buyer-seller meets, payments are only realized after the goods are finally sold in the end-market. The buyers of these products deposit only 10-20% of the total value of goods as advance payments, which leaves the unit owners to arrange for working capital for the intermediate period. Often, enterprises have to extend credit of more than 120 days to their clients, which ties up the working capital finance. The credit limit set by the banks in the cluster is often not sufficient for the units to cover their working capital expenses.

Such shortages of credit in the Ludhiana cluster could be provided through WCTL accounts. Although this arrangement is presently applicable to borrowers having working capital requirement of ₹ 10 crore or above, this service can extended to small enterprises with needs less than ₹ 10 crore as well.

**Receivables-linked Bridge Financing for Working Capital Needs**

One of the major factors inhibiting Bills Discounting in the cluster is the lack of payment discipline amongst buyers. This creates a serious and endemic problem in the cluster for MSEs of inability to procure future orders. The issue of post-dated cheques (PDCs) by buyers can bring about payment discipline, especially because dishonor of cheques is a criminal offence under the Negotiable Instruments Act. However, buyers from MSMEs typically do not agree to issue of PDCs.

A possible way through which receivables bills can be made to work in favor with MSEs will be to club it with the ‘bridge financing’ concept, where funding can be extended with bills as collateral to enable the units to take further order and not suffer from the delayed payment from debtors (customers).

Bridge financing is used to maintain liquidity in the scenario of anticipated cash inflows. This can be seen as temporary loan that shall map the sales receivables cycle to future order procurement to facilitate continuous operation of MSEs. Under this method, banks can finance MSEs on procurement of new orders, based on the bills issued by them for executed orders. At around the same time, the bank may be repaid out a payment received by the MSE from an earlier transaction.

Small units, such as those in the Rourkela Engineering Cluster, would find this as an effective method for overcoming difficulties with the current bill-discounting schemes.
Apart from the above credit products and delivery mechanisms, a number of innovative products based on specific purposes (such as the Quality Testing and Registration-linked Financing scheme in the Pune F&V cluster) and renewed application of standard products (such as Lease Financing) to clusters where such products are generally unavailable, have been recommended in the current report. Where appropriate, new credit delivery mechanisms, such as the formation of Joint Liability Group (JLG) for MSE lending in the Coimbatore Engineering cluster has been recommended.

Financial Inclusion through BDS Initiatives under the MSME-FDP

Apart from the successes of the BMO-centric model in Faridabad Engineering cluster and the MFI-centric model among micro enterprises in the Delhi Apparel industry, there have been other successes from motivating cluster level financial institutions to lend to MSMEs under the MSME-FDP.

In Coimbatore, four interaction meets were organized with financial institutions, which were attended by nearly 200 cluster firms. As a consequence, many firms have obtained loans from TIIC and Banks and SIDBI. Coimbatore implemented the Faridabad financial model for the benefit of MSMEs. 24 cluster firms got financial support from Bank of Baroda and 3 firms got financial support from SIDBI.

Similarly in Rourkela, BDS initiatives under the MSME-FDP have helped establish linkages among SBI, SIDBI and a local Micro-finance Institution (MFI) named Sambandh Financial Services. 37 microenterprises are in the process of obtaining loans under the initiative. Further, access to finance has also been facilitated through Special Purpose Vehicles (SPVs) such as the Rourkela Techno-Park Self Help Cooperative Limited (RTPSHCL).
Credit Gap Definition under the Current Study

Overview of Credit Flow to the MSME Sector

The micro, small, and medium enterprise (MSMEs) sector is an important and integral part of Indian economy, contributing significantly to the industrial output, employment, and exports. The sector acts as an incubator of entrepreneurship and helps spread the wealth at the grass-root level. According to the “PM Task Force Report on MSME”, released in early 2010, MSME sector contributes 8% of country GDP, 45% of the industrial output, and 40% of total exports. Additionally, it provides employment to approximately 60 million people through 26 million enterprises. The report also mentioned that 94% of total MSMEs are unregistered, with a large number of them being informal or unorganized. Recognizing the significant contribution of the sector, there has been special emphasis on its growth and promotion by government.

To shore up the MSMEs in the country, financial inclusion has been identified as one of the critical requirements as none/inadequate/delayed supply of credit has been a major impediment to the growth of this sector. There is a growing awareness and agreement towards financial inclusion and it has become a national and a government imperative in the last few years. Several nationalized banks in public and private sector extend loans to MSME sector through their branches/specialized centers across India but the services are restricted and limited. The direct intervention of banking the unbanked is fraught with challenges for financial institutions that include high barriers to entry, long gestation period, and high go-to market and servicing costs. This is further aggravated with a lack of awareness and trust amongst the financially excluded regarding the benefits of banking system.

According to Fourth All India Census of MSMEs (2006-07), only 11.2% of the registered units availed institutional finance, while only 4.8% of the unregistered units had limited access to bank finance. Most of MSMEs, for their credit needs, depend on self-finance, borrowed funds from friends, relatives, and moneylenders charging high interest rates.
Taking note of the significant contribution of the sector towards national GDP, exports, and employment coupled with lack of sufficient credit supply, Government of India and Reserve Bank of India have been taking appropriate policy measures for promotion of these enterprises.

To analyze the impact of policy initiatives taken to improve the flow of funds to MSE sector, including complexities of the system and related procedures, RBI has constituted various committees since the nineties decade. Prominent among these are Nayak Committee, S.L Kapur Committee, and Ganguly Committee. These committees have given a number of recommendations covering various aspects relating to Credit Demand estimation and Credit flow to MSE sector. Subsequently, a number of recommendations of these committees have been translated into policy guidelines by RBI and Government of India for financial and other support service institutions engaged in the development of this sector. Below is the summary of each committee’s recommendation and relevance for current project.

<table>
<thead>
<tr>
<th>Committee Name</th>
<th>Key Recommendations</th>
<th>Relevance to the current assignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nayak Committee Report (1991)</td>
<td>• Estimated the working capital need for the enterprise as 25% of the forecasted sales&lt;br&gt;• Endorsed the Tandon committee views that 80% of the working capital need be funded by banks i.e. 20% of the</td>
<td>• Method of estimation of working capital finance&lt;br&gt;• Insights for estimation of term credit</td>
</tr>
<tr>
<td>Committee Name</td>
<td>Key Recommendations</td>
<td>Relevance to the current assignment</td>
</tr>
<tr>
<td>-------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| Abid Committee Report on Small Enterprises (1997)           | • Setting up of a ₹ 2500 crore fund to help enterprises that are negatively affected by the recommended abolition of reservations for small scale industry  
• Setting up specialized branches catering to needs of small scale industry                                                                 | • Insights on channels and medium of credit delivery          |
| Kapur Committee Report on Credit (1998)                     | • Recommended training for branch managers for appraising small projects              
• Increasing the limit for composite loan to ₹ 5 lakh (currently limit is ₹ 1 crore)  
• Opening more specialized branches for MSME sector  
• Urging banks to pay more attention to backward states                                                                 | • Credit Delivery Mechanisms                                  |
| Gupta Committee Interim Report on Development of Small Enterprises (1999) | • Recommended that MSME sector be given the same importance as agriculture sector under priority sector lending  
• Urged banks to directly lend to the MSE sector instead of adopting soft approaches like subscription to bonds of SFCs, NABARD, etc. | • Priority Sector Lending and Delivery Mechanisms  
• Emphasis on direct Lending                                                                 |
| Chakraborty Committee Report on Rehabilitation of Sick MSMEs (2008) | • Recommended to simplify procedures in preparing techno-economic feasibility  
• Suggested setting up single point credit processing cells  
• Stressed the need for simplification of financial reporting requirements  
• Legislation to encourage factoring, refinance at concessional rates                                                                 | • Effective credit delivery  
• Timely disbursements and process simplifications |
### Exhibit 3: Summary of Committee Recommendations

<table>
<thead>
<tr>
<th>Committee Name</th>
<th>Key Recommendations</th>
<th>Relevance to the current assignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prime Minister Task Force’s Sub-Group on Credit to MSMEs</td>
<td>• Setting up a rehabilitation fund for revival of sick MSMEs and a National Fund Equity scheme that can be utilised for Greenfield or expansion projects&lt;br&gt;• Urged SEBI to expedite the process of setting up an MSME exchange&lt;br&gt;• Recommended that all scheduled commercial banks should achieve a year-on-year credit growth of 20% to micro and small enterprises and strictly adhere to allocation of 60% to micro enterprises under the priority sector lending&lt;br&gt;• Suggested changes in bank lending norms for innovation start-up firms&lt;br&gt;• Recommended increasing mandatory coverage under CGTMSE from ₹ 5 lakh to ₹ 10 lakh for MSMEs</td>
<td>• Insights on methodology for estimation of credit gap&lt;br&gt;• Effective credit delivery mechanisms</td>
</tr>
</tbody>
</table>

### Comparison of MSEs and Medium Enterprises w.r.t Financial Inclusion

Indian MSMEs are a diverse and heterogeneous group but broadly face common set of problems. They are primarily in the areas of:

- **Credit**
  - Unable to provide collateral required for institutional credit
  - High interest rate incurred on credit borrowed from non-institutional money-lenders
  - Delay in institutional credit disbursal upon loan approval

- **Long Asset Conversion cycle**

- **Lack of suitable quality control facilities and non-awareness of new technology.**

- **Hard to procure raw materials without credit**

- **Limited end markets access**

- **Not equipped to suitably manage financial books on their own**
As we set out to identify the Credit Gap in the identified clusters, it is imperative to understand where Micro and Small enterprises stand vis-à-vis Medium enterprises, when it comes to financial inclusion. This understanding will also help us in defining the credit gap.

Further, to gain a better understanding of the status on financial inclusion of various forms of enterprises, we need to understand how the credit appraisal process works and the typical characteristics associated with MSEs and Medium-sized enterprises.

**Credit Appraisal Process**

Once the loan application is received, the bank assesses the risk involved in the project based on various parameters such as project details (project concept, location, sector type, project strength through DSCR, project IRR, payback period etc.), borrower background, fixed asset information, cash conversion cycle, previous relationship of the bank with borrower, and details of existing and proposed credit facilities. Lending institutions have internal rating models for assessment of project proposals, and few lending institutions accept ratings of external credit rating agencies.

The proposal acceptance rate is relatively high (almost 90-95%) in case of Public Sector Banks compared to Private Sector and Foreign Banks. The lower rate of acceptance in case of Private Sector and Foreign Banks is mainly due to their focus on large corporates and perceived risk in MSE sector.

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**Exhibit 4: MSE Lending Process**

<table>
<thead>
<tr>
<th>Submission of loan application and supporting documents by MSE</th>
<th>Document checking by the bank</th>
</tr>
</thead>
<tbody>
<tr>
<td>In-Principal Approval by the Bank</td>
<td>Proposal Rejection</td>
</tr>
<tr>
<td>Credit Appraisal Process and Risk Evaluation Process</td>
<td></td>
</tr>
<tr>
<td>Credit Approval and Letter of Intent</td>
<td>Loan Agreement</td>
</tr>
</tbody>
</table>

*Source: Primary Survey of Lending Institutions, D&B India*

The table below provides a comparison of characteristics of MSE vs. Medium enterprises in terms of certain parameters that determine their likelihood of being financially excluded.
<table>
<thead>
<tr>
<th>Criteria</th>
<th>MSEs</th>
<th>Medium-size Enterprise</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1</strong> Bank's Requirement for Loan Approval</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.a Collateral Presence</td>
<td>Absent-Low</td>
<td>Available/Acceptable</td>
</tr>
<tr>
<td>1.b Guarantee</td>
<td>Not Always Available</td>
<td>Available</td>
</tr>
<tr>
<td>1.c Fixed Asset</td>
<td>Not Always Available</td>
<td>Available</td>
</tr>
<tr>
<td>1.d Credit Rating</td>
<td>Not Always Available</td>
<td>Available</td>
</tr>
<tr>
<td>1.e Cash Conversion Cycle</td>
<td>Not Favorable</td>
<td>Favorable</td>
</tr>
<tr>
<td>1.f Stability of cash flows</td>
<td>Low-Mid-High</td>
<td>High</td>
</tr>
<tr>
<td>1.g Business/Project Plan</td>
<td>Not Always Available</td>
<td>Available</td>
</tr>
<tr>
<td>1.h Accounting Information</td>
<td>Not Always Available</td>
<td>Available</td>
</tr>
<tr>
<td>1.i Previous Relationship with the Bank</td>
<td>None-Low</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>2</strong> Other Factors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.a Banking System Awareness</td>
<td>None-Low</td>
<td>High</td>
</tr>
<tr>
<td>2.b Borrowing from-Non Institutional Sources</td>
<td>Low-High</td>
<td>Low</td>
</tr>
<tr>
<td>2.c New/Upcoming Technology know-how</td>
<td>None-Low</td>
<td>High</td>
</tr>
</tbody>
</table>

Due to unfavorable conditions existing at MSEs end, the loan approval either takes longer or gets rejected compared to that of medium size units.

Enterprises that do not use formal financial services fall into two categories viz., voluntary self-exclusion and involuntary exclusion. The figure below illustrates the difference between the two.
Non-users of formal financial services, who fall under involuntary exclusion is definitely a critical parameter for defining credit gap. Equally important are those who fall under voluntary self-exclusion bracket. Enterprises that do not need credit can be safely assumed to be self-sustainable w.r.t credit requirement and is not a serious concern to policy makers. However, those enterprises “who do tap funds from informal source of credit supply at higher interest rate” and “those who curtail production rather than borrow, because they perceive themselves as being ineligible for loans from formal sources at reasonable interest rates” needs attention due to lack of credit supply from formal financial institutions.

**Considering that MSEs suffer greater financial exclusion, as explained above, Credit Gap estimation under current study is aimed only at MSEs and the study shall not consider medium size enterprises for computation of credit gap.**

**Credit Gap Definition and Concerned Clusters**

In light of the above, Credit gap can be defined as unmet credit requirement of MSEs, over and above the available access to credit from formal institutional sources of finance. The same measures are used by international institutions like IMF and World Bank.

Below is the list of selected clusters for the current study.

<table>
<thead>
<tr>
<th>Cluster</th>
<th>District</th>
<th>Industry</th>
<th>Lead Bank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faridabad</td>
<td>Faridabad</td>
<td>Engineering</td>
<td>Syndicate Bank</td>
</tr>
<tr>
<td>Coimbatore</td>
<td>Coimbatore</td>
<td>Engineering</td>
<td>Canara Bank</td>
</tr>
<tr>
<td>Rajkot</td>
<td>Rajkot</td>
<td>Engineering</td>
<td>State Bank of India</td>
</tr>
<tr>
<td>Rourkela</td>
<td>Sundargarh</td>
<td>Engineering</td>
<td>State Bank of India</td>
</tr>
<tr>
<td>Ahmedabad</td>
<td>Ahmedabad</td>
<td>Dyes &amp; Chemicals</td>
<td>Dena Bank</td>
</tr>
<tr>
<td>Hyderabad</td>
<td>Hyderabad</td>
<td>Pharmaceuticals</td>
<td>State Bank of India</td>
</tr>
<tr>
<td>Ludhiana</td>
<td>Ludhiana</td>
<td>Knitwear</td>
<td>Punjab &amp; Sind Bank</td>
</tr>
<tr>
<td>Chennai</td>
<td>Chennai</td>
<td>Leather</td>
<td>State Bank of India</td>
</tr>
<tr>
<td>Kolkata</td>
<td>Kolkata</td>
<td>Leather</td>
<td>United Bank of India</td>
</tr>
<tr>
<td>Pune</td>
<td>Pune</td>
<td>F&amp;V Processing</td>
<td>Bank of Maharashtra</td>
</tr>
</tbody>
</table>

Source: RBI Annual Publications, Branch Banking Statistics
Methodology for Credit Gap Estimation

Estimation of Credit Gap requires identification of Credit Demand and Credit Supply to MSEs. Further, these can be broken down into Working Capital gap \((demand, supply)\) and Term Loan gap \((demand, supply)\). Below is the schematic of credit gap estimation and discussion of suitable credit gap estimation methodologies.

Credit Demand Estimation

Credit Demand is defined as capital required for running a business – both for daily operation as well as in the longer term. The need for credit in case of MSEs arises from the following activities conducted by them:

- ✓ Raw materials purchase
- ✓ Labor cost
- ✓ Facility rent, and utilities cost
- ✓ Machinery maintenance
- ✓ External facilities/units \((Manufacturing \& Quality compliance)\) usage
- ✓ Credit rating approval
- ✓ Support \& Development Services such as financial audit and monitoring, project development and report preparation etc.
- ✓ Excise tax
- ✓ Technology up-gradation
Credit Gap Mapping of Select Clusters

- Fixed Asset revision
- Construction of new facilities for manufacturing & quality compliance

Credit Demand for MSEs is broadly divided into two parts viz. Working Capital and Term Capital Demand.

**Working Capital Demand**

It is the working capital required for managing day to day business operations and compliance activities.

The Cash Conversion Cycle plays a critical part in determining working capital requirements for enterprises. Cash Conversion Cycle-CCC (also known as Asset Conversion Cycle) is an important analysis tool to identify the need of cash at different stage of production cycle. It is the number of days that an enterprise takes to convert resource inputs into cash flows. This metric looks at the amount of time needed to sell inventory, the amount of time needed to collect receivables, and the length of time to pay the bills. Effectively, it is the time gap between cash outlay and cash recovery.

\[
CCC = DIO + DSO - DPO
\]

Where:

- DIO = days inventory outstanding
- DSO = days sales outstanding
- DPO = days payable outstanding

The shorter the cycle, lesser the time capital is tied up in the business processes.

**Term Credit Demand**

It is the demand that emanates from requirement for new facilities establishment, technology upgradation, and fixed asset revision.

**Methodology for Credit Demand Estimation**

To determine an appropriate Credit Demand estimation methodology, D&B India conducted primary and secondary research that included the study of reports prepared by various committees (constituted by RBI), Diagnostic Study Reports prepared by various cluster implementation agencies, the Arjun Sengupta Committee report on unorganized sector and various other sources. In addition,
D&B India conducted a primary survey of enterprises in the 10 identified clusters. Below is a note on each source.

**Nayak Committee**

The Reserve Bank of India constituted a Committee under the Chairmanship of Shri P.R. Nayak, Deputy Governor during 1991 to examine the difficulties confronting the MSMEs in the country in securing finance. Of the broad contours set for the committee, one of the key requirement was to examine the adequacy of institutional credit for the MSE sector, particularly, with reference to the increase in the cost of raw materials and locking up of the available resources due to delay in the realization of sale proceeds from large companies and Government agencies. The committee was an extension of the earlier work done by Tandon/Chore committee.

In the process of examining the adequacy of institutional credit, the committee, outlined methods for estimating the credit gap through developing credible demand estimates for credit. While the committee stressed on strong quantitative methods for Working Capital credit estimation, the term credit estimation was fairly qualitative in nature.

For estimation of working capital, the committee suggested using the *forecasted sales approach*. 25% of the *forecasted sales for the enterprises would be considered as requirement for working capital. The working capital bank credit would be 80% of the estimated working capital requirements."

**Arjun Sengupta Committee Report**

D&B India also studied the report prepared by the National Commission for Enterprises in the Unorganized Sector (NCEUS) under the chairmanship of Dr. Arjun K Sengupta. The Government of India had setup the commission to recommend measures for bringing about improvements in the non-farm unorganized sector. The commission defined the non-farm unorganized units as, “all unincorporated private enterprises owned by individual or households engaged in the sale and production of goods and services operated on a proprietary or partnership basis and with less than ten total workers.”

The commission was setup with the objective of recommending necessary measures so as to improve the productivity of these enterprises, generate large scale employment opportunities on a sustainable basis, particularly in the rural areas, enhance the competitiveness of the sector in the emerging global environment, linkage of the sector with institutional framework in areas such as credit, raw material, infrastructure, technology up-gradation, marketing and formulation of suitable arrangements for skill development.

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1 Financing of Enterprises in the Unorganized Sector and Creation of a National Fund for the Unorganized Sector (NCEUS, Nov 2007)
This commission had written a report on the financing needs of the unorganized sector wherein they had calculated and commented upon the credit gap that exists in the financing of enterprises in the unorganized sector. Under this method, the average credit needs of the unorganized units were obtained from a survey. Average credit need was then multiplied by the total number of estimated unorganized units to obtain the Total Credit Demand.

While the commission’s method was most effective for estimating credit requirements of unorganized enterprises (mostly micro proprietary units), extrapolated estimates of credit demand are prone to outliers in the sample surveyed. Existence of detailed diagnostic studies on the clusters and a detailed survey among a limited but representative sample enabled D&B India to rely on the ‘Forecasted Turnover Approach’ for estimating WC requirements and its own method (explained below) for estimating Term Loan requirements, separately.

**D&B India Survey**

D&B India conducted a sample survey across 10 identified clusters, in discussion with GIZ and SIDBI stakeholders. At least 50 MSME respondents (enterprises) were identified for each cluster and well distributed across micro, small, and medium enterprises. The questions in the questionnaire included queries on financial information (such as assets, turnover, profit etc.), nature of credit requirement, and perception/experience with the banking system.

**Step-wise Credit Demand Estimation Method**

D&B India proposes to use two methods for estimation of credit demand\(^2\). They are

- **Forecasted Turnover Methodology for Working Capital Demand based on Nayak Committee Report**

  1. Cluster Turnover was estimated on the basis of the D&B India Survey of 50 enterprises in each cluster. Turnover of the enterprises within the sample were extrapolated using the number of micro and small enterprises in the cluster. The number of enterprises was taken from the Cluster Diagnostic Study (DS) Reports\(^3\)

  2. The above values (calculated in 1.) were then projected to 2011-12 level using average growth in Index of Industrial Production (IIP)\(^4\) for the corresponding industry

---

\(^2\) Credit Demand includes both working capital and term capital demand

\(^3\) DS turnover estimates haven’t been considered as the figures correspond either for year 2008 or earlier, thus preventing significant deviation. Number of micro and small units though have been taken from DS reports

3. Using Nayak Committee guidelines (20% of projected turnover as working capital funding requirement), working capital estimates were arrived for micro and small units.

To estimate the **Term Credit Demand**, the following steps were employed:

1. D&B India Survey was used to obtain “Investments in Plants & Machinery” for the sample number of units covered for MSEs.

2. Annual Survey of Industries (ASI) statistics⁵ was used to obtain the growth rates in Fixed Capital for different industries state-wise. Subsequently, this was used to forecast population estimates obtained in step 1.

3. The difference in values for 2011-12 (projected; calculated in step 2.) and 2010-11 years is taken as Term Credit requirement and 80% of the same is termed as **Term Credit Funding requirement**.

**Credit Supply Estimation**

According to ⁴th All India Census of Micro, Small, and Medium Enterprises-MSME (2006-07), only 11.2% of the registered units availed institutional finance, while only 4.8% of the unregistered units had limited access to bank finance. Most of the MSMEs, for their credit needs, depend on self-finance, borrowed funds from friends, relatives, and moneylenders charging high interest rates.

With the motive of effective implementation of social objectives, RBI implemented lead bank scheme in year 1969 as per a recommendation from SKF Nariman and Prof. Gadgil. Under the scheme, one of the commercial banks in the district functions as a lead bank and acts as consortium leader for coordinating the efforts of all financial institutions operating in the district. The lead bank is expected to take the lead role in identifying the potential areas for banking and banking development and expanding credit facilities in the district. There is reporting hierarchy under which lead bank has to provide key lending statistics of the financial institutions to District Level Committees (DLCCs) and then further to State Level Banking Committees (SLBCs).

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⁵ ASI estimates on Fixed Capital for different industries within a state – MOSPI ASI Report
Step-wise Credit Supply Estimation Method

Enterprise turnover is one of the important criteria for loan appraisal process and it can be safely assumed that credit supply to the cluster is correlated with the turnover generated. Thus, D&B India proposes to use a method involving the “Proportion of Cluster Turnover to Industry State Turnover” to arrive at cluster level credit supply. The methodology steps are:

1. Obtain state industry level advances from RBI – Basic Statistical Returns available till March 2010.

2. Obtain state industry turnover (ASI) and cluster turnover.

3. Forecast both the advances (obtained in 1.) and turnover (obtained in 2.) to the current level (March 2011)
   a. Using state total advances growth rate, obtain the state industry level advance (SIA) to current level (2011). State Total Advances is available for the period ending Mar, 2011.
   b. Using National IIP growth rates, forecast the state industry turnover (SIT) and cluster turnover (CT) to the current level (2011).

4. Obtain the proportion (P1 = CT:SIT) of cluster turnover to state industry turnover (obtained in 3.).

5. Calculate the credit supply at Project cluster level using the above proportion (Cluster Level Credit Supply - CLCS = P1*SIA).

6. Credit supply from major non-SCB (SFCs, SIDBI, and Cooperatives) institutions is added to the above credit supply to get the supply level at the cluster level.

7. Further, total credit supply was broken down into Term Credit and Working Capital using “State Level Advances – Working Capital Advance and Term Loan Advance (SE) to Small
Enterprise (SE)\textsuperscript{10}. Term loan advance proportion to total advance (obtained above) is termed as $P_2$

a. Working Capital supply is then arrived at using formula $(1-P_2) \times CLCS$

b. Term Capital supply is $P_2 \times CLCS$

D&B India also contacted various Lead Banks for the identified district clusters under the current study and obtained aggregated (of financial institutions) credit supply data at district level. The estimates for Credit Supply Outstanding for each cluster computed by D&B India were matched with Lead Bank data on Outstanding Total Advances, Priority Sector Advances and MSE Advances, in order to ensure consistency.

The Lead Bank supply data included data from Scheduled Commercial Banks (SCBs), State Finance Corporation (SFC), SIDBI, and Co-operative Banks. However data of SFC, SIDBI, and Co-operative Banks was available for only few districts as provided by lead bank. Further, there were qualitative discussions with lead bank manager to get an estimate of credit supply at cluster level in each district.

**Credit Gap in the MSE Sector**

The methodology discussed above has been applied to all identified clusters (MSEs) for credit gap estimation. The various end statistics reported for different clusters are:

- Working Capital Demand obtained from Nayak Committee Approach
- Term Capital Demand from D&B India Approach
- Working Capital Credit Supply from D&B India Approach
- Term Capital Credit Supply from D&B India Approach
- Lead Bank data on District Level Advance (Total, Priority Sector, MSE)

After obtaining Credit Demand and Supply figures, Credit Gap was accordingly obtained and validated against lead bank data for each cluster. Below is the schematic representation of the Credit Gap estimation process.

\textsuperscript{10}Table 6.1, Statistical Tables Relating to Banks in India, 2009-10s
Further, D&B India has provided qualitative inputs on credit supply and demand for each cluster in the individual cluster reports.

As mentioned earlier, MSEs face greater financial exclusion compared to medium-sized enterprises. Credit Gap estimation for different clusters are obtained only for MSEs using above methodology. However, the methodology can be extended to MSMEs and as well as to clusters (*not undertaken in the current study*) for credit gap estimation.
Pune Fruits and Vegetables Processing Cluster
Overview

The fruits and vegetables units cluster is located in the District of Pune and in and around Panchgani (District Satara). Proximity to urbanized markets such as Mumbai, Nasik, Nagpur, Aurangabad etc., changing food habits, cosmopolitan nature of the city, connectivity to JNPT and hence convenience of exports etc. are the factors that have given the required boost to make this segment a fast-growing one in Pune.

The products covered under various segments for the purpose of the project implementation are given below.

- **Spices and Pickles**: This segment covers basic raw spices, spice mixtures (powders and pastes), pickles as well as papads
- **Fruit and Vegetable processing**: Products such as dehydrated vegetables, vegetable and fruit powders, jams, sauces, purées, etc. are included in this segment. All products covered in this segment require an FPO license
- **Ready-to Eat (RTE) / Ready-to-Cook products (RTC)**: Heat-and-eat products are classified as Ready-to-Eat or RTE products. These are in the form of cooked curries or frozen pulps, frozen foods on which no further processing is required. Ready-To-Cook or RTC products are those on which some final level of cooking is required before they can be consumed. Ready-to-cook spice mixes have been accounted for under the Spices category and not RTC because they are an ingredient rather than the final product

Major products that account for a larger share in this cluster are spices and pickles. Therefore, larger representation of these products was ensured while developing the sampling criterion.

The following table summarizes the information about the fruit and vegetables cluster:

<table>
<thead>
<tr>
<th>Particular</th>
<th>Fruits and Vegetables Processing</th>
<th>Spices</th>
<th>RTE</th>
<th>Total*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investment (Plant and Machinery)</td>
<td>₹ Cr</td>
<td>116</td>
<td>111</td>
<td>32</td>
</tr>
<tr>
<td>Turnover</td>
<td>₹ Cr</td>
<td>194</td>
<td>581</td>
<td>71</td>
</tr>
<tr>
<td>Employment (No’s)</td>
<td></td>
<td>2988</td>
<td>8665</td>
<td>1560</td>
</tr>
</tbody>
</table>

Source: Pune BDS website (http://www.punebds.com) – Cluster Diagnostic Study, D&B India Survey

Note: *Information pertains to only the F&V Segment and non-F&V items are not included above.
The estimates of “Investment (in Plant & Machinery)” and Turnover have been prepared on the basis of D&B India Sample Survey, while cluster employment figure has been borrowed from Diagnostic Study (DS)\textsuperscript{11} Report, prepared for SIDBI in 2007.

No statistical estimates of the number of units processing fruit and vegetable are known so far conducted through any of the published sources. A MCCIA study provides only the break-up of “Total Food Processing” in Pune district. However, MCCIA estimates have revealed the following tentative guesstimates on number of units within the defined geographical locations of this cluster:

- Micro – about 400 units
- Small/Medium – About 150 units

\textbf{Sources of Demand for Credit – Opportunity and Risks}

The food processing industry in Pune is highly heterogeneous. There is great diversity in terms of the range of products, technology used, and their production facilities. The cluster is highly disorganized and at a nascent stage. Inter-linkages among the firms by way of transmission of materials or process synergies are relatively lower. The exhibit below depicts the various stages of production for various products.

\textbf{Exhibit 7: Cluster – Production Value Chain}

\begin{figure}
\centering
\includegraphics[width=\textwidth]{Exhibit_7.png}
\end{figure}

The value chain in the cluster is relatively simple with a large focus on traditional and domestic methods. The technology though not obsolete, is however orthodox. Credit requirements arise from each of the activities in the value chain.

**Procurement of Farm Produce and Primary Processing**

Procurement involves accessing the *mandis* to procure the required farm produce through networks or knowledge of the exact product requirements. Market yards are used exhaustively by the enterprises for sourcing raw-materials. Procurement of farm produce at the reasonable prices is important for all further processes and the competitiveness of the end-products. The owners within micro and small enterprises do these themselves in order to have greater control on the production costs in the firm. Payments for raw-materials procured at market yards need to be made on the spot. Besides, many of the raw-materials are seasonal, while the demand for their end-products is not. Hence, payments on finished products are realized long after the inputs are procured.

A few enterprises have also developed linkages with the farmer to get assured supply of the required standard of raw material. There is the need to not only develop linkages with the raw material supplier but also ensuring availability of the post-harvest infrastructure necessary to keep the produce in a standardized form which is cost efficient to the industry. **However, there has been very little investment in post-harvest infrastructure in the cluster.**

Post procurement, the production activity also includes smaller activities like cleaning, sorting, grading, processing, grinding/ homogenizing or temperature controlling. Whilst most of these are elementary processes, **inadequate automation of primary processing** reduce process efficiency and result in the risks of contamination and rejection of supplies.

There is also improper synchronization in production planning, which results in inaccuracies in material requirement assessment. Therefore, the **enterprises face the risk of market price fluctuations**, because of which economies of scale cannot be reaped by the enterprises.

**Secondary Processing**

A large proportion of the output from medium enterprises is met through sub-contracting to smaller or micro units. These include the large spices and pickles manufacturers and some players in the RTC segment. However, process quality checks are conducted by these enterprises themselves before initiating the sub-contracting agreement. Most of the times, the basic raw material is provided. For example, in making the onion-garlic spice, the onion-garlic paste in ground format as required is
provided to the smaller firm. The risk of poor quality and contamination is attempted to be eliminated at the first stage itself.

Secondary processing in the cluster typically involves use of heat and temperature controls effectively for processes such as sterilization and pasteurization. While, the level of knowledge of these techniques was found to be low, certain organizations have invested in expert food technologists for controlling their unit. These enterprises have been successful in terms of cost control, productivity improvement and hence, remained competitive in the cluster. This demonstrated success is encouraging other enterprises to follow suit.

**Marketing and General Management**

Most of the enterprises in the cluster are heavily dependent on trade fairs (see exhibit below). At such fairs / exhibitions, buyers typically get multiple options for bargaining with various exhibitors. Hence, the orders are booked at buyer's prices, with the enterprises wielding very little bargaining power.

As the Pune cluster has wide variety of companies competing with each other, every company has positioned itself differently with respect to different segments and has different branding strategies for different products. Most of the micro and small enterprises are not concerned about developing their own brands. These firms largely rely on sub-contracted orders received from medium enterprises. As a consequence, the products manufactured by these firms have a limited regional market restricting their revenue potential.

**Exhibit 8: Buyer Profile**

<table>
<thead>
<tr>
<th>Buyers at Trade Fairs/Exhibitions</th>
<th>Corporate Single Buyer</th>
<th>Retail Customers</th>
</tr>
</thead>
<tbody>
<tr>
<td>68%</td>
<td>63%</td>
<td>53%</td>
</tr>
</tbody>
</table>
Export marketing is also limited in the cluster, largely due to the lack of awareness. There is low to moderate awareness amongst the cluster firms with respect to documents for export, customs duty and IEC number. This need of providing the adequate information on export regulations is currently therefore serviced by the BDS providers in the cluster and are available within the reach of only the larger enterprises.

Finance as a function typically faces a lack of skilled staff, for using and analyzing TDS, other tax related issues like CENVAT and Duty Drawback schemes. Another challenge is the usage of IT in the finance function as well. While most of the activities of the finance function involve usage of IT for filing returns, maintaining regular records, audit related documents etc. need automation. The knowledge of IT in most of the firms is elementary and is now beginning to be focused upon.

**Nature of Technology Used**

There is minimal interaction among the units in the cluster. Every firm intends to preserve its unique identity through its well-crafted and developed recipes. This has led to enterprises remaining traditional since access to modern technology and sources of knowledge is only available either through material suppliers or from buyers.

**The nature of technology used is skill and labor intensive.** There are issues with respect to labor availability and wage bargaining. Highly irregular work force makes entrepreneurial involvement higher and at the same time. The following exhibit depicts the nature of technology used:

---

**Exhibit 9: Type of Technology Used across Various Firms**

<table>
<thead>
<tr>
<th>Type of Technology Used</th>
<th>Micro</th>
<th>Small</th>
<th>Medium</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human skill based</td>
<td>34%</td>
<td>53%</td>
<td>13%</td>
</tr>
<tr>
<td>Domestic technology</td>
<td>38%</td>
<td>38%</td>
<td>23%</td>
</tr>
</tbody>
</table>

*Note: The chart represents the current technology being used at the enterprises. For a particular technology, the numbers add up to 100% across enterprise categories.*
Excessive dependence on labor-driven technology causes cyclical production, with production impacted as and when availability of labor is altered. Also, the enterprises face pressure from local administration like the Gram Panchayats since these enterprises operate on lands procured from these bodies.
Supply of Credit to MSEs

Estimate of Outstanding Credit to MSEs in the F&V Cluster

The credit supply to the Pune F&V cluster is estimated to be ₹137 Crore out of which ₹29 Crore (21%) is term credit and ₹109 Crore (79%) is working capital supply.

Enterprise turnover is one of the important criteria for loan appraisal process and it can be safely assumed that credit supply to the cluster is correlated to the turnover generated. Thus, D&B India proposes to use the “Cluster Turnover proportion to Industry State Turnover” method to arrive at cluster level credit supply.

The steps for computation under the identified Methodology are detailed in Annexure I.

The data obtained through above methodology was further validated against the data on Outstanding Advances collected from the lead bank in Pune district.

The RBI Lead Bank Scheme is implemented by Bank of Maharashtra as the lead bank in the cluster. According to the RBI Banking Statistical Returns, the outstanding credit for Pune district stood at an aggregate of about ₹57,780 Crore (as of March 31, 2010). Information obtained from the lead bank suggests that the outstanding credit to the priority sector could stand at ₹22,167 Crore (38.5% of the total credit). The following exhibit depicts the banking flow of credit in the Pune District. It can be clearly seen that the Priority Sector Advances in the Pune District are close to the prescribed lending norm of 40% (of total advance).

Exhibit 10: Lending Activities of All Scheduled Commercial Banks in Pune District

<table>
<thead>
<tr>
<th>Amount in Rs. Crore</th>
<th>Source: Data from Pune Distt. Lead Bank - Bank of Maharashtra as of June 30, 2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>28,700</td>
<td>63% Non-PSA</td>
</tr>
<tr>
<td>16,823</td>
<td>37% Agri. Adv</td>
</tr>
<tr>
<td>11,487</td>
<td>25% Non Agri Adv</td>
</tr>
<tr>
<td>5,336</td>
<td>12%</td>
</tr>
</tbody>
</table>

12 Table 5.9, District Wise Classification of Outstanding Credit of SCBs, Basic Statistical Returns of SCBs in India, Vol 39 – Mar, 2010
Performance of Banks

Public sector banks contribute to 59% of the total credit and 50% of the priority sector credit. In contrast, private sector banks contribute to 34% of the total credit, and 33% of the priority sector credit. The predominant focus for the private banks is the MSME sector, further reinforcing the increasing role of these banks in MSME financing.

The following is the composition of Agriculture, Other Priority Sector and Non-Priority Sector credit in Pune as of June 30, 2011, for the top ten banks. The top 10 banks contribute to 75% of the outstanding credit in the Pune district. HDFC Bank has the largest outstanding credit portfolio. The Bank of Maharashtra leads among the Public Sector Banks and has the largest priority sector lending portfolio. Private sector banks have relatively smaller agricultural loan portfolios, but have relatively larger Other Priority Sector loans outstanding in the Pune district.

Exhibit 11: Lending of Major Banks across various categories in Pune District

<table>
<thead>
<tr>
<th>Bank</th>
<th>Agriculture</th>
<th>Other PS</th>
<th>Non-Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>HDFC Bank</td>
<td>1322</td>
<td>4791</td>
<td></td>
</tr>
<tr>
<td>BOM</td>
<td>2229</td>
<td>2911</td>
<td></td>
</tr>
<tr>
<td>ICICI</td>
<td>1748</td>
<td>3711</td>
<td></td>
</tr>
<tr>
<td>SBI</td>
<td>891</td>
<td>4166</td>
<td></td>
</tr>
<tr>
<td>IDBI</td>
<td>963</td>
<td>1134</td>
<td></td>
</tr>
<tr>
<td>Bank of India</td>
<td>376</td>
<td>1345</td>
<td></td>
</tr>
<tr>
<td>CBI</td>
<td>344</td>
<td>1345</td>
<td></td>
</tr>
<tr>
<td>Canara Bank</td>
<td>322</td>
<td>1406</td>
<td></td>
</tr>
<tr>
<td>Punjab National Bank</td>
<td>403</td>
<td>1117</td>
<td></td>
</tr>
<tr>
<td>BOB</td>
<td>589</td>
<td>753</td>
<td></td>
</tr>
</tbody>
</table>

Notes: Amount in ₹ Crore  
Source: Data Obtained from Bank of Maharashtra as of June 30, 2011

60 MSMEs were interviewed on the overall perception of their association with various institutional (including SIDBI) and non-institutional sources w.r.t to time taken for loan disbursement and collateral requirement.

The following exhibit depicts perception among respondents of time taken for loan processing and disbursement by various financial sources.
Based on the survey, it is perceived that SIDBI takes 4+ weeks to process and disburse loans. However, it is important to note the underlying reason for this perception. With the introduction of CART software, SIDBI has been able to markedly improve the loan approval and disbursal process upon successful loan application, and fair better than the most banks. During a loan application process, usually, there is a lag between dialogue initiation (between borrower and bank) for loan application and acceptance of relevant documents/loan application by bank. Borrowers, sometimes, do consider this time lag also in loan processing and disbursement process time and thus forming their perception on different banks. This is not an ideal scenario. However, financial institutions need to make prospective borrowers more aware of the loan application process, so that customer perception is more realistic and positive. There are mixed responses regarding perception of time taken for loan processing and disbursement for financial sources such as Public Sector Banks, Private and Foreign Banks, Cooperative Banks and other institutional sources. The non-institutional sources are perceived to disburse loans largely within 2 weeks.

The following exhibit shows the nature of collateral requirements across various financial sources.
Public Sector Banks seem to demand a marginally higher amount of collateral than SIDBI. However, the type of collateral in case of both the financial sources ranges across charge on fixed and current assets, corporate, personal and third party guarantee, and other types.

**Demand for Credit by MSEs**

**Estimate of Credit Demand by MSEs in the F&V Cluster**

D&B India has employed Nayak Committee approach to arrive at Total Credit Demand at cluster level, as mentioned in the methodology section. The methods involved are:

**Nayak Committee-D&B India Approach**

a. **Working Capital Demand** - Turnover Based Approach (Basis – Nayak Committee Guidelines)

b. **Term Capital Demand** - D&B India Approach (Basis – Growth in Fixed Capital)

Below are the highlights of the credit demand estimates in the cluster:-

- Total number of Micro and Small units in the cluster is 530
- The turnover for the Pune F&V MSE cluster is pegged at ₹ 846 Crore during 2010-11 from the D&B India survey at cluster level
- The turnover is estimated to rise by an annual average growth rate of 13.4% (IIP estimate) to ₹ 960 Crore in the year 2011-12
- Working Capital Requirement (Basis-Nayak Committee Guidelines) is estimated to be ₹ 192 Crore
- Term Credit Requirement (Basis-Growth in Fixed Capital) is estimated to be ₹ 42 Crore
- Total Credit Demand is thus obtained from above [(192) + (42)] and is ₹ 234 Crore

Most banks including the lead bank have indicated that for appraisals of working capital loan requirements, Nayak Committee Recommendations are being followed. The equity margin expected from promoters as per the recommendations is 20% of the working capital loan. It was observed from the survey that across categories of Micro, Small and Medium Enterprises, this ratio though has varied; the average margin requirement is marginally lower than the prescribed Nayak Committee Norm of 20% at around 17% of the working capital gap. While the average is 10% for small
Credit Gap Mapping of Select Clusters

enterprises, it is equal to the prescribed 21% and 20% for micro and medium enterprises in the sample.

Micro enterprises are not able to provide adequate collaterals to support their financing needs and hence are required to provide a relatively higher equity margin. Also, since major products produced by the micro units are seasonal in nature, the risk perception of bankers is higher. Also, most enterprises require cooling facilities or freezers for transportation of orders. The orders are rejected and no payments are realized if the necessary conditions are not met. This increases the risks of default further, especially for products like frozen corn, frozen peas etc.

Medium enterprises in the cluster are exploring newer business models for technology up-gradation and newer products. For example, entrepreneurs are exploring vegetable juices and vegetable juice instant mix. These products are not tested in Indian markets and hence, face issues with respect to providing adequate comfort levels to the bankers.

The following exhibit shows the composition of credit among the 60 respondents interviewed in the survey. While medium firms avail largely working capital, micro and small firms avail higher value of term loans than working capital, although the primary requirement in the cluster is for working capital.

Exhibit 14: Break-up of Credit to MSME Survey Respondents

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount (Lakhs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medium</td>
<td>6,126 (12)</td>
</tr>
<tr>
<td>Small</td>
<td>1,350 (20)</td>
</tr>
<tr>
<td>Micro</td>
<td>603 (19)</td>
</tr>
</tbody>
</table>

Source: D&B India (Amount in ₹ Lakhs; number of respondents in parentheses)

The following exhibit shows composition of working capital and term loans for the 60 respondents by sources of finance, separately for Micro, Small and Medium enterprises. In case of working capital, the major sources of finance for micro and small firms are Public Sector Banks, and Private
and Foreign Banks, while the major sources of Finance for medium firms are Public Sector Banks and SIDBI. In case of term loans, while micro firms largely avail the facility from Public Sector Banks and Private and Foreign Banks, small and medium firms avail the facility largely from SIDBI and Public Sector Banks.

### Exhibit 15: Sources of Finance (Amount in ₹ Lakh)

<table>
<thead>
<tr>
<th>Source</th>
<th>Micro</th>
<th>Small</th>
<th>Medium</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working Capital</td>
<td>72%</td>
<td>477%</td>
<td>2,948%</td>
</tr>
<tr>
<td>Term Loans</td>
<td>22%</td>
<td>451%</td>
<td>2,333%</td>
</tr>
</tbody>
</table>

- **SIDBI**
- **Public Sector Banks/RRBs**
- **Private Indian/Foreign Banks**
- **Other Institutional Sources**
- **Non-Institutional Sources**

Source: D&B India

In summary, the total working capital credit requirement across the surveyed 60 (48 MSEs) enterprises is around ₹ 46 Crore (₹ 7.8 Crore in MSEs) while the term credit is around ₹ 35 Crore (₹ 12 Crore in MSEs). It is also important to note that SIDBI finances micro enterprises for working capital advances through SIDBI-IDBI partnership route, while for term loans it is actively financing small and medium enterprises directly.

Thus, there is a higher credit requirement for working capital needs. The following can be summarized as major reasons for the same:

- Largely seasonal and demand driven business involving in higher stocking of finished goods
- Dependent on seasonality of cropping season as well (e.g. pickles) which are made only once a year and hence, larger working capital gets locked in while realizations occur only over a period of year or even more at times
- Quality considerations with respect to Food Safety and banks asking for these certifications increasingly now requires larger investments to be made in the quality process
From the various methods employed and explained before, the demand and supply side estimations of the cluster have been provided in the next section.

**Credit Gap in the MSE Segment**

For the current study, D&B India considered the credit supply data of only scheduled commercial banks that form the major source of credit supply. The table below contains the estimated Credit Gap in the cluster on the basis of the two methods.

<table>
<thead>
<tr>
<th>Method</th>
<th>Total Gap</th>
<th>Credit Supply</th>
<th>Total Credit Demand</th>
<th>Working Capital Demand</th>
<th>Term Capital Demand</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nayak Committee-D&amp;B India Method (In ₹ Crore)</td>
<td>98</td>
<td>137</td>
<td>234</td>
<td>192</td>
<td>42</td>
</tr>
</tbody>
</table>

**Summary of Credit Gap Assessment**

The greater working capital need in the Pune F&V cluster (compared to term credit need) also translates into a significant gap in working capital credit. D&B India has, through its primary & secondary research, identified possible reasons for why the credit demand is not being met, despite the fact that there are ample financial institutions in the district. A summary of the findings are mentioned below:

- Linkages between micro and medium or small enterprises do not exist, primarily due to absence of any sub-contracting agreements which reduces bankers’ confidence in micro unit financing, since the realization of payments is riskier

- Most of the raw material procurements happen either from direct farmers or mandis. At both these touch points for enterprises, credit is rarely available. All payments have to be made on the spot. The only way the units can borrow is by describing the order book. Banks do not accept these order books since payments are not realized. Therefore, lower turnover is used as a basis for working capital estimations. On the basis of this, the size of working capital loan appraised for the unit is relatively lower than their requirements

- Enterprises themselves refrain from obtaining bank credit, since there are no instances available in the cluster for collateral free or credit guarantee loans. Further, CGTMSE loans increase the cost of borrowings for the units

Absence of collateral free lending and seasonal nature of business coupled with absence of forward and backward linkages in the cluster are main reasons for the credit gap
- Most of the enterprises do not tend to maintain their books of accounts and hence, it is practically impossible for banks to provide credit

- Banks at times also ask for quality certifications for the product being manufactured and sold. In absence of these certifications, loans are not provided, since the proposition for the banks becomes riskier

Additionally, quality of credit received by various enterprises can be judged from three factors viz., time taken for loan processing, loan interest rate, and adequacy of credit. Though many enterprises are unable to avail bank finance, those which do so are also not obtaining adequate and timely loans

It has been observed that 80-90% of the lending to Pune F&V cluster is routed through SIDBI or PSB/RRBs, the perception of other banks is that they tend to take higher time for loan processing. It has also been observed that private sector banks are getting more active due to passive approach of major public financial institutions and banks. These banks provide finance to the cluster at relatively higher rates.

The food processing sector is a fast growing industry. The enterprises in the Pune cluster also enjoy proximity to a large number of urbanized markets. Despite the challenges faced by enterprises in the cluster, the favorable location and good growth of the industry presents a significant opportunity for financial institutions (FIs) and banks to cater more actively to the cluster in terms of their credit requirements. This shall go a long way in growth of the cluster and establishment of its foot-print in Food Processing Industry at the national level.
Recommended Products and Delivery Channels

Requirement of Capital

The greater working capital need in the Pune F&V cluster (compared to term credit need) is primarily borne out of three reasons stated below:

- Raw material procurement and absence of credit cycle
- Quality certifications
- Delay in payment from buyers

Major products that account for a larger share in the cluster are spices, pickles, and papads. Most of the units in the cluster are micro or small (>80%) and majority of them (70%) is based on proprietorship model. The units mainly operate on leased lands and the operation/processes are labor driven, and there exist no fixed asset collateral to avail institutional finance.

There is an absence of linkage of units with farmers; the raw material has to be purchased mostly from mandis, where spot payment needs to be made. Only few large units have been able to develop linkage with farmers to procure raw materials. Further, the linkage between different units is mainly limited to supply of preservatives, packaging, and primary processing such as cutting, and cleaning. There are instances where there is credit cycle of one month for raw material procurement, but it is mostly available to medium and large units. However, there exists significant advantage of buying raw materials in bulk at the mandis/farmers with cash as there is a discount of 2-2.5%, which is mostly availed by bigger units as production scale is much higher. The bulk of the raw materials purchase (> 60%) is in the months of March, April, and May. And the sale takes place throughout the year and more specifically in the festive season (October), and wedding seasons (December, January & June).

Raw materials availability at reasonable price is a major problem for the micro F&V processing firms in Pune. Because of a lack of a proper backward supply chain infrastructure, there is a lot of wastage and pilferage in raw materials leading to wide fluctuation in their prices. In the Agricultural Produce Market Committee (APMC) markets, the farmers face problems like high commission charges, high transportation and loading and unloading charges, no guaranteed remunerative prices, delayed payment by commission agents etc., which adds to the costs of the processing units ultimately. Also, almost all units face problems in procuring raw material of uniform quality. The impact of rising raw materials prices is not felt by the medium type firms due to scale advantages whereby they can
operate even on thin margins, and it is the small & micro firms that are feeling the pinch of thinning margins in a highly competitive market.

Further, it has been noticed that there is lack of order agreement and there exist the endemic problem of delayed payment from customers, who are mainly industrial canteens, hotels, distributors, and marriage event organizers/caterers.

The inherent nature of the industry requires quality testing procedures at every level in the value chain right from primary processing, secondary processing to packaging. However, there are only few private laboratories that carry out upper end tests for exports. NAFARI (National Agriculture & Food Analysis & Research Institute) is the only institute providing a full range of testing and analysis services. It was set up jointly by MCCIA and COFIT. The certification consultants and agencies are also in short supply with not more than 10-15 agencies in Pune. There is also a lack of adequate facilities in Pune cluster for training in hygiene, HACCP, and risk management. Moreover, existing consultants are an expensive proposition for MSMEs due to short supply.

The cluster is in growth phase and there is little cooperation on process parameters. Most of the units are looking to develop uniqueness of their products leading to minimal sharing of information on processes. However, BDS programmes under the MSME-FDP have played a critical role to foster market development. A note on the impact of the MSME Finance and Development Project in the Pune cluster is provided below.

### A Note on the Impact of MSME-FDP in the Pune F&V Cluster

BDS activity in the Pune Fruit & Vegetable cluster under the MSME-FDP primarily focused on quality improvement and related skill enhancement in the cluster.

To reposition the traditional food cluster from local ethnic food base to a national and international one, the ready-to-eat and ready-to-cook was focused upon. This was achieved by enabling adoption and adherence to quality standards like ISO, GMP, GHP and HACCP etc. and using the services of marketing consultants to enable firms to reach out to national and international markets.

The project used all types of tools to institutionalize the best practices like sensitization workshop and awareness building programmes and creation of a broad partnership base with BMOs. This resulted in to the significant improvement in the cluster ecosystem in terms of awareness of BDS and functioning of the BDS market.

Training of firms as well BDSPs has been the most important component of the project. Around 2000 persons were trained in various skills under the project. The cluster has significantly improved in terms of quality of production as result of adoption of various standards like ISO, GMP, GHP
and HACCP, etc. There is also an improved level of awareness on food laws, marketing techniques, export markets, etc. As a result around 20% MSME units in the cluster reported quality improvement and 60% MSMEs seeking training on quality related issues thus creating a market for such services.

Firms were also linked and sensitized on government schemes including National Horticulture Mission (NHM). With increased awareness level pack house units were able to connect to National Bank of Agriculture and Rural Development (NABARD) and Bank of Maharashtra for the financial requirements.

**Working of Government Schemes**

**Credit Linked Capital Subsidy Scheme (CLCSS)**

Aimed at technology up gradation of the small scale enterprises, the Government (Ministry of MSME) has been operating a Credit Linked Capital Subsidy Scheme since the year 2000. The scheme aims at facilitating technology up gradation for improvement in productivity of the MSE units, by providing them 15 per cent (initially it was 12 per cent) upfront subsidy.

Since there is insufficient linkage in the cluster and frequent delayed payment, the micro/small units have less timely repayment capacity. This makes the micro/small units reluctant to go for machinery up-gradation due to increased financial burden with unpredictable and untimely cash inflows. Most of the requirement comes for working capital and only growing units seek term loan demand.

**Credit Guarantee Trust Scheme for Micro & Small Enterprises (CGTMSE)**

The Credit Guarantee Fund Trust Scheme (term loan and working capital loan both) for Small Industries was introduced by the Government (Ministry of Small Scale Industries) in May 2000 with the objective of making available credit to small scale industrial units, particularly micro units (with investment in plant and machinery less than ₹ 25 lakh) for loans up to ₹ 25 lakh without collateral/third party guarantees. The scheme is being operated through the Credit Guarantee Fund Trust for Micro and Small Enterprises (CGTMSE) set up jointly by the Government of India and the Small Industries Development Bank of India (SIDBI).

The players in the cluster suffer from the unpredictability in their end products prices and due to seasonality of raw materials and insufficient linkage, it becomes difficult to map the cash flows and profitability. There is absence of CGMTSE loan facility disbursement due to lack of awareness and increased cost of borrowing. Historically, there have been repayment defaults from micro/small enterprises, FIs also do refrain from collateral free loan.
Other Schemes

The Ministry of Food Processing Industries, GOI provides loans to private sector organization for capital equipment. Through another scheme, entrepreneurs are given grants for creation of common irradiation facility in food parks. APEDA (Agriculture & Processed Food Products Export Development Authority) also provides assistance for setting up of irradiation facilities.

There are also general term/working capital loans, bills discounting facilities available from different financial institutions but they are not of much use given the fact that most of MSEs operate out of illegal land premise and cannot furnish fixed asset collaterals. Applicability of bills discounting facility is less as there is low linkage in the cluster across units. Most of the units prefer to maintain their uniqueness and this leads to less cooperation and sub-contracting.
In light of the above discussion, one of the major problems associated with MSEs in the cluster is the lack of fixed asset collateral. This becomes a major huddle for units to procure working capital loan, which is the major requirement in the cluster. Further there are limited linkages across the value chain, limited sub-contracting between units, lower level of cooperation to preserve uniqueness of products, limited affordable quality test facilities, and seasonality (non-seasonality) of raw materials (end products). Affordable and economically viable working capital financing is the need of the hour in the cluster. Loan products need to be structured to match the payments to the borrower's cash flow cycle and address specific credit needs that exist in the cluster. Further, financial institutions need to have a greater focus on providing credit based on cash flow rather than based on collaterals, which is mostly absent with the MSEs, and also create a mechanism to evaluate the economic viability of the project. Below is the representation of MSEs critical credit needs and suitable financial products to address the same.
Credit Gap Mapping of Select Clusters

The dotted line indicates potential future linkages (basis the use of recommended financial products) and orange box indicates the type of products that may be introduced to cater to specific needs of the cluster.

**Raw Materials Purchase Linked Working Capital Finance**

Since the majority of raw material procurement happens during March to May months, the credit requirement is maximum during this period and survival/growth is dependent largely on the ability to procure raw materials at a discounted price with less restriction on amount of purchase due to limited credit access.

Under this scheme, the financial institutions (FIs) shall finance the raw material purchase and Agricultural Produce Market Committee (APMC) shall be the implementing institute as it controls the major trading hubs except for Hadapsar market. Below are the salient points of the scheme:

- APMC shall assist in the preparation of agricultural supply and demand forecast
- Based on the above forecast, APMC shall purchase the raw materials in bulk, get heavy discount, and get financed by FIs, with raw materials serving as collateral and APMC serving as guarantor
- APMC becomes the major supplier of raw materials to the MSEs present in the cluster at a discount
- For the loan facility to be economically feasible, the basic condition that may have to be checked at the cluster would be \((y\% - z\%) > x\%\)
APMC is directly controlled by Maharashtra State Agricultural Marketing Board (MSAMB) and APMC regulate the marketing of different kinds of agriculture produce in the assigned market by issuing license to traders (sellers) and buyers to participate in the APMC controlled market such as Hadapsar market in Pune district. On talking with official in MSAMB, APMC indicated that they can take the role of implementing agency for raw material bank as it already has oversight control on the market participants (sellers and buyers) and sufficient workforce especially in APMC Pune. Additionally, few FIs need to form a consortium to facilitate the raw material finance. It is recommended that a pilot project be initiated with only few FIs in the consortium with one FI serving as facilitator/implementing agency.

Receivables Linked Bank Account

Since there have been instances of payment defaults by micro/small units, there has to be significant risk control system on financing the raw material purchase. One way is to introduce specialized bank account product where receivables of MSEs (who availed “Raw Material purchase linked Working Capital Finance”) are directly payable to bank account the control of which resides with the bank. Specific covenants (interest rate, repayment tenure etc.) can be worked keeping in mind the working of earlier product (Raw Materials linked Working Capital Finance).

The major challenge would be to encourage MSE units to use bank account for their transactions, since many micro units prefer cash transactions for both purchase and receivables from customers.

Micro Finance – SHG Bank Linkage Model

It is important to note here that during year 2006-07, 15230 SHGs were financed with a loan amount of ₹ 42 Crore by banks in the Pune district averaging to an amount of ₹ 27,500 per SHG. For repeat finance, a maximum of ₹ 50,000/- per SHG was envisaged under the plan for a target of 5000 SHGs. There is also a provision of cash credit limit finance of ₹ 25,000/- through the Savitri Credit Card (Bank of Maharashtra) for marketing initiatives of these SHGs, from where these SHGs can meet their working capital needs. The SHG linkage model is highly successful with a 100% recovery record. The private banks are not much into the SHG linkage micro finance model, except HDFC bank, which is financing NGOs. However, such a model of finance does not fulfill the requirements of progressive units who wish to move into a higher turnover loop.

The historical success of SHG model provides significant opportunity to increase lending on a similar approach. Further, there is significant women workforce (in the cluster) which has been a unique feature for Bangladesh Grameen model and SHG model to be successful in different parts of the world.
### Annexure I Estimation Method for Credit Supply

**ESTIMATION OF CREDIT SUPPLY TO THE PUNE FRUIT AND VEGETABLE CLUSTER**

<table>
<thead>
<tr>
<th>Item</th>
<th>Mar, 2011 Estimate</th>
<th>Remarks/Assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Estimated Maharashtra F&amp;B Industry Advances Outstanding - March, 2011 (₹ Crore, Projected at an expected annual growth rate of 31%)</td>
<td>14,303</td>
<td>Expected growth rate is estimated from State Level Advances (SLA) growth Rate using SLA figures ending Mar, 2010 &amp; Mar, 2011 Source - Table 4.9- Annual-Basic Statistical Returns of SCB, Mar ’2010 Source - Statement 9: RBI Quarterly-Basic Statistical Returns of SCB, Mar ’2011</td>
</tr>
<tr>
<td>2 Estimated Maharashtra F&amp;B Industry Turnover - Mar, 2011 (₹ Crore, Projected at an expected annual growth rate of  1.4% and 14.4% for Year 2009-10 and 2010-11)</td>
<td>67,405</td>
<td>Expected growth rate is estimated from National IIP growth rates Source - Table 3 - ASI, Government of India, MOSPI, 2009 Source - Latest National IIP figures – Statement II in “MOSPI Press Release on IIP Estimates”, Aug 2011</td>
</tr>
<tr>
<td>3 Cluster Sample Turnover (MSEs), Sample Size - 48 units in MSEs Sector (₹ Crore)</td>
<td>136</td>
<td>D&amp;B India Survey</td>
</tr>
<tr>
<td>4 Total Number of MSE units (530) in Pune F&amp;V Processing Cluster</td>
<td></td>
<td>From Pune F&amp;V Cluster Diagnostic Study (DS) Report</td>
</tr>
<tr>
<td>5 Estimated the Cluster Total Turnover (MSEs, ₹ Crore) using (3) &amp; (4) for year ending Mar, 2011</td>
<td>846</td>
<td></td>
</tr>
<tr>
<td>6 Estimated Proportion (P1) of Cluster Turnover to State Industry Turnover using (2) and (5) [P1 = (5) / (2)]</td>
<td>1.3%</td>
<td></td>
</tr>
<tr>
<td>7 Estimated the Cluster Level Credit Supply [(1) + (6)] - ₹ Crore</td>
<td>137</td>
<td>Estimation based on RBI's Statistical Returns-SCB Source - Table 6.1, Statistical Tables Relating to Banks in India, 2009-10</td>
</tr>
<tr>
<td>8 State Level Advances – Term Loan Advance (Small Enterprise - SE) to Total Advance (SE) Proportion (P2)</td>
<td>21%</td>
<td></td>
</tr>
<tr>
<td>9 Using (7) and (8) Working Capital Supply is [(1-P2)*7].</td>
<td>108</td>
<td></td>
</tr>
<tr>
<td>10 Using (7) and (8) Term Credit Supply is [(P2)*7].</td>
<td>29</td>
<td></td>
</tr>
</tbody>
</table>
## Annexure II Estimation Method for Credit Demand

### ESTIMATION OF CREDIT DEMAND IN THE PUNE FRUIT AND VEGETABLE CLUSTER

<table>
<thead>
<tr>
<th>Method</th>
<th>Item</th>
<th>Mar, 2012 Estimate</th>
<th>Remarks/Assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nayak Committee Approach - Working Capital</td>
<td>Cluster Sample Turnover (MSEs), Sample Size - 48 units in MSEs Sector</td>
<td>D&amp;B India Survey</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total Number of MSE units (530)</td>
<td></td>
<td>Pune F&amp;V Cluster Diagnostic Report</td>
</tr>
<tr>
<td></td>
<td>Estimated the Cluster Sample Total Turnover (MSEs, ₹ Crore) for year</td>
<td>136</td>
<td>D&amp;B India Survey</td>
</tr>
<tr>
<td></td>
<td>Estimated the Cluster Total Turnover (MSEs, ₹ Crore) - Mar, 2012,</td>
<td>960</td>
<td>Expected growth rate is estimated from National IIP growth rates</td>
</tr>
<tr>
<td></td>
<td>Expected growth rate of 13.4%</td>
<td></td>
<td>Source- Latest National IIP figures – Statement II in “MOSPI Press Release on IIP</td>
</tr>
<tr>
<td></td>
<td>Basis Nayak Committee Guidelines, Working Capital Funding</td>
<td>192</td>
<td>Estimates</td>
</tr>
<tr>
<td></td>
<td>Requirement is 20% of Projected Turnover calculated in (3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D&amp;B India Approach - Term Capital</td>
<td>Cluster Sample &quot;Investments in Plant &amp; Machinery&quot;, Sample Size - 48</td>
<td>49</td>
<td>D&amp;B India Survey</td>
</tr>
<tr>
<td></td>
<td>in MSE Sector (₹ Crore)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total Number of MSE Units (530)</td>
<td></td>
<td>Pune F&amp;V Cluster Diagnostic Report</td>
</tr>
<tr>
<td></td>
<td>Estimated the Cluster Total &quot;Investments in Plant &amp; Machinery&quot; (MSEs,</td>
<td>259</td>
<td></td>
</tr>
<tr>
<td></td>
<td>₹ Crore) using (1) &amp; (2) for year ending Mar, 2011</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Value in (8) projected to Mar, 2012 level using moving average growth</td>
<td>313</td>
<td>Source - Annual Survey of Industries (ASI) estimates on Fixed</td>
</tr>
<tr>
<td></td>
<td>rate of fixed capital for Industry-state wise (21%)</td>
<td></td>
<td>Capital for different industries within a state – MOSPI ASI Report, 2009-10</td>
</tr>
<tr>
<td></td>
<td>(9) - (8) gives the growth in fixed capital</td>
<td>53</td>
<td></td>
</tr>
<tr>
<td></td>
<td>80% of (10) is estimated to be Term Credit Funding Requirement</td>
<td>42</td>
<td></td>
</tr>
<tr>
<td>Total Credit Demand</td>
<td>Total Credit Demand [192 + 42] calculated above in [ (5) and (11)]</td>
<td>234</td>
<td></td>
</tr>
</tbody>
</table>
### Scheme for Financing of Raw Material Procurement

- **Purpose**: Raw materials need to be purchased in bulk during certain months of the year
- **Benefits**: Bulk purchase enables MSEs to benefit from discounted prices

<table>
<thead>
<tr>
<th>Scheme, Purpose &amp; Benefits</th>
<th>Implementation Process</th>
<th>Clusters Where Applicable</th>
<th>Pre-requisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw materials need to be purchased in bulk during certain months of the year</td>
<td>Group of banks catering to cluster form a consortium and enter into a common MoU with an implementation agency</td>
<td>Pune Fruit and Vegetables - Through Agriculture Produce Market Committee</td>
<td>Implementation agency should be an existing integral stakeholder in the raw material procurement process or an agency implementing a cluster-specific government scheme</td>
</tr>
<tr>
<td>Bulk purchase enables MSEs to benefit from discounted prices</td>
<td>Forecast of annual production of MSE units and annual raw material requirements to be prepared basis inputs from MSEs, industry associations (say, MCCIA in Pune), large sub-contracting industrial buyers (say, Khadims / Sreeleathers in Kolkata), cluster sector-specific research institutions (say, Central Leather Research Institute – CLRI in Chennai)</td>
<td>Ludhiana Knitwear - Through Knitwear Club / KAMAL / LAKMA</td>
<td>Interest charged by the bank for financing will be the predominant cost of service. For the raw material financing scheme to be economically viable, the costs of service must be less than or equal to the difference in procurement price and sale price to MSEs</td>
</tr>
<tr>
<td></td>
<td>Implementation agency to procure the raw material with MoU banks / FIs financing the purchase</td>
<td>Rourkela Engineering - Through Orissa State Industrial Corporation (OSIC)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Raw material procured to serve as collateral with implementation agency serving as facilitator / guarantor</td>
<td>Kolkata Leather</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Implementation agency becomes the primary raw material supplier. Discount obtained by acquiring the raw material in bulk may be passed on to MSEs after deducting fee towards costs of provision of the service by implementation agency</td>
<td>Through Indian Leather Products Association (ILPA) / Central Leather Research Institute</td>
<td></td>
</tr>
</tbody>
</table>

### Factoring (or reverse factoring)

- **Purpose**: Reliance on CC while there is high proportion of receivables in working capital cycle and sales/cash flows fluctuations leads to intermittent over / under financing
- **Benefits**: Strong inter-linkages and subcontracting of manufacturing activities exist

<table>
<thead>
<tr>
<th>Scheme, Purpose &amp; Benefits</th>
<th>Implementation Process</th>
<th>Clusters Where Applicable</th>
<th>Pre-requisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reliance on CC while there is high proportion of receivables in working capital cycle and sales/cash flows fluctuations leads to intermittent over / under financing</td>
<td>Factor / (bank / FI offering service) obtains control over the sales ledger of the client. In effect, the entire receivables management is taken over by the factor</td>
<td>Rajkot and Coimbatore Engineering Clusters</td>
<td>Strong inter-linkages and subcontracting of manufacturing activities exist</td>
</tr>
<tr>
<td>Factoring involves extension of working capital finance on ongoing basis against invoices raised by MSEs on buyers</td>
<td>Client make an application to factor with last 3 years’ statements Factor conducts the client’s appraisal and approves/disapproves</td>
<td>Hyderabad Pharmaceutical Cluster</td>
<td>Open account sales are preferred between larger buyers and smaller sellers</td>
</tr>
<tr>
<td>Factoring ensures : Improved cash flows</td>
<td>Credit line is based on financial strength of borrowing client’s debtors, as well as on the borrower’s own financial strength</td>
<td>Kolkata Leather Cluster</td>
<td>If factors are hesitant to offer services to MSEs (as the case may be for Kolkata Leather and Hyderabad Pharmaceutical clusters), ‘Reverse Factoring’ can be looked at as an alternative, where banks purchase accounts receivables only from high-quality buyers</td>
</tr>
<tr>
<td>Improved cash flows</td>
<td>Client submits sales ledger of customers to factor Sanction limit is assigned based on the quality of customers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fixed assets freed up for collateralization elsewhere</td>
<td>Factor sends notification to client buyers. Upon acceptance, a factoring agreement is signed between the client and factor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Benefit of sales ledger management</td>
<td>Based on the invoices, factor makes advance prepayments (up to 80% of invoice value) and subsequently manages the client’s ledger and sends due reminder to client customers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scheme, Purpose &amp; Benefits</td>
<td>Implementation Process</td>
<td>Clusters Where Applicable</td>
<td>Pre-requisites</td>
</tr>
<tr>
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</tr>
<tr>
<td>Pre-approved Collateral-free Equipment Finance Scheme</td>
<td>✅Would enable quick acquisition of critical equipment. MSEs often face situations where suppliers are offering a discount or where the equipment is required for complying with a norm within a deadline</td>
<td>Rajkot and Coimbatore Engineering Clusters</td>
<td>✓Industry association should be representative of the cluster with a large member base</td>
</tr>
<tr>
<td></td>
<td>✅Would enable acquisition of a number of small-value equipments through the year. Formal application processes are considered tedious with no certainty of sanction. Hence, either costly unsecured loans are sourced or WC credit is employed</td>
<td>Hyderabad Pharmaceutical Cluster</td>
<td>✓Units should not be spread far and wide, as such an intervention may not be operationally feasible</td>
</tr>
<tr>
<td></td>
<td>✅Absence of appropriate collateral common reason for loan applications to be rejected. Many MSEs over leveraged and lack collateral for fresh loans</td>
<td>Kolkata Leather Cluster</td>
<td>✓Units should share information on products and processes among themselves</td>
</tr>
<tr>
<td></td>
<td>✅POF is pre-shipment finance that enables an MSE to receive WC funds based on orders placed by their credit worthy buyers</td>
<td>Rajkot and Coimbatore Engineering Clusters</td>
<td>✓Strong linkages exist between large and established buyers and a host of small and medium enterprises that carry out sub-contracted work</td>
</tr>
<tr>
<td></td>
<td>✅Allows seller to receive funds far sooner than if it had to wait for buyer to pay and even sooner than if invoice is discounted</td>
<td>Hyderabad Pharmaceutical Cluster</td>
<td>✓Payment discipline on the part of large established buyers</td>
</tr>
<tr>
<td></td>
<td>✅POF allows the unit to take on multiple orders and deliver them successfully</td>
<td>Kolkata Leather Cluster</td>
<td></td>
</tr>
</tbody>
</table>

**Implementation Process:**

- A bank/financial institution will enter into an MoU with a local industry association, which is truly representative of the cluster MSMEs.
- The local industry association will be responsible for processing loan applications, conducting appraisals, recommending limits as per prescribed norms and providing them to banks/financial institutions, as well as verifying the pro-forma invoice, ensuring margin payment, asset value, etc.
- A collateral-free line of credit is sanctioned to enterprises, which can avail this facility any time during the year, either in full or in parts, for purchasing equipment.
- Disbursements can be made within 2-3 days on a pre-approved loan.
- Loans, when availed, can be repaid through PDCs either in the form of EMIs. If required, repayment can be staggered/ballooned with gestation period.

**Clusters Where Applicable:**

- Rajkot and Coimbatore Engineering Clusters
- Hyderabad Pharmaceutical Cluster
- Kolkata Leather Cluster

**Pre-requisites:**

- Industry association should be representative of the cluster with a large member base
- Units should not be spread far and wide, as such an intervention may not be operationally feasible
- Units should share information on products and processes among themselves

**Purchase Order Financing**

- Buyer send PO to seller and furnishes comfort letter to bank detailing seller information and credibility.
- Seller then submits PO to bank for POF. Bank advance is made to the unit or directly to its supplier to cover the costs of materials, trade goods and/or services.
- Seller produces or assembles the goods and ships the products to the buyer.
- Seller submits invoice directly to bank and buyer pays according to payment terms, usually directly to the bank.
- Bank receives payment from buyer, withholds amount advanced to seller as repayment on POF loan, and also deducts agreed amount of interest and fees. The balance is then remitted to the seller.

**Where Applicable:**

- Rajkot and Coimbatore Engineering Clusters
- Hyderabad Pharmaceutical Cluster
- Kolkata Leather Cluster

**Pre-requisites:**

- Strong linkages exist between large and established buyers and a host of small and medium enterprises that carry out sub-contracted work.
- Payment discipline on the part of large established buyers.

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**Clusters**

- Rajkot and Coimbatore Engineering Clusters
- Hyderabad Pharmaceutical Cluster
- Kolkata Leather Cluster
<table>
<thead>
<tr>
<th>Scheme, Purpose &amp; Benefits</th>
<th>Implementation Process</th>
<th>Clusters Where Applicable</th>
<th>Pre-requisites</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Working Capital Term Loan (WCTL)</strong></td>
<td>If MSMEs extend credit of &gt; 120 days to clients (like in Ludhiana), it ties up the WC finance. In many cases, credit limit set by the banks in the cluster is often insufficient for units to cover their WC expenses.</td>
<td>Ludhiana Knitwear Cluster - Orders booked at buyer-seller meets, but payments realized after goods are sold in end-markets</td>
<td>Requirement of credit in excess of sanctioned limit, often for seasonal bulk raw material procurement.</td>
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<td>Such shortages of credit in the Ludhiana cluster could be provided through a Working Capital Term Loan (WCTL) accounts.</td>
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<td></td>
<td>Although this arrangement is presently applicable to borrowers having working capital requirement of Rs.10 crores or above, this service can extended to small enterprises with needs less than Rs. 10 crores as well.</td>
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<tr>
<td><strong>Receivables-linked Bridge Financing Scheme</strong></td>
<td>MSEs deliver the previous order goods to customers.</td>
<td>Small units, such as those in the Rourkela Engineering Cluster, would find this as an effective method for overcoming difficulties with the current bill-discounting schemes.</td>
<td>Continuity in terms of execution of past orders, receipt of fresh orders and payments on earlier transactions, is a must.</td>
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<td></td>
<td>Bills Receivables created on the executed order.</td>
<td></td>
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<td></td>
<td>MSEs procures next order.</td>
<td></td>
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<td></td>
<td>FIs finance to MSEs for new order based on Bills Receivables as collateral.</td>
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<td></td>
<td>New order execution starts after bank finance.</td>
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<td></td>
<td>At around the same time, bank may be repaid out a payment received by MSE from an earlier transaction.</td>
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</tr>
<tr>
<td><strong>Up-scaling of Micro Finance Programs</strong></td>
<td>MFIs can target lower end of SME spectrum that have features in common with existing clients - Average loan size of micro firms (say ~INR 1.0 L).</td>
<td>Unorganized micro enterprises in the Coimbatore, Rourkela and Kolkata clusters that carry out sub-contracted work for larger enterprises.</td>
<td>Refinancing / on-lending and other support from DFI, etc crucial for helping MFIs adapt current practices to serve MSEs.</td>
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<td></td>
<td>MFI can modify microfinance business models to incorporate SME operations by taking advantage of their market knowledge and network, and by adapting their microfinance methodologies.</td>
<td></td>
<td>Following to be addressed:</td>
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<tr>
<td></td>
<td>Reasons for the recent MFI regulation in AP, and draft bill on MFIDR 2011 that have put MFI lending model under scanner to be taken into consideration.</td>
<td></td>
<td>• Development of suitable loan products and attributes.</td>
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<td></td>
<td>Microfinance has made significant inroads into Tamil Nadu, Orissa and West Bengal.</td>
<td></td>
<td>• MFI collection cycle and recovery mechanism to adapt to MSEs Asset Conversion Cycle.</td>
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<td></td>
<td>May encourage transition from informal to formal enterprise.</td>
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<td>• Capacity Building / Training for MFIs and Borrowers.</td>
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</tbody>
</table>
Annexure A.2 Financial Inclusion Initiatives under MSME-FDP

By achieving integration of BDS market development with 'access to finance' initiatives, a greater multiplier effect can be unleashed. Every cluster has different financial needs and look for customized products and services. The terms and conditions of granting loans need to be suitably amended as well depending on the profile of cluster firms. It is felt that momentum can be rendered to the mission of enabling access to finance by attending to this through BDS approach.

MSME Financing and Development Project

SIDBI is the implementing agency for the MSME Financing and Development Project (MSME-FDP) involving the World Bank, DFID, UK and GIZ, Germany as partners. The project attends to demand and supply side needs of MSMEs through judicious provision of financial and non-financial services. It has reached out to around 1 lakh beneficiaries, which are largely MSMEs & stakeholders.

By fostering Business Development Services (BDS) in 19 clusters, project has given new dimensions to cluster development by acting as market enabler. This systemic change has been brought about by developing sustainable & technically competent - locally relevant experts, 450 BDS providers -both individual/ Institutional which also include BDS Providers(BDSPs) in area of Skill development, Technology, Quality, Marketing, Finance and so on. This has not only enabled national/ international compliances by MSMEs in clusters but also fostered competitiveness by enabling markets to work for MSMEs. Financial BDS have given reference for linkages to Banking fraternity for around ₹ 3.94 billion.

The BDS market development believes in the theory that once BDS are capacitated and are successful in satisfying the appetite of MSMEs, the market rejuvenates. By using services, MSMEs get growth impetus and subsequent profit. They seek more services of BDS and as profitability of service provider goes up, it attracts other players. The market attributes get imbibed in form of a self-sustaining loop (exhibited below – courtesy OTF USA and Cluster Pulse) which brings in innovation, cooperation and competition.

At the very early stage, project realized that the main problem in clusters is not the availability of the finance but the lack of awareness about its availability and how to approach lenders. Project has not only created awareness programme to enhance the knowledge of MSMEs in the area but also hand hold them to get to the finance from various Banks/FIs. A total number of 874 enquiries for ₹ 394
Crore were generated through the programs and an amount of ₹ 242 Crore availed by 412 MSMEs across various clusters.

Project has worked with various models and took various initiatives which have acted as catalysts. Major models which project have adopted are:

- **BDS centric model**

  In BDS centric model, individual BDS providers were strengthened to provide better services to cater the customized needs of MSMEs in various clusters. MSMEs were sensitized and grouped together to avail BDS services at affordable prices. Efforts have been made to facilitate their initial transactions through voucher support to showcase the demonstrative effect in the clusters. Later some of the BDS formed consortia have to provide one stop shop services to MSMEs.

- **MFI centric model**

  In this model to reach the enterprise at the bottom of pyramid, assistance was provided on pilot basis to a MFI. Besides sanctioning a credit limit, capacity building support in form of handholding support was extended. Project also piloted a downscaling model (doing small loan profitably) by roping in a consultancy agency of international experience. Later it is planned to scale up this model for wide replication.

- **BMO led model**

  In this model, BMOs capacity was build and they were promoted as BDSP for financial linkages. This enabled the strengthening of credit delivery channel for the financial linkages with the Bank.
The primary responsibility of due diligence rested with the BMOs which formed a separate SPV to create awareness among MSMEs. Few other bankers have joined the initiative with the BMO. Further this initiative is being replicated by SIDBI at another state also. Few other BMOs have evinced interest to adopt the model.

Along with facilitation of credit in the clusters project has also focused towards Credit Dispensation and Supplementation. For Credit Dispensation, it has channelized over USD 444 mio to 7750 MSMEs through Environment and Social Risk (E&S) aligned facilities for which 140 plus credit officials of 45 branches have been trained. For credit supplementation, it has supported piloting of Risk Sharing Facility (through CGTMSE) which has been institutionalized, setting up of SME commercial Bureau in CIBIL (database has grown from 0.04 mio to 6.4 mio with 0.3 mio reports accessed), SME Rating Agency (emerged sustainable through 14000 plus ratings and launch of Green ratings etc.), and capacity building of strategic institutions in Risk Capital, Technology Access etc.
Annexure A.3 List of Documents Reviewed

1. Survey of Past Committee Reports
   (http://dcmsme.gov.in/publications/comitterep/creport.html)
   - Nayak Committee Report, 1991
   - Abid Committee Report on Small Enterprises, 1997
   - Kapur Committee Report on Credit Flow to SSI Sector, 1998
   - Gupta Committee Report on Development of Small Enterprises, 1999
   - Chakraborty Committee Report on Re-habilitation of Sick SMEs, 2008

2. Report on Prime Minister’s Task Force on MSMEs, 2010

3. Financing of Enterprises in the Unorganized Sector & Creation of a National Fund for the
   Unorganized Sector (NCEUS, Nov 2007)
   http://msme.gov.in/

4. RBI Guidelines for Priority Sector Lending

5. RBI Annual Publications, Basic Statistical Returns, Quarterly Publications, Branch Banking
   Statistics

6. RBI – Functions and Working

7. SIDBI Annual Report, 2009-10

8. IDBI Annual Report, 2009-10

9. Annual Survey of Industries (ASI), Government of India
   http://mospi.nic.in/mospi_new/upload/asi/ASI_main.htm?status=1&menu_id=88

10. Handbook of Indian Economy Statistics

11. Fourth All India Census of MSMEs, 2006-07

12. State Level Bankers Committee Reports

    http://econ.worldbank.org/

14. Diagnostic Study Reports for 10 identified clusters
    (http://www.MSME-FDP.net/Dignostic_Study.aspx)
    - Faridabad Auto Components and Engineering Cluster
Credit Gap Mapping of Select Clusters

- Coimbatore Engineering Cluster
- Rajkot Engineering Cluster
- Rourkela Engineering Cluster
- Ahmedabad Dyes and Chemicals Cluster
- Hyderabad Pharmaceuticals Cluster
- Ludhiana Knitwear Cluster
- Chennai Leather Cluster
- Kolkata Leather Cluster
- Pune Fruits & Vegetable Processing Cluster


Credit Gap Mapping of Select Clusters

Engineering Clusters: Coimbatore, Faridabad, Rajkot and Rourkela