Credit Gap Mapping of Select Clusters

Engineering Clusters: Coimbatore, Faridabad, Rajkot and Rourkela
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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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, Upscaling 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
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 Financing and 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 4 identified Engineering MSME clusters.
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 (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 MSEs 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 MSMEs 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 MSMEs.

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
Credit Gap Mapping of Select Clusters

- 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 Up gradation and Compliance with Quality and Environmental Norms

The need for technology up gradation 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 MSMEs 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 MSMEs, 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 microfinance 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 ₹ 200,000/-;
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</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Endorsed the Tandon committee views that 80% of the working capital need be funded by banks i.e. 20% of the</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Method of estimation of working capital finance</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Insights for estimation of term credit</td>
</tr>
</tbody>
</table>
### 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>Abid Committee Report on Small Enterprises (1997)</td>
<td>• Setting up of a ₹ 2500 crore fund to help enterprises that are negatively affected by the recommended abolition of reservations for small scale industry&lt;br&gt;• Setting up specialized branches catering to needs of small scale industry</td>
<td>• Insights on channels and medium of credit delivery</td>
</tr>
<tr>
<td>Kapur Committee Report on Credit (1998)</td>
<td>• Recommended training for branch managers for appraising small projects&lt;br&gt;• Increasing the limit for composite loan to ₹ 5 lakh (currently limit is ₹ 1 crore&lt;br&gt;• Opening more specialized branches for MSME sector&lt;br&gt;• Urging banks to pay more attention to backward states</td>
<td>• Credit Delivery Mechanisms</td>
</tr>
<tr>
<td>Gupta Committee Interim Report on Development of Small Enterprises (1999)</td>
<td>• Recommended that MSME sector be given the same importance as agriculture sector under priority sector lending&lt;br&gt;• Urged banks to directly lend to the MSE sector instead of adopting soft approaches like subscription to bonds of SFCs, NABARD, etc.</td>
<td>• Priority Sector Lending and Delivery Mechanisms&lt;br&gt;• Emphasis on direct Lending</td>
</tr>
<tr>
<td>Chakraborty Committee Report on Rehabilitation of Sick MSMEs (2008)</td>
<td>• Recommended to simplify procedures in preparing techno-economic feasibility&lt;br&gt;• Suggested setting up single point credit processing cells&lt;br&gt;• Stressed the need for simplification of financial reporting requirements&lt;br&gt;• Legislation to encourage factoring, refinance at concessional rates</td>
<td>• Effective credit delivery&lt;br&gt;• Timely disbursements and process simplifications</td>
</tr>
</tbody>
</table>
## 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>
</table>
| Prime Minister Task Force’s Sub-Group on Credit to MSMEs                      | • 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 | • Insights on methodology for estimation of credit gap
                                                                                           | • Urged SEBI to expedite the process of setting up an MSME exchange            | • Effective credit delivery mechanisms
                                                                                           | • 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 |                                                                                         |
                                                                                           | • Suggested changes in bank lending norms for innovation start-up firms          |                                                                                         |
                                                                                           | • Recommended increasing mandatory coverage under CGTMSE from ₹ 5 lakh to ₹ 10 lakh for MSMEs |                                                                                         |

### 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**

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.
### Credit Gap Mapping of Select Clusters

<table>
<thead>
<tr>
<th>Criteria</th>
<th>MSEs</th>
<th>Medium-size Enterprise</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Bank's Requirement for Loan Approval</td>
<td></td>
</tr>
<tr>
<td>1.a</td>
<td>Collateral Presence</td>
<td>Absent-Low</td>
</tr>
<tr>
<td>1.b</td>
<td>Guarantee</td>
<td>Not Always Available</td>
</tr>
<tr>
<td>1.c</td>
<td>Fixed Asset</td>
<td>Not Always Available</td>
</tr>
<tr>
<td>1.d</td>
<td>Credit Rating</td>
<td>Not Always Available</td>
</tr>
<tr>
<td>1.e</td>
<td>Cash Conversion Cycle</td>
<td>Not Favorable</td>
</tr>
<tr>
<td>1.f</td>
<td>Stability of cash flows</td>
<td>Low-Mid-High</td>
</tr>
<tr>
<td>1.g</td>
<td>Business/Project Plan</td>
<td>Not Always Available</td>
</tr>
<tr>
<td>1.h</td>
<td>Accounting Information</td>
<td>Not Always Available</td>
</tr>
<tr>
<td>1.i</td>
<td>Previous Relationship with the Bank</td>
<td>None-Low</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Other Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.a</td>
</tr>
<tr>
<td>2.b</td>
</tr>
<tr>
<td>2.c</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.

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

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\(^2\) 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) statistics\(^5\) 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 4\(^{th}\) 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).

**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:

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\(^5\) ASI estimates on Fixed Capital for different industries within a state – MOSPI ASI Report
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)”
   a. Working Capital supply is then arrived at using formula (1-P2)*CLCS
   b. Term Capital supply is P2*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

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6 Table 4.9- Annual-Basic Statistical Returns of Scheduled Commercial Banks, Mar ’2010
7 Table 3 – Annual Survey of Industries (ASI), Government of India, MOSPI
8 Statement 9: RBI Quarterly-Basic Statistical Returns of SCB, Mar ’2011
10 Table 6.1, Statistical Tables Relating to Banks in India, 2009-10s
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.
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.
Coimbatore Engineering Cluster
Overview

Coimbatore is one of the major industrial hubs of Tamil Nadu. It is well-known for its engineering units, with a large presence of foundry units, pumps and motors manufacturers, and light engineering enterprises. There is a strong inter linkage among engineering units in the cluster as pumps and motors manufacturers are one of the major customers for foundry units. Thousands of MSEs located in the cluster including ancillaries and jobbing units have helped Coimbatore to be recognized as an important industrial hub of South India.

The following exhibit summarizes the information on the Coimbatore engineering cluster.

<table>
<thead>
<tr>
<th>Type of Industry</th>
<th>Type of Firm</th>
<th>No. of units</th>
<th>Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pumps &amp; Motors industry</td>
<td>Medium</td>
<td>4</td>
<td>4,500</td>
</tr>
<tr>
<td></td>
<td>Small</td>
<td>500</td>
<td>50,000</td>
</tr>
<tr>
<td></td>
<td>Micro</td>
<td>600</td>
<td>50,000</td>
</tr>
<tr>
<td>Light engineering units</td>
<td>Micro</td>
<td>25,000</td>
<td>75,000</td>
</tr>
<tr>
<td>Foundry industry</td>
<td>-</td>
<td>600</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>26,704</td>
<td>1,79,500</td>
</tr>
</tbody>
</table>

Source: APITCO Diagnostic Study Report, July 2009

Base on D&B India survey estimates, the turnover generated by MSEs in the cluster amounts to ₹4740 crore. The following exhibit gives the break-up of turnover based on two parameters (Exports/Imports, and Sub-Sectors)
The success for the development of industries could be attributed to the innovative and technical skills of artisans, technocrats and industrialists. Apart from the engineering cluster, some of the other industrial clusters in Coimbatore are textile power loom, hosiery and agricultural implements. The product range of the engineering cluster includes foundry castings, machine tools, cutting tools, electric motors and pumps, wet grinders, textile machinery, washing machines, automobile spares, domestic electrical appliances, plastic spares and components, etc. The cluster largely caters to the domestic needs of the country as the export share of the cluster in the total sales is only 10%. There is a huge domestic demand for Coimbatore engineering products; because of this the firms have concentrated less on international markets.

The development of agricultural sector in Tamil Nadu state and strengthening of the industrial sector during the successive five year plan has played a significant role in the development of the cluster. The cluster was primarily dominated by Pumps and Motors sub-sector in 1990s but gradually diversified to different engineering segments. The foundry units present in the cluster caters mainly to the pumps and motor sub-sector in the cluster. Slowly, foundry units have been also catering to auto-components sub-sector. There is considerable inter-linkage in the cluster with micro units acting as sub-contractors to small and medium size firms. Though micro units play a critical role in the cluster, they are heavily dependent on small and medium units and lack the technology and marketing know-how to grow and expand. Further, most of them do not have access to institutional finance.

Despite the success of the cluster in engineering sector, there are threats to the foundry, pumps and motors industry due to growing environmental concern regarding pollution control, strong overseas competition from countries like China and the perennial problem of long power cuts. The prolonged power cuts have forced many units to rethink the option of relocation and because of this foundry units and micro units are getting badly hit.

The local support institutions in the cluster include

- Government support institutions that include DIC, NSIC, BIS, Export Promotion Council-Engineering (EEPC), Tamil Nadu Industrial Investment Corporation (TIIC), etc.
- Industries Associations include South India Engineering Manufacturing Association (SIEMA), The Coimbatore Tiny and Small Foundry Owners Association (COSMAFAN), Tamil Nadu Association of Cottage and Micro Enterprises (TACT), Tamil Nadu Pumps and Motors Spares Manufacturers Association (TAPMA), Coimbatore SIDCO Industrial Estate Manufacturers Association (SIDCOMA), etc.
- Private BDS providers in the field of financial advisory, skill development, technical knowledge, etc.

While there are many private BDS providers, the extent of usage varies depending on information and type of services. Before MSME-FDP was implemented majority of MSEs lacked awareness of existing BDS facilities and therefore were foregoing the opportunity to leverage the services. There exist a great need for creating awareness of existing support system and make credit available to use those facilities. This has been appropriately taken care of by the BDS activities under the MSME-FDP.

Sources of Demand for Credit – Opportunity and Risks

**Significant Micro Units and Lack of Technology Know-how**

There are approximately 25000 micro units in the cluster and are present across different engineering segments in the cluster and lack the vision to modernize and grow their business. These units have traditional manufacturing systems and little awareness about the new technologies and product developments. Most of these units take orders from small and medium size units and lack the access to end market.

**Purchase of Raw Materials**

Commodities are the major constituents of raw materials going to different units in the cluster. These include Pig Iron, Coke, Copper, Aluminum etc. While big players are able to purchase the raw materials in bulk, the micro and small players have to rely on retail traders and thus make the cost of purchase costlier.

**Manpower Intensive Manufacturing**

Traditionally, the manufacturing process is manpower intensive. As per Diagnostic Study estimates, the cluster provides direct employment to about more than two lakh people. Therefore, the requirements of the working capital to make continuous labor payments increase. It also increases the risk in the sector due to labor issues, varying productivity levels etc.

**Technology Up-gradation**

Since the cluster is well diversified in different engineering segments, the technology usage varies across firms and types. Traditionally, the output of the cluster has been consumed domestically, and there has been little stress on exports. Gradually, the cluster has started looking towards foreign markets and this has produced the challenge of upgrading their technology either for end products (such as Energy Efficient Pumps) or manufacturing set-up (such as Foundry units having Energy Efficient Furnaces Units).

**Quality and Norms Compliance**

The Bureau of Energy Efficiency (BEE) has unveiled improved energy efficiency norms for the electric motor and pump industry. The standards set are higher than BIS norms. Further, there are pollution norms, set by Tamil Nadu Pollution Control Board, to be adhered in the state. Even
though the air pollutants released by foundries are within permissible limits, the increased number of
units has increased the environment pollution significantly.

**Skill Development and Common Facility Center Usage**

The skill development services are either provided by private BDS providers or Industry Associations present in the cluster. Majority of micro units do not have advance skills and neither have information on improving their skill set. An enabling environment has, however, been created under MSME-FDP BDS programme for this. And even if they are aware of competency building facilities, the services are fee based. This puts upward pressure on their working capital need. Further, there are common test facility centers provided by different support institutions such as SIEMA, CONINDIA etc. for BIS certification, Energy Audit Services, Cleaner Production Audit, and Vendor Registration Services. But facility usage is subjected to a fee, which becomes a hindrance for the micro units as credit out working capital pool has to be allocated, putting extra pressure on micro units. Additionally, it increases the cost of their end products/services decreasing their profitability. Voucher support mechanisms, tried under the MSME-FDP, is an appropriate approach to cater to their expectations.

**Supply of Credit to MSEs**

**Estimate of Outstanding Credit to MSEs in the Engineering Cluster**

The credit supply to the Coimbatore Engineering cluster is estimated to be ₹ 704 crore out of which ₹ 162 crore (23%) is term credit and ₹ 542 crore (77%) 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 Coimbatore district.

It is important to understand the credit supply environment in the state and the achievement of annual credit plan targets set by the State Level Bankers Committee before the actual estimation of credit supply to MSMEs at district level. In Tamil Nadu, Indian Overseas bank is heading the SLBC and it reviews the various banking activities in the state. For the year 2010-11, as per the annual credit plan banks should achieve a credit target of ₹ 47,228 crore and the banks in Tamil Nadu have disbursed ₹ 52,224 crore at 110% achievement level. The credit outstanding increased by 21.83%
during the year ended March 2011. In this the share of priority sector advances to total credit is 47.49% as of March 2011 against the RBI norm of 40%. So it can be clearly seen that the priority sector advances in the state are as per the prescribed lending norms of 40%. For the current year 2011-12, a target of ₹ 56,662 crore has been set as per the annual credit plan.

**Performance of Banks**

RBI lead bank scheme in the district is implemented by Canara bank, as Canara bank is the lead bank in the district. According to the lead bank, there are a total of 472 bank branches as on March 2011 and the total advances to priority sector at the district level is ₹ 13,262 crore as on March 2011. Priority sector advances stand at 41.20% of the total bank advances at district level which shows a healthy credit disbursement to priority sector. Out of the total priority sector lending, the total credit outstanding to MSE sector stands at 45.10% or 18.58% of the total net bank credit. The exhibit below indicates the credit outstanding in priority and non-priority sector advances at district level. The data includes scheduled commercial banks, regional rural banks, co-operative banks, state finance corporation and SIDBI. The total advances at district level stands at ₹ 32,190.76 crore.
As MSEs fall under priority sector, it is important to understand the disbursement of credit and also the composition of priority sector lending/advances. It acts as an important indicator of the banking sector’s thrust on the agriculture and small industries sector. It is observed that of the total priority sector credit disbursements, around 45% of the credit has been provided to the small industries sector as on March 2011. The exhibit below represents the composition of priority sector advances in Coimbatore. The data on priority sector include advances from scheduled commercial banks, regional rural banks, co-operative banks, SIDBI and TIIC. However the advances to micro credit under priority sector is minimal in the district despite the fact that around 25,000 micro units are present in the district.
It is known that there are no internal targets set for MSE lending under priority sector and the total priority sector lending should meet the target of 40% of net bank credit. As per the annual credit plan 2010-11, the priority sector lending target has been achieved and the total share of priority sector advances stands at 41.2%. In other words, the banks are able to meet the targets and the credit disbursement to important sectors of the district has been met. However it is to be noted that there are many micro units in Coimbatore, who do not have access to credit from formal financial institutional sources.

Exhibit 9: MSE Lending of major Banks in Coimbatore District

<table>
<thead>
<tr>
<th>Bank</th>
<th>MSE Advances</th>
<th>Non-MSE Advances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corporation Bank</td>
<td>217</td>
<td>375</td>
</tr>
<tr>
<td>Axis Bank</td>
<td>235</td>
<td>304</td>
</tr>
<tr>
<td>Union Bank of India</td>
<td>251</td>
<td>231</td>
</tr>
<tr>
<td>Bank of Baroda</td>
<td>256</td>
<td>239</td>
</tr>
<tr>
<td>Indian Bank</td>
<td>446</td>
<td>708</td>
</tr>
<tr>
<td>Canara Bank</td>
<td>654</td>
<td>842</td>
</tr>
<tr>
<td>Indian Overseas Bank</td>
<td>950</td>
<td>549</td>
</tr>
<tr>
<td>State Bank of India</td>
<td>822</td>
<td>1,216</td>
</tr>
</tbody>
</table>

Amount in ₹ Crore
Source: Data obtained from Canara bank as on March 2011

In terms of total credit disbursements, the top 8 banks account for 64% of the MSE advances in the district. Canara Bank is the lead bank in the district, and accounts for almost 11% of total MSE advances in the district and clearly it is leading from the front. It has a market share of around 11% next only to Indian Overseas Bank and State Bank of India. In Coimbatore, Indian Overseas Bank is the leading bank in MSE lending though it has a total loan book size which is less than that of State Bank of India. The exhibit below presents the credit supply position in the district of Coimbatore across major banking institutions. The information includes credit disbursement information for development finance institution like SIDBI and State Finance Corporation. The information also includes co-operative banks and regional rural banks. It is evident that the active banks in the MSE lending are IOB with a market share of 16%, SBI with 14% and Canara Bank with 11%. Also, it is interesting to note that a private sector bank features among the top league in MSE lending, which indicates that the private sector banks are ready to lend to MSEs under the assumption that there is a huge potential untapped in Coimbatore engineering units business.
The 21 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. While 30% of the respondents believed that SIDBI would largely take less than 2 weeks, 50% indicated the timeframe to be 2-4 weeks to process and disburse loans. There were mixed views on other financial sources. The sources that are believed to take less than 2 weeks (by a greater proportion of respondents) for loan processing and disbursement are the private / foreign banks, other institutional sources and the non-institutional source.

The quality of credit received by various enterprises can be compared on two parameters:

- The loan documentation process for MSMEs needs to be simplified in order to deliver credit in a timely manner. It is observed that there is a common perception among MSMEs that PSBs take longer time to process and disburse loans and it is clearly reflected in the survey. Also, it is understood that entrepreneurs in Coimbatore are sensitive to interest rates and most of them prefer to avail loan from public sector banks as the interest rates are comparatively lower. So, there is a need for PSBs to simplify their loan documentation process especially for disbursing working capital loans.

- Perceptions on time taken for loan processing across bank groups indicates the timeliness of credit received. The following exhibit indicates the duration of loan processing for working capital and term loans across major bank groups. The processing is faster only in case of non-institutional sources of credit followed by private Indian banks. It is interesting to note that perceptions on SIDBI’s loan processing time closely resemble some of the major private sector banks. Most respondents indicated that working capital and term loans were disbursed in less than 4 weeks.
The following exhibit depicts perception among respondents of time taken for loan processing and disbursement by various financial sources.

**Exhibit 11: Perception of Time Taken for Loan Processing and Disbursement**

While most of the banks follow their code of lending to MSMEs that stipulates faster processing of loan applications, it is observed that SIDBI processes its applications faster than public sector banks and cooperative banks. However, a marginally greater number of respondents felt that private Indian / Foreign banks process their applications faster than SIDBI.

Also, loans from non-institutional sources are usually perceived to get disbursed within 2 weeks due to lesser due diligence; however, their interest rates are highest.

The following exhibit shows the nature of collateral requirements across various financial sources.

**Exhibit 12: Nature of Collateral Requirements**

Private and Foreign Banks are perceived to demand more forms of collateral across all major types such as charge on fixed and current assets, and corporate guarantee, while SIDBI is known to ask for least collateral, usually charge on fixed assets.
Credit Gap Mapping of Select Clusters

Demand for Credit by MSEs

Estimate of Credit Demand by MSEs in the Engineering 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 26700
- The turnover for the Coimbatore Engineering MSE cluster is pegged at ₹ 4739 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 9.8% (IIP estimate) to ₹ 5204 crore in the year 2011-12
- Working Capital Requirement (Basis-Nayak Committee Guidelines) is estimated to be ₹ 1041 crore
- Term Credit Requirement (Basis-Growth in Fixed Capital) is estimated to be ₹ 894 crore
- Total Credit Demand is thus obtained from above [(1041) + (894)] and is ₹ 1934 crore

Credit Appraisal processes followed by various banks differs in terms of time taken for appraisals. However, most of the banks including the lead bank have indicated that for appraisals of working capital loan requirements, the Nayak Committee Recommendations are being followed. However, during the survey, it was observed that across categories of Small and Medium Enterprises, this ratio has varied considerably. The exhibit below presents the equity contribution of entrepreneurs for working capital loans indicated by a sample of 50 enterprises. It can be concluded that the Nayak Committee Recommendations are currently not being followed at least in the case of small enterprises where the contribution is comparatively high.
During the qualitative study conducted by D&B India in Coimbatore it is understood that SIDBI is providing working capital loans to enterprises in the cluster through SIDBI-IDBI partnership route, where IDBI provide the back-end support service to enable working capital finance. However, more promotion in the cluster may be required to enable more units to avail this facility.

The following exhibit shows the composition of credit among the 50 respondents interviewed in the survey. While 66% of the total respondents were small enterprises, 2% were micro and 32% were medium enterprises. As depicted below, major requirement in this cluster is for working capital loans, across all categories.
The following exhibit shows composition of working capital and terms loans for the 50 respondents by sources of finance, separately for Micro, Small and Medium enterprises. It can be seen from the exhibit that MSEs depend heavily on non-institutional sources for finance, while SIDBI is the major lender for term loans to medium units.
Banks such as State Bank of India, Canara Bank, Indian Bank, United Bank of India etc. provide equipment finance and high value long term working capital support in the cluster. These banks have tie ups with NSIC for the same, wherein NSIC recommends the units to the banks. Since Coimbatore Engineering Cluster is one of the oldest clusters, there is an increasing trend towards machinery up gradation. Also, foundry enterprises require energy efficient equipments i.e., up gradation to CNC machines from conventional lathe machines or new machinery purchase for reducing energy consumption. All the units that go for purchase of energy efficient equipment are covered under the ‘Scheme for energy saving project in MSME sector’ wherein the units can avail loan at a subsidized rate of interest i.e., at a rate 0.75% lower than the normal lending rate.

Micro enterprises find it difficult to get loans from financial institutions / banks and instead source loan from private sources at a higher interest rate. Micro units are also unaware of specific schemes like CGTMSE and CLCSS.

The vendor development scheme is quite dominant in Coimbatore as most of these units supply to big firms such as Lakshmi Machine Works and C.R.I pumps. Most of the units which are acting as suppliers to big firms can avail loan under this scheme without any collateral and the units are not required to bring in any contribution for equipment purchase.

SIDBI Coimbatore branch lends to small and medium enterprises directly, whereas lending to micro units happens through TIIC where SIDBI, Chennai branch refines to TIIC every year for micro units lending purposes. Under term loans, SIDBI caters to both small and medium enterprises but bills discounting is currently availed by medium enterprises only.
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>Credit Demand</th>
<th>Working Capital Demand</th>
<th>Term Capital Demand</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nayak Committee-D&amp;B India (In ₹ Crore)</td>
<td>1231</td>
<td>704</td>
<td>1934</td>
<td>1041</td>
<td>894</td>
</tr>
</tbody>
</table>

Summary of Credit Gap Assessment

While it is clear that there is a significant credit gap (₹ 1231 crore) in the cluster, it is also important to note that working capital demand is more than term capital demand but both are significant. While working capital emanates from inherent labor intensive nature of the sector and quality & norms compliance, term capital demand emanates from technology up-gradation requirement.

D&B India looked at possible reasons for the large credit gap in the cluster and identified the following reasons for the gap.

- Banks take a very conservative approach and are risk averse in sanctioning loans to MSEs. Bankers fail to take into account the track record of the entrepreneur and his credit history in sanctioning long term finance
- It is understood that SIDBI prefers lending to units with credit requirement above ₹ 100 lakh. But the small units require credit in the range of ₹ 50-100 lakh to meet their working capital requirements and new machinery purchase. The reason for this situation is SIDBI has low staff to process and monitor loans and prefers to process high ticket size loans to meet annual targets. There are many small units that have a good track record in loan repayment and SIDBI indicated that they can look to increase the staff numbers to tap these small units. The knowledge level of bankers about CGTMSE, CLCSS and other government schemes is low and this suggests that there is a gap in credit delivery to MSMEs
- Majority of the micro units don’t have access to bank finance. It is understood that around 40% of the micro units have access to current accounts in banks and approx. 5-7% have proper access to institutional credit. Most of the micro units depend on non-institutional sources of finance for capital requirements to run the business. These non-institutional sources charge interest rates in the range of 36 - 60% p.a.
- The micro units have credit needs in the range of ₹ 50,000 – 5,00,000 and majority of the financial institutions are not willing to lend to micro units. The reason for this is the high risk
perception of bankers towards micro units despite the mandatory norm to cover under CGTMSE and norms laid by RBI i.e. 60% of the MSME credit should go to micro units

- The awareness level of MSMEs on credit rating is high but the common opinion among MSMEs is the perceived minimum benefit of the tool in availing credit from financial institutions

Further analysis revealed that working capital requirements are met by banks for medium-size units as they can provide collaterals. MSEs find it difficult to furnish collaterals leading to the high credit gap. There is a large presence of micro and small units in the cluster and the need of the hour is to cater to their credit needs both in terms of working capital and term capital requirement. Coimbatore engineering cluster has the potential to be significant player in the engineering export market and financial institutions have a major role to play in timely and adequate fulfillment of credit demand, especially in MSEs sector.

**A Note on BDS Programmes under MSME-FDP in the Coimbatore Engineering Cluster**

BDS activity in the Coimbatore Engineering cluster under the MSME-FDP primarily focused on interventions in four major areas, i.e. quality, skill trainings, energy saving measures and technology up gradations. 45 new service providers were introduced to the cluster.

Associations and firms could realize the advantages of these interventions. The first milestone was achieved with the facilitation of quality certifications like BIS and BEE for 50 firms. Another major area covered was intervention through skill development training programme. As a result 500 semi-skilled persons upgraded their skills. Some of them were absorbed in larger firms and nearly 50 trained persons availed loans for purchasing CNC Machines.

Similarly, energy saving measures were adopted by 25 firms, out of 10 firms reaped large benefits. Energy audits have demonstrated that savings worth nearly ₹ 25 lakh accrued with a payback period of 3-5 years.

Six technology up-gradation programmes were organized during the project period resulting in installation of Divided Blast Technology. Improvement in terms of quality and saving of fuel was experienced. Standardization of components in Motors and Pumps with the help of BDS Project interventions resulted in a saving of ₹ 40 lakh per year. Standardization would continue in the cluster by leveraging government funds from the local MSME DI.
Recommended Products and Delivery Channels

Requirement of Capital

The requirement of units in the cluster is for both working capital and term capital. However, the working capital requirement is more. The nature of capital requirements are as follows:

- Purchase of raw materials
- Wage payments
- Quality and norms compliance
- Technology up-gradation

The units suffer from low awareness of new technology know-how and different financial services in the cluster. There are many micro units in the cluster who do not have collateral to fulfill the requirements of loan application process. This creates a perennial problem of units being unable to grow. There is a strong inter linkage among engineering units in the cluster as pumps and motors manufacturers are one of the major customers for foundry units. The thousands of MSEs located in the cluster including ancillaries and jobbing units have helped Coimbatore to be recognized as an important industrial hub of South India. There are many support institutions that are active in the cluster but there is low awareness amongst micro units of their existence in the cluster. The MSME-FDP BDS programmes have been able to address these issues effectively.

Further there are quality and norms compliance issues which units are unable to fulfill due to non-availability of capital. Majority of FIs serve mainly to medium size units and there is a significant financial exclusion of MSEs. Further, the micro units depend on retail traders to buy raw materials leading to their low profitability and inability to sustain longer without any capital support.

Working of Government Schemes

The current schemes that units can be availed by units are

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.
There are majority of micro units in the cluster and due to their lack of new technology know-how, makes the above scheme not much applicable to the cluster. For this scheme to take off micro units have to be made aware of the different upcoming technology and then units shall be able to reap the benefits of this scheme.

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

The Credit Guarantee Fund Trust Scheme for small industries was introduced by the Government 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 awareness of the scheme is low in the cluster and thus the benefits haven’t reached as intended. This scheme is very much suitable to the cluster, since there is presence of large number of micro units, whose requirement is in the range of ₹ 50,000 – 5,00,000. Cluster institutions have undertaken awareness programmes across the cluster to apprise the units of the benefits of this scheme. However, this needs scaling up.

**Vendor Development Scheme**

The scheme is quite predominant in Coimbatore as most of the firms supply to big firms such as Lakshmi Machine Works, CRI Pumps etc. Most of the firms who are acting as suppliers to these big firms can avail credit without any collateral and the firms do not need to bring in contribution for equipment purchase. Since the awareness for new technology amongst micro units is low, the usability of the scheme for new equipment purchase is not being utilized. It is recommended that industry association such as COTMA or TACT undertake the awareness programs to educate the micro/small units on the above scheme so that units reap the benefit of the same.

The other products that are available in the cluster includes bills discounting (medium size units), general working/term capital loan, open letter of credit (LC) for exporters, and equipment lease finance (small and medium size units).

**Descriptions of Products and Delivery Mechanisms**

**Lease Financing**

Most of the units in this cluster are micro and currently using conventional machines. In such cases, the formal financial institutions can help these units by financing their equipment purchase under lease financing. Based on promoter’s record, the business’s future potential in addition to unit’s
proven track record, banks can do lease financing for the acquisition of plant, machinery and the equipments for these units.

The typical term for the lease would be 5-10 years. The units would pay rentals to the bank for the period till when they have successfully repaid the cost of the equipment. The banks could also charge a processing fee and a lease management fee for the same. Till the time the entire amount has been paid back, the equipment/machinery would stand as the primary security. The possession of the equipment will remain with the borrower, while the bank would enjoy the full legal title. The equipment would become the property of the unit as soon as the debt is paid.

The major advantage of lease financing is that it enables the lessee (manufacturing unit) to plan its cash flows properly. The rentals can be paid out of the cash coming into the business from the use of the same assets

Factoring

There is a strong inter linkage among engineering units in the cluster as pumps and motors manufacturers are one of the major customers for foundry units. The thousands of MSEs located in the cluster including ancillaries and jobbing units have helped Coimbatore to be recognized as an important industrial hub of South India. Keeping above in mind, 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 one such 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 this 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.

Further, as opposed to Cash Credit, under ‘Factoring’, there is scope for flexibility as to quantum of potential funding, as it is based on the level of debtors. Also, 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. The borrower’s bank approves the list of debtors whose invoices, it is prepared to finance and accordingly, the level of funding varies as per the amount due from such approved debtors. 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.

Factoring has the potential to emerge as a valuable alternative means of finance, because of the following benefits:
Improved cash flows: Majority of MSMEs in the cluster is not able to grow due to insufficient capital and long receivables credit cycle, factoring could be a viable solution for propelling the growth of MSMEs. Factoring solution provides instant cash on receivables, the funding problem of MSMEs can be easily solved.

Elimination of default risk: Factoring without recourse eliminates credit risk for the clients, which is transferred to the factor company. This is a valuable service for MSMEs, as their sensitivity to default risk is usually very high.

Fixed assets freed up for collateralization for other credit requirements: Since factoring generally does not use fixed assets for collateralizations against advances, these assets of the clients are freed up, which can be used as collateral against other loans, for other business needs.

Benefit of sales ledger management: With collections and sales ledger management being outsourced to the factoring companies, MSMEs would be able to utilize the freed up resources for marketing or other business development purposes. Besides, due to specialization, factor companies are better placed to conduct these functions effectively.

Increased ability to extend open account terms to clients: Since extending open account terms of credit involves higher risk, MSMEs are able to offer these terms only to long standing reliable clients, in the absence of open-account receivables finance and adequate credit protection. However with factoring, MSMEs can enjoy better cash flows and reduced default risks, which would enable them to offer open account terms of credit to their clients, which would in turn help their businesses to grow.

Improved financials: Factoring without recourse removes credit sales receivables from the balance sheets of clients, resulting in improved accounts receivable days and a better current ratio. Since factoring would also reduce the additional debt requirements for working capital, it helps in improving the debt-equity ratio and the debt service coverage ratio of the entities.

Factoring Mechanism

The parties involved in a factoring arrangement are:

- The Client, or the seller
- The Debtor, or the buyer
- The Factor (International factoring may have a correspondent factor in addition to the domestic factor)
Steps Involved:

- Client approaches factor company with last three year financial statements and fills the application form

- Factor conducts the client’s appraisal (quantitative assessment of financial ratios etc. and qualitative assessment such as integrity and management capability etc.) and approves/disapproves accordingly

- Client submits the sales ledger of his customers to the factor and sanction limit is assigned based on the quality of customers

- Factor sends the notification letter to client buyers and upon acceptance of notification a factoring agreement is signed between the client and factor

- Based on the invoices, factor makes advance prepayments (up to 80% of invoice value) and subsequently manage the client’s ledger and sends due reminder to client customers. The whole process is taken care through a proper software system
Pre-approved Collateral-free Equipment Finance Scheme

- Through MoU with Coimbatore District Small Scale Industries Association (CODISSA) / Tamil Nadu Association of Cottage and Micro Enterprises (TACT) / other associations active in the region

There is a unique credit disbursement mechanism in Faridabad Auto and Light Engineering cluster, where SIDBI and FSIA work in tandem to sanction a pre-approved loan facility that can be tapped anytime during the year. 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.

In the Coimbatore engineering cluster, a similar initiative can be undertaken where Banks / SIDBI can enter into a MoU with CODISSA / TACT to form a special cell taking care of the initial due-diligence of the units by CODISSA / TACT. Subsequently, based on the recommendation of CODISSA / TACT, Banks / SIDBI can approve the loan either for working capital or term capital requirement. The credit limits, margin payment, collateral requirement etc. can be discussed between Banks / SIDBI and CODISSA / TACT, so that a suitable and workable arrangement can be made specific to the cluster.

Financial Inclusion Initiatives under the MSME-FDP

There have already been a few successes from motivating cluster level financial institutions in Coimbatore to lend to MSMEs under the MSME-FDP. 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.

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

Microfinance has made significant inroads into Tamil Nadu. The total number of microfinance clients in Tamil Nadu (Credit Self Help Group (SHG) members and MFI Client put together) stood at roughly 1.12 crore in 2011, next only to Andhra Pradesh. The various microfinance models have been tried, tested and have met with success, creating an overall conducive environment for microfinance. Microfinance loans in Tamil Nadu aggregated to ₹ 6,434 crore in 2011, with average loans outstanding per household standing at ₹ 22,109.

There are roughly 25,600 micro units in the Coimbatore Engineering cluster. Micro units act as subcontractors to small and medium size firms. Roughly, 40% of the micro units have access to current
accounts in banks and approximately 5-7% has proper access to institutional credit. Most of the micro units depend on non-institutional sources of finance for capital requirements to run the business. These non-institutional sources charge interest rates in the range of 36 - 60% p.a.

The micro units have credit needs in the range of ₹ 50,000 – 5,00,000 and majority of the financial institutions are not willing to lend to micro units. The reason for this is the high risk perception of bankers towards micro units despite the mandatory norm to cover under CGTMSE’ and norms laid by RBI i.e., 60% of the MSME credit should go to micro units.

Up-scaling MFIs would prove to be a potent method to handle this issue. 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. In such cases, up-scaling would comprise offering financial services/products that cater to the special needs of a micro enterprise. The benefits of up-scaling may encourage a transition from an informal to a formal enterprise.

MFI active in and around Coimbatore 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.

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.

**Formation of Joint Liability Groups (JLG)**

It has been found that most of the micro units in Coimbatore do not have access to institutional finance and the entrepreneurs of micro units borrow from private money lenders at exorbitant interest rates. The major reason behind this practice is the high risk perception of bankers towards micro units. Banks perceive lending to micro units as risky investment and it incurs high monitoring, administrative and transaction costs. In order to overcome this issue D&B India recommends forming Joint Liability Groups (JLG) among micro unit entrepreneurs. The group should consist of 5-7 members each from micro units located in Coimbatore. The group should get registered with one of the micro units association in Coimbatore i.e., either with COTMA or TACT. The association would take the responsibility of forming the group keeping in mind the repayment capabilities of the group and the past performance of the members in doing business. The formal registration with association ensures that the formed group possesses the ability to repay the loan. Here it should be noted that the group will be held responsible for any credit borrowed from the bank, if any of the borrowers from the group defaults the bank loan, the group would be liable to repay the loan.

The role of association in this model is that it acts as an intermediary between the banks and the groups. The association is eligible to act as a guarantor to the group provided it maintains a savings account with the bank. The account should represent the corpus of the association and all the members’ contribution. The loans provided to the groups would be worked based on a ratio of the micro unit association savings. The association would act as a guarantor provided it can pool the savings; the extent to which the association could take the role of guarantor would be decided based on the amount of savings. The ratio of savings to total loan amount should be at the discretion of the issuing bank. The savings pool would act as a Delinquency Risk Fund to the banker and in this way the association would take the responsibility of tracking the performance of the various groups in terms of loan repayment.

In this model the credit risk of the borrowers is distributed among the group members and any default by one of the group members continuously for three months would lead to ineligibility of other group members to obtain a loan from the bank in the future. Here it should be noted that this
model works on concept of peer pressure which acts as a source of social collateral to the bank. It is understood that the bankers are wary of the repayment capabilities of the borrowers and this model would minimize the credit risk borne by the banker and in terms of collateral the joint liability would act as social collateral in addition to the association guarantee if at all considered by the banker.

The performance of the group is tracked by the bank and the loan limit can be extended or reduced based on the past credit history of the group with the bank. The loan taken can be utilized for the following purposes: Working capital requirement, Expansion/ Modernization of the unit. The success of the model is dependent on the model implementation by the associations in terms of formation of right groups and also the sensitization of bankers about the model.

The JLG scheme has been tried and run effectively by cooperatives such as the Coimbatore District Central Cooperative for women traders. The strong family, kinship and community ties that still exist in Coimbatore is conducive for the JLG model, which requires peer pressure to act as a social collateral.
### Annexure I Estimation Method for Credit Supply

#### ESTIMATION OF CREDIT SUPPLY TO THE COIMBATORE ENGINEERING CLUSTER

<table>
<thead>
<tr>
<th>Item</th>
<th>Mar, 2011 Estimate</th>
<th>Remarks/Assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Cluster Sample Turnover (MSEs), Sample Size - 34 units in MSEs Sector (₹ crore)</td>
<td>54</td>
</tr>
<tr>
<td>4</td>
<td>Total Number of MSE units in the Cluster</td>
<td>26700</td>
</tr>
<tr>
<td>5</td>
<td>Estimated the Cluster Total Turnover (MSEs, ₹ crore) using (3) &amp; (4) for year ending Mar, 2011</td>
<td>4739</td>
</tr>
<tr>
<td>6</td>
<td>Estimated Proportion (P1) of Cluster Turnover to State Industry Turnover using (2) and (5) [P1 = (5) / (2)]</td>
<td>4.4%</td>
</tr>
<tr>
<td>7</td>
<td>Estimated the Cluster Level Credit Supply [(1) * (6)] - ₹ crore</td>
<td>704</td>
</tr>
<tr>
<td>8</td>
<td>State Level Advances – Term Loan Advance (Small Enterprise - SE) to Total Advance (SE) Proportion (P2)</td>
<td>23%</td>
</tr>
<tr>
<td>9</td>
<td>Using (7) and (8) Working Capital Supply is [(1-P2)*(7)].</td>
<td>542</td>
</tr>
<tr>
<td>10</td>
<td>Using (7) and (8) Term Credit Supply is [(P2)*(7)].</td>
<td>162</td>
</tr>
</tbody>
</table>
## ESTIMATION OF CREDIT DEMAND IN THE COIMBATORE ENGINEERING CLUSTER

<table>
<thead>
<tr>
<th>Method</th>
<th>Item</th>
<th>Mar, 2012 Estimate</th>
<th>Remarks/Assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Nayak Committee Approach - Working Capital</strong></td>
<td>1 Cluster Sample Turnover (MSEs), Sample Size - 34 units in MSEs Sector</td>
<td></td>
<td>D&amp;B India Survey</td>
</tr>
<tr>
<td></td>
<td>2 Total Number of MSE units in the cluster</td>
<td>26700</td>
<td>Coimbatore Engineering Cluster Diagnostic Report</td>
</tr>
<tr>
<td></td>
<td>3 Estimated the Cluster Sample Total Turnover (MSEs, ₹ crore) for year ending Mar, 2011</td>
<td>54</td>
<td>D&amp;B India Survey</td>
</tr>
<tr>
<td></td>
<td>5 Basis Nayak Committee Guidelines, Working Capital Funding Requirement is 20% of Projected Turnover calculated in (3)</td>
<td>1041</td>
<td></td>
</tr>
<tr>
<td><strong>D&amp;B India Approach - Term Capital</strong></td>
<td>6 Cluster Sample &quot;Investments in Plant &amp; Machinery&quot;, Sample Size - 34 in MSE Sector (₹ crore)</td>
<td>47</td>
<td>D&amp;B India Survey</td>
</tr>
<tr>
<td></td>
<td>7 Total Number of MSE units in the cluster</td>
<td>26700</td>
<td>Coimbatore Engineering Cluster Diagnostic Report</td>
</tr>
<tr>
<td></td>
<td>8 Estimated the Cluster Total &quot;Investments in Plant &amp; Machinery&quot; (MSEs, ₹ crore) using (1) &amp; (2) for year ending Mar, 2011</td>
<td>3989</td>
<td>Source - Annual Survey of Industries (ASI) estimates on Fixed Capital for different industries within a state – MOSPI ASI Report, 2009-10</td>
</tr>
<tr>
<td></td>
<td>9 Value in (8) projected to Mar, 2012 level using moving average growth rate of fixed capital for Industry-state wise (28%)</td>
<td>5106</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10 (9) - (8) gives the growth in fixed capital</td>
<td>1117</td>
<td></td>
</tr>
<tr>
<td></td>
<td>11 80% of (10) is estimated to be Term Credit Funding Requirement</td>
<td>894</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credit Demand</strong></td>
<td>12 Total Credit Demand [1041 + 894] calculated above in [ (5) and (11)]</td>
<td>1934</td>
<td></td>
</tr>
</tbody>
</table>
Faridabad Auto Components & Engineering Cluster
Overview

The Automobile Industry, due to its very nature, has grown in clusters. The clusters have OEMs as hubs or centers of growth while the suppliers have formed their bases around the OEMs. There are 3 major automobile and auto component production clusters across the country, namely,

- Western Region (Mumbai – Pune – Nasik – Aurangabad)
- Southern Region (Chennai – Bangalore – Hosur)
- Northern Region (Delhi – Gurgaon – Faridabad)

In the Eastern region, activity in the automotive sector is seen in Jamshedpur and Kolkata, but the development in this region has been to a lesser extent than in the others.

The Faridabad Auto Component and Light Engineering Cluster is a naturally evolved and one of the oldest auto components cluster in the country. Faridabad Small Industries Association (FSIA) has been instrumental in the overall development of the cluster over the past 32 years.

The Faridabad Auto Components and Light Engineering cluster broadly covers two categories of manufacturers – auto components and light engineering segment. The exhibit below lists the different products manufactured in the cluster.

<table>
<thead>
<tr>
<th>Exhibit 16: Different Products Manufactured in Faridabad Cluster</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Auto Components</strong></td>
</tr>
<tr>
<td>Engine and Engine Parts</td>
</tr>
<tr>
<td>Transmission and Steering Parts</td>
</tr>
<tr>
<td>Suspension and Braking Parts</td>
</tr>
<tr>
<td>Equipments</td>
</tr>
<tr>
<td>Electricals</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

Source: Faridabad - Cluster Diagnostic Study (Prepared by APEX)

The majorities of companies is in the micro / small category and are being managed by the first generation owner-entrepreneurs. In most of these companies delegation was ineffective. Here the owner – entrepreneur was the only manager who provides guidance / takes decisions in all aspects of operations and has no effective second line of managers. In a few cases there were one or two managers but they too were not given any authority and responsibilities.
The below exhibit summarizes the cluster information.

<table>
<thead>
<tr>
<th>Unit Type</th>
<th>Number of Units</th>
<th>Turnover (In ₹ Crore)</th>
<th>Investments In Plant and Machinery (In ₹ Crore)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Micro and Small</td>
<td>17,000</td>
<td>10,240</td>
<td>3,432</td>
</tr>
</tbody>
</table>

Source: D&B India Survey

The estimates of “Investment (in Plant & Machinery)” and Turnover have been prepared on the basis of D&B India Sample Survey, while number of units in the cluster has been borrowed from Diagnostic Study (DS) Report, prepared, by APEX Quality Management Systems, for GIZ.

Sources of Demand for Credit – Opportunity and Risks

Material Linkages

Bulk of the requirements for material related credit was due to the nature in which material itself is handled. Due to entrepreneurial control over the entire facility, most of the times it was observed that lot sizes for ordering varied considerably, economic order quantities were not called for and most of the procurements are conducted on the “gut feel” of the owner. This has led to primarily two major issues – one the fact that raw material lying on the floor is increasing and second to control this (and minimize wastages of material through rusting, oxidation etc.), the materials and processes and converted to WIP stocks. Therefore, in most of the enterprises, either large inventories or WIP stocks are observed. This largely has to deal with the problem of inadequate skills of the entrepreneur. In medium enterprises, where production planning procedures were observed, this problem was rarely seen. Slow moving of items on the shop floor is leading to increased working capital needs.

Sales Linkages

Large scale industries like Hero Motor Company, New Holland, JCB, Escorts etc. rely on MSMEs for contract manufacturing. Each industry has a fixed credit cycle and is typically disciplined in meeting payment deadlines. The overall credit cycle in the cluster on an aggregate basis is around 60-90 days but can go up to 120 days. However, well established and strong players (like JCB) pay within 30 days as well. Therefore, the sales and credit linkages are relatively well established in the cluster. The small units however, at times, face issues in obtaining payments from the micro or medium enterprises.

With respect to marketing as well, a well-established marketing organization is not required in the cluster since most of the work is fixed through contracting and once the contracts are established, these stay for longer durations.
Technology
The light engineering segment of the cluster is fairly under-developed with respect to the knowledge and usage of modern technology. In specific cases like sheet metal processing industries, most of the companies were using traditional power presses, and, only a few were running on hydraulic presses. Typically, the hydraulic presses require larger capital investments and also regular maintenance. It was observed that the units had to resort on external AMCs for this purposes. Therefore, there is a regular requirement for working capital for maintenance and a sporadic requirement for term credit directed towards technology up-gradation.

Quality Management Systems
The most common certifications for quality management are ISO: 9001:2000 and ISO TS: 16949. While a significantly lower number of enterprises are ISO certified and those which have the certification have not invested significantly in the QMS as a process. Data collected and captured is only related to production and dispatches; however data related to material defects, process issues etc. are not captured. Investments in precision instruments and data capturing techniques are necessary and certain units have implemented this.

Supply of Credit to MSEs
Estimate of Outstanding Credit to MSEs in the Engineering Cluster
The credit supply to the Faridabad Auto and Light Engineering cluster is estimated to be ₹ 779 crore out of which ₹ 79 crore (10%) is term credit and ₹ 700 crore (90%) is working capital supply.

After taking into consideration of lending by SIDBI to MSEs (₹ 47 crore) and HFC (₹ 1.6 crore) finance in the cluster, the revised credit supply stands at ₹ 828 crore.

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 (except for the addition of SFC and SIDBI supply data) are detailed in Annexure I. The data obtained through the above methodology was further validated against the data on outstanding advances collected from the lead bank in Faridabad district.

The RBI Lead Bank Scheme management is implemented by Syndicate Bank as the lead bank in the cluster. According to information obtained from the lead bank, an aggregate of about ₹ 9,500 crore was disbursed under various forms of advances to multiple beneficiary groups like Priority Sector, Weaker Section Loans, Advances to Small Farmers, Advances under DRI Scheme, Other Schemes etc. The following exhibit depicts the banking flow of credit in the Faridabad District. It can be
clearly seen that the Priority Sector Advances in the Faridabad District are around the prescribed lending norms of 44%.

**Exhibit 18: Lending Activities of All Commercial Banks in Faridabad District**

<table>
<thead>
<tr>
<th>Amount in ₹ Crore</th>
<th>Source: Data Obtained from Syndicate Bank as on March 2011</th>
</tr>
</thead>
</table>

**MSE Advances**

The proportion of MSE advances in the total priority sector lending indicates the development focus of the particular district. The MSE sector receives around 32% of the total credit disbursements in the cluster. This is also around 71% of the total priority sector advances. Thus, larger proportion of the credit is provided to the industries and the MSE Sector. The following is the composition of MSE and non-MSE Advances in Faridabad as of March 2011 of the top ten banks

**Exhibit 19: MSE Lending of Major Banks across various categories in Faridabad District**

<table>
<thead>
<tr>
<th>Bank</th>
<th>MSE Advances</th>
<th>Non-MSE Advances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canara Bank</td>
<td>276</td>
<td>442</td>
</tr>
<tr>
<td>S.B.I.</td>
<td>209</td>
<td>483</td>
</tr>
<tr>
<td>P.N.B.</td>
<td>215</td>
<td>433</td>
</tr>
<tr>
<td>ICICI Bank</td>
<td>75</td>
<td>547</td>
</tr>
<tr>
<td>I.O.B.</td>
<td>187</td>
<td>432</td>
</tr>
<tr>
<td>Bank of India</td>
<td>174</td>
<td>426</td>
</tr>
<tr>
<td>S.B.O.P.</td>
<td>66</td>
<td>503</td>
</tr>
<tr>
<td>O.B.C.</td>
<td>191</td>
<td>342</td>
</tr>
<tr>
<td>Allahabad Bank</td>
<td>59</td>
<td>344</td>
</tr>
<tr>
<td>Syndicate Bank</td>
<td>99</td>
<td>250</td>
</tr>
</tbody>
</table>

Notes: Amount in ₹ Crore
Source: Data Obtained from Syndicate Bank as on March 31st, 2011
On interactions with the various banking bodies, it is estimated that around 28% of the total credit in the Faridabad district is available for the Faridabad Auto Components and Light Engineering Cluster, while major lending is directed towards other clusters.

**Performance of Banks**

In terms of performance of various bank groups, it is seen that of the approximate ₹ 3000 crore of credit to the MSE sector, around 68% of it is provided by the public sector banks. Around 20% of the credit is provided by private sector banks like ICICI since they seem to offer better services and faster turnaround time.

**Exhibit 20: MSE Lending of Major Banks categories in Faridabad District**

- **Private Sector Banks:** ₹ 603, 20%
- **Public Sector Banks:** ₹ 2,050, 68%
- **Other Banks:** ₹ 364, 12%

Notes:
1. Amount in ₹ Crore
2. Source: Data Obtained from Syndicate Bank as on March 2011

The Syndicate Bank is the lead bank in the district however, in terms of aggregate credit disbursements to the MSE sector, Canara Bank leads the overall activity. The aggregate disbursements of Canara Bank account for around 7% of the total MSE credit disbursements in the district.

In terms of aggregate credit disbursements, the above indicated 10 banks contribute to around 60% of the aggregate credit disbursements in the Faridabad district. The private sector banks account for 20% of the credit disbursements to the MSE sector in Faridabad district.

State Bank of India, Canara Bank, Punjab National Bank and SIDBI are the major banks operating in the Faridabad cluster. In terms of advances among MSE units in Faridabad district, SIDBI has the highest outstanding, with MSE loan book of ₹ 296 crore, and Canara Bank, with an MSE loan book of ₹ 276 crore, is the largest commercial bank, followed by Punjab National Bank and State Bank of India.
Institutional finance is also very popular in the Faridabad cluster. NBFCs such as Electronica Finance Limited (EFL) and Bajaj Capital are very active with large loan books despite the high interest rates charged by them. Many are unsecured loans of large ticket sizes. Major plus points for the NBFCs are their large marketing teams, simpler application forms, and easier loan processing. Haryana Finance Corporation (HFC), tapped by MSEs for land and machinery purchase (CNC, etc.) has a large loan book of ₹ 258 crore.

**SIDBI MoU with FSIA – A unique arrangement:**

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, SIDBI along with FSIA (a dominant industry association in the Faridabad Auto Components and Engineering cluster) designed a scheme under which 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.

- The association is responsible for processing of application for the ₹ 50 Lakh limit, doing appraisals, recommending limits as per prescribed norms and provide it to SIDBI, verify the pro-forma invoice, ensuring margin payment, asset value, etc.
- SIDBI does due diligence for the loan. Before disbursement of loan, the assets’ existence, working condition, insurance, is verified
- SIDBI disbursements to the MSE sector in Faridabad stand at around ₹ 295 crore, representing around 10% of the aggregate disbursements to MSE sector
- The SIDBI-FSIA MoU was signed and became operational at the height of the recession in 2008
- Under the MoU with FSIA, 52 projects have been sanctioned in 30 months. 39 of these have availed the loan. The last outstanding amount was ₹ 18 crore
- There are minor issues that inhibit its use. A number of enterprises have got their limit sanctioned, but are not using it. When an enterprise seeks a part disbursement out of its ₹ 50 Lakh limit, he has to begin paying the EMI on the entire limit, because the SIDBI software system does not allow payment of EMI to the extent of the disbursement. While the software has not been corrected, SIDBI has allowed borrowers to defer EMI payment by a few months
50 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. Most of the respondents had favorable views on suitability of SIDBI products, helpfulness of SIDBI officials and processing time of loan applications. One-thirds of SIDBI’s customers and half of non-SIDBI customers suggested that SIDBI needs to further strengthen its marketing of different schemes.

The following exhibit depicts perception among respondents of time taken for loan processing and disbursement by various financial sources.

**Exhibit 21: Perception of Time Taken for Loan Processing and Disbursement**

SIDBI is predominantly perceived to process loans within 4 weeks, while Public Sector Banks have the reputation of taking longer in Faridabad. Cooperative banks are perceived to have the worst track record, with around one-third respondents perceiving that these institutions take more than 6 weeks. Private Indian and Foreign banks, such as HDFC Bank, ICICI Bank and HSBC have a relatively good reputation when it comes to speed of loan processing. Almost all respondents perceive Non-Institutional source to be the fastest.
The following exhibit shows the nature of collateral requirements across various financial sources.

Exhibit 22: Nature of Collateral Requirements

A majority of the respondents in the cluster are asked for a charge to be created on fixed assets as well as current assets. A relatively large proportion was also asked for corporate and even personal guarantees. The proportion of such respondents is only marginally lower for SIDBI customers.

Demand for Credit by MSEs

Estimate of Credit Demand by MSEs in the Cluster

There are two methods that D&B India has followed 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 17000
- The turnover for the Faridabad Auto and Engineering MSE cluster is pegged at ₹ 10240 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 9.8% (IIP estimate) to ₹ 11245 crore in the year 2011-12
- Working Capital Requirement (Basis-Nayak Committee Guidelines) is estimated to be ₹ 2249 crore
- Term Credit Requirement (Basis-Growth in Fixed Capital) is estimated to be ₹ 568 crore
Total Credit Demand is thus obtained from above [(2249) + (568)] and is ₹ 2817 crore

Credit Appraisal Processes followed by various banks differ in terms of time taken for appraisals. However, most of the banks including the lead bank have indicated that for appraisals of working capital loan requirements, the Nayak Committee Recommendations are being followed. It was also observed from the survey that across categories of Micro, Small and Medium Enterprises, this ratio though has varied; the average margin requirement is as per the prescribed Nayak Committee Norm of 20% of the working capital gap. The following exhibit presents the equity contribution indicated by a sample of 50 enterprises.

Exhibit 23: Equity Contribution for Loan Disbursements Across Financial Institutions in Faridabad Engineering Cluster

Source: Data Obtained from 50 MSME Enterprises conducted by D&B India

It can be seen that for micro and small enterprises, the demand for higher margin contribution is from the bankers’ side. The primary reasons for this is micro enterprises are not able to provide adequate collaterals to support their financing needs and hence are required to provide a higher equity margin. Also, since major products produced by the micro units are of the nature of inputs to medium enterprises, variations in order book exists around the year for micro units. There are no long term contracts between micro and medium enterprises. However, the medium enterprises have longer term contracts with the automobile OEMs. Hence, it is easier for medium enterprises to obtain loans at lower margins.

The following exhibit show the composition of credit among the 50 respondents interviewed in the survey. While 44% of the total respondents were small enterprises, an equal 28% were micro as well as medium enterprises. The amount of credit per firm in a medium enterprise is 10 times higher than that in a small enterprise. Also, major demand in the cluster is for working capital loans.
Micro Enterprises: Due to limited availability of affordable land and space, most Micro units are content with their current scale of operations and do not plan to take term loans for expansion. However, such units, particularly job workers, may have term loan needs in case they plan to purchase new cleaner technology. Of the few units that did indicate interest in availing terms loans, it was primarily for purchase of land and building in another area in Faridabad. The quantum of investments that these units would typically look at is ₹ 50 lakh, while they would be able to bring in around ₹ 15 lakh as own funds. Also, many Micro units do not avail any working capital loans as they are able to fund their working capital requirements through proceeds from sales. The typical operating cycle allows them to adjust receivables and payables in such a way that working capital needs are met.

Medium enterprises: These firms avail term loans on a regular basis for the purpose of purchasing new machines, land and building for new factories, and other loans such as car loans. SIDBI is a preferred source for such loans mainly because of lower interest rate and faster disbursement. The CGTMSE scheme has also been utilized by enterprises for such loans.

The following exhibit shows composition of working capital and terms loans for the 50 respondents by sources of finance, separately for Micro, Small and Medium enterprises. Public Sector Banks and Regional Rural Banks are the major sources of Working Capital loans across all sizes of enterprises,
whereas SIDBI is the major funding source in Term Loans for Small and Medium enterprises. Also, non-institutional sources are a significant source of Working Capital funds for Micro units.

Exhibit 25: Sources of Finance (Amount in ₹ Lakh)

There is significant scope for development of new financial products in the cluster. Industry associations also feel that banks currently offer very standardized products and new avenues for credit delivery can be explored for enterprises in the cluster. For example, MSME units face difficulty in procuring credit for expensive software, as there is no tangible collateral. Financial products that enable funding for such purposes could be introduced.

Source: D&B India
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>Credit Demand</th>
<th>Working Capital Demand</th>
<th>Term Capital Demand</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nayak Committee-D&amp;B India (In ₹ Crore)</td>
<td>1989</td>
<td>828</td>
<td>2817</td>
<td>2249</td>
<td>568</td>
</tr>
</tbody>
</table>

Summary of Credit Gap Assessment

Faridabad is a hub for auto component players, including manufacturers, export houses, job workers, etc. and caters largely to large automobile players such as Maruti, Hero Honda, JCB, Suzuki Motorcycles, etc. Faridabad though is well served cluster including credit facility, but credit facility is limited largely to small and medium size units. Micro firms do suffer from lack of access to institutional finance and new technology know-how.

There is significant credit gap in MSEs in the Faridabad Auto and Engineering cluster. Additionally, there is credit demand both for working capital and term capital. However, working capital demand is significantly more than term credit demand. Therefore there is more credit requirement for working capital needs compared to term capital needs. The following can be summarized as major reasons for the same:

- Material inventories of raw materials and WIP inventories due to lack of proper production planning requires larger working capital needs
- Most businesses in the cluster are at the commoditized end of the product spectrum with little or no pricing power –the business risk is high. To mitigate such risks, lending to such units is restricted
- In the move to expand and grow, most of the medium enterprises borrow for research and development purposes and technology improvement in small steps

The cluster growth is highly dependent on growth of the auto sector, which has been one of the fastest growing sectors in India. In countries like Germany and USA, the automobile sector contributes more than 10% of the GDP while in India, the contribution stands much less than that (<5%). India is witnessing increased consumer spending and this impacts auto sector positively. Keeping this in mind, there is an urgent need to address to support the growth of Faridabad Auto and Engineering cluster, one of the most important clusters across India. MSEs needs to be catered for their credit needs in a timely and adequate fashion to make sure the opportunity at the door step is not lost.
Credit Gap Mapping of Select Clusters

Recommended Products and Delivery Channels

Requirement of Capital

Though the cluster is well served of its credit needs, the micro units do suffer from significant credit gap. There is a large presence of micro units and they have working capital demand to fulfill wage payment, warehouse management etc. to run their daily operations. The typical capital requirements are as follows:

- Purchase of raw materials
- Wage payments
- Quality management systems
- Technology up-gradation

The cluster is one of the most important clusters in terms of output and importance. It caters largely to auto sector and is well served cluster in terms of credit. There are well established auto players in the cluster such as Maruti, Hero Honda, JCB, and Suzuki Motorcycles. The MSME units have well established linkages with the bigger players and there is discipline amongst the entrepreneurs and bigger players in terms of their delivery and credit payments. There is enough awareness of financial services available to them except for CGMTSE as pointed by people of the units, association, and banks.

Working of Current Government Schemes

The current schemes that units can be availed by units are

SIDBI MoU with FSIA

As described earlier in this section, a unique arrangement has been operationalized by SIDBI through its MoU with FSIA in 2008.

- SIDBI disbursements to the MSE sector in Faridabad stand at around ₹295 crore, representing around 10% of the aggregate disbursements to MSE sector
- Under the MoU with FSIA, 52 projects have been sanctioned in 30 months. 39 of these have availed the loan. The last outstanding amount was ₹ 18 crore
- There are minor issues that inhibit its use. A number of enterprises have got their limit sanctioned, but are not using it. When an enterprise seeks a part disbursement out of its ₹ 50 Lakh limit, he has to begin paying the EMI on the entire limit, because the SIDBI software system does not allow payment of EMI to the extent of the disbursement
- While in the short-run, SIDBI has allowed borrowers to defer EMI payment by a few months, SIDBI may upgrade its software to facilitate seamless part disbursements and EMI accruals
Credit Linked Capital Subsidy Scheme (CLCSS)

Aimed at technology upgradation 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 upgradation for improvement in productivity of the MSE units, by providing them 15 per cent (initially it was 12 per cent) upfront subsidy.

Awareness of this scheme is low and benefits of this scheme have not reached the units. The light engineering segment of the cluster is fairly under-developed and proper awareness and utilization of the above scheme can spur the growth of the units in the light engineering sub-sector.

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

The Credit Guarantee Fund Trust Scheme for small industries was introduced by the Government 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.

Awareness of this scheme is low and benefits of this scheme have not reached the units. The presence of many micro units has led to huge credit gap in the cluster and if micro firms know and avail the above scheme, then major credit gap can be taken care in the future. FSIA along with SIDBI need to promote this scheme at a much wider scale.

The other products that are available in the cluster include bills discounting, and general working/term capital loan.

Bills discounting credit cycle is currently 90 days but is being looked to extend it for 180 days, as there are payments that go up to even 150-180 days. It is also recommended that Post-Dated Cheques be used to make bills discounting product more effective.

Descriptions of Products and Delivery Mechanisms

Reverse Factoring

It is financing solution that starts by the ordering party, in order to help his suppliers to finance more easily their receivables, with a best interest rate than the one they would have got otherwise. The solution involves three parties namely ordering party, supplier and, the factor (FIs). Contrary to basic factoring the initiative is not from the supplier that would have presented his invoices to the factor to be paid earlier. This time, it is the ordering party that starts the process – usually a large company – choosing invoices that he will allow to be paid earlier by the factor. And then, the supplier will himself choose which of these invoices he will need to be paid by the factor. It is therefore a really collaborative project between the ordering party, the supplier and the factor.
Since there is well established linkage and discipline with regards to payment across MSME and bigger units in the cluster, the above product shall work well in favor of the micro and small units. Below is the transaction scheme:

**Purchase Order Financing**

It is a short term funding provided by FIs and can be used as working capital to manufacture goods for some credit-worthy buyer. Every order is evaluated on its merit and terms are identified with the seller. The fund is then used by the unit to procure raw materials and support other working capital expense required to fulfill the order. Since the cluster has players of very high credit worthiness, POF seems a viable way of providing financial support. One of the primary requirements for this to work from the bank’s perspective is that buyer has to furnish a comfort letter to the bank detailing the seller information and credibility.

The POF mechanism shall work in the following way for MSEs in the cluster:

- The buyer/customer (high credit worthiness players) submits a purchase order to the seller (MSEs) with all documents
- The seller submits the purchase order to the bank for POF
- The bank makes a partial advance to the seller on the value of the purchase order. The advance is made to the seller to cover the costs of materials, trade goods and/or services. (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. POF allows the seller to receive funds even before the goods are shipped and the invoice is issued.)
• The seller procures the raw materials and fabricates the goods and ships the products to the buyer

• The seller prepares and submits an invoice for the sale. Depending on the agreement, the invoice will go to the buyer or directly to the bank (or factoring company)

• 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.
## ESTIMATION OF CREDIT SUPPLY TO THE Faridabad Auto and ENGINEERING CLUSTER

<table>
<thead>
<tr>
<th>Item</th>
<th>Mar, 2011 Estimate</th>
<th>Remarks/Assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Cluster Sample Turnover (MSEs), Sample Size - 32 units in MSEs Sector (₹ crore)</td>
<td>39</td>
</tr>
<tr>
<td>4</td>
<td>Total Number of MSE units in the Cluster</td>
<td>17000</td>
</tr>
<tr>
<td>5</td>
<td>Estimated the Cluster Total Turnover (MSEs, ₹ crore) using (3) &amp; (4) for year ending Mar, 2011</td>
<td>10240</td>
</tr>
<tr>
<td>6</td>
<td>Estimated Proportion (P1) of Cluster Turnover to State Industry Turnover using (2) and (5) [P1 = (5) / (2)]</td>
<td>15.4%</td>
</tr>
<tr>
<td>7</td>
<td>Estimated the Cluster Level Credit Supply</td>
<td>779</td>
</tr>
<tr>
<td>8</td>
<td>State Level Advances – Term Loan Advance (Small Enterprise - SE) to Total Advance (SE) Proportion (P2)</td>
<td>10%</td>
</tr>
<tr>
<td>9</td>
<td>Using (7) and (8) Working Capital Supply is [(1-P2)*7].</td>
<td>700</td>
</tr>
<tr>
<td>10</td>
<td>Using (7) and (8) Term Credit Supply is [(P2)*7].</td>
<td>79</td>
</tr>
</tbody>
</table>
## Annexure II Estimation Method for Credit Demand

### ESTIMATION OF CREDIT DEMAND IN THE Faridabad Auto and ENGINEERING CLUSTER

<table>
<thead>
<tr>
<th>Method</th>
<th>Item</th>
<th>Mar, 2012 Estimate</th>
<th>Remarks/Assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Nayak Committee Approach - Working Capital</strong></td>
<td>1 Cluster Sample Turnover (MSEs), Sample Size - 32 units in MSEs Sector</td>
<td></td>
<td>D&amp;B India Survey</td>
</tr>
<tr>
<td></td>
<td>2 Total Number of MSE units in the cluster</td>
<td>17000</td>
<td>Faridabad Engineering Cluster Diagnostic Report</td>
</tr>
<tr>
<td></td>
<td>3 Estimated the Cluster Sample Total Turnover (MSEs, ₹ crore) for year ending Mar, 2011</td>
<td>39</td>
<td>D&amp;B India Survey</td>
</tr>
<tr>
<td></td>
<td>4 Estimated the Cluster Total Turnover (MSEs, ₹ crore) - Mar, 2012, Expected growth rate of 9.8%</td>
<td>11245</td>
<td>Expected growth rate is estimated from National IIP growth rates (Source - Latest National IIP figures – Statement II in “MOSPI Press Release on IIP Estimates”, Aug, 2011)</td>
</tr>
<tr>
<td></td>
<td>5 Basis Nayak Committee Guidelines, Working Capital Funding Requirement is 20% of Projected Turnover calculated in (3)</td>
<td>2249</td>
<td></td>
</tr>
<tr>
<td><strong>D&amp;B India Approach - Term Capital</strong></td>
<td>6 Cluster Sample &quot;Investments in Plant &amp; Machinery&quot;, Sample Size - 36 in MSE Sector (₹ crore)</td>
<td>33</td>
<td>D&amp;B India Survey</td>
</tr>
<tr>
<td></td>
<td>7 Total Number of MSE units in the cluster</td>
<td>17000</td>
<td>Faridabad Engineering Cluster Diagnostic Report</td>
</tr>
<tr>
<td></td>
<td>8 Estimated the Cluster Total &quot;Investments in Plant &amp; Machinery&quot; (MSEs, ₹ crore) using (1) &amp; (2) for year ending Mar, 2011</td>
<td>3432</td>
<td>Source - Annual Survey of Industries (ASI) estimates on Fixed Capital for different industries within a state – MOSPI ASI Report, 2009-10</td>
</tr>
<tr>
<td></td>
<td>9 Value in (8) projected to Mar, 2012 level using moving average growth rate of fixed capital for Industry-state wise (21%)</td>
<td>4142</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10 (9) - (8) gives the growth in fixed capital</td>
<td>710</td>
<td></td>
</tr>
<tr>
<td></td>
<td>11 80% of (10) is estimated to be Term Credit Funding Requirement</td>
<td>568</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credit Demand</strong></td>
<td>12 Total Credit Demand [2249+568] calculated above in [ (5) and (11)]</td>
<td>2817</td>
<td></td>
</tr>
</tbody>
</table>
Rajkot Engineering Cluster
Overview

Rajkot is centrally located in Saurashtra region in the state of Gujarat in India. The geographical spread of the cluster includes Aji Vasahat, Bhaktinagar Industrial Area, Mavdi Plot, Samrat Industrial Area and Atika Industrial Area areas in Rajkot. In addition, a large number of engineering units are located in fast expanding industrial neighborhoods such as Metoda GIDC and Sapar-Veraval.

Gujarat has a large and vibrant engineering industry and accounts for nearly 9% of the total production from engineering sector in the country. Location of large industrial projects, good infrastructure, availability of natural resources, proactive government policies besides entrepreneurship excellence, have contributed to development of the engineering sector in the state. Rajkot, in the state of Gujarat, is one of the largest engineering clusters in the country. The cluster manufactures a range of engineering items across the value chain and they are represented in the below exhibit.

<table>
<thead>
<tr>
<th>Exhibit 26: Different Engineering Segments in Rajkot Cluster</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foundry</td>
</tr>
<tr>
<td>---------</td>
</tr>
<tr>
<td>Pump and Motor bodies</td>
</tr>
<tr>
<td>Diesel Engine Components</td>
</tr>
<tr>
<td>Auto Components</td>
</tr>
<tr>
<td>Other Casting Products</td>
</tr>
</tbody>
</table>

Source: Rajkot - Cluster Diagnostic Study, Aug 2009 (Prepared by TERI)

In addition to the above, a number of miscellaneous engineering items such as agricultural implements, hydraulic jacks, air compressors, fasteners and so on are also manufactured in the cluster.

Historically, Rajkot was famous for diesel engines manufacturing catering to agricultural sector and exports. The engines were mainly exported to countries in Africa and Gulf. Due to the falling water table in the Rajkot region, the farmers had to switch to submersible pumps and thus foundries catering primarily to diesel engine sector, diversified to pump castings, automobile castings, and electrical motor bodies etc. Though the cluster is known for its entrepreneurship excellence, there are only few firms that are progressive in nature. The rest of the firms, mainly micro firms, are unaware of new technology, credit facilities, and lack skills to grow their business. The membership fee for Industry Associations is a hindrance factor for many micro firms and does not use any external BDS
facilities. Out of all engineering segments, foundry and pump-sets are two segments that hold good potential to modernize and grow.\(^{11}\)

The cluster development program for Rajkot engineering cluster was initiated by EDI back in 2003 and was supported by Development Commissioner, MSE Association, Government of India, and ICICI Bank. There have been interventions in the cluster to promote growth and prominent amongst them include UNIDO-Technology Up-gradation for machine tools units and TERI promoted Energy Efficient Technology in the cluster. The MSME-FDP has been a key differentiator, through which BDS market development was fostered.

The local support institutions in the cluster include Rajkot Industry Association, Training Institutions (ITI, and Engineering Colleges), National Small Industries Corporation Ltd. (NSIC), Financial Institutions (SIDBI, Commercial and Cooperative Banks), and many unorganized BDS providers in different fields such as Environment, Financial Services, R&D etc.

The following exhibit summarizes the information on Rajkot Engineering cluster.

<table>
<thead>
<tr>
<th>Category</th>
<th>Number of Units (MSME)</th>
<th>Employment Numbers</th>
<th>MSEs - Turnover (In ₹ Crore)</th>
<th>MSEs - Investments In Plant and Machinery (In ₹ Crore)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foundry</td>
<td>505</td>
<td>20000</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Diesel and Generation Sets</td>
<td>374</td>
<td>7500</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Machine Tools</td>
<td>326</td>
<td>10000</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Automobile Parts</td>
<td>303</td>
<td>9500</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Pump Sets</td>
<td>161</td>
<td>4700</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Bearings</td>
<td>88</td>
<td>3100</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Forgings</td>
<td>433</td>
<td>8000</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>2190</td>
<td>62800</td>
<td>9157</td>
<td>1072</td>
</tr>
</tbody>
</table>

Source: Rajkot – Cluster Diagnostic Study, Aug 2009 (Prepared by TERI), and D&B India Survey

Out of total 2190 MSMEs units, 1769 (80\%) are micro units, 294 (13\%) are small units, and rest 127 (6\%) are medium units. The estimates of “Investment (in Plant & Machinery)” and Turnover have been prepared on the basis of D&B India Sample Survey, while number of units and cluster employment figure has been borrowed from Diagnostic Study (DS) Report, prepared for SIDBI in 2009.

\(^{11}\)Diagnostic Study Report on Rajkot Engineering Cluster prepared by TERI under MSME-FDP, Aug 2009
Sources of Demand for Credit – Opportunity and Risks

Presence of Sub-contracting and significant Non-progressive Tiny Units

It is observed that only a small number of firms are progressive in the cluster. A vast segment of units in each of the market segments in the cluster can be categorized as ‘micro’ in size and lack the vision to modernize and grow their business. These units have traditional manufacturing systems and little awareness about the new technologies and product developments. These units are producing 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. Most of these small assembly shops employ less than 10 workers. The owners of these micro units lack spare time to think about business growth since the owner himself and his family members are working in the same unit. Some of the common factors which can be attributed to their backwardness are lack of knowledge of latest technology and know-how, lack of access to finance/capital for expansion/modernization and lack of marketing skills. In order to promote the micro units, there is a significant need to create awareness on new technology and skill development. Subsequently, there would be capital need to implement the new technology and skill-development initiatives.

Manpower Intensive Manufacturing

Traditionally, the manufacturing process is manpower intensive. As per industry estimates, the cluster provides direct employment to about more than half a million people. Therefore, the requirements of the working capital to make continuous labor payments increase. It also increases the risk in the sector due to labor issues, varying productivity levels etc.

Quality and Norms Compliance

BIS has issued separate standard specifications for each type of pump. Similarly, testing facilities for agricultural, jet and submersible pumps are also specified by BIS to be followed by the industries. All pump set manufacturers must follow the Bureau of Indian Standards (BIS) for pumps. BIS is mandatory to ensure that the industry produces standard quality pump-sets only. Regular calibration and testing of all gauges and instruments used in testing the final pump is essential. Hence the units need to maintain proper records of calibration of such testing equipment and meters.

For BIS certification, it is mandatory to employ qualified technicians for conducting the inspection and testing. Most progressive industries have their own quality control system which is used during the manufacturing stages of each component. A small percentage of pump manufacturers have ISO 9000 certification. This is also a critical component of the bankers’ project and viability assessment while appraising loans to these units.


**Technology**

Majority of the enterprises are presently using conventional manufacturing processes such as manual lathe and turning machines. Knowledge about upgradation of manufacturing processes by use of advanced machining centers such as CNC (computer numerically controlled) machines and VMC (Vertical Milling Centre) is non-existent among majority of the enterprises. Similarly, most of the machine tool manufacturers in the cluster manufacture conventional machine tools only and do not have knowledge of upgrading to advance machine tool manufacture.

**Vendor Development**

Most of the machine tool manufacturers are buying castings from foundries located in other clusters such as Kolhapur, Belgaum, Ahmedabad etc. due to lack of availability of good quality castings for machine tools within Rajkot. Most of the foundries in Rajkot are primarily catering to diesel engine, pumps and motors and automobile segments. There is a scope and need for SIDBI schemes like the Vendor Development Scheme to take off.

**Skill Development and Common Facility Center Usage**

A technical services center of NSIC (The National Small Industries Corporation Ltd.) was established in Rajkot in the 1960s. The Centre has a large campus of about 70 acres. The Centre used to offer courses for foundry, pattern shop, fabrication shop, electroplating and heat treatment shop, but these courses have been discontinued some time back and the facilities are not being used at present. Presently, only courses related to welding and pump calibration and testing are being offered, albeit only once in a while. Other ongoing activities of the center include material testing (both mechanical and chemical), testing and calibration of pump-sets for BIS certification, energy audit services, cleaner production audit, and vendor registration services for MSMEs. Vendor certification is mandatory for submitting quotation for DGS&D (Directorate General of Suppliers & Disposal) government rate contracts. A testing laboratory of CMTI (Central Manufacturing Technology Institute), Bangalore, has been established with assistance under the UNIDO machine tool intervention a few years back. The laboratory is housed within the NSIC campus. For usage of above mentioned facilities for skill-development or testing/certification, the enterprises incur cost that has to be allocated out from credit available for working capital fulfillment, putting extra pressure on very small units.

**Supply of Credit to MSEs**

**Estimate of Outstanding Credit to MSEs in the Engineering Cluster**

The credit supply to the Rajkot Engineering cluster is estimated to be ₹1,161 crore out of which ₹204 crore (18%) is term credit and ₹956 crore (82%) 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 the above methodology was further validated against the data on outstanding advances collected from the lead bank in Rajkot district.

In terms of financial institutions support, it is estimated that Rajkot district has a bank branch network of more than 298 branches of around 35 scheduled commercial banks with a strong presence of major public sector banks. Along with nationalized banks there are private sector banks, co-operative banks, regional rural banks and other financial institutions such as SIDBI, Gujarat State Finance Corporation.

The RBI Lead Bank Scheme is implemented by State Bank of Saurashtra as the lead bank in the district. According to the RBI Banking Statistical Returns, the outstanding credit (by all SCBs) for Rajkot district stood at an aggregate of about ₹ 9325 Crore (as of March 31, 2010). Information obtained from the lead bank suggests that the total outstanding credit (by all SCBs, June 11, 2011) is 12880 crore out of which priority sector advance (PSA) stand at ₹ 7607 Crore (60% of the total credit). Out of total PSA, the contribution to MSE stands at ₹ 3558 crore (47% of PSA).

The following exhibit depicts the banking flow of credit in the Rajkot District.

Exhibit 28: Lending Activities of All Scheduled Commercial Banks in Rajkot District

Source: Data from Rajkot Distt. Lead Bank - State Bank of Saurashtra as of June 11, 2011

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 62% of the priority sector credit. In contrast, private sector banks contribute to 29% of the total credit, and 22% of the priority sector credit. The MSE sector is primarily served by Public sector banks, contributing 80% of total outstanding credit to the sector.

The following is the composition of total advance, priority sector and MSE sector credit in Rajkot as of June 11, 2011, for the top ten banks. The top 10 banks contribute to 80% of the outstanding credit in the Rajkot district. State Bank of India has the largest outstanding credit portfolio as well as priority sector lending. HDFC bank leads among the Private Sector Banks and has the largest priority sector lending portfolio.

<table>
<thead>
<tr>
<th>Bank名称</th>
<th>Total Adv</th>
<th>PSA</th>
<th>MSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>State Bank of India</td>
<td>3405</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RIT Dist. Co. Bank</td>
<td>1629</td>
<td>1340</td>
<td></td>
</tr>
<tr>
<td>Bank of India</td>
<td>1213</td>
<td>828</td>
<td></td>
</tr>
<tr>
<td>HDFC Bank Ltd</td>
<td>1198</td>
<td>622</td>
<td></td>
</tr>
<tr>
<td>Bank of Baroda</td>
<td>1012</td>
<td>870</td>
<td></td>
</tr>
<tr>
<td>IndusInd Bank</td>
<td>824</td>
<td>72</td>
<td></td>
</tr>
<tr>
<td>ING Vysys Bank</td>
<td>584</td>
<td>413</td>
<td></td>
</tr>
<tr>
<td>Oriental Bank Comm.</td>
<td>563</td>
<td>257</td>
<td></td>
</tr>
<tr>
<td>Corporation Bank</td>
<td>559</td>
<td>24</td>
<td></td>
</tr>
<tr>
<td>IDBI Bank</td>
<td>531</td>
<td>103</td>
<td></td>
</tr>
</tbody>
</table>

Notes: Amount in ₹ Crore  
Source: Data Obtained from State Bank of Saurashtra as of June 11, 2011

SIDBI is providing direct finance only through its Rajkot branch and refinancing facility is provided through Ahmedabad branch. Under direct financing, SIDBI Rajkot is offering financial services which are term loans, working capital term loans, working capital accounts and bills discounting. Working capital account service is extended by SIDBI with the support of IDBI. All the back-end support like technology, service platform etc. is extended by IDBI and SIDBI is utilizing these services to provide working capital account to its existing customers. Bill discounting facility is not directly made available through SIDBI-Rajkot branch but it is provided through Ahmedabad branch and there is only one customer from Rajkot branch who is availing this facility.
SIDBI is actively lending under different government schemes like Credit Guarantee Fund Trust for Micro and Small Enterprises (CGTMSE) and Credit Linked Capital Subsidy Scheme (CLCSS), but the disbursement of loans under CGTMSE is comparatively low as most of the small and medium size units prefer to provide collateral security to the bank. Customers do not avail benefit of CGTMSE because, customers have to pay a charge of 1.5% of disbursed loan amount as a one-time fees in first year and from 2nd year onwards, unit has to pay 0.75% of loan amount to continue with the scheme.

50 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.

The quality of credit received by various enterprises can be compared on two parameters:

- The loan documentation process for MSME’s needs to be simplified in order to deliver credit in a timely manner. It is observed that there is a common perception among MSME’s that PSB’s and the cooperative banks take long time to process and disburse loans and it is clearly reflected in the survey. Also, it is understood that entrepreneurs in Rajkot are sensitive to interest rates and most of them prefer to avail loan from public sector bank as the interest rates are comparatively lower. So, there is a need for PSU’s to simplify their loan documentation process especially for disbursing working capital loans

- The time taken for loan processing across bank groups indicates the timeliness of credit received.

The following exhibit indicates the duration of loan processing for working capital and term loans across major bank groups. The processing is faster only in case of non-institutional sources of credit followed by private Indian banks.
SIDBI/Cooperative Banks are predominantly perceived to process and disburse loans in less than 4 weeks. Public Sector Banks have a slightly less better reputation and while a few believe they take less than 2 weeks, few others also believe it to take more than 9 weeks. Other sources such as Private Banks, and other institutional and non-institutional sources of finance also have mixed perception of time taken for loan processing and disbursement.

The following exhibit shows the nature of collateral requirements across various financial sources.

**Exhibit 31: Nature of Collateral Requirements**

| Source: D&B India |

A majority of the respondents in the cluster are asked for a charge to be created on fixed assets as well as current assets, with a relatively large proportion also asked for corporate and even personal guarantees.

**Demand for Credit by MSEs**

**Estimate of Credit Demand by MSEs in the Cluster**

There are two methods that D&B India has followed 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 2063
The turnover for the Rajkot Engineering MSE cluster is pegged at ₹ 9157 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 9.8% (IIP estimate) to ₹ 1005 crore in the year 2011-12.

Working Capital Requirement (Basis-Nayak Committee Guidelines) is estimated to be ₹ 2011 crore.

Term Credit Requirement (Basis-Growth in Fixed Capital) is estimated to be ₹ 398 crore.

Method 1 - Total Credit Demand is thus obtained from above [(2011) + (398)] and is ₹ 2409 crore.

Credit Appraisal processes followed by various banks differs in terms of time taken for appraisals. However, most of the banks including the lead bank have indicated that for appraisals of working capital loan requirements, the Nayak Committee Recommendations are being followed. However, during the survey, it was observed that across categories of Small and Medium Enterprises, this ratio has varied considerably. The following exhibit presents the equity contribution of entrepreneurs for working capital loans indicated by a sample of 50 enterprises. It can be concluded that the Nayak Committee Recommendations are currently not being followed at least in the case of micro and small enterprises where the contribution is comparatively high.

Exhibit 32: Equity Contribution for W/C Loan Disbursements Across Financial Institutions in Rajkot

Source: Data Obtained from 50 MSME Enterprises conducted by D&B India

In Rajkot, a significant proportion of the firms are able to fund their capital requirements, and many of those who have additional financing needs prefer non-institutional sources such as family and friends. This is because of the long procedures and detailed documentation requirements in case of banks. Also, because of high land costs in Rajkot, not many enterprises have expansion plans and are
self-content with existing scale of operations. Hence, they don’t have significant term loan requirements and the limited requirements are fulfilled by the preferred non-institutional sources.

Also, enterprises prefer cooperative banks as opposed to schedules commercial banks in spite of higher interest rates as they require less number of documents and provide speedy loan disbursement. Cooperative banks in Rajkot are lending aggressively to MSMEs due to lower level of audits that they are subjected to. They require less paperwork and disburse the loan amount in about a week’s time.

Industry Associations are of the opinion that engineering units in Rajkot are not aware of various financial products such as bills discounting and do not utilize such products. Banks do not actively cater to the MSME units in Rajkot. The attitude of banks was described as being very conservative towards MSMEs in this region.

The following exhibit shows the composition of credit among the 50 respondents interviewed in the survey. While 28% of the total respondents were micro enterprises, 40% were small and 32% were medium enterprises. Major demand among micro and small units is for working capital loans, and among medium units is for term loans.

### Exhibit 33: Break-up of Credit

<table>
<thead>
<tr>
<th>Source: D&amp;B India (Amount in ₹ Lakh; number of respondents in parentheses)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Medium</strong></td>
</tr>
<tr>
<td><strong>Small</strong></td>
</tr>
<tr>
<td><strong>Micro</strong></td>
</tr>
</tbody>
</table>

The following exhibit shows composition of working capital and terms loans for the 50 respondents by sources of finance, separately for Micro, Small and Medium enterprises.
In case of working capital, the major source of capital is mostly PSBs/RRBs. For term loans, SIDBI is the major financial institution across micro, small, and medium units.

It can be seen from the above exhibit that for the surveyed enterprises, the aggregate term credit and working capital loans are almost equal at ₹ 42 crore (₹ 11 crore in MSEs). It can be seen that share of SIDBI has been relatively higher in case of medium enterprises for term loans. The medium enterprises are able to meet the appraisal criteria set by SIDBI for its term loans and hence, a higher financing is provided to these firms. Due to high ticket size of loans, SIDBI constitutes a major proportion of credit among the 50 respondents for working capital as well as term loan. Among the remaining respondents, very few have availed any credit at all from banks and other institutional and non-institutional sources. SIDBI is the primary lending institution in the cluster but the working capital lending to micro and small units have been relatively lower. Of the total credit requirement, bulk of the credit requirement is primarily for working capital. Certain micro and medium enterprises also require term credit in the cluster. The following can be summarized for the greater working capital needs:

- Large presence of micro units that have labour intensive manufacturing process, increasing working capital (daily wage) requirement on the enterprise

- Quality and Norms compliance – The enterprise have to adhere to different standard specifications for their products and this requires credit for using fee based service provided by common facility centres
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>Credit Demand</th>
<th>Working Capital Demand</th>
<th>Term Capital Demand</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nayak Committee-D&amp;B India (In ₹ Crore)</td>
<td>1248</td>
<td>1161</td>
<td>2409</td>
<td>2011</td>
<td>398</td>
</tr>
</tbody>
</table>

**Summary of Credit Gap Assessment**

The engineering sector is an important industrial segment for economic growth. The sector contributes to nearly 38% the total industrial production and provides 30% of total employment. And Rajkot is one of the largest engineering clusters in India, contributing significantly to State and Country’s output. The cluster also exports 20% of its total output.

Despite the cluster importance to country’s engineering output, the cluster suffers from significant credit gap. SIDBI is the major financial institutions serving the Rajkot district but Ceramic cluster is the major beneficiary of SIDBI credit facility. There is huge credit demand in the cluster and the primary reasons driving the demand are:

- Labor intensive sector and large presence of micro units driving working capital demand especially for wages requirement
- Quality and norms compliance expenditures
- Machinery maintenance and Technology up-gradation

There is a total credit gap of approximately ₹ 1200 crore. D&B India, through its research, identified possible reasons for this huge gap. A summary of the findings are mentioned below.

- No maintenance of account books, leading to rejection of loan applications
- Credit appraisal process requires quality certification and absence of these lead to loan application rejection
- Lack of awareness on enterprise part on their eligibility for loan
- Lack of quick loan disbursal induces borrowers to take credit from non-institutional sources
For the unit owners who are not able to provide collateral security for loans, central government has introduced different schemes like CGTMSE and CLCSS. But banks are very apprehensive to implement these schemes because under CGTMSE the bank gets back at the most only 75% of the amount defaulted by creditor and the rest amount bank has to bear as loss

All most 50% of the unit owners fund their credit requirements either through their internal accruals or through their family and friends as they find the procedure of taking finance from banks is cumbersome and when they take loans from the banks they have to justify some of their business decisions in front of the banks

The units whose gross turnover exceeds ₹ 40 lakh per year have to get their accounts audited from a qualified Chartered accountant; this increases the overheads for the unit. To subvert this law units usually do not report their sales above ₹ 40 lakh and hence their financial worth shown on paper is much less than their real worth and hence banks are able to give credit to units only in accordance with what units have shown on their financial statements

Some units from the cluster are located in illegal premises and some banks are not ready to fund their businesses despite providing with 100% collateral security

Some unit owners in the cluster do not possess CST VAT registration number which is preliminary requirement for loan application as per RBI KYC norms for opening a current account. These unit owners are either ignorant about the importance of this registration or in order to evade taxes they do not register their firm under VAT law. Due to this reason these unit owners are not able to avail finance from the banks

Further analysis revealed that working capital requirements are met by banks for medium-size units as they can provide collaterals. MSEs find it difficult to furnish collaterals leading to the high credit gap. There is a large presence of micro and small units and the need of the hour is to cater to their credit needs both in terms of working capital and term capital requirement, creating an environment where credit support is provided to propel growth of one of the most important engineering clusters of India.

A Note on the BDS Implemented under MSME-FDP in the Rajkot Engineering Cluster

BDS business grew significantly (~30% on an average) during the period of the MSME-FDP in the Rajkot Engineering cluster. Significant growth was observed in newly introduced BDS such as BEE star labeling, followed by export promotion and energy auditing. The clientele of MSMEs served by BDSPs also grew significantly. In addition a SPV was formed for establishing a CFC for pump testing in the cluster. A Detailed Project Report (DPR) was prepared, which has been submitted to the relevant state/central government agencies. BDS activity in the Coimbatore Engineering cluster under the MSME-FDP primarily focused on interventions in four major areas, i.e. quality, skill
trainings, Energy saving measures and technology up-gradations. 45 new service providers were introduced to the cluster.

Associations and firms could realize the advantages of these interventions. The first milestone was achieved with the facilitation of quality certifications like BIS and BEE for 50 firms. Another major area covered was intervention through skill development training programme. As a result 500 semi-skilled persons upgraded their skills. Some of them were absorbed in larger firms and nearly 50 trained persons availed loans for purchasing CNC Machines.

Similarly, energy saving measures were adopted by 25 firms, out of 10 firms reaped large benefits. Energy audits have demonstrated that savings worth nearly ₹ 25 lakh accrued with a payback period of 3-5 years.

Six technology up-gradation programmes were organized during the project period resulting in installation of Divided Blast Technology. Improvement in terms of quality and saving of fuel was experienced. Standardization of components in Motors and Pumps with the help of BDS Project interventions resulted in a saving of ₹ 40 lakh per year. Standardization would continue in the cluster by leveraging government funds from the local MSME DI.

The project, through strengthening the network of BDSPs in the cluster, has contributed to enhance the turnover of the cluster by about ₹ 2600 crore. About 86 units in the cluster received direct voucher cost support under the project. Strengthening of BDSP in financial services resulted in direct loan disbursement, through SIDBI alone, of about ₹ 30 crore to 20 small and medium scale units. Other areas where the project scored significantly were productivity and quality improvement, energy savings, skill up-gradation and employment generation.

While exiting from the cluster, the sustainability of various initiatives has been ensured. The SPV has been formed under the umbrella of Rajkot Engineering Association (REA). The good organization set-up and infrastructure existing with REA would ensure the sustenance of the SPV and the proposed CFC in the cluster. All the BDSPs in the cluster have been brought under a consortium which has strong links with REA. The BDS consortium also has its own web-site and organization structure. The linkages between local technical institutes/colleges and industry association have been strengthened to ensure the growth of training and skill-up gradation activities in the cluster. To this effect, an MOU has been signed between the two stake holders with clearly laid out areas of cooperation and sharing of responsibilities. Hence sustenance and growth of the focus sub-sectors within the cluster has been ensured.

The total outreach of the project has been vast. The project has impacted (both directly and indirectly) a large group of stakeholders in the cluster. This includes about 40 BDS providers across a
range of business development areas covering technology, energy efficiency, market development etc. Over 150 MSMEs have directly been impacted either in voucher activities and/or workshop participation. Similarly, the project has also impacted over 500 MSMEs through various demonstration and knowledge dissemination activities. Furthermore, REA and other cluster associations operating in different industrial zones of Rajkot along with industrial associations in neighboring clusters have also been strengthened through capacity building and knowledge propagation activities.

Recommended Products and Delivery Channels

Requirement of Capital

The primary requirement is for working capital however term capital requirement can’t be ruled out. The presence of micro units, who mainly use traditional technology, drives the requirement of working capital for wage payments. The know-how of units for new technology is low and thus the need for term capital is low. There are also other quality norms (BIS etc.) and registration (VAT) requirements that drive the working capital requirement. Micro units do not maintain their books properly and do not have quality certification and VAT registration leading to rejection of their loan proposal. Unlike other clusters such as Rourkela, units do possess fixed assets and can be presented as collateral for securing loan from institutional sources.

Few salient points regarding the cluster:

- Micro units are producing sub-assemblies for more organized manufacturers of automobile parts, diesel engine pump sets, and machine tools in the cluster. Therefore term loan requirement for these units is very low. However, there is working capital requirement in the form of wage payments
- There is well established linkage between pump and bearings manufacturing units
- Most of the foundry units are catering to diesel engine, pumps & motors, and automobile segments and there seems to be well established linkage of the units
- NSIC provide all kind of technical support activities such as testing, calibration, certification, energy audit services, and vendor registration services
- Mostly the pump manufacturing units in Rajkot are doing the work of assembling the parts which they procure from other units who do job type of work therefore their requirement for term loan as well as WC loan is quite low and therefore the demand for credit from such units is quite low
- The DIC also assists MSME’s in taking finance from the bank particularly for the micro sector and it recommends them to banks to give them loan. Prior to getting recommendation
from the DIC an individual unit owner is interviewed by a committee which comprises of
eminent people like district collector, MP’s, MLA’s, Principal of ITI/Polytechnic etc. of the
area for the project feasibility and knowledge of the unit owner regarding the business

Working of Government Schemes

The current schemes that units can be availed by units are

Credit Linked Capital Subsidy Scheme (CLCSS)

Aimed at technology upgradation 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 upgradation for improvement in productivity of the MSE units, by
providing them 15 per cent (initially it was 12 per cent) upfront subsidy.

There are majority of micro units and due to their lack of new technology know-how and this makes
the above scheme not applicable to the cluster. For this scheme to take off micro units have to be
made aware of the different upcoming technology and then units shall be able to reap the benefits of
this scheme.

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

The Credit Guarantee Fund Trust Scheme for small industries was introduced by the Government
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.

It is important to note here that overall, units do not face problems of producing collaterals for
availing loan facility from institutional source. This makes the above scheme to be expensive for the
units and makes units reluctant to avail this scheme.

Bills Discounting

This product is being offered by the SIDBI Ahmedabad branch and by Rajkot branch, which is more
near to Rajkot engineering cluster. Only one unit is availing this facility through Ahmedabad branch.
Additionally, awareness of this product is quite low in the cluster, and there exist a need to create
more awareness for this scheme.
Foundry and Pumps industry forms the backbone of the cluster and there is significant linkage between the units in the cluster. The two significant linkages are:

- Between pump and bearings manufacturing units
- Most of the foundry units are catering to diesel engine, pumps & motors, and automobile segments and there seems to be well established linkage of the units

Keeping above in mind, the following products seem applicable to the growth of the cluster.

Pre-approved Collateral-free Equipment Finance Scheme
- Through MoU with Rajkot Industry Association (RIA)
There is a unique credit disbursal mechanism in Faridabad Auto and Light Engineering cluster, where SIDBI and FSIA works in tandem to sanction a pre-approved loan facility that can be tapped anytime during the year. 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.

In the Rajkot engineering cluster, a similar initiative can be taken where Banks / SIDBI can enter a MoU with RIA to form a special cell taking care of the initial due-diligence of the units by RIA. Subsequently, based on the recommendation of RIA, Banks / SIDBI can approve the loan either for working capital or term capital requirement. The credit limits, margin payment, collateral requirement etc. can be discussed between Banks / SIDBI and RIA, so that a suitable and workable arrangement can be made specific to the cluster.

Factoring

As there are two strong linkages (Pump and Bearing sub-sector, Foundry and units in diesel engines, and pumps sub-sector) in the Rajkot engineering cluster, and open account sales is the preferred arrangement between larger buyers and smaller sellers, 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 one such 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 this 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.

Further, as opposed to Cash Credit, under ‘Factoring’, there is scope for flexibility as to quantum of potential funding, as it is based on the level of debtors. Also, 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. The borrower’s bank approves the list of debtors whose invoices, it is prepared to finance and accordingly, the level of funding varies as per the amount due from such approved debtors. 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.

Factoring has the potential to emerge as a valuable alternative means of finance, because of the following benefits:

**Improved cash flows:** Majority of MSMEs in the cluster is not able to grow due to insufficient capital and long receivables credit cycle, factoring could be a viable solution for propelling the growth of MSMEs. Factoring solution provides instant cash on receivables, the funding problem of MSMEs can be easily solved.

**Elimination of default risk:** Factoring without recourse eliminates credit risk for the clients, which is transferred to the factor company. This is a valuable service for MSMEs, as their sensitivity to default risk is usually very high.

**Fixed assets freed up for collateralization for other credit requirements:** Since factoring generally does not use fixed assets for collateralizations against advances, these assets of the clients are freed up, which can be used as collateral against other loans, for other business needs.

**Benefit of sales ledger management:** With collections and sales ledger management being outsourced to the factoring companies, MSMEs would be able to utilize the freed up resources for marketing or other business development purposes. Besides, due to specialization, factor companies are better placed to conduct these functions effectively.

**Increased ability to extend open account terms to clients:** Since extending open account terms of credit involves higher risk, MSMEs are able to offer these terms only to long standing reliable clients, in the absence of open-account receivables finance and adequate credit protection. However with factoring, MSMEs can enjoy better cash flows and reduced default risks, which would enable them to offer open account terms of credit to their clients, which would in turn help their businesses to grow.

**Improved financials:** Factoring without recourse removes credit sales receivables from the balance sheets of clients, resulting in improved accounts receivable days and a better current ratio. Since factoring would also reduce the additional debt requirements for working capital, it helps in improving the debt-equity ratio and the debt service coverage ratio of the entities.
**Factoring Mechanism**

The parties involved in a factoring arrangement are:
- The Client, or the seller
- The Debtor, or the buyer
- The Factor (International factoring may have a correspondent factor in addition to the domestic factor)

**Factoring mechanism**

1. Client approaches factor company with last three year financial statements and fills the application form
2. Factor conducts the client’s appraisal (quantitative assessment of financial ratios etc. and qualitative assessment such as integrity and management capability etc.) and approves/disapproves accordingly
3. Client submits the sales ledger of his customers to the factor and sanction limit is assigned based on the quality of customers
4. Factor sends the notification letter to client buyers and upon acceptance of notification a factoring agreement is signed between the client and factor
Credit Gap Mapping of Select Clusters

- Based on the invoices, factor makes advance prepayments (up to 80% of invoice value) and subsequently manage the client’s ledger and sends due reminder to client customers. The whole process is taken care through a proper software system

Lease Financing

Most of the units in this cluster are micro and currently using conventional machines. In such cases, the formal financial institutions can help these units by financing their equipment purchase under lease financing. Based on promoter’s record, the business’s future potential in addition to unit’s proven track record, banks can do lease financing for the acquisition of plant, machinery and the equipments for these units.

The typical term for the lease would be 5-10 years. The units would pay rentals to the bank for the period till when they have successfully repaid the cost of the equipment. The banks could also charge a processing fee and a lease management fee for the same. Till the time the entire amount has been paid back, the equipment/machinery would stand as the primary security. The possession of the equipment will remain with the borrower, while the bank would enjoy the full legal title. The equipment would become the property of the unit as soon as the debt is paid.

The major advantage of lease financing is that it enables the lessee (manufacturing unit) to plan its cash flows properly. The rentals can be paid out of the cash coming into the business from the use of the same assets.

Purchase Order Financing

It is a short term funding provided by FIs and can be used as working capital to manufacture goods for some credit-worthy buyer. Every order is evaluated on its merit and terms are identified with the seller. The fund is then used by the unit to procure raw materials and support other working capital expense required to fulfill the order. Since the cluster has players of very high credit worthiness, POF seems a viable way of providing financial support. One of the primary requirements for this to work from the bank’s perspective is that buyer has to furnish a comfort letter to the bank detailing the seller information and credibility.

The POF mechanism shall work in the following way for MSEs in the cluster:

- The buyer/customer (high credit worthiness players) submits a purchase order to the seller (MSEs in Foundry and Bearings industry) with all documents
- The seller submits the purchase order to the bank for POF
The bank makes a partial advance to the seller on the value of the purchase order. The advance is made to the seller to cover the costs of materials, trade goods and/or services. (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. POF allows the seller to receive funds even before the goods are shipped and the invoice is issued.)

- The seller procures the raw materials and fabricates the goods and ships the products to the buyer
- The seller prepares and submits an invoice for the sale. Depending on the agreement, the invoice will go to the buyer or directly to the bank (or factoring company)
- 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

Quality Testing and Registration linked Working Capital Finance

The units in the cluster have to adhere to many quality standards and registration procedures to procure orders and avail institutional finance. In the cluster, NSIC provides comprehensive testing and compliance services to the units in the cluster and DIC recommends the units to banks for loan after due diligence. This existing condition can be taken advantage by creating a working capital finance product solely for quality testing and registration activities. This will make units more competitive. Here is how this product shall work:

- NSIC collaborate with DIC to prepare a list of units that have had healthy financial state
- Based on the above list, units avail the NSIC facility and FIs finance the facility center usage for the units
- Units pay to the FIs after some time decided earlier by discussion amongst NSIC, DIC, and FIs
## Annexure I Estimation Method for Credit Supply

### ESTIMATION OF CREDIT SUPPLY TO THE RAJKOT ENGINEERING CLUSTER

<table>
<thead>
<tr>
<th>Item</th>
<th>Mar, 2011 Estimate</th>
<th>Remarks/Assumptions</th>
</tr>
</thead>
</table>
| 1    | Estimated Gujarat Engineering Industry Advances Outstanding - March, 2011 (₹ crore, March, 2010 projected at an expected annual growth rate of 7%) | 8,458 | Expected growth rate is estimated from State Level Advances (SLA) growth Rate using SLA figures ending Mar, 2010 & 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 |
| 2    | Estimated Gujarat Engineering Industry Turnover - Mar, 2011 (₹ crore, Projected at an expected annual growth rate of 6% and 7% for Year 2009-10 and 2010-11) | 62,268 | Expected growth rate is estimated from National IIP growth rates  
Source - Table 3 - ASI, Government of India, MOSPI, 2009  
| 3    | Cluster Sample Turnover (MSEs), Sample Size - 34 units in MSEs Sector (₹ crore) | 170 | D&B India Survey |
| 4    | Total Number of MSE units in the Cluster | 2063 | From Rajkot Engineering Cluster Diagnostic Study (DS) Report |
| 5    | Estimated the Cluster Total Turnover (MSEs, ₹ crore) using (3) & (4) for year ending Mar, 2011 | 9157 |  |
| 6    | Estimated Proportion (P1) of Cluster Turnover to State Industry Turnover using (2) and (5) [P1 = (5) / (2)] | 14.7% |  |
| 7    | Estimated the Cluster Level Credit Supply [(1) + (6)] - ₹ crore | 1161 |  |
| 8    | State Level Advances – Term Loan Advance (Small Enterprise - SE) to Total Advance (SE) Proportion (P2) | 18% | Estimation based on RBI's Statistical Returns-SCB  
Source - Table 6.1, Statistical Tables Relating to Banks in India, 2009-10 |
| 9    | Using (7) and (8) Working Capital Supply is [(1-P2)*7]. | 956 |  |
| 10   | Using (7) and (8) Term Credit Supply is [(P2)*7]. | 204 |  |
## Annexure II Estimation Method for Credit Demand

### ESTIMATION OF CREDIT DEMAND IN THE RAJKOT ENGINEERING CLUSTER

<table>
<thead>
<tr>
<th>Method</th>
<th>Item</th>
<th>Mar, 2012 Estimate</th>
<th>Remarks/Assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Nayak Committee Approach - Working Capital</strong></td>
<td>Cluster Sample Turnover (MSEs), Sample Size - 34 units in MSEs Sector</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Total Number of MSE units in the cluster</td>
<td>2063</td>
<td>Rajkot Engineering Cluster Diagnostic Report</td>
</tr>
<tr>
<td>2</td>
<td>Estimated the Cluster Sample Total Turnover (MSEs, ₹ crore) for year ending Mar, 2011</td>
<td>170</td>
<td>D&amp;B India Survey</td>
</tr>
<tr>
<td>3</td>
<td>Estimated the Cluster Total Turnover (MSEs, ₹ crore) - Mar, 2012, Expected growth rate of 9.8%</td>
<td>10,055</td>
<td>Expected growth rate is estimated from National IIP growth rates Source - Latest National IIP figures – Statement II in “MOSPI Press Release on IIP Estimates”, Aug, 2011</td>
</tr>
<tr>
<td>4</td>
<td>Basis Nayak Committee Guidelines, Working Capital Funding Requirement is 20% of Projected Turnover calculated in (3)</td>
<td>2011</td>
<td></td>
</tr>
<tr>
<td><strong>D&amp;B India Approach - Term Capital</strong></td>
<td>Cluster Sample &quot;Investments in Plant &amp; Machinery&quot;, Sample Size - 45 in MSE Sector (₹ crore)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Total Number of MSE units in the cluster</td>
<td>2063</td>
<td>Rajkot Engineering Cluster Diagnostic Report</td>
</tr>
<tr>
<td>6</td>
<td>Estimated the Cluster Total &quot;Investments in Plant &amp; Machinery&quot; (MSEs, ₹ crore) using (1) &amp; (2) for year ending Mar, 2011</td>
<td>1113</td>
<td>Source - Annual Survey of Industries (ASI) estimates on Fixed Capital for different industries within a state – MOSPI ASI Report, 2009-10</td>
</tr>
<tr>
<td>7</td>
<td>Value in (8) projected to Mar, 2012 level using moving average growth rate of fixed capital for Industry-state wise (45%)</td>
<td>1610</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>(9) - (8) gives the growth in fixed capital</td>
<td>497</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>80% of (10) is estimated to be Term Credit Funding Requirement</td>
<td>398</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credit Demand</strong></td>
<td>Total Credit Demand [2011+398] calculated above in (5) and (11)</td>
<td>2409</td>
<td></td>
</tr>
</tbody>
</table>
Rourkela Engineering Cluster
Overview

Rourkela is located in the mineral rich district of Sundargarh, also the industrial capital of the state of Orissa. The engineering cluster of Rourkela mainly consists of machining and fabrication units and the core activity of the units is structural and equipment machining, and fabrication. The cluster mainly caters to metallurgical, cement and power sector. There are more than 220 MSMEs\(^1\) in the cluster, out of which 190 fall in MSEs segment.

The growth of the cluster can be traced back to the establishment of factories in the adjoining area such as Orissa Cement Limited (OCL) plant at Raigangpur in 1951, Hindustan Steel Limited (now Rourkela Steel Plant) in 1955 and Utkal Machinery plant (Now Larsen and Toubro’s Heavy Engineering). These factories provided impetus to rapid industrialization of region in and around Rourkela. A large number of sponge iron, steel melting (Induction Furnace), and Re-Rolling units came up in and around Rourkela, catering to the need of both large & medium scale and also small individual customers. Currently, there are 35 sponge iron units, 40 induction furnace units, and 10 rerolling mills. Sponge iron produced is used mainly as an alternate to scrap for melting. There is a lack of effort on entrepreneurs to produce value added products from sponge iron and explore additional markets for their products. There has been a significant increase in competition from other clusters coming up in Jharkhand and Karnataka and this requires initiatives in different business functions (such as operational efficiency, marketing, new products introduction etc.) from units in the cluster to remain competitive.

The fabrication and machining units present in the cluster are supplying equipment and structures for above units, in addition to serving SAIL, RSP, and other plants directly.

NSIC implemented cluster development programme for the foundry sector of Rourkela in the year 2002. Later, UNIDO implemented a cluster development programme during 2005-08, where the project’s objective was to promote the economic growth of the cluster. SIDBI implemented BDS market development programmes under MSME-FDP aimed at instilling sustainability and functionality among BDS providers. It has brought in systemic change in 19 clusters on pan India basis, including the Rourkela Engineering Cluster.

The local support service in the cluster is unorganized and there is lack of awareness of availability of support services in the area. Majority of micro units have not used the fee based service and do not have access to institutional finance. The support institutions present in the cluster include:

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\(^{1}\) APITCO Cluster Diagnostic Report, July 2009 under MSME-FDP
Government support institutions include DIC, Development Institute-MSME, NSIC, Testing Lab, Employment Exchange, OSIC, Orissa State Finance Corporation (OSFC), and Orissa Industrial Infrastructure Development Corporation (IDCO).

Industry Associations include Rourkela Chambers of Commerce and Industry (RCCI), Orissa Young Entrepreneurs Association (OYEA), District Small Scale Industries Association (DSSIA), and Orissa Assembly of Small and Medium Enterprise (OASME).

Private BDS providers in different fields such as audit, design, testing, and skill development.

The following exhibit summarizes the information on Rourkela Engineering Cluster.

<table>
<thead>
<tr>
<th>Type of Units</th>
<th>No. of Units</th>
<th>Employment</th>
<th>Turnover (₹ Crore)</th>
<th>Investments (₹ Crore)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Micro Units</td>
<td>150</td>
<td>4620</td>
<td>316</td>
<td>94</td>
</tr>
<tr>
<td>Small Units</td>
<td>40</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Diagnostic Study Report, July 2009, prepared by APITCO limited and D&B India Survey

The estimates of “Investment (in Plant & Machinery)” and Turnover have been prepared on the basis of D&B India Sample Survey, while number of units and cluster employment figure has been borrowed from Diagnostic Study (DS) Report, prepared for SIDBI in 2009.

Sources of Demand for Credit – Opportunity and Risks

Material Linkages
Machining and fabrication units buy their material i.e. steel rods, sheets, channels, beams and plates locally and through dealers. Retails branch of Rourkela Steel Plant (RSP) also supplies in bulk quantity. Special steels and stainless steel is procured from Kolkata and Mumbai. Sometimes inventories have to be maintained for such items. Orissa Small Industries Corporation is also supplying to the small units as it gets its discounted supply from RSP the benefit of which is passed on to the units. Its services are not fully utilized by the units due to procedural problems. Other than the steels available from Rourkela Steel Plant, steel products of private steel plants like Jindal, Bhushan steel are also consumed through dealers. There is no credit system in purchase of steel, however due to long standing business relationship between the units and traders, short term credit of 3 to 7 days are generally negotiated. There are local traders who stock and supply welding consumables, inert gas and miscellaneous items.

Sales Linkages
The units in and around Rourkela presently do the marketing of their own without engaging any outside agencies. The enquiries are obtained from organizations and the quotation is prepared with
detailed study of drawings. Most of the clients go for lowest bid, which are further negotiated based on technical requirements, quality adherence and once accepted the order is placed by the client. Rourkela steel plant outsources 25% of their machining and fabrication work from the cluster. The units have to be registered with RSP for getting enquiries and participate in tender. Number of power plants is being established in the eastern region, the equipments and components required for power plant are procured from the fabrication cluster located in southern and western region of our country.

**Technology**

The cluster manufactures products related to cement, paper and metallurgical plants and employs conventional welding and cutting equipment and machinery resulting in increase in man-day for completing a job. If the cluster goes for modern machineries like CNC multi nozzle cutting machine, automated welding machine etc., there is scope for at least 25-30% increase in production resulting in execution of more tonnage of work per month. Relatively larger firms have capability to manufacture power plant equipments which are of high value with the existing facilities but lack technical inputs on design capabilities.

**Registrations and Rating**

Most of the firms operate from illegal premises or rented land. Since most of the micro units sub-contract to larger units, these tend to operate out of the premises of the larger units. As a result, there is no formal lease or rental agreement which can be produced as evidence of operations. Further, Dun and Bradstreet India and SMERA are constantly covering registrations and banks have now started accepting these. Hence, this also increases the need for working capital finance.

Registrations like Export Marketing (EM and EM1) require mandatory stocks of inventories to be carried all the time; failing to which these registrations are canceled. Hence, for those units which engage in exports, the working capital requirements are higher.
Below is the schematic of the value chain of the cluster:

In the diagram above, the term “customers” is synonymous with the players such as RSP, L&T etc. that float tenders for outsourcing of fabrication/machining jobs. The red circle zone represents major huddle for MSE units operating in the cluster.

**Supply of Credit to MSEs**

**Estimate of Outstanding Credit to MSEs in the Engineering Cluster**

The credit supply to the Rourkela Engineering Cluster is estimated to be ₹ 42 crore out of which ₹ 5 crore (11%) is term credit and ₹ 37 crore (89%) 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 the above methodology was further validated against the data on outstanding advances collected from the lead bank in Sundargarh district.

The RBI Lead Bank Scheme management is implemented by State Bank of India as the lead bank in the cluster. According to information obtained from the lead bank, an aggregate of about ₹ 4,000 crore was disbursed under various forms of advances to multiple beneficiary groups like Priority Sector, Weaker Section Loans, Advances to Small Farmers, Advances under DRI Scheme, Other Schemes etc. The following exhibit depicts the banking flow of credit in the Sundargarh District. It can be clearly seen that the Priority Sector Advances in the Ludhiana District are around the prescribed lending norms of 39 – 40%.

**Exhibit 36: Lending Activities of All Commercial Banks in Sundargarh District**

The proportion of MSEs advances in the total priority sector lending indicates the development focus of the particular district. The MSE Sector receives around 6% of the total credit disbursements in the cluster. This is also around 16% of the total priority sector advances. A larger proportion of the credit is provided to the other Priority sector and agricultural credit.
The following is the composition of MSE and non-MSE Advances in Sundargarh as of March 2011

<table>
<thead>
<tr>
<th>Bank</th>
<th>MSE Advances</th>
<th>Non-MSE Advances</th>
</tr>
</thead>
<tbody>
<tr>
<td>SBI</td>
<td>68</td>
<td>1,873</td>
</tr>
<tr>
<td>UCO</td>
<td>504</td>
<td></td>
</tr>
<tr>
<td>SDCCB</td>
<td>266</td>
<td></td>
</tr>
<tr>
<td>UBI</td>
<td>150</td>
<td></td>
</tr>
<tr>
<td>OSCB</td>
<td>172</td>
<td></td>
</tr>
<tr>
<td>BOB</td>
<td>134</td>
<td></td>
</tr>
<tr>
<td>BOI</td>
<td>86</td>
<td></td>
</tr>
<tr>
<td>HDFC</td>
<td>81</td>
<td></td>
</tr>
<tr>
<td>ICICI</td>
<td>33</td>
<td></td>
</tr>
<tr>
<td>CANARA</td>
<td>64</td>
<td></td>
</tr>
</tbody>
</table>

Notes:
1. Amount in ₹ Crore
2. SIDBI data not available with lead bank. Ranking of banks may vary if SIDBI data is considered
Source: Data Obtained from State Bank of India as on March 2011

On interactions with the various banking bodies, it is estimated that only 1% of the total credit in the Sundargarh district is available for the Rourkela Engineering Cluster, while major lending is directed towards other clusters.

**Performance of Banks**

The State Bank of India is the lead bank in the district and is also leading the share of credit of banks to total disbursements. The aggregate disbursements of SBI in Sundargarh account for around 48% of the total credit disbursements in the district.

In terms of aggregate credit disbursements, the above indicated 10 banks contribute to around 90% of the aggregate credit disbursements in the Sundargarh district. It can be seen that around 17 Public Sector Banks share 82% of the total credit disbursements in the district indicating strong influence of public sector banks in the financing activities in the district.
Of these disbursements, the private sector banks like HDFC, ICICI and Axis contribute to 5% of the disbursements.

14 SIDBI customers were surveyed on the overall perception of SIDBI, as well as on attributes such as time taken for loan disbursement and collateral requirement. While respondents believed that SIDBI would largely take 2-4 weeks to process and disburse loans, a couple of them reported that it would take less than 2 weeks. 2-4 weeks was also the norm in the case of Public and Private sector banks. The only source that is believed by a greater number of respondents to take less than 2 weeks for loan processing and disbursement is the non-institutional source.
The following exhibit depicts perception among respondents of time taken for loan processing and disbursement by various financial sources.

### Exhibit 39: Perception of Time Taken for Loan Processing and Disbursement

<table>
<thead>
<tr>
<th>Source: D&amp;B India</th>
<th>Note: Figures in brackets show total number of respondents for each financial source</th>
</tr>
</thead>
<tbody>
<tr>
<td>WC SIDBI (14)</td>
<td>WC Public Sector Banks/RRBs (14)</td>
</tr>
<tr>
<td>TL SIDBI (14)</td>
<td>WC Cooperative Banks (14)</td>
</tr>
<tr>
<td>TL Private Indian/Foreign Banks (14)</td>
<td>WC Other Institutional Sources (14)</td>
</tr>
<tr>
<td>WC Non-Institutional Sources (14)</td>
<td>WC TL Non-Institutional Sources (14)</td>
</tr>
<tr>
<td>&lt; 2 weeks</td>
<td>2-4 weeks</td>
</tr>
<tr>
<td>2-4 weeks</td>
<td>4-6 weeks</td>
</tr>
<tr>
<td>4-6 weeks</td>
<td>6-9 weeks</td>
</tr>
<tr>
<td>6-9 weeks</td>
<td>&gt; 9 weeks</td>
</tr>
<tr>
<td>15% SIDBI (14)</td>
<td>14% Public Sector Banks/RRBs (14)</td>
</tr>
<tr>
<td>43% SIDBI (14)</td>
<td>57% Cooperative Banks (14)</td>
</tr>
<tr>
<td>50% SIDBI (14)</td>
<td>36% Private Indian/Foreign Banks (14)</td>
</tr>
<tr>
<td>14% SIDBI (14)</td>
<td>36% Other Institutional Sources (14)</td>
</tr>
<tr>
<td>14% Non-Institutional Sources (14)</td>
<td>&gt; 9 weeks</td>
</tr>
</tbody>
</table>

Many MSMEs are of the opinion that high loan processing time is a major obstacle with respect to availing of loans in the cluster.

The following exhibit shows the nature of collateral requirements across various financial sources.

### Exhibit 40: Nature of Collateral Requirements

<table>
<thead>
<tr>
<th>Source: D&amp;B India</th>
<th>Note: Figures in brackets show total number of respondents for each financial source</th>
</tr>
</thead>
<tbody>
<tr>
<td>SIDBI (13)</td>
<td>Public Sector Banks/RRBs (5)</td>
</tr>
<tr>
<td>SIDBI (13)</td>
<td>Term Loan (5)</td>
</tr>
<tr>
<td>Working Capital</td>
<td>Term Loan</td>
</tr>
<tr>
<td>Working Capital</td>
<td>40% Charge to be created on fixed assets</td>
</tr>
<tr>
<td>Working Capital</td>
<td>40% Charge to be created on current assets</td>
</tr>
<tr>
<td>Public Sector Banks/RRBs (5)</td>
<td>40% Corporate guarantee</td>
</tr>
<tr>
<td>Personal guarantee</td>
<td>Third party guarantee</td>
</tr>
<tr>
<td>Other</td>
<td>Other</td>
</tr>
</tbody>
</table>

SIDBI customers as well as Public Sector Banks and Regional Rural Banks customers are asked for charge on fixed assets, charge on current assets, and corporate guarantee.

---

14 Relates to 50 respondents from the Rourkela Engineering Cluster only
**Demand for Credit by MSEs**

**Estimate of Credit Demand by MSEs in the Cluster**

There are two methods that D&B India has followed 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 190
- The turnover for the Rourkela Engineering MSE cluster is pegged at ₹ 316 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 4.4% (IIP estimate) to ₹ 330 crore in the year 2011-12
- Working Capital Requirement (Basis-Nayak Committee Guidelines) is estimated to be ₹ 66 crore
- Term Credit Requirement (Basis-Growth in Fixed Capital) is estimated to be ₹ 18 crore
- Method 1 - Total Credit Demand is thus obtained from above [(66) + (18)] and is ₹ 84 crore

Credit Appraisal Processes followed by various banks differ in terms of time taken for appraisals. However, most of the banks including the lead bank have indicated that for appraisals of working capital loan requirements, the Nayak Committee Recommendations are being followed. It was also observed from the survey that across categories of Micro, Small and Medium Enterprises, this ratio though has varied; the average margin requirement is as per the prescribed Nayak Committee Norm of 20% of the working capital gap. The following exhibit presents the equity contribution indicated by a sample of 50 enterprises. Nayak Committee recommended a maximum of 80% of the working capital gap as maximum permissible bank finance; it implies a margin contribution of minimum 20%.
Exhibit 41: Equity Contribution for Loan Disbursements Across Financial Institutions in Rourkela Engineering Cluster

Source: Data Obtained from 50 MSME Enterprises conducted by D&B India

It can be seen that for micro enterprises, the demand for higher margin contribution is from the bankers’ side. The primary reasons for this is micro enterprises are not able to provide adequate collaterals to support their financing needs and hence are required to provide a higher equity margin. An important reason for lower collaterals being provided by micro enterprises is that these enterprises most of the time do not operate from their own premises and hence, cannot provide land or machinery (which is also rented) as collateral.

Rourkela is majorly served by the Public Sector Banks such as State Bank of India and Central Bank of India.

While the medium enterprises in Rourkela cluster get contracts directly from big companies, the small and micro firms receive outsourced work from external companies such as Shapoorji Pallonji, which in turn, get contracts from big companies. Such small and micro units have urgent finance needs which are not being met from the financial sources in the region currently. Problems faced by the smaller units include delayed payments from big companies, immense price competition, increase in power tariff, frequent power outages and affordability of DG sets shortage of workers and low wages, use of conventional machines, etc..

The primary reasons due to which the small and micro units are not able to obtain credit are that they do not have bank records or financial statements, as most transactions are cash transactions, and because they are unable to provide any address proof as they operate on land unofficially rented out to them by bigger units.
Industry associations are of the opinion that banks could be encouraged to accept the residence proof of owners for extending credit, and could consider extending bills discounting facility with relaxed guidelines, so that such micro and small units are able to overcome the credit crunch and other problems faced due to limited financial sources. SIDBI officials suggest that instead of extending general working capital facility, banks could consider extending the facility against specific orders which would remain valid for the duration of the order. This would enable small units to execute bigger orders, which they might otherwise not be able to execute due to high working capital requirements.

The following exhibits show the composition of credit among the 50 respondents form the Engineering Cluster interviewed in the survey. While 40% of the total respondents were small enterprises, 32% were micro and 28% were medium enterprises. Also, major requirement in the cluster is for working capital loans, in all categories.

![Exhibit 42: Break-up of Credit](image)

While the credit available to a micro firm is 1/10th of that to a medium in almost all clusters studied, the same in Rourkela engineering cluster is 1/100th of that of a medium firm. This reiterates the feedback given by the industry associations in the area that credit crunch is faced mostly by the smallest firms in the cluster due to various problems stated.

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15 Relates to 50 respondents from the Rourkela Engineering Cluster only
The following exhibit shows composition of working capital and terms loans for the 50 respondents by sources of finance, separately for Micro, Small and Medium enterprises. As noted earlier, Public Sector Banks and Regional Rural Banks are the major sources of Working Capital as well as Term Loans across all sizes of enterprises. SIDBI is a significant contributor in medium enterprises for Working Capital and in small and medium enterprises for Term Loans.

Exhibit 43: Sources of Finance (Amount in ₹ Lakh)

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.

Summary of Credit Gap Assessment

Though, Rourkela is relatively small engineering cluster compared to its benchmark Rajkot cluster, it has significant importance due to its useful to nearby steel and cement industries. Total credit gap in the cluster is 42 crore, much less than Rajkot cluster and it is primarily due to lesser number of units.

16 Relates to 50 respondents from the Rourkela Engineering Cluster only
present in the cluster and lesser average turnover for micro and small units compared to that of Rajkot cluster.

The primary component of total credit requirement emanated from working capital needs compared to term capital needs and following are the reasons for the same:

- Raw material linkages for coal and iron are not well established hence either raw materials or finished goods inventories need to be carried
- Registrations cause higher inventories to be carried by firms increasing the demand for working capital
- The benchmark cluster for Rourkela is Rajkot Engineering Cluster and compared to this cluster, the productivity is much lower, and hence output is also lower
- Production outages cause inventory holdings for coal and diesel for generators
- Sales channels are primarily routed through traders and hence, payments are at the discretion of the large traders, which take a longer period for processing

Further, micro and small enterprises compared to medium firms are in greater need of working capital loans because of the following factors

- The enterprises in the cluster primarily do contractual machining and fabrication work. The major customers of the units in the cluster are the big plants such as Bhushan Steel, NALCO, RSP, etc.
- The micro and small units tend to operate out rented premises located in the industrial area. The prevalent practice is that bigger units with extra space tend to unofficially rent out the space to the micro and small units. As the land originally belongs to Orissa Industrial Infrastructure Development Corporation, and cannot be legally sub leased, there are no legitimate lease documents which serve as proof of address. Due to this, the basic documentation for proof of address that is required by banks is not available with micro units
- Another key problem is that majority of the micro and a substantial portion of the small units mainly enter into cash transactions and hence do not have any bank records. In addition they do not maintain regular financial statements, thereby making it difficult for them to avail bank finance
- Even those units which do prepare financial accounts tend to show lower profits in order to reduce tax liability. The lower profits results in lower net worth thereby further harming their chances of getting bank finance
- The small and micro units generally experience delays in obtaining payments from their big customers. The raw material suppliers however have to be paid on time and at times,
immediately. This causes a gap between cash receipts and cash payments thereby increasing the need for cash and thereby working capital

- For outsourced jobs to micro/small units, bigger units do not always provide raw materials and have to be procured on their own
- Raw materials supplies at OSIC are not sometime sufficient and rates offered are same as market ones, so no advantage can be tapped using OSIC service for procuring raw materials

The small and medium enterprises intend to avail working capital and term loans mainly for technology upgradation and maintenance. Other than these, the following issues are observed in the cluster:

- Most of the units are currently using traditional or non-automated technology. There is a general opinion that if the cluster goes for modern machineries like CNC multi nozzle cutting machine, automated welding machine etc., there is scope for at least 25-30% increase in production resulting in execution of more tonnage of work per month
- Developing and contracting necessary linkages and centers within the organization for testing, calibration of equipments, maintenance, etc. are required for medium enterprises. Hence, term loan requirements increase
- SIDBI is unable to provide credit to micro and smaller enterprises, primarily due to absence of documentary proofs and inability to provide adequate collaterals
- In term credit as well, various problems are experienced with respect to specific loan schemes and loans under CGTMSE are only utilized by medium enterprises
- Due to operation on illegal premise, many micro/small units cannot furnish the fixed asset collateral to obtain institutional finance
- Due to non-availability of working capital credit from institutional sources, the units are unable to procure large orders preventing the growth of the units
- Order procurement trend by micro units has been on decline due to adverse market forces, self-capability of larger firms to complete the task, and reluctance of big firms to sub-contract the task to micro/small units

The cluster, though having lower productivity compared to other engineering clusters, has enough potential to become one of the fastest growing clusters in India, given its proximity to core industries and unexplored markets for its products. Many units in the cluster are unaware of different support services existing in the cluster and this is a major bottleneck in promoting growth of the cluster. Very few enterprises in the cluster have access to institutional finance. This presents a significant opportunity to the financial institutions to participate in the growth of the cluster through its credit awareness and lending programs.
A Note on Impact of BDS Implemented under MSME-FDP in Rourkela Engineering Cluster

BDS activity in the Rourkela Engineering cluster under the MSME-FDP primarily focused on interventions in four major areas – Marketing, skill training, Energy studies and technology upgradation. Around 40 new service providers were introduced to the cluster.

Associations and firms could realize the advantages of these interventions. The first milestone was achieved with interventions in the area of Marketing, by the way of formation of consortium (by 10 firms) with the coordination of the Associations. The consortia have been able to bid for projects worth ₹ 158 Crore till date. They have received orders worth ₹ 11.25 Crore. Linkages have been established with major industries like Nalco, Vedanta, HEC, PPT and NCL.

Another major area covered was intervention through skill development training programmes such as TOT and NDT programmes. As a result 74 persons were upgraded in technical areas and 165 candidates were trained in welding, fitting, Auto CAD, etc.

Similarly, training in Energy Conservation was imparted to 15 firms. Energy audits demonstrate that nearly ₹ 16 lakh of savings accrued with a pay-back period of 3-5 years. Interventions also resulted in the installation of automated CNC machines and Portable Cutting tools in 6 firms. An improvement in terms of quality as well as productivity increase of 25% to 40% was experienced.

Overall the Project Impact include (a) Turnover of the cluster has gone up from ₹ 257 Crore per annum to ₹ 512 Crore per annum (b) Capacity of the cluster to meet the orders has gone up from 4000 TPA to 6720 TPA and (c) Employment has gone up from 2075 to 3310.

Recommended Products and Delivery Channels

Requirement of Capital

The primary credit need of the MSEs is for working capital and there is minimal requirement for term loan. This is due to the fact that most of micro and small firms do not have continuity in their operation due to intermittent order (and that too small ones) procurement, thereby leading to their reluctance of expansion.

The specific capital needs and associated issues that arise are:

- Raw material procurement
  - Raw materials supplies at OSIC are not sometime sufficient and rates offered are same as market ones, so no advantage can be tapped using OSIC service for procuring raw materials
Under the scenario where micro/small units have to procure raw materials, the cost of raw material acts as a deterrent for them to execute order in a profitable manner since the cost of making the end products exceeds the agreed price of end products in the order agreement.

Due to non-availability of working capital credit from institutional sources, the units are unable to procure large orders preventing the growth of the units.

- Finished goods storage cost
  Big players, who sub-contract to MSEs, tend to delay accepting the supplies and thus MSEs incur extra storage cost, for which they need working capital. The delay, sometimes, extend to months making difficult for units to manage the cost.

- Power Tariffs
  Increase in power tariffs has further hampered the business operations of the units in the cluster. Last year tariffs were raised by 40%. This year, tariff hike of 30% was proposed however it has been stayed by the court.

- Delayed payments from customers leading to inability to procure and execute further orders
  Delayed payment from big players to micro/small is also significant in the cluster and this makes Bills Discounting facility under current repayment tenure of 90 days becomes non-profitable scheme for smaller units. Further, smaller units can’t introduce a delayed payment penalty clause in the order agreement as this puts them at a disadvantage in procuring order.

It is important to note here that the primary/critical requirement of working capital emanates from “Raw material procurement”, and “Delayed payment from customers”. The section below highlights the existing financial support to cater to these needs and how new products/mechanism can be devised to better address the above problems.

### 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.

Most of MSEs are not looking to upgrade their machinery/set-up facilities as they are not sure of procuring order all the time. There is insufficient linkage in the cluster leading to unpredictability of continuous operation of the units. This makes the micro/small units reluctant to go for machinery up-gradation due to increased financial burden with unpredictable and untimely cash inflows.
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).

Units face adverse market forces in the form of very competitive pricing and high raw material cost and as a result, the MSEs are reluctant to avail this scheme as it makes them more uncompetitive because of higher borrowing cost (one time charge of 1.5% of the borrowed amount and yearly charge of 0.75%). Further, banks are reluctant to lend under this scheme as MSEs are operating in intermittent manner and repayment risk becomes high.

Bills Discounting

The current bills discounting facility is mainly availed by medium/bigger units. SIDBI and other financial institutions do offer this product in the cluster. The current credit offered by SIDBI under bills discounting stands at ₹ 40 crore. The buyer/debtor has to pay within 90 days under the current covenant associated with this credit product.

On discussion with various stakeholders in the cluster namely SIDBI, MSEs, and BDS providers, D&B India found that there is frequent delay in payment (> 90 days) by customers of MSEs and this makes bills discounting an uneconomical means of financing.

There are also general term/working capital loans 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 can’t furnish fixed asset collaterals.

Descriptions of Products and Delivery Mechanisms

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 hurdle for units to procure working capital loan, which is the major requirement in the cluster. Other than that, there has been little support to MSEs from financial institutions and major focus has been on medium and bigger units. The above coupled with lack of discipline from bigger players to make timely payments to their suppliers (MSEs) has hampered the growth of the units in the cluster. 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. Further, to propel the growth of the cluster, MSEs need to be promoted to take up bigger orders, which they are unable to do currently due to lack of working capital financing.

Below is the representation of MSEs critical credit needs and suitable financial products to address the same.

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.

The detail on each product is elaborated below.
Raw Materials Purchase Linked Working Capital Finance

Under this scheme, the financial institutions (FIs) shall finance the raw material purchase and Orissa Small Industries Corporation (OSIC) shall be the implementing institute as it is already supplying raw material (though limited) to different units. Below are the salient points of the scheme:

- Since MSEs cater largely to the industries within the cluster, a forecast of the yearly production (output) of large units can be obtained directly through large players itself

- Based on the above forecast, OSIC shall purchase the raw materials in bulk, get heavy discount, and get financed by FIs, with raw materials serving as collateral and OSIC serving as guarantor

- OSIC 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 \((y\%-z\% > x\%)\)

The mentioned scheme would facilitate a better growth of MSEs as it would promote them to procure bigger orders.

Receivables linked Bridge Financing for Working Capital Finance

One of the major factors inhibiting Bills Discounting in the cluster is the lack of payment discipline amongst buyers. The major beneficiary of bills discounting facility is the larger units. The restricted use by MSEs is because of delayed payment (often payment duration exceeds 150 days) by their customers. This creates a serious and endemic problem in the cluster for MSEs of inability to
Credit Gap Mapping of Select Clusters

procure future orders. Using post-dated Cheques (by debtors) has been in practice for implementing bills discounting facility in western world but it does not seem to be feasible in the current scenario where bigger players largely govern the working of the cluster in terms of conditions/agreement with contractors (MSEs)

The possible solutions that can be addressed using existing Bills Discounting facility are:

- Flexibility from the current 90 days period for repayment by debtor shall be the key to effective growth of this facility in the cluster. 90 days period could be extended to 150 days to suit the requirements of the cluster. Further, the covenants and returns on modified bills discounting should be worked out to get a viable funding model for MSEs

- Another way for receivables bills to work in favor with MSEs shall be to club with 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. Below is the schematic how bridge financing shall work addressing the specific need of the cluster.

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

Orissa is one among the top 5 states in terms of the number of microfinance clients. Microfinance has made significant inroads into Orissa, creating a conducive culture for the financing mechanism.

The total number of microfinance clients in Orissa (Credit Self Help Group (SHG) members and MFI Client put together) stood at roughly 62 lakh in 2010. The SHG model is predominant in
Orissa. There are roughly 46 lakh credit SHG members and 16 lakh MFI clients in the state. Microfinance loans in Orissa aggregated to $2,680 crore in 2010, with average loans outstanding per household standing at $7,582.

There are roughly 150 micro units in the Rourkela Engineering cluster. Micro enterprises in the cluster primarily do contractual machining and fabrication work and tend to operate out of rented premises located in the industrial area. The prevalent practice is that bigger units with extra space tend to unofficially rent out the space to the micro and small units. As the land originally belongs to Orissa Industrial Infrastructure Development Corporation, and cannot be legally sub leased, there are no legitimate lease documents which serve as proof of address. Due to this, the basic documentation for proof of address that is required by banks is not available with micro units. Further, these enterprises mainly enter into cash transactions and hence do not have any bank records.

Up-scaling MFIs would prove to a potent method to handle this issue. 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. In such cases, up-scaling would comprise offering financial services/products that cater to the special needs of a micro enterprise. The benefits of up-scaling may encourage a transition from an informal to a formal enterprise.

MFI active in the Sundargarh district modify their microfinance business models to incorporate MSME operations by taking advantage of their market knowledge and network, and by adapting their microfinance methodologies. 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.

**Financial Inclusion Initiatives under the MSME-FDP**

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).

**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 an 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 ₹ 50000/- 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**

It is a short term funding provided by FIIs and can be used as working capital to manufacture goods for some credit-worthy buyer. Every order is evaluated on its merit and terms are identified with the seller. The fund is then used by the unit to procure raw materials and support other working capital expense required to fulfill the order. Since the cluster has big players of very high credit worthiness, POF seems a viable way of providing financial support. This was further confirmed on discussion with an official from SIDBI, Rourkela and was of the opinion that a pilot project could be initiated to see its efficacy. One of the primary requirements for this to work from the bank’s perspective is that buyer has to furnish a comfort letter to the bank detailing the seller information and credibility.

The POF mechanism shall work in the following way for MSEs in the cluster:

- The buyer/customer (big players) submits a purchase order to the seller (MSEs) with all documents
- The seller submits the purchase order to the bank for POF
• The bank makes a partial advance to the seller on the value of the purchase order. The advance is made to the seller to cover the costs of materials, trade goods and/or services. (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. POF allows the seller to receive funds even before the goods are shipped and the invoice is issued.)

• The seller procures the raw materials and fabricates the goods and ships the products to the buyer

• The seller prepares and submits an invoice for the sale. Depending on the agreement, the invoice will go to the buyer or directly to the bank (or factoring company)

• 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
### ESTIMATION OF CREDIT SUPPLY TO THE ROURKELA ENGINEERING CLUSTER

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<td>3755</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>
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<td>4 Total Number of MSE units in the Cluster</td>
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<td>5 Estimated the Cluster Total Turnover (MSEs, ₹ crore) using (3) &amp; (4) for year ending Mar, 2011</td>
<td>316</td>
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<td>6 Estimated Proportion (P1) of Cluster Turnover to State Industry Turnover using (2) and (5) [P1 = (5) / (2)]</td>
<td>8.4%</td>
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<td>7 Estimated the Cluster Level Credit Supply [(1) * (6)] - ₹ crore</td>
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<td>8 State Level Advances – Term Loan Advance (Small Enterprise - SE) to Total Advance (SE) Proportion (P2)</td>
<td>11%</td>
<td>Estimation based on RBI’s Statistical Returns-SCB Source - Table 6.1, Statistical Tables Relating to Banks in India, 2009-10</td>
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<td>9 Using (7) and (8) Working Capital Supply is [(1-P2)×(7)].</td>
<td>37</td>
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### Annexure II Estimation Method for Credit Demand

#### ESTIMATION OF CREDIT DEMAND IN THE ROURKELA ENGINEERING CLUSTER

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<td>2</td>
<td>Total Number of MSE units in the cluster</td>
<td>190</td>
<td>Rourkela Engineering Cluster Diagnostic Report</td>
</tr>
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<td>3</td>
<td>Estimated the Cluster Sample Total Turnover (MSEs, ₹ crore) for year ending Mar, 2011</td>
<td>146</td>
<td>D&amp;B India Survey</td>
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<td>Estimated the Cluster Total Turnover (MSEs, ₹ crore) - Mar, 2012, Expected growth rate of 9.8%</td>
<td>330</td>
<td>Expected growth rate is estimated from National IIP growth rates</td>
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<td>5</td>
<td>Basis Nayak Committee Guidelines, Working Capital Funding Requirement is 20% of Projected Turnover calculated in (3)</td>
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<td>Cluster Sample &quot;Investments in Plant &amp; Machinery&quot;, Sample Size - 42 in MSE Sector (₹ crore)</td>
<td>40</td>
<td>D&amp;B India Survey</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Total Number of MSE units in the cluster</td>
<td>190</td>
<td>Rourkela Engineering Cluster Diagnostic Report</td>
</tr>
<tr>
<td>8</td>
<td>Estimated the Cluster Total &quot;Investments in Plant &amp; Machinery&quot; (MSEs, ₹ crore) using (1) &amp; (2) for year ending Mar, 2011</td>
<td>94</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Value in (8) projected to Mar, 2012 level using moving average growth rate of fixed capital for Industry-state wise (23%)</td>
<td>116</td>
<td>Source - Annual Survey of Industries (ASI) estimates on Fixed Capital for different industries within a state – MOSPI ASI Report, 2009-10</td>
</tr>
<tr>
<td>10</td>
<td>(9) - (8) gives the growth in fixed capital</td>
<td>22</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>80% of (10) is estimated to be Term Credit Funding Requirement</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credit Demand</strong></td>
<td>Total Credit Demand [66+18] calculated above in ] (5) and (11) ]</td>
<td>84</td>
<td></td>
</tr>
</tbody>
</table>
### Annexure A.1 Summary: Recommended Products/Delivery Mechanisms

<table>
<thead>
<tr>
<th>Scheme, Purpose &amp; Benefits</th>
<th>Implementation Process</th>
<th>Clusters Where Applicable</th>
<th>Pre-requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Scheme for Financing of Raw Material Procurement</strong></td>
<td></td>
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</tr>
<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></td>
<td></td>
</tr>
<tr>
<td>✓ Bulk purchase enables MSEs to benefits 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, MCCI 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></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Implementation agency to procure the raw material with MoU banks / FIs financing the purchase</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Raw material procured to serve as collateral with implementation agency serving as facilitator / guarantor</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Implementation agency becomes the primary raw material supplier. Discount obtained by acquiring the raw material in bulk may be pass on to MSEs after deducting fee towards costs of provision of the service by implementation agency</td>
<td></td>
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<tr>
<td><strong>Factoring (or reverse factoring)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<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></td>
<td></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></td>
<td></td>
</tr>
<tr>
<td>✓ Factoring ensures:</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></td>
<td></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>
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</tbody>
</table>

### Clusters

- **Kolkata Leather Cluster**
  - Through Indian Leather Products Association (ILPA) / Central Leather Research Institute
- **Rourkela Engineering Cluster**
  - Through Orissa State Industrial Corporation (OSIC)
- **Ludhiana Knitwear Cluster**
  - Through Knitwear Club / KAMAL / LAKMA
- **Pune Fruit and Vegetables Cluster**
  - Through Agriculture Produce Market Committee
- **Rajkot and Coimbatore Engineering Clusters**
- **Hyderabad Pharmaceutical Cluster**

### Pre-requirements

- Implementation agency should be an existing integral stakeholder in the raw material procurement process or an agency implementing a cluster-specific government scheme
- 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
- Strong inter-linkages and subcontracting of manufacturing activities exist
- Open account sales are preferred between larger buyers and smaller sellers
- 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
**Credit Gap Mapping in 10 MSME Clusters in India**

<table>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>Pre-approved Collateral-free Equipment Finance Scheme</strong></td>
<td>🔄 A bank / financial institution will enter into an MoU with a local industry association, which is truly representative of the cluster MSMEs</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>✓ 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>🔄 The local industry association will be responsible for processing of 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</td>
<td>Hyderabad Pharmaceutical cluster units - implementation of technology-intensive Good Manufacturing Practices (GMP)</td>
<td>🔄 Units should not be spread far and wide, as such an intervention may not be operationally feasible</td>
</tr>
<tr>
<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>🔄 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</td>
<td>Ahmadabad Dyes and Chemicals cluster - compliance with state pollution control norms, that involve acquisition of ETPs</td>
<td>🔄 Units should share information on products and processes among themselves</td>
</tr>
<tr>
<td><strong>Purchase Order Financing</strong></td>
<td>🔄 Buyer send PO to seller and furnishes comfort letter to bank detailing seller information and credibility</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>✓ Absence of appropriate collateral common reason for loan applications to be rejected. Many MSEs over leveraged and lack collateral for fresh loans</td>
<td>🔄 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</td>
<td>Hyderabad Pharmaceutical Cluster</td>
<td>🔄 Payment discipline on the part of large established buyers</td>
</tr>
<tr>
<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>🔄 Seller produces or assembles the goods and ships the products to the buyer</td>
<td>Kolkata Leather Cluster</td>
<td></td>
</tr>
<tr>
<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>🔄 Seller submits invoice directly to bank and buyer pays according to payment terms, usually directly to the bank</td>
<td></td>
<td></td>
</tr>
<tr>
<td>✓ POF allows the unit to take on multiple orders and deliver them successfully</td>
<td>🔄 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</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Credit Gap Mapping in 10 MSME Clusters in India

<table>
<thead>
<tr>
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</thead>
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<tr>
<td><strong>Working Capital Term Loan (WCTL)</strong>&lt;br&gt;✓ CCs &amp; ODs assist MSMEs through transitory (fluctuating) WC requirements. WCTLs cover core (permanent) part of WC&lt;br&gt;✓ MSMEs possess lower control over WC and lack expertise in managing loan funds intended for meeting WC requirements; hence WCTL as more appropriate</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&lt;br&gt;↓ Such shortages of credit in the Ludhiana cluster could be provided through a Working Capital Term Loan (WCTL) accounts&lt;br&gt;↓ 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>
<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&lt;br&gt;Expenses financed through WCTL should be permanent component of WC and not transitory</td>
</tr>
<tr>
<td><strong>Receivables-linked Bridge Financing Scheme</strong>&lt;br&gt;✓ Factor inhibiting Bills Discounting is lack of payment discipline amongst buyers. MSEs are often unable to procure future orders&lt;br&gt;✓ Bridge Financing enables temporary loan that maps sales receivables cycle to future order procurement to facilitate continuous operation of MSEs&lt;br&gt;✓ Can be used to maintain liquidity in the scenario of anticipated cash inflows</td>
<td>↓ MSEs deliver the previous order goods to customers&lt;br&gt;↓ Bills Receivables created on the executed order&lt;br&gt;↓ MSEs procures next order&lt;br&gt;↓ FIs finance to MSEs for new order based on Bills Receivables as collateral&lt;br&gt;↓ New order execution starts after bank finance&lt;br&gt;↓ At around the same time, bank may be repaid out a payment received by MSE from an earlier transaction</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>
</tr>
<tr>
<td><strong>Up-scaling of Micro Finance Programs</strong>&lt;br&gt;✓ Can prove potent for unorganized micro units that do not approach banks due to required documentation, site-audits and inspections etc.&lt;br&gt;✓ Many do not have any tangible assets which could act as collaterals nor any formal work order and hence banks refuse credit&lt;br&gt;✓ May encourage transition from informal to formal enterprise.</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”)&lt;br&gt;↓ MF can modify microfinance business models to incorporate SME operations by taking advantage of their market knowledge and network, and by adapting their microfinance methodologies&lt;br&gt;↓ 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>Unorganized micro enterprises in the Coimbatore, Rourkela and Kolkata clusters that carry out sub-contracted work for larger enterprises&lt;br&gt;Microfinance has made significant inroads into Tamil Nadu, Orissa and West Bengal.</td>
<td>Refinancing / on-lending and other support from DFI, etc crucial for helping MFIs adapt current practices to serve MSEs&lt;br&gt;Following to be addressed:&lt;br&gt;• Development of suitable loan products and attributes&lt;br&gt;• MFI collection cycle and recovery mechanism to adapt to MSEs Asset Conversion Cycle&lt;br&gt;• Capacity Building / Training for MFIs and Borrowers</td>
</tr>
</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
- 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