

## Credit Gap Mapping of Select Clusters

Hyderabad Pharmaceutical Cluster

Ahmedabad Dyes and Chemicals Cluster

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**New Delhi, March 2012**

### **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, Up-scaling of Microfinance to cater to Micro Enterprises, Purchase Order Financing, Receivables-linked Bridge Financing for Working Capital Needs, Quality Testing and Registration-linked Financing scheme, Lease Financing, Joint Liability Group (JLG) for MSE lending, etc. Some of these credit delivery models are tried and tested and display scalable potential with regard to their replication.

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

A handwritten signature in black ink, appearing to read 'S. Muhnot'.

[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

## Programme and Partners

### MSME Umbrella Programme

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

The **MSME Financing and Development component** is being jointly implemented by Deutsche Gesellschaft für Internationale 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

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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 Hyderabad Pharmaceuticals and Ahmedabad Dyes & Chemicals MSME clusters.*

## Executive Summary

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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.

Industry	Clusters
Engineering	Faridabad, Coimbatore, Rajkot and Rourkela
Leather	Kolkata and Chennai
Fruits & Vegetables Processing	Pune
Textile and Garments (Knitwear)	Ludhiana
Dyes and Chemicals	Ahmedabad
Pharmaceuticals	Hyderabad

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 MSE Advances, in order to ensure consistency.

### Sources of Credit Demand in the 10 MSME Clusters under Study

#### Nature of Raw Material Procurement and the Asset Conversion Cycle

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

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

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

Examples include the:

- Fruit and vegetable procurement at mandis / market yards in the Pune Food Processing cluster
- Knitting and garmenting units in Ludhiana, which are dependent on suppliers of yarn, chemical, accessories and packing materials, fabricating units and distribution networks

- Tanneries in Kolkata and Chennai Leather clusters that have to procure the raw hides and skins from traders / local suppliers who source the skins from across the country
- Procurement of commodities such as pig iron, coke, copper, aluminum, etc. by MSMEs at uncertain prices in engineering clusters from retailers, unlike larger firms who buy in bulk directly from raw material manufacturers at pre-determined prices

### **Subcontracting Arrangements**

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

- Micro and small units (many of which are foundries) in the Rajkot Engineering cluster produce sub-assemblies for more organized manufacturers of automobile parts, diesel engine, pump-sets and machine tools in the cluster. Usually, the manufacturers or middlemen purchase their goods directly from their doorsteps
- Large scale industries like Hero Motor Company, New Holland, JCB, Escorts etc. in the Faridabad Light Engineering cluster rely on MSMEs for contract manufacturing. Further, many medium and small auto-ancillary units in the cluster rely on micro-units for activities such as electro-plating
- Micro enterprises in the Coimbatore Engineering Cluster (mainly foundries), act as sub-contractors 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.

Exhibit 1: Credit Gap Estimates for 10 MSEs Clusters		
Cluster	MSE Credit Gap: Nayak Committee Method - In ₹ Crore	MSE Turnover (Year 2010-11) - In ₹ Crore
Pune	98	846
Coimbatore	1,231	4,739
Rajkot	1,248	9,157
Faridabad	1,989	10,240
Rourkela	42	316
Ahmedabad	441	2,730
Kolkata	121	2,876
Ludhiana	1,235	11,905
Chennai	275	3,060
Hyderabad	105	1,378

Source : D&B India Estimates

## Recommended Products and Delivery Mechanisms

### Financing of Raw Material Procurement

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

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

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

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

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 upto ₹ 50 lakh is sanctioned to enterprises, which can avail this facility any time during the year, either in full or in parts, for purchasing equipment. Disbursals are typically made within three days on a pre-approved loan. The association is responsible for processing of application, doing appraisals, recommending limits as per prescribed norms and providing it to SIDBI, as well as verifying the pro-forma invoice, ensuring margin payment, asset value, etc.

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

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

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

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

A number of unorganized micro enterprises in the Coimbatore, Rourkela and Kolkata clusters that carry out sub-contracted work for larger enterprises face a high degree of financial exclusion. Most of these units do not even approach the banks for their requirements with the apprehension of

excessive documentation, site-audits and inspections etc. Many do not have any tangible assets, which could act as collaterals nor any formal work order. Hence banks refuse credit to the cluster.

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

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

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

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

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

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

needed both for MFIs and borrowing micro units on the business cycle, lending model, and practices adopted to ensure smooth implementation.

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

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

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

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

- A. Assistance to design and develop a special credit scheme with the following features:
  1. Loan ticket size in the range of ₹ 50,000/- to ₹ 2,00,000/-;
  2. Loan to be available for investment in machinery or for work capital needs;
  3. Repayment period up-to 2 years;
  4. Repayment in fortnightly/monthly installments instead of daily installments depending on cash flow of the borrower;
  5. No collateral security;
- B. Assistance in HR development for appraising and risk assessment of credit to MEs
- C. Interactive sessions were held with apparel supply chain MEs to understand their needs followed by sensitization workshops to motivate them to borrow from SCNL. They were given an

orientation course in accounting, finance, quality improvement and marketing after working hours.

The results of pilot intervention (started in late 2008) are as under:

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

### **Purchase Order Financing**

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

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

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

POF is indeed an effective product for easing working capital shortages where strong linkages exist between large and established buyers and a host of small and medium enterprises that carry out sub-contracted 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 be 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 TIIIC 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

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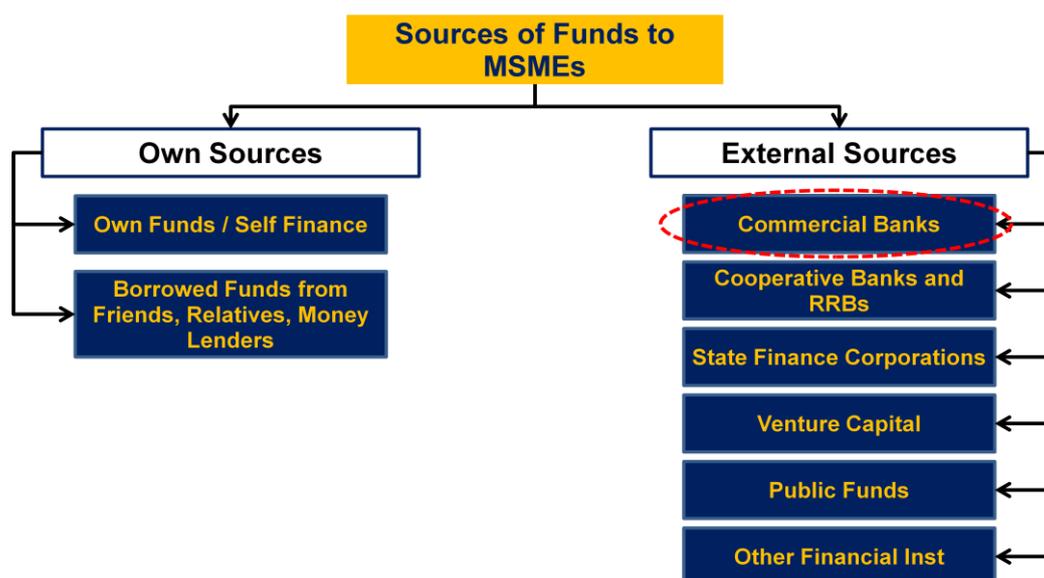
### Overview of Credit Flow to the MSME Sector

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.

Exhibit 2: Source of Funds



Source: Report on Trend and Progress of Banking in India 2008-09 and Ministry of MSMEs, Annual Report 2009-10

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.

Exhibit 3: Summary of Committee Recommendations

Committee Name	Key Recommendations	Relevance to the current assignment
Nayak Committee Report (1991)	<ul style="list-style-type: none"> <li>Estimated the working capital need for the enterprise as 25% of the forecasted sales</li> <li>Endorsed the Tandon committee views that 80% of the working capital need be funded by banks i.e. 20% of the</li> </ul>	<ul style="list-style-type: none"> <li>Method of estimation of working capital finance</li> <li>Insights for estimation of term credit</li> </ul>

Exhibit 3: Summary of Committee Recommendations		
Committee Name	Key Recommendations	Relevance to the current assignment
	forecasted sales	
Abid Committee Report on Small Enterprises (1997)	<ul style="list-style-type: none"> <li>Setting up of a ₹ 2500 crore fund to help enterprises that are negatively affected by the recommended abolition of reservations for small scale industry</li> <li>Setting up specialized branches catering to needs of small scale industry</li> </ul>	<ul style="list-style-type: none"> <li>Insights on channels and medium of credit delivery</li> </ul>
Kapur Committee Report on Credit (1998)	<ul style="list-style-type: none"> <li>Recommended training for branch managers for appraising small projects</li> <li>Increasing the limit for composite loan to ₹ 5 lakh (currently limit is ₹ 1 crore).</li> <li>Opening more specialized branches for MSME sector</li> <li>Urging banks to pay more attention to backward states</li> </ul>	<ul style="list-style-type: none"> <li>Credit Delivery Mechanisms</li> </ul>
Gupta Committee Interim Report on Development of Small Enterprises(1999)	<ul style="list-style-type: none"> <li>Recommended that MSME sector be given the same importance as agriculture sector under priority sector lending</li> <li>Urged banks to directly lend to the MSE sector instead of adopting soft approaches like subscription to bonds of SFCs, NABARD, etc.</li> </ul>	<ul style="list-style-type: none"> <li>Priority Sector Lending and Delivery Mechanisms</li> <li>Emphasis on direct Lending</li> </ul>
Chakraborty Committee Report on Rehabilitation of Sick MSMEs (2008)	<ul style="list-style-type: none"> <li>Recommended to simplify procedures in preparing techno-economic feasibility</li> <li>Suggested setting up single point credit processing cells</li> <li>Stressed the need for simplification of financial reporting requirements</li> <li>Legislation to encourage factoring, refinance at concessional rates</li> </ul>	<ul style="list-style-type: none"> <li>Effective credit delivery</li> <li>Timely disbursements and process simplifications</li> </ul>

Exhibit 3: Summary of Committee Recommendations		
Committee Name	Key Recommendations	Relevance to the current assignment
	<ul style="list-style-type: none"> <li>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</li> </ul>	
Prime Minister Task Force's Sub-Group on Credit to MSMEs	<ul style="list-style-type: none"> <li>Urged SEBI to expedite the process of setting up an MSME exchange</li> <li>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</li> <li>Suggested changes in bank lending norms for innovation start-up firms</li> <li>Recommended increasing mandatory coverage under CGTMSE from ₹ 5 lakh to ₹ 10 lakh for MSMEs</li> </ul>	<ul style="list-style-type: none"> <li>Insights on methodology for estimation of credit gap</li> <li>Effective credit delivery mechanisms</li> </ul>

### 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

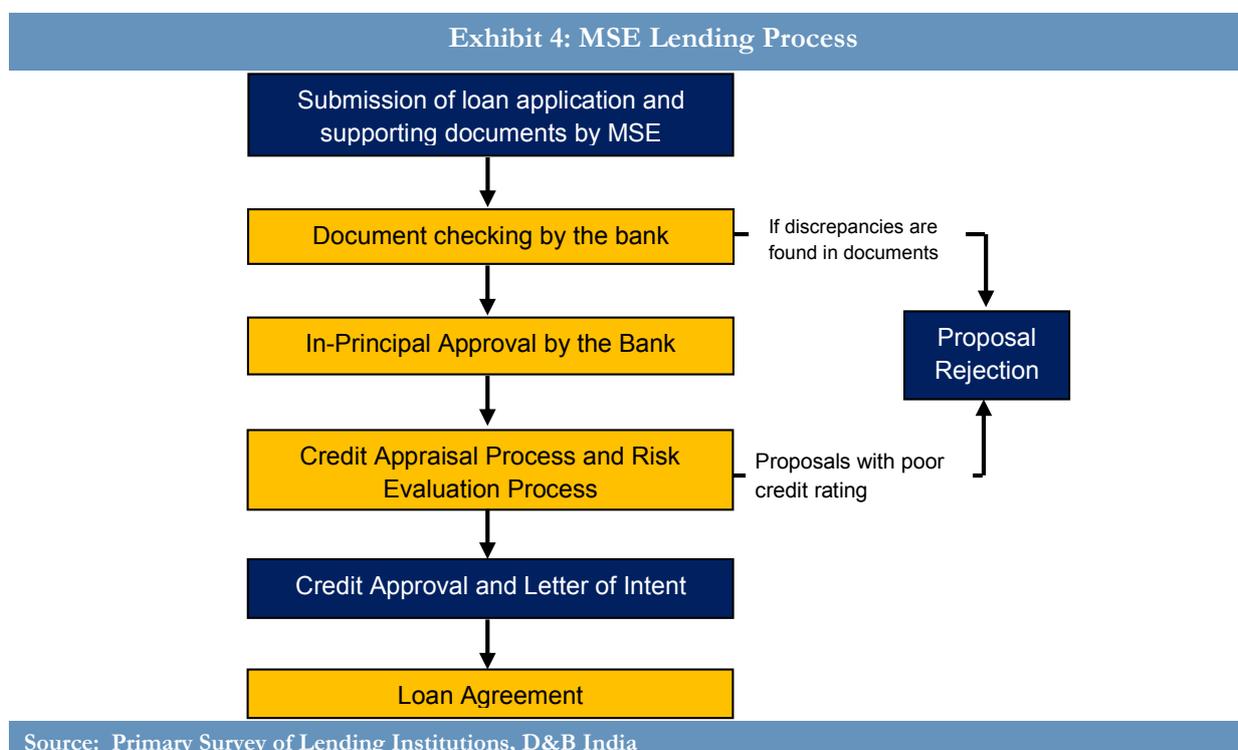
As we set out to identify the Credit Gap in the identified clusters, it is imperative to understand where Micro and Small enterprises stand vis-à-vis Medium enterprises, when it comes to financial inclusion. This understanding will also help us in defining the credit gap.

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.

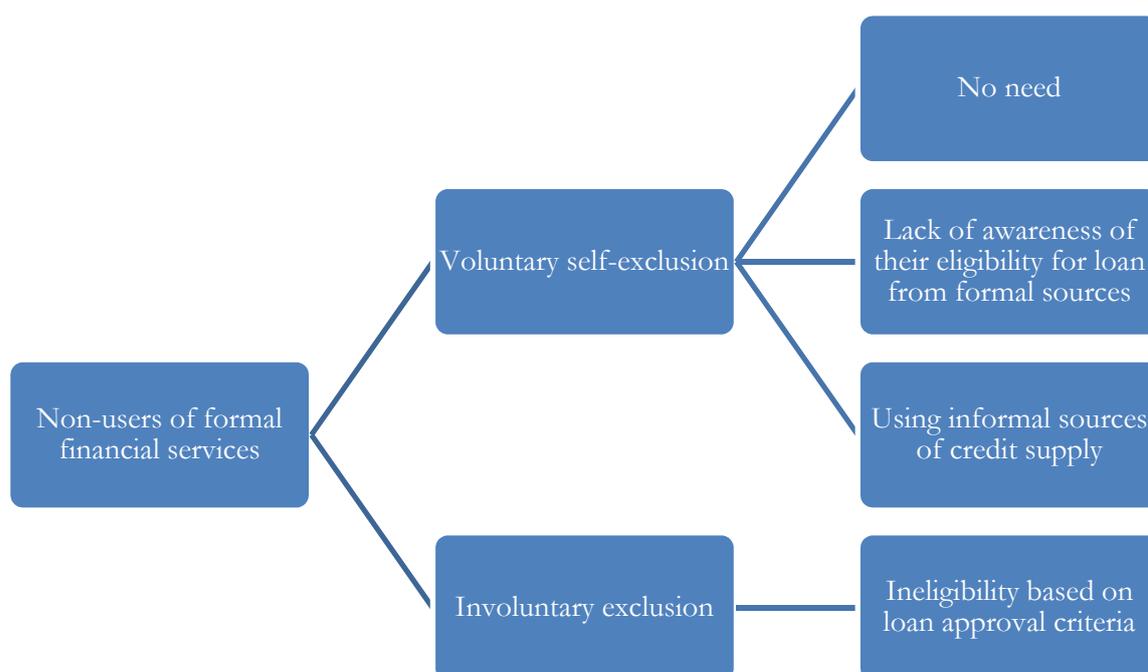


The table below provides a comparison of characteristics of MSE vs. Medium enterprises in terms of certain parameters that determine their likelihood of being financially excluded.

	Criteria	MSEs	Medium-size Enterprise
<b>1</b>	Bank's Requirement for Loan Approval		
1.a	Collateral Presence	Absent-Low	Available/Acceptable
1.b	Guarantee	Not Always Available	Available
1.c	Fixed Asset	Not Always Available	Available
1.d	Credit Rating	Not Always Available	Available
1.e	Cash Conversion Cycle	Not Favorable	Favorable
1.f	Stability of cash flows	Low-Mid-High	High
1.g	Business/Project Plan	Not Always Available	Available
1.h	Accounting Information	Not Always Available	Available
1.i	Previous Relationship with the Bank	None-Low	Yes
<b>2</b>	Other Factors		
2.a	Banking System Awareness	None-Low	High
2.b	Borrowing from-Non Institutional Sources	Low-High	Low
2.c	New/Upcoming Technology know-how	None-Low	High

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.

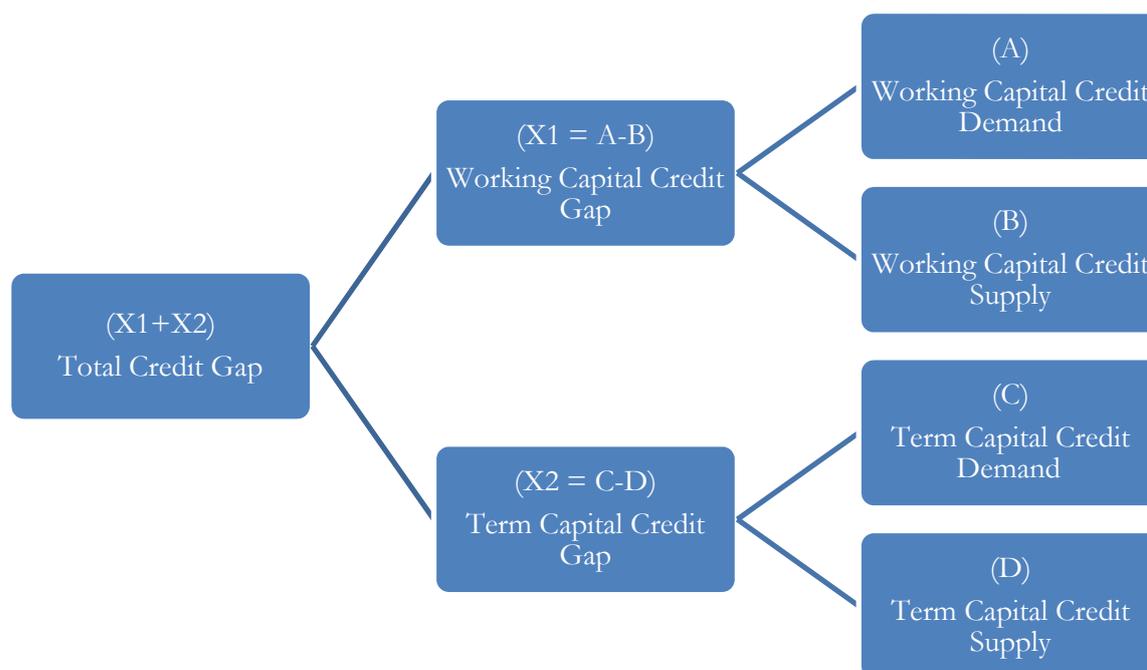
Below is the list of selected clusters for the current study.

Selected Clusters			
Cluster	District	Industry	Lead Bank
Faridabad	Faridabad	Engineering	Syndicate Bank
Coimbatore	Coimbatore	Engineering	Canara Bank
Rajkot	Rajkot	Engineering	State Bank of India
Rourkela	Sundargarh	Engineering	State Bank of India
Ahmedabad	Ahmedabad	Dyes & Chemicals	Dena Bank
Hyderabad	Hyderabad	Pharmaceuticals	State Bank of India
Ludhiana	Ludhiana	Knitwear	Punjab & Sind Bank
Chennai	Chennai	Leather	State Bank of India
Kolkata	Kolkata	Leather	United Bank of India
Pune	Pune	F&V Processing	Bank of Maharashtra

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

- ✓ 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 up-gradation, 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 <sup>1</sup>National Commission for Enterprises in the Unorganized Sector (NCEUS) under the chairmanship of Dr. Arjun K Sengupta. The Government of India had setup the commission to recommend measures for bringing about improvements in the non-farm unorganized sector. The commission defined the non-farm unorganized units as, “all unincorporated private enterprises owned by individual or households engaged in the sale and production of goods and services operated on a proprietary or partnership basis and with less than ten total workers.”

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

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<sup>1</sup> 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<sup>2</sup>. 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<sup>3</sup>
2. The above values (*calculated in 1.*) were then projected to 2011-12 level using average growth in Index of Industrial Production (IIP)<sup>4</sup> for the corresponding industry

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<sup>2</sup> Credit Demand includes both working capital and term capital demand

<sup>3</sup> 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

<sup>4</sup> Latest National IIP figures – Statement II in “MOSPI Press Release on IIP Estimates”, Aug, 2011

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 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<sup>5</sup> 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<sup>th</sup> 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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<sup>55</sup> 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 <sup>6</sup>
2. Obtain state industry turnover (*ASI*)<sup>7</sup> 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<sup>8</sup>
  - b. Using National IIP growth rates<sup>9</sup>, 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)”<sup>10</sup>. Term loan advance proportion to total advance (obtained above) is termed as **P2**
  - 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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<sup>6</sup>Table 4.9- Annual-Basic Statistical Returns of Scheduled Commercial Banks, Mar '2010

<sup>7</sup> Table 3 – Annual Survey of Industries (ASI), Government of India, MOSPI

<sup>8</sup> Statement 9: RBI Quarterly-Basic Statistical Returns of SCB, Mar '2011

<sup>9</sup>Latest National IIP figures – Statement II in “MOSPI Press Release on IIP Estimates”, Aug 2011

<sup>10</sup>Table 6.1, Statistical Tables Relating to Banks in India, 2009-10ss

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.

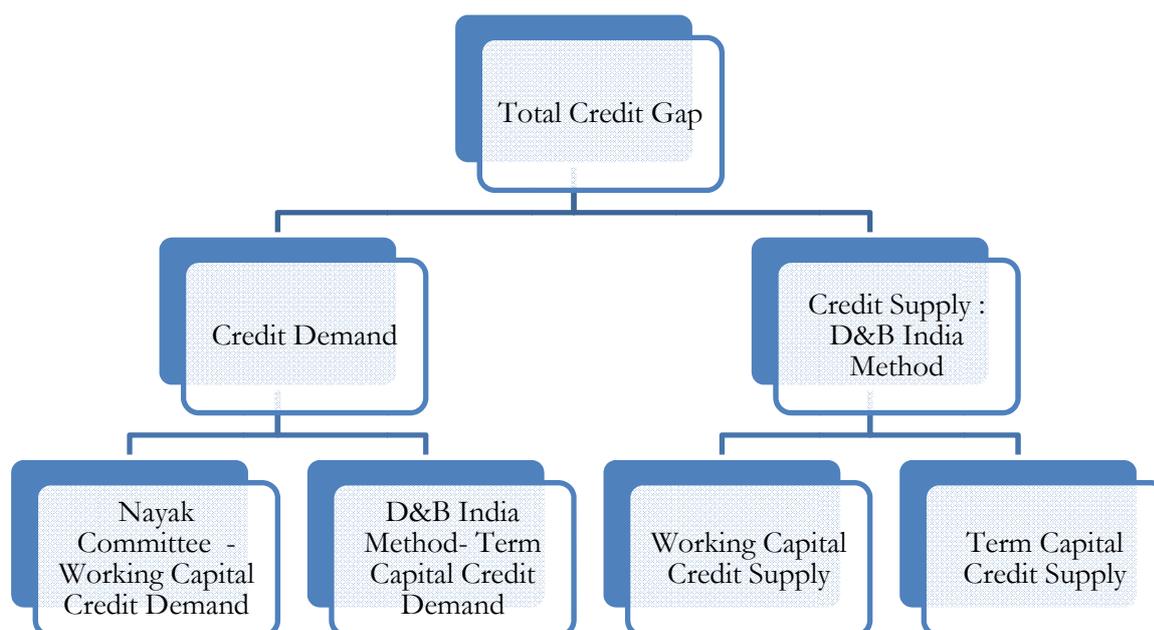
The Lead Bank supply data included data from Scheduled Commercial Banks (SCBs), State Finance Corporation (SFC), SIDBI, and Co-operative Banks. However data of SFC, SIDBI, and Co-operative Banks was available for only few districts as provided by lead bank. Further, there were qualitative discussions 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.

## Ahmedabad Dyes & Chemicals Cluster

## Overview

Ahmedabad is the commercial capital of Gujarat and is the hub of major business/ manufacturing activities in the state. Ahmedabad based Dyes & Chemicals cluster started with servicing the needs of the textile industry but in recent times its products are being utilized in other industries such as leather, foodstuffs etc.

The Ahmedabad Dyes & Chemicals cluster has 1200 units and provides employment to nearly 40,000 people. The key reasons that can be attributed to the growth of this cluster in the state are strong base of petrochemical industry, increasing availability of feed stock, relatively low overhead cost and availability of necessary infrastructure.

The following presents the overview of the Ahmedabad Dyes & Chemicals cluster-

Exhibit 6: Ahmedabad Cluster Information		
Particular	No. of Units	Employment (nos.)
Micro Units	803	13,000
Small Units	375	20,000
Medium Units	22	5,000

Source: Diagnostic Study Report on Ahmedabad Cluster, June 2009, prepared by Entrepreneurship Development Institute of India (EDI)

The turnover generated by the MSE units in the cluster, based on D&B India survey estimates, amounts to ₹ 2,730 crore.

Units from Ahmedabad dyes and chemicals cluster produce organic as well as inorganic chemicals. Organic chemicals produced by these units have application in manufacturing of various products like Dyestuff Intermediates, Solvents, Paints, textile products etc. Inorganic chemicals produced by these units have application in manufacturing of dyestuffs, bullion, paints, and paper etc.

The per capita consumption of dyes in India is comparatively less as compared to global consumption. Hence most of units in cluster are export oriented units. Some of the major markets for chemicals are North America, Western Europe, Japan and emerging economies in Asia and Latin America.

One of the major problems plaguing this cluster is that of pollution control, which has created the issue of survival for the cluster. The units from the cluster are not able to curb the level of pollutants released by them and hence they are facing stringent actions from the pollution control board.

Recently some members of Dyes & Chemicals cluster in Ahmedabad have decided to form a consortium, Ahmedabad DyeChem Manufacturers Cluster Limited to buy raw material and allied

purchases and also to market the final products jointly. Some of the major activities to be focused upon will be as follows-

- Purchase of raw materials and chemicals jointly
- Purchase of shop floor consumables
- Joint efforts to negotiate acquiring new technologies
- Establishing a ware house for goods other than under the SPV
- Undertake study and business tours
- Marketing effort for unexplored areas
- Undertake the product research
- Take up social activities, etc.

The cluster faces credit related problems due to environmental problems posed by the cluster. The units in the cluster have restricted access to finance because they come under the restrictive list of industries and many units from the cluster are not complaint with the pollution control norms set down by GPCB. Hence, these units are forcefully closed down by GPCB. As banks are wary of financing such units which are facing closure, they have put entire dyestuff industry under restrictive list.

These units are not able to comply with GPCB because they are overproducing chemicals than the consents given to them. These consents were given to them initially when they were established. Over a period of time the units increased their production capacities but their consents were not revised accordingly. Ahmedabad city falls under the list of most polluted cities in the country and because of which the pollution control norms are becoming more stringent day by day and due to this many units are facing closures. To avoid closure many units are under-producing than their optimum capacity, due to which their production costs are increasing and their profit margins are dwindling. This results in deterioration of their financial health and banks are not easily ready to finance such units.

The Dyes and Chemical cluster in Ahmedabad has installed capacity to produce about 12% of the world's requirement for dyes but it is currently producing only 7% of world's requirement. As the units are not receiving finance from the banks they are not able to invest more in their primary effluent treatment plants and hence they are not able to curb down the level of pollutants released by them. Because of this the unit requires new consent for undertaking more production and it results into a cyclical phenomenon.

The SIDBI-implemented MSME-FDP has met with some success in helping the cluster enterprises survive and grow, by facilitating adoption of effluent treatment and cleaner production methods.

### Sources of Demand for Credit

#### Material Linkages

The cluster requires large quantities of raw material inputs from the petrochemicals industry where material payments have to be made within the defined credit period. This is because the larger petrochemical manufacturers do not have flexibility in repayment processes. Secondly, the extent of rivalry and competition does not leave any room for any inter-linkages between the cluster enterprises. This reduces the financial interdependency amongst the cluster enterprises. Absence of sub-contracting also leads to increased efforts and costs for marketing and selling the end product.

Further, 70% of the output of the dyes industry is consumed by the textiles industry. Since the textiles sector is seasonal, the dye making units have to carry adequate inventories for sudden demand fluctuations in the textiles sector. Thus, absence of sub-contracting and excessive dependence on a seasonal sector for finished goods off take increases the demand for working capital.

#### Pollution Control Norms

The Gujarat Pollution Control Board (GPCB) has stipulated all enterprises in pollutant producing industries to set up effluent treatment facilities or use the services of the facilities center which increases the necessity of holding cash or increasing operating expenses. Further, the ETP is not covered under the Credit Linked Capital Subsidy Scheme (CLCSS) of Government of India, as well. Even if some components are covered, the maximum limit under the CLCSS is up to ₹ 1 crore which is sometimes not enough.

#### Obsolescence of Technology

Most of the units are older and traditional firms and hence, technology up-gradation is the primary reason for term loans in the cluster. Further, the micro and small enterprises are facing shortfall in working capital loans for improving and adopting clean manufacturing techniques.

#### Safety and Hazard Protection

The environment safety and hazard protection norms stipulate adequate hazard control tools and equipments such as safety helmets, jackets, specific areas for storage, special tanks etc. Most of the micro enterprises face problems in stocking these (non-value adding) items and hence, stand the risk of losing licenses at renewals. As a consequence, the banks refrain from providing finance to these units, unless the safety certification is also attached.

## Supply of Credit to MSEs

### Estimate of Outstanding Credit to MSEs in the Dyes & Chemicals Cluster

The credit supply to the Ahmedabad D&C cluster is estimated to be ₹ 168 crore out of which ₹ 17 crore (10%) is term credit and ₹ 151 crore (90%) is working capital supply.

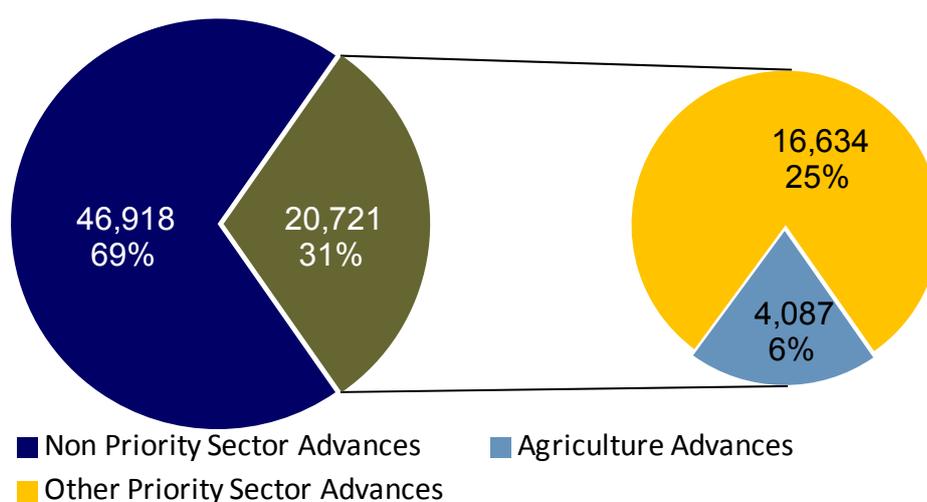
Enterprise turnover is one of the important criteria for loan appraisal process and it can be safely assumed that credit supply to the cluster is correlated to the turnover generated. Thus, D&B India proposes to use the “Cluster Turnover proportion to Industry State Turnover” method to arrive at cluster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

The RBI Lead Bank Scheme is implemented by Dena Bank as the lead bank in the cluster. According to the RBI Banking Statistical Returns, the outstanding credit for Ahmedabad district stood at an aggregate of about ₹ 62,830 Crore (as of March 31, 2010)<sup>11</sup>. Information obtained from the lead bank suggests that the outstanding credit to the priority sector could stand at ₹ 20,720 Crore (31% of the total credit). The following exhibit depicts the banking flow of credit in the Ahmedabad District. Priority Sector Advances in the Ahmedabad District is lower than the prescribed lending norm of 40% (of total advance).

**Exhibit 7: Lending Activities of All Scheduled Commercial Banks in Ahmedabad District**



Amount in ₹ crore

Source: Data from Ahmedabad Distt. Lead Bank – Dena Bank as of Mar 30, 2011

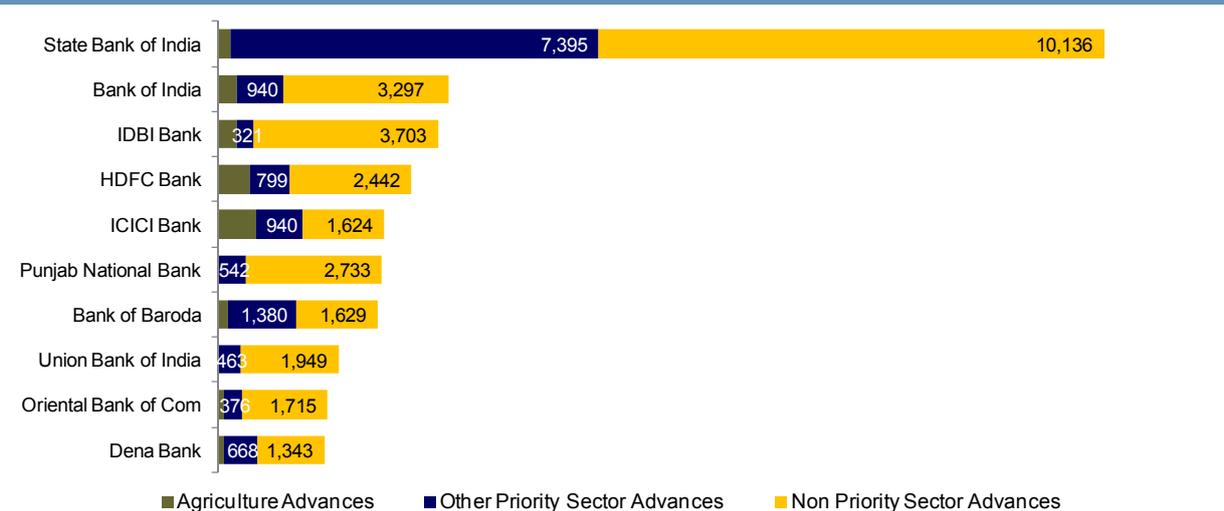
<sup>11</sup> Table 5.9, District Wise Classification of Outstanding Credit of SCBs, Basic Statistical Returns of SCBs in India, Vol 39 – Mar, 2010

### Performance of Banks

The public sector banks take the lead here contributing close to 75% of the total credit and 76% of the priority sector credit. In contrast, private sector banks merely contribute to 23% of the total credit, and 22% of the priority sector credit. The rest of the credit is advanced by few cooperative banks that operate in the district.

The following is the composition of Agriculture, Other Priority Sector and Non-Priority Sector credit in Ahmedabad as of Mar 31, 2011, for the top ten banks. The top 10 banks contribute to 70% of the outstanding credit in the Ahmedabad district. SBI is the largest lender in the Ahmedabad district contributing nearly a quarter of total advances and 14% of the total priority sector lending in Ahmedabad district. ICICI Bank leads among the Private Sector Banks with the largest priority sector lending portfolio.

**Exhibit 8: Lending of Major Banks across various categories in Ahmedabad District**

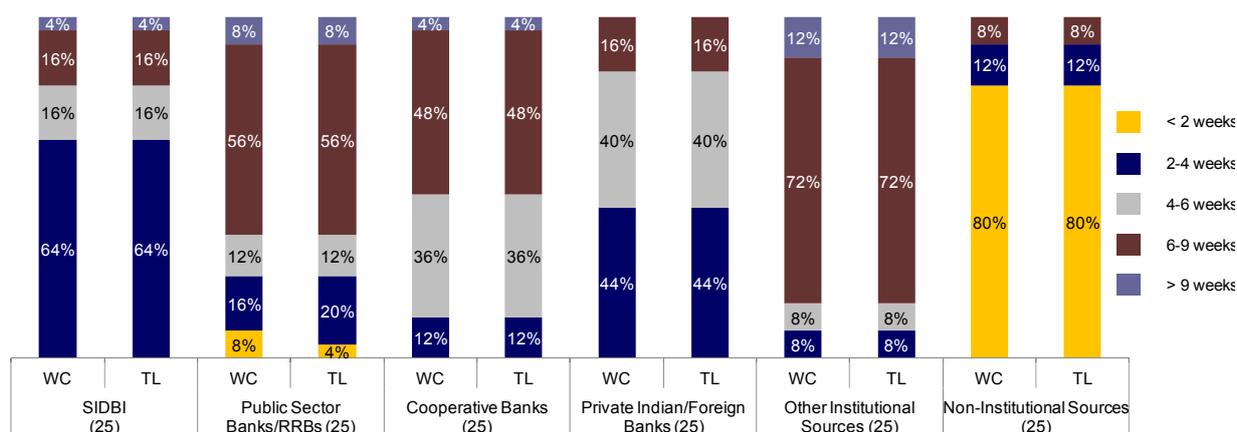


Notes: Amount in ₹ Crore  
 Source: Data Obtained from Dena Bank as of Mar 31, 2011

Opinion of 25 SIDBI customers were taken on the overall perception of SIDBI, as well as on attributes such as time taken for loan disbursement and collateral requirement. While the respondents believed that SIDBI would largely take 2-4 weeks to process and disburse loans, Public Sector banks, Regional Rural Banks and Cooperative banks would take more than 4 weeks. Non-institutional sources are perceived to take the least time for loan processing and disbursement.

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

Exhibit 9: Perception of Time Taken for Loan Processing and Disbursement

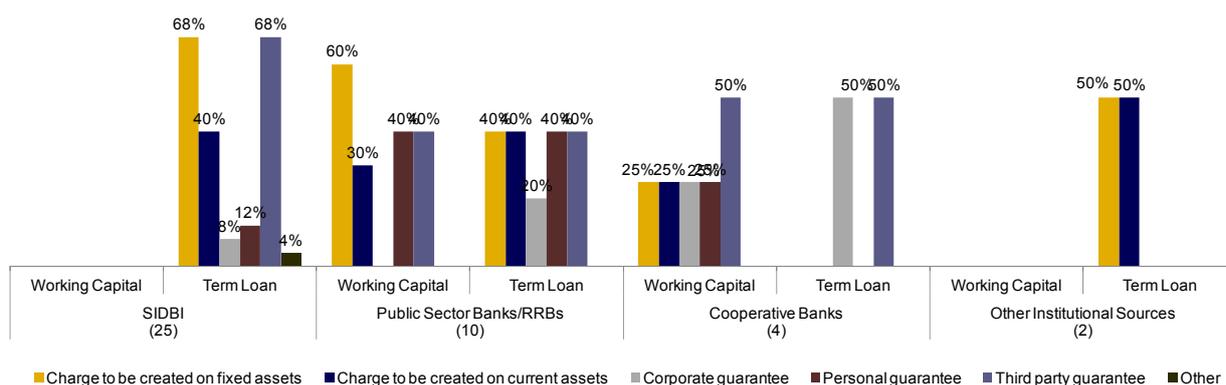


Source: D&B India

Note: Figures in brackets show total number of respondents for each financial source

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

Exhibit 10: Nature of Collateral Requirements



Source: D&B India

Note: Figures in brackets show total number of respondents for each financial source

SIDBI and Public Sector Banks ask for charge on current assets in addition to the charge on fixed assets, according to the findings. A high proportion of SIDBI customers reported being asked for Third Party Guarantees, but no personal guarantees, which was required by Public Sector banks.

It has been observed that most of the financial institutions are not lending to units in the Ahmedabad Dyes & Chemicals cluster because the units in the cluster are hazardous. Among the various institutions, other institutional sources demand the highest value of collateral and across all major types such as charge on fixed and current assets, and corporate guarantee, while SIDBI asks for least collateral, usually charge on fixed assets and personal guarantee. According to the findings, the Public Sector Banks ask solely for charge on fixed assets.

## Demand for Credit by MSEs

### Estimate of Credit Demand by MSEs in the Dyes & Chemicals 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 1,178
- ❖ The turnover for the Ahmedabad Dyes & Chemicals MSE cluster is pegged at ₹ 2,730 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 2.0% (IIP estimate) to ₹ 2,785 crore in the year 2011-12
- ❖ Working Capital Requirement (Basis-Nayak Committee Guidelines) is estimated to be ₹ 557 crore
- ❖ Term Credit Requirement (Basis-Growth in Fixed Capital) is estimated to be ₹ 51 crore
- ❖ Total Credit Demand is thus obtained from above [(557) + (51)] and is ₹ 608 crore

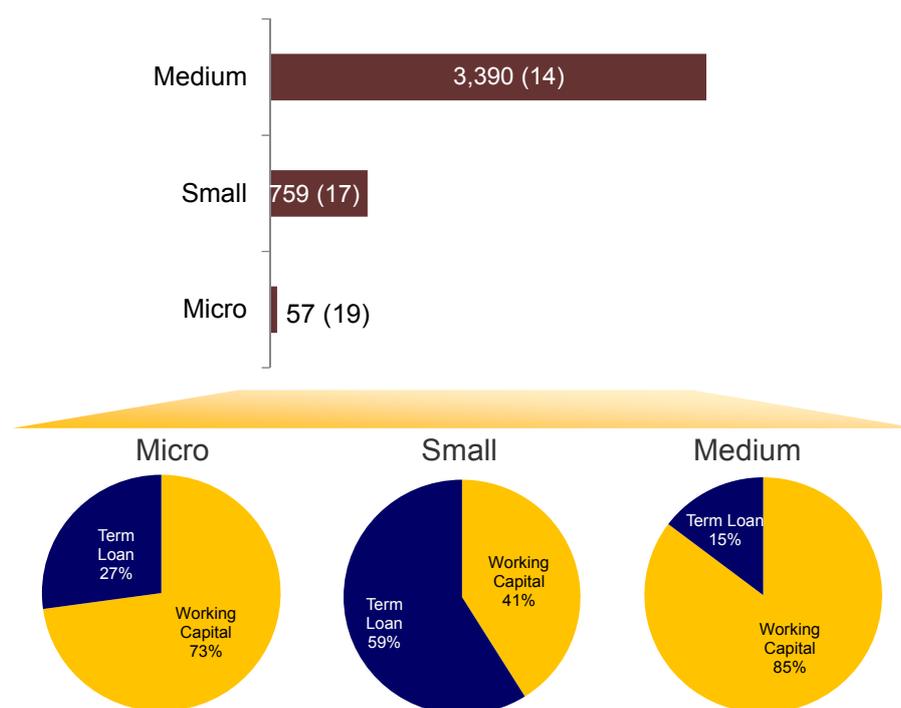
Most banks including the lead bank have indicated that for appraisals of working capital loan requirements, Nayak Committee Recommendations are being followed. The equity margin expected from promoters as per the recommendations is 20% of the working capital loan. It was observed from the survey that across categories of Micro, Small and Medium Enterprises, this ratio though has varied, the average margin requirement is much higher than the prescribed Nayak Committee Norm of 20% at around 34% of the working capital gap. The average among the micro, small and medium enterprises is 45%, 28% and 32% respectively.

A major reason for this behavior by banks is the nature of financing itself. Since most of the borrowers can afford to provide higher margin money due to their affluent backgrounds, the margin contributions indicated by most of the respondents are voluntary and not mandated by the banks.

However, for micro enterprises, the demand for higher margin contribution is from the bankers' side. This is because the nature of the industry is risky and since certain sub-sectors are under the restricted industries list, banks prefer asking for higher equity margins. Also, the bank lending is more focused on the relatively risk-free engineering sector where hazards, pollution control regulations, seasonality in demand etc. are relatively lower as compared to the dyes and chemicals industry.

The following exhibits show the composition of credit among the 50 respondents interviewed in the survey. Looking at the exhibit below, it can be assuaged that the major requirement in the cluster is for working capital loans, in micro and medium categories, and term loans, in small category.

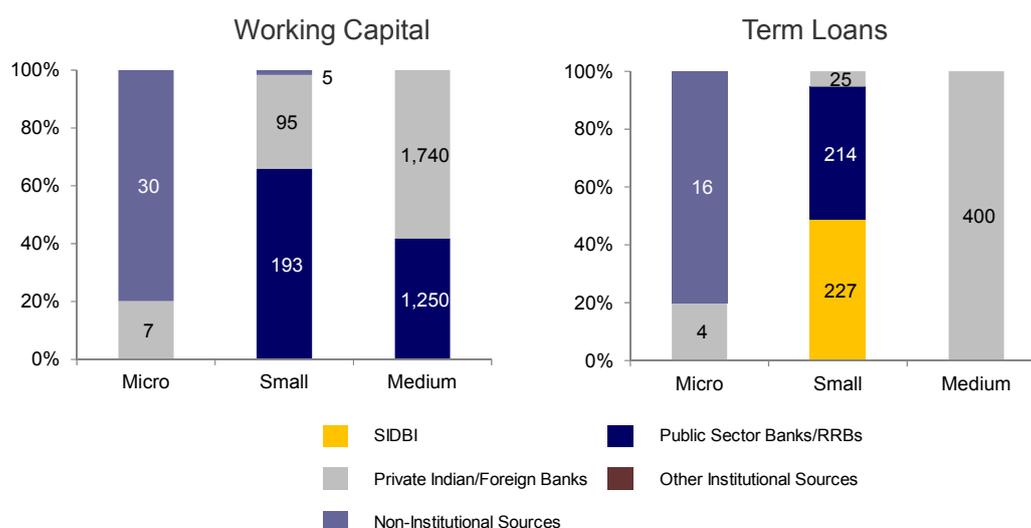
**Exhibit 11: Break-up of Credit**



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

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. Private and Foreign Banks, and non-institutional sources are major sources of working capital as well as Term Loans for Micro enterprises. Public Sector Banks Private and Foreign Banks are the major sources of Working Capital for small and medium enterprises.

Exhibit 12: Sources of Finance (Amount in ₹ Lakh)



Source: D&amp;B India

In summary, the total working capital credit across the surveyed 50 enterprises is around ₹ 32 crore while the term credit is around ₹ 9 crore. Thus, there is a higher credit requirement for working capital needs. The following can be summarized as major reasons for the same:

- The nature of the end-industry (textiles) is seasonal and hence, enterprises have to lock-in higher volumes of inventories
- There are no instances of sub-contracting. In fact, the competitive rivalry in micro enterprises is even higher since the nature of products is similar and patenting is expensive
- Though product conversion cycles are lower, inventory holding for raw materials and finished goods are higher, increasing the demand for working capital credit
- Increasing pollution control norms requiring constant improvements in processes and technology, adoption of better manufacturing practices etc.

From the various methods employed and explained before, the demand and supply side estimations of the cluster have been provided in the next section

#### A Note on BDS Programmes under MSME-FDP in Ahmedabad Dyes & Chemicals Cluster

In the first year, the MSME-FDP BDS project addressed the pollution control issue in a practical way by showing the cluster a cost effective design to achieve the norms of PTP (Pre Treatment Plant). It demonstrated the effectiveness of the PTP design by building them in 5 units. The results of this first thrust area were disseminated to the entire cluster through a formal workshop cum interactive session. The results achieved in the demonstrated units automatically led to 30 more units adopting similar design without project support. The most beneficial qualitative impact has been that units who have gone in for PTP have been ensured of their very SURVIVAL. GPCB has been

closing down units which fail to meet with the CETP norms. The beneficiary units (under this intervention) have come out of this risk of closure through proper adherence to the norms.

After giving the above survival kit to the cluster, the project went one step ahead of merely controlling the effluents by offering method. They came up with an initiative for CP (Cleaner Production) to reduce the generation of effluent itself. This was taken up in the second year. The project had introduced the concept of Cleaner production in dyes industry and demonstrated the concept by implementing cleaner production in 15 units. This second thrust area of the project – namely the CP initiative- apart from reducing the generation of effluents also helped the units to optimize their production and operational efficiency. 15 units achieved a cost reduction of 5-7 % on an average. Based on the impact demonstrated in the selected 15 units, 20 more units are in the process of adopting CP, without project support. CP is a firm step towards greener production.

The dyes and chemicals industry depends on a volume based business. The buyers want to buy large volume through single source to get the maximum price advantage and to be free from the hassle of dealing with many small suppliers. The third thrust area of the project was to facilitate the creation of a common front of the units in the form of a SPV (ADMAC). The SPV route would give volume advantage to both the buyer and the units in the cluster. It would result in a win-win situation for the industry. The annual benefit to each member unit is 168 lakh PA per unit. It is likely to go up to by additional 15% in the coming year. Considering a conservative estimate of 10% increase in volume the overall benefit would be ₹ 240 lakh/per annum /per unit.

The fourth thrust area has been in supporting the formation of Society for Clean Earth - Erection and installation of common evaporating unit for hazardous waste and effluent. The project has been conceived and given a form by GITCO with the financial support given by SIDBI-PMD Project (implemented by EDI). The project envisages setting up facilities for evaporating hazardous effluent by way of using Multi Effective Evaporation followed by spray dryer & other scientific techniques. By using evaporation of effluent the project would achieve Zero Discharge which is eco-friendly.

The project found that while Ahmedabad had all the BDS and BDSPs in this field, they were not accessible to the small unit in this sector. The Project introduced 24 BDSPs to the small units cluster. The project introduced 2 new BDS areas in the cluster. The project supported the cluster with 53 Voucher cost facilities, spread across four thrust areas.

There are an estimated 1200 units in the Ahmedabad cluster. The project could spread its message and goal to 440 units through their various activities (this considers units which attended on one or more events/activities). A conservative outreach of the message of the Project is estimated to be 33%. However there are 120 direct beneficiaries through voucher cost support. This amounts 10% of the total units in the cluster.

The two associations mentioned above are tailored to meet with the requirements of small units in the cluster. They would carry on the agenda taken up by the project in getting higher outreach. It is ensured that these two SPVs are sustainable as they have definite income out of the proposed activities.

### 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.

Method	Total Gap	Credit Supply	Total Credit Demand	Working Capital Demand	Term Capital Demand
Nayak Committee-D&B India Method (In ₹ crore)	440	168	608	557	51

### Summary of Credit Gap Assessment

For the Ahmedabad Dyes & Chemicals cluster it is the working capital need which is significantly influencing the total credit need gap, this in spite of Ahmedabad having ample banking coverage. D&B India has, through its primary & secondary research, identified possible reasons for mismatch in the credit demand and supply why the credit demand is not being met. A summary of the findings are mentioned below-

The micro enterprises require larger working capital loans mainly because of the following factors,

- The pollution control board norms are stricter with respect to effluent handling systems. Since micro enterprises cannot afford to have an in-house Effluent Treatment Plant (ETP), they have to outsource this to the common facilities center and hence, there is a higher cost attached in doing so. This is also important from compliance point of view
- The micro enterprises are relatively older in the cluster and hence, their sanctioned production limits are much lower and have not been revised in recent times. Thus, as per these limits, the micro units are over-capacity units and hence obtaining bank finance for such units becomes difficult
- Many units in the cluster do not have requisite permission to release pollutants as per their production capacity. These units illegally undertake production but do not report these sales figures on their financial statements. As a result of this, the sales figures as well as profits shown

in the financial statements are much lower than actual figures and due to this banks are not able to provide finance to such units

- External rating system is an important source for increasing credit worthiness of the enterprises where most of the sector is regulated and restricted. However, micro enterprises cannot afford such services and at times, they are even unaware of such rating agencies
- Non-flexibility in deployment of labor discourages modernization and investment in technological changes and eventually leads to industrial sickness, thus adversely affecting workers as well. Hence, the cost of labor increases considerably in turn increasing their operating expenses

The small and medium enterprises intend to avail working capital and term loans mainly for setting up the ETP which is mandated by the Gujarat Pollution Control Board (GPCB). Other than these, the following issues are observed in the cluster-

- While land is accepted as collateral for the loan, the book value of land is considered and hence, the valuation turns out to be meager which in turn impacts the capital adequacy of the credit provided adversely
- Along with ETP, most of the units intend to adopt cleaner and greener technologies, however these loans are not readily available in the cluster
- Finally, for those units that have availed term credit, their monthly payments are considered as current liabilities and hence, the net working capital limit gets impacted, thereby reducing the working capital advances

Additionally, quality of credit received by various enterprises can be judged from three factors viz., time taken for loan processing, loan interest rate, and adequacy of credit. Only in case of lending by Public Sector Banks/Regional Rural Banks is faster with processing time less than 4 weeks. Rests of the banks or financial institutions have higher processing time.

### Recommended Products and Delivery Channels

Ahmedabad Dyes & Chemicals (D&C) cluster is one of the major production hubs of dyes and chemicals in the country. The emergence of such a large number of MSME units is due to ever growing number of textile manufacturing and processing units. Other key reasons could be attributed to strong base of petrochemical industry, increasing availability of feed stock, relatively low overhead costs and availability of necessary infrastructure.

### Requirement of Capital

Based on the discussions with multiple enterprises and with officials from Banks / SIDBI, D&B India has identified that the specific reasons for requirement of capital are-

- Raw Material Procurement
- Technological Up-gradation
- Installation of Effluent Treatment Plants

The units typically buy their raw materials from large petrochemical players who provide **limited flexibility in payment**. Also a large proportion of units in this cluster serve the textile industry and since the **textile sector is seasonal**, the dye making units have to carry adequate inventories for sudden demand fluctuations in the textiles sector. This further increases their working capital requirements.

Most of the MSE units in this cluster are currently using conventional machines and are now looking at **upgrading their technology**. A lot of enterprises are looking at **adopting cleaner production tools** which is a preventive strategy that aims to reduce pollution at source. Investment proposals based on cleaner production give a very solid basis for achieving financial support from banks.

Majority of these **units are pollutant producing**, the state Pollution Control Board (GPCB) has stipulated all such enterprises to set up effluent treatment facilities or use the services of the facilities center which increases the necessity of holding cash or increasing operating expenses.

Besides the above mentioned reasons, the units are also looking for finance to get **quality certifications such as REACH certification** and other quality registrations.

Most of these units are **export oriented units** and internationally they are facing major competition from Chinese dyes producers. These Chinese units initially had advantages like low land cost, low labor cost, low power cost etc. over Indian producers but nowadays due to China's own economic development most of them have faded out but the biggest advantage Chinese producers still enjoy is of low cost of capital. The cost of capital in China is around 5% while in India it is around 15-16%.

Another problem these units in the cluster sometimes face is that they have **restricted access to finance because they come under the restrictive list of industries.**

### Working of Government Schemes

The Indian dyestuff industry is only about 40 years old though a few MNCs did set up dyestuff units in the pre independence era. Like the rest of the chemical industry, the dyestuff industry is also highly fragmented. Though the central government doesn't have any special schemes for this sector, the units tend to avail benefits of the major schemes being run for the benefit for MSME enterprises, such as Credit Linked Capital Subsidy Scheme (CLCSS) and Credit Guarantee Trust Scheme for Micro and Small Enterprises (CGTMSE).

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

Aimed at technology up gradation of the small scale enterprises, the MSME Ministry has been operating the Credit Linked Capital Subsidy Scheme (CLCSS) 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 upfront subsidy with a ceiling of ₹ 1 crore. Though common ETP's and other equipments such as reactors, ice flakers, filtration system, product drying system, incinerators and blenders are covered under the scheme, the units in the Ahmedabad D&C cluster have not benefitted from it to the extent that they would have liked to.

#### 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.

Banks in the cluster are very cautious about lending to micro & small units under the CGTMSE scheme in an effort to mitigate their risk. And hence they scrutinize the loan application with a major focus on checking the viability of the project, promoter's record, their payback capability before disbursing such loans. Also the banks charge a yearly service fee (0.75% of the sanctioned amount every year till the loan is paid back) plus a one-time fee (1.5% of the sanctioned amount), which increases the net effective interest rate for enterprises making it more unattractive for them.

Off late though, SIDBI has been trying hard to disburse loans under the scheme. SIDBI has compulsorily started processing all loans under ₹ 5 Lacs under the CGTMSE scheme after being convinced of the business idea. For loans above ₹ 5 Lacs where money has not been dispersed under the CGTMSE scheme, the branch officers have to provide justification as to why credit was denied to the entity under the scheme.

### Interest Reimbursement Scheme

Under this scheme the state government of Gujarat provides 5-7% interest reimbursement to the enterprises. Lot of units are availing the scheme are very happy with it, since it provides them access to short term capital at attractive rates. Enterprises initially pay the full interest (current prevailing interest rates ~14- 15%) to the banks and are reimbursed the amount at a later date.

### JICA Line of Credit

SIDBI has arrangement with Japan International Cooperation Agency (JICA) for promoting Energy Saving projects in MSME sector in India. Under JICA line of credit, eligible projects are financed at a subsidized rate of interest. New / existing MSME units shall be eligible for assistance under the scheme. Units should have minimum acceptable internal rating of SIDBI.

### Bills Discounting

Units in the Ahmedabad cluster are also making use of bill discounting facility. This facility is being availed by units engaged in domestic as well as international trade. In international trade, trade bills drawn under Letters of Credit issued by banks are used to fund the receivables. This bill discounting facility is provided for a period of 3-6 months depending upon the tenor of the bill or Letter of Credit.

### Channel Financing

Through Channel Financing, lots of units in this cluster who have business relationships with large companies are able to arrange for working capital finance. This is generally in the form of either cash credit facilities or as a bill discounting line of credit.

### Packing Credit

A lot of units in the Ahmedabad D&C cluster are export oriented units and are dealing with international clients directly and are making use of Packing Credit facility. The units take loan for manufacturing, processing, purchasing or packing of goods meant for export against a firm order or Letter of Credit. There are however some difficulties that these players may face while trying to obtain such facilities from their bankers for several reasons, e.g. the exporter may be relatively new to export business, the extent of facilities needed by him may be out of proportion to the equity of the firms or the value of collateral offered by the exporter may be inadequate.

### Descriptions of Products and Delivery Mechanisms

#### Bill Discounting

A lot of units in the Ahmedabad cluster are export oriented units and generally the time duration offered for payments is of between 120 -150 days, whereas the banks provide bill discounting facility to an unit owner for the period of 60-90 days.

The problem can be addressed if banks relax the current repayment period from 90 days and extend the same to 150 days to suit the requirements of the enterprises. Further, the covenants and returns on modified bills discounting should be worked out to get a viable funding model for MSEs.

#### Purchase Order Finance

It has been generally seen that in the Ahmedabad cluster most of the units are over leveraged and do not have any collateral based on which they can take the loan. In this scenario, they can make use of their orders placed by their clients by taking a loan based on the purchase order to address the problem of working capital financing. Another aspect which will make this product successful in this cluster is the fact that a lot of units here are selling to international clients, which will be a comforting factor to the lenders.

Purchase Order Finance (POF) is one such pre-shipment finance product, wherein a manufacturing unit is able to receive working capital funds from its bank based on the order placed by any credit worthy buyer. More importantly, it allows the unit to take on multiple orders and deliver them successfully. The POF mechanism works in the following way:

- The client/customer sends across the purchase order to the manufacturing unit (seller) with all documents
- The seller then submits the purchase order to its bank for POF
- The bank makes a partial advance to the manufacturing unit on the value of the purchase order. The advance is made to the unit or directly to its supplier to cover the costs of materials, trade goods and/or services
- The supplier delivers the materials, goods and/or services to the seller for production of the product or assembly of the trade goods to fill the order
- The manufacturing unit produces or assembles the goods and ships the products to the buyer
- The unit then prepares and submits an invoice for the sale. Depending on the agreement, the invoice will go to the client/buyer or directly to the bank (or factoring company)
- The client pays the invoice according to the payment terms, usually directly to the bank

- When the bank receives payment on the invoice from the client, the bank withholds the amount it advanced to the seller unit as repayment on the POF loan, and also deducts the agreed amount of interest and fees. The balance is then remitted to the seller

The short terms of POF coupled with the transaction specific nature of this type of financing, the high leverage (typically with POF, only 10-40 percent of the total transaction value is advanced), and the resulting diversification of the lending portfolio help lower overall risk and provides greater flexibility. Loans can be structured in a variety of ways including to match payments to the borrower's cash flow cycle.

### Pre-approved Equipment Financing Scheme in Association with GDMA (For adoption of Cleaner Technology)

Units in the cluster are looking at adopting new cleaner technology and also comply with government regulations regarding disposal of wastes by installing effluent treatment plants. In majority of the cases the units have to resort to unsecured loans or Loans against Property from various financial institutions at very high interest rates ranging from 16-24% or from the markets at even higher interest rates or use their very limited and precious Working Capital/ CC/OD limits. These loans are costly and are also of shorter duration (1-3 years), which further results in liquidity tightness in these small units. By the end of every financial year, a lot of working capital and reserves get stuck in these assets and thus cash position remains tight.

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. **A similar arrangement could be struck by SIDBI and other banks with Gujarat Dye Manufacturers Association (GDMA) for extending the same arrangement to the credit worth units of Ahmedabad Dyes & Chemicals cluster.** Under this arrangement, the association recommends its well performing member units to SIDBI, based on a preliminary scrutiny provided by the bank for quicker dispensation of credit at a discounted rate. This assistance could be a pre-approved loan, which the units can make use of as required.

These loans can be intimated to such MSEs in the form of sanction letters valid for, say 6 months or more, so that at the time equipment is to be purchased, the disbursement can be made immediately, say, within 24-48 hours. These loans, as and when availed, shall be repaid through post-dated Cheques either in the form of Equated Monthly Installment (EMI) or wherever required, repayment can be staggered/ ballooned with gestation period. The enterprises would also be able to avail the Credit Linked Capital Subsidy @ 15% wherever applicable.

### Lease Financing for Equipment Purchase

Lease financing could be another financial product which the formal financial institutions can extend to the units in the cluster to assist them in their equipment purchase. 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 3-5 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.

## Annexure I Estimation Method for Credit Supply

ESTIMATION OF CREDIT SUPPLY TO THE AHMEDABAD DYES AND CHEMICALS CLUSTER			
	Item	Mar, 2011 Estimate	Remarks/Assumptions
1	Estimated Gujarat Dyes & Chemicals Industry Advances Outstanding - March, 2011 (₹ crore, Projected at an expected annual growth rate of 7%)	10,997	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 Dyes & Chemicals Industry Turnover - Mar, 2011 (₹ crore, Projected at an expected annual growth rate of 5.0% and - 1.0% for Year 2009-10 and 2010-11)	100,313	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
3	Cluster Sample Turnover (MSEs), Sample Size - 25 units in MSEs Sector (₹ crore)	68	D&B India Survey
4	Total Number of MSE units (1,178) in Ahmedabad Dyes & Chemicals Cluster		From Ahmedabad Dyes & Chemicals Diagnostic Study (DS) Report
5	Estimated the Cluster Total Turnover (MSEs, ₹ crore) using (3) & (4) for year ending Mar, 2011	2,730	
6	Estimated Proportion (P1) of Cluster Turnover to State Industry Turnover using (2) and (5) [ $P1 = (5) / (2)$ ]	2.7%	
7	Estimated the Cluster Level Credit Supply [(1) * (6)] - ₹ crore	168	Based on qualitative discussions we've had in the various parties in the cluster, regarding the pollution norms and effluent treatment, we have adjusted the supply figures
8	State Level Advances – Term Loan Advance (Small Enterprise - SE) to Total Advance (SE) Proportion (P2)	10%	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)].	151	
10	Using (7) and (8) Term Credit Supply is [(P2)*(7)].	17	

## Annexure II Estimation Method for Credit Demand

ESTIMATION OF CREDIT DEMAND IN THE AHMEDABAD DYES AND CHEMICALS CLUSTER					
	Method		Item	Mar, 2012 Estimate	Remarks/Assumptions
	Nayak Committee Approach - Working Capital	1	Cluster Sample Turnover (MSEs), Sample Size - 25 units in MSEs Sector		D&B India Survey
		2	Total Number of MSE units (1,178)		Ahmedabad Dyes and Chemicals Cluster Diagnostic Report
		3	Estimated the Cluster Sample Total Turnover (MSEs, ₹ crore) for year ending Mar, 2011	68	D&B India Survey
		4	Estimated the Cluster Total Turnover (MSEs, ₹ crore) - Mar, 2012, Expected growth rate of 2.0%	2,785	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
		5	Basis Nayak Committee Guidelines, Working Capital Funding Requirement is 20% of Projected Turnover calculated in (3)	557	
	D&B India Approach - Term Capital	6	Cluster Sample "Investments in Plant & Machinery", Sample Size - 36 in MSE Sector (₹ crore)	19	D&B Survey
		7	Total Number of MSE Units (1,178)		Ahmedabad Dyes and Chemicals Cluster Diagnostic Report
		8	Estimated the Cluster Total "Investments in Plant & Machinery" (MSEs, ₹ crore) using (1) & (2) for year ending Mar, 2011	470	
		9	Value in (8) projected to Mar, 2012 level using moving average growth rate of fixed capital for Industry-state wise (14%)	534	Source - Annual Survey of Industries (ASI) estimates on Fixed Capital for different industries within a state – MOSPI ASI Report, 2009-10
		10	(9) - (8) gives the growth in fixed capital	64	
		11	80% of (10) is estimated to be Term Credit Funding Requirement	51	
	<b>Total Credit Demand</b>	12	Total Credit Demand [557 + 51] calculated above in [ (5) and (11)]	608	



## Hyderabad Pharmaceuticals Cluster

## Overview

The pharmaceutical cluster of Hyderabad is known for its bulk drug products & formulations and it currently contributes a lion's share of the total bulk drug production of Andhra Pradesh. The cluster is spread in a radius of 60 km and includes units/enterprises spread in Hyderabad, Ranga Reddy, Medak and Nalgonda districts.

The cluster which has been in existence for just 25 years, constitutes of 361 units and provides employment to 20,000 people. The key success factors for the development of Hyderabad pharmaceuticals cluster can be attributed to the strong technical knowledge of entrepreneurs, their past working experience with large and medium pharmaceutical organizations and proactive steps taken by state government in the development of infrastructure.

The following presents the overview of the Hyderabad cluster,

Exhibit 13: Hyderabad Cluster Information			
Type of Manufacturers	Type of Firm	No. of Units	Employment
Bulk Drugs	Small	86	3500
	Medium	150	12000
Formulations	Small	75	2000
	Medium	50	2500

Source: Diagnostic Study Report on Hyderabad Pharmaceutical Cluster, July 2009, prepared by APITCO

The turnover generated by the MSE units in the cluster, based on D&B India survey estimates, amounts to ₹ 1,378 crore.

The units in the cluster act as contract manufacturers to large pharmaceutical organizations with majority of the units in the cluster supply bulk drugs to large organizations which are export oriented. However, with respect to pricing and contracting, the smaller firms are exploited by the larger firms through lower prices, stringent delivery schedules etc. The smaller firms also lack access to the export markets directly.

The product range of the cluster includes bulk drugs and formulations. Bulk drugs are active pharmaceutical ingredients (APIs) and formulations include tablets, syrups, capsules, ointments, orals and injectibles. Of the total production volume of the cluster, around 20-25% of bulk drugs production and around 18-22% of formulations production is exported.

### Sources of Demand for Credit

#### Raw Material Procurement

In many cases the nearly 50% of the product cost is contributed by the cost of raw materials. Although many raw materials for various formulations are available locally, in some of the cases it has to be imported from overseas markets. Presence of middle men in this mix, sometimes leads to issues regarding quality of material supplied and also timely delivery of supply.

Most of the pharma MSMEs in the Hyderabad cluster are first generation entrepreneurs. Their financial status is also not very strong to tide over any short term financial requirements. Majority of these pharma MSMEs either work as contract manufacturers to large pharma units or distribute their product through traders, in either cases they are not in a position to bargain terms to their advantage or realization of their bills would take longer period. There is an urgent need to provide a steady credit facility to such firms to tide over any urgent / short term financial requirements.

#### Quality Compliance

Pharma industry the world over is a heavily regulated industry, with lots of acts and certifications being put in place for the drug manufacturers. In India the pharma industry is covered by Drug & Cosmetic act 1945 which governs the manufacturing and quality control practices of the industry. All pharmaceutical manufacturers whether they are micro, small or large are covered under this act and are expected to follow Good Manufacturing Practices (GMP) program.

Organizations that have complied with the local GMP norms and wish to enter into outside markets, they need to upgrade their GMP norms to meet such regulations, for example, organization to enter into the US market need to meet USFDA GMP norms, to the European market it is EDQM norms etc. In general there is no serious difference in any of these regulations, expect how the regulatory bodies evaluate.

It has been felt by some of the cluster firms that soft loans by way of concessional interest and higher moratorium to meet the cost facility up gradation will help the industry. Also they have indicated that any special products / packages from financial institutions for GMP implementation and up gradation will help the industry in a big way.

#### Manpower

With frequent changes in technology and regulations, arranging for employable manpower is a big challenge for all pharma MSMEs in this cluster. Also GMP implementation requires experienced personnel, and most of the small and medium enterprises are unable to afford such personnel to

employ on a full time basis. Few MSMEs are engaging external consultants on retainer basis or few are engaging some of GMP personnel of large organization on informal basis. This gap in availability of qualified personnel increases the manpower cost of the pharma MSMEs.

### Supply of Credit to MSEs

#### Estimate of Outstanding Credit to MSEs in the Pharmaceutical Cluster

The credit supply to the Hyderabad Pharmaceutical cluster is estimated to be ₹ 297 crore out of which ₹ 24 crore (8%) is term credit and ₹ 273 crore (92%) 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](#).

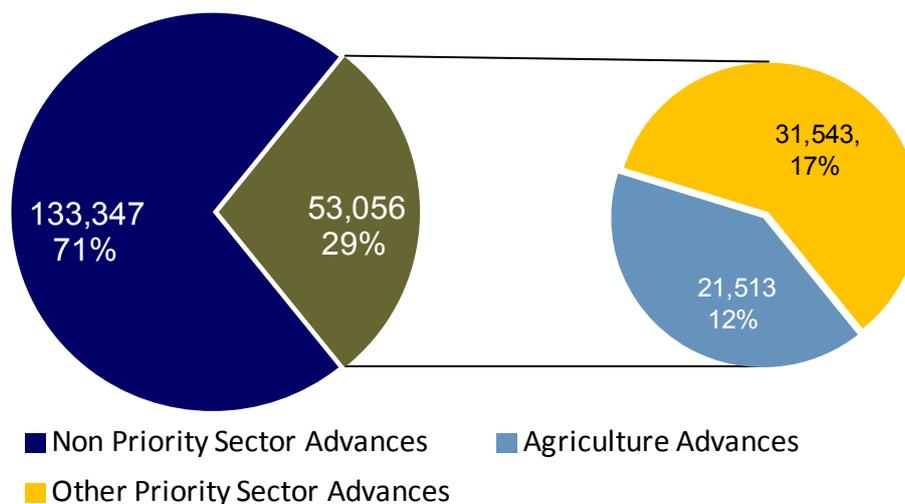
The data obtained through above methodology was further validated against the data on Outstanding Advances collected from the lead bank in Hyderabad, Ranga Reddy, Medak and Nalgonda district, since the Hyderabad pharmaceutical cluster is spread over these four districts.

The RBI Lead Bank Scheme is implemented by State Bank of Hyderabad in Hyderabad, Ranga Reddy and Nalgonda district, while State Bank of India is the lead bank in Medak district. According to the RBI Banking Statistical Returns, the outstanding credit for the 4 districts stood at an aggregate of about ₹ 154,214 Crore (as of March 31, 2010)<sup>12</sup>. Information obtained from the lead bank suggests that the outstanding credit to the priority sector could stand at Rs 53,057 crore (29% of the total credit). The following exhibit depicts the banking flow of credit in these 4 districts. Priority Sector Advances in these districts is much lower than the prescribed lending norm of 40% (of total advance).

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<sup>12</sup> Table 5.9, District Wise Classification of Outstanding Credit of SCBs, Basic Statistical Returns of SCBs in India, Vol 39 – Mar, 2010

Exhibit 14: Lending Activities of All Scheduled Commercial Banks in Hyderabad, Ranga Reddy, Medak and Nalgonda District



Amount in ₹ crore

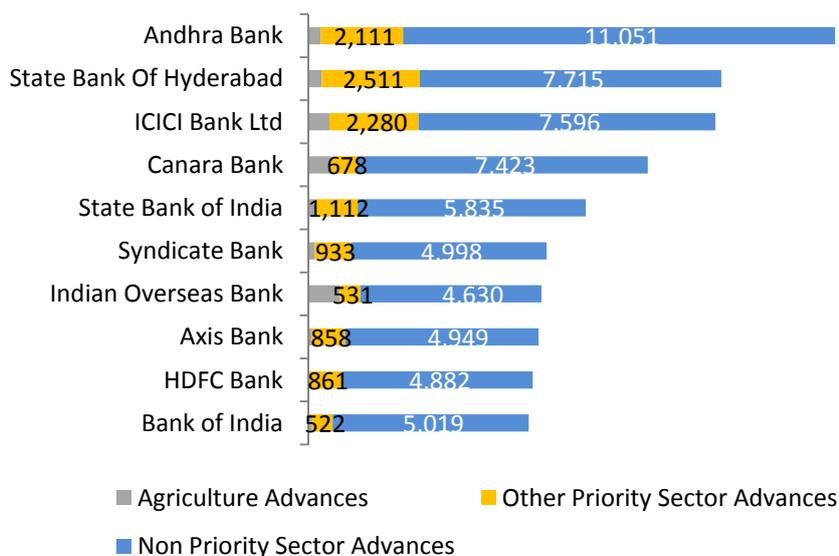
Source: Data from AP SLBC website<sup>15</sup> as of Mar 30, 2011

The lead bank scheme for the Hyderabad district is implemented by State Bank of Hyderabad. The public sector banks take the lead here contributing close to 76% of the total credit and 74% of the priority sector credit. In contrast, private sector banks contribute to 23% of the total credit, and 24% of the priority sector credit. The rest of the credit is advanced by few cooperative banks that operate in the district.

The following is the composition of Agriculture, Other Priority Sector and Non-Priority Sector credit in Hyderabad district as of Mar 31, 2011, for the top ten banks. The top 10 banks contribute to 55% of the outstanding credit in the Hyderabad district with Andhra Bank being the largest lender. ICICI Bank leads among the Private Sector Banks with the largest advances and priority sector lending portfolio.

<sup>15</sup> Information from AP SLBC - [www.slbcap.nic.in/pages/keyindicators.aspx](http://www.slbcap.nic.in/pages/keyindicators.aspx)

Exhibit 15: Lending of Major Banks across various categories in Hyderabad District

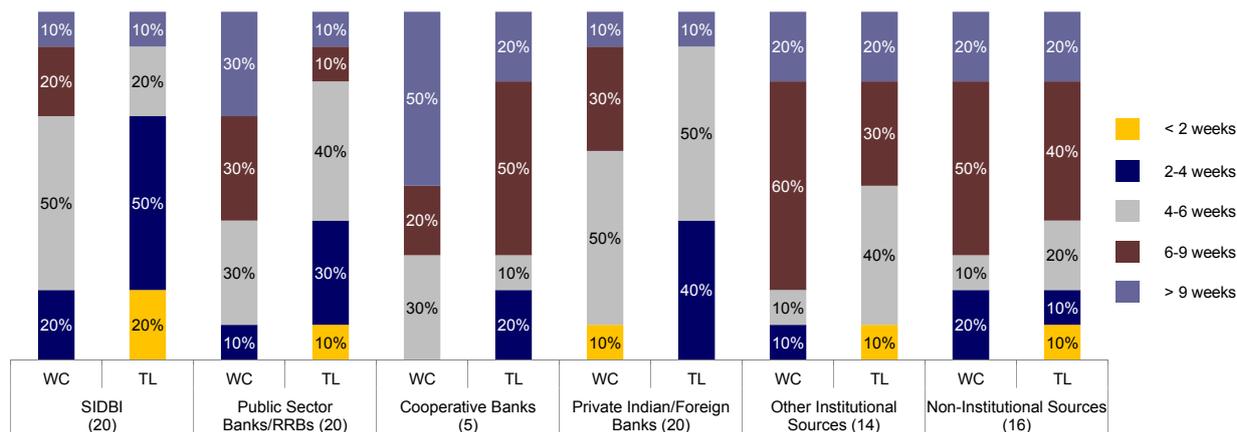


Notes: Amount in ₹ Crore  
 Source: Data Obtained from State Bank of Hyderabad as of Mar 31, 2011

In the Hyderabad pharmaceutical cluster, enterprises 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.

Exhibit 16: Perception of Time Taken for Loan Processing and Disbursement



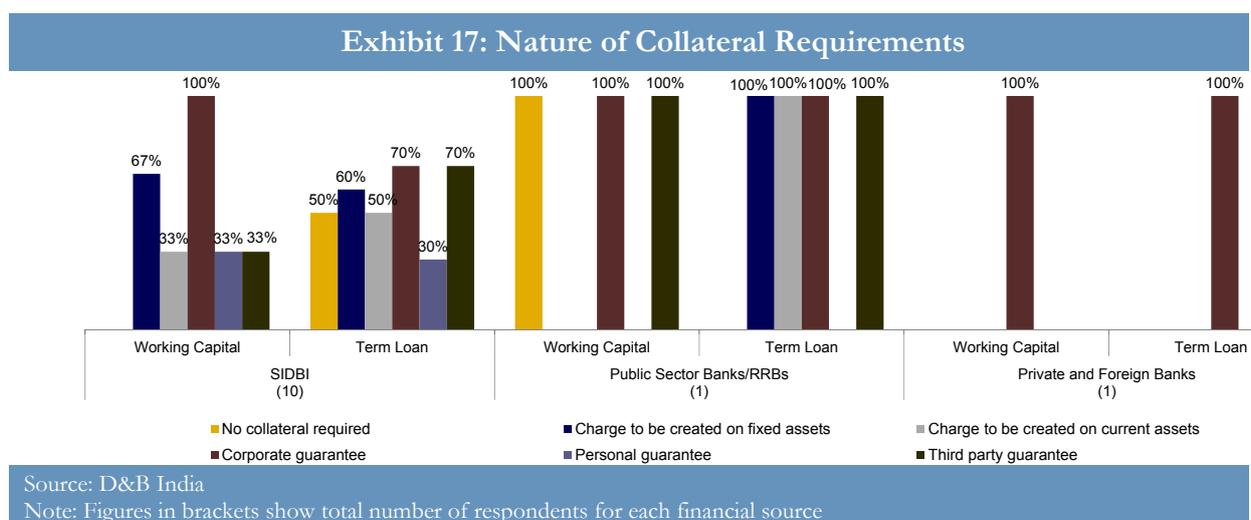
Source: D&B India  
 Note: Figures in brackets show total number of respondents for each financial source

Many MSMEs are of the opinion that high loan processing time is a major issue with respect to availing of loans from public sector banks. As per the survey, 60% respondents believe that public sector banks take more than 1.5 months to process and disburse working capital loan, and more than

1 month to process and disburse term loan. Some also believed the time taken to be around 3 months.

80% of the SIDBI customers reported that SIDBI took less than 4 weeks to process applications in case of term loans – the best record among all forms of lenders. This was, however, higher in case of WC limits / loans. The following exhibit shows the nature of collateral requirements across various financial sources for the respondents from the Pharmaceuticals Cluster.

The following exhibit shows the nature of collateral requirements across various financial sources for the respondents from the Pharmaceuticals Cluster.



SIDBI customers are asked for either charge on fixed assets, charge on current assets, corporate guarantee, personal guarantee, or a mix of various options. Many respondents have also availed collateral-free loans. The respondents believe that public sector banks need to actively implement government schemes such as CGTMSE, CLCSS, etc. to MSME sector. Lack of initiative in implementation of such schemes is one area which currently hinders the availability of collateral-free loans to MSMEs.

### Demand for Credit by MSEs

#### Estimate of Credit Demand by MSEs in the Pharmaceutical 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)

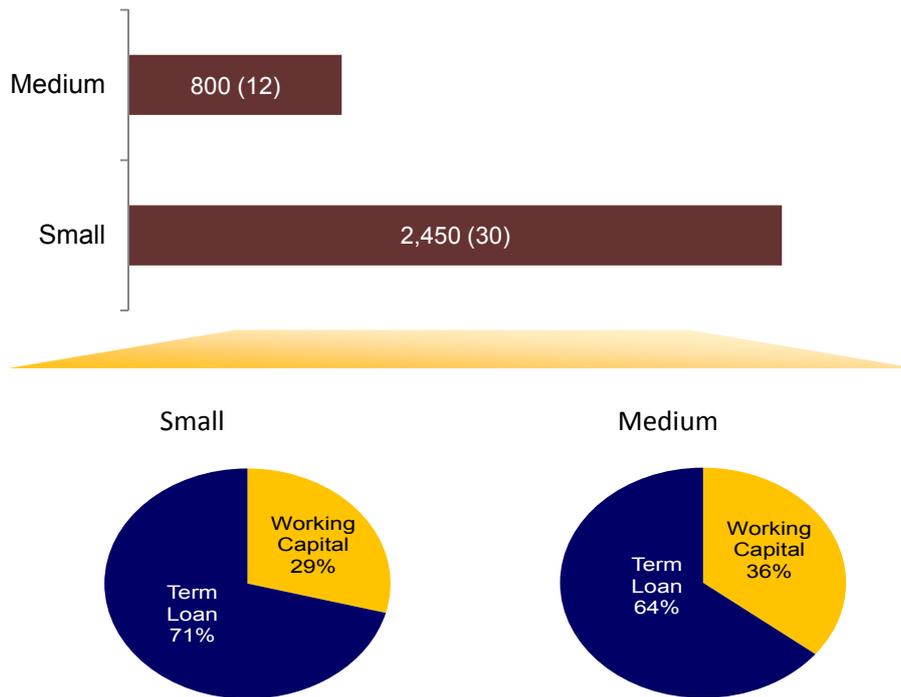
Below are the highlights of the credit demand estimates in the cluster:

- ❖ Total number of Micro and Small units in the cluster is 161
- ❖ The turnover for the Hyderabad Pharmaceutical MSE cluster is pegged at ₹ 1,378 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 2.6% (IIP estimate) to ₹ 1,414 crore in the year 2011-12
- ❖ Working Capital Requirement (Basis-Nayak Committee Guidelines) is estimated to be ₹ 283 crore
- ❖ Term Credit Requirement (Basis-Growth in Fixed Capital) is estimated to be ₹ 120 crore
- ❖ Total Credit Demand is thus obtained from above [(283) + (120)] and is ₹ 403 crore

Most banks including the lead bank have indicated that for appraisals of working capital loan requirements, Nayak Committee Recommendations are being followed. The equity margin expected from promoters as per the recommendations is 20% of the working capital loan. However, during a survey of carried out among 36 enterprises, it was observed that this ratio has varied considerably with small enterprises having an equity margin of 24.1% and medium enterprises having an equity margin of 29.8%. It can be concluded that a higher equity margin is required, specifically from small enterprises.

The following exhibit shows the composition of credit among the 50 respondents interviewed in the survey. The key areas where term loans are required are purchase of new machinery, up gradation of existing machinery, setting up of effluent treatment plants, and increasing the capacity of existing effluent management systems.

Exhibit 18: Break-up of Credit



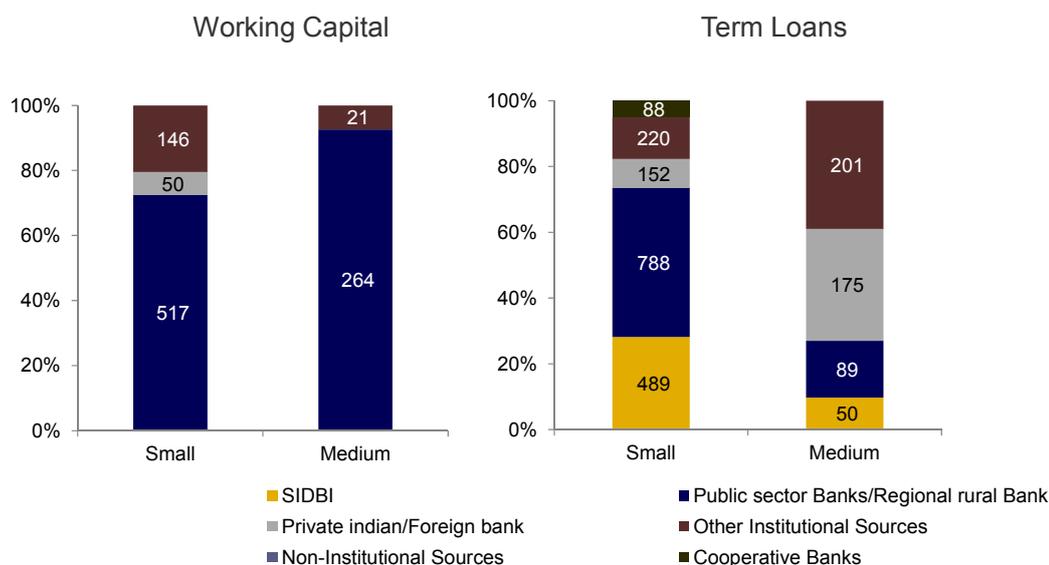
Source: D&B India (Amount in ₹ Lakh; number of respondents in parentheses)

According to SME enterprises looking to avail working capital loans, the immediate financing needs of the cluster are short term in nature and capital is mostly required for purchase of raw materials, quick realization of bills, etc. The cluster lacks sufficient support from financial institutions to fulfill the short term financing needs of the units. Bankers are hesitant to lend to units because of the units' inability to service working capital loans. The reason is that pharmaceutical SMEs are largely contract manufacturers to large organizations and are dependent on them to a large extent. The realization of bills has become a major hindrance to servicing the working capital loans. Most of the promoters in the cluster are first generation entrepreneurs and are not strong enough financially to tide over any short term financial crisis. The entrepreneurs tend to borrow money from non-institutional sources to fulfill their short term requirements, which depletes the profits of the units as the interest rates from non-institutional sources are very high (36 – 48% p.a.).

Most of the pharmaceutical units have realized the importance of GMP certification and are looking to upgrade the units to GMP compliance status. This enables the units to get export orders and enhances their capacity to produce high quality products. There is a greater need to fulfill the financial need for c-GMP status as it would help in increased growth and export competitiveness of the cluster. There is a need to develop a cluster specific product to address the requirements and to simplify the loan application form. Also, a single window loan appraisal would aid in the reducing the loan processing time.

The following exhibit shows composition of working capital and terms loans for the 36 respondents by sources of finance, separately for Small and Medium enterprises in the Pharmaceuticals Cluster. Public Sector Banks and Regional Rural Banks are the major sources of Working Capital loans across all sizes of enterprises, whereas SIDBI, Public Sector and Regional Rural Banks, as well as Private India and Foreign Banks are significant contributors to Term Loans.

Exhibit 19: Sources of Finance (Amount in ₹ Lakh)



Source: D&B India

In summary, it can be noted that there is both term credit and working capital needs of the units. As mentioned earlier, the immediate financing needs of the cluster is borne out for raw material purchase, realization of bills etc. Term credit needs is due to machinery up-gradation, GMP implementation etc. Though SIDBI is primarily into term loan requirements, it also does provide working capital loan through SIDBI-IDBI partnership. Units are able to avail loan from SIDBI for Multiple Effect Evaporator installation, which is required as per APPCB norms. Additionally, Public Sector Banks and Regional Rural Banks do finance working capital needs. The following can be summarized as major reasons for the term credit needs:

- Most of the enterprises are traditional and older units and hence are now undergoing modernization and capacity expansions. Also, requirement for automation has increased due to avoid risks of contamination
- Newer tools like Good Manufacturing Practices (GMP) require capital investments and these are now a pre-requisite in most of the export markets. GMP certifications also require regular working capital infusions

- In order to comply with the pharmaceutical practices like Schedule M, Schedule H etc., pollution and effluent treatment plants are being set up by small and medium enterprises within their premises and hence, additional capital investments are required

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.

Method	Total Gap	Credit Supply	Total Credit Demand	Working Capital Demand	Term Capital Demand
Nayak Committee-D&B India Method (In ₹ crore)	106	297	403	283	120

### Summary of Credit Gap Assessment

The Hyderabad cluster which is a pharmaceutical cluster also experiences a gap in the credit requirements and supply. D&B India has, through its primary & secondary research, identified possible reasons for why the credit demand is not being met, despite the fact that there are ample financial institutions in the district. A summary of the findings are mentioned below:

- The level of knowledge about product patenting and Intellectual Property knowledge is lower in small enterprises. As a consequence, copying across the enterprises is prevalent leading to intense competition. A major reason often cited is poaching of employees for higher salaries. Therefore, in order to retain work-force, enterprises tend to resort to retention techniques like increasing wages frequently. This increases their primary requirement for cash
- Certain chemicals which are raw materials for pharmaceuticals are produced by the chemical firms only twice or thrice in a year. Such chemicals are often consumed over the entire year. E.g. Omeprazole (gastro drug) is required around the year, however, the chemical constituent for the same is produced only twice a year. For such Active Pharmaceutical Ingredients (APIs), inventories have to be carried around the year. This increases the requirement for working capital
- Compliance with Schedule H and Schedule M requires additional expenses like testing and quality certification from designation labs, printing on product blisters, specification of product blisters like Aluminum-PVC or PVC-PVC etc. This regulation also often increases expenses

- Safety, health and environment standards require clean room techniques, no contamination and maximum extent of automation possible
- Smaller units do not have the space and potential to establish an in-house effluent treatment plant (ETP). These plants are mandatory as per the order of the Andhra Pradesh Pollution Control Board (APPCB). Since smaller units cannot afford these, they tend to use services of common facilities center which are expensive
- Where ETP services are not used, the products are sold without entering in the books of accounts. This reduces the extent of audited turnover, thereby reducing the working capital limits
- The labor has to be frequently updated and trained about revisions and changes in norms. Therefore, cost of training increases

Along with working capital needs for the cluster, the small and medium enterprises also require a higher amount of term credit. While technology up gradation is one of the primary reasons for the same, other reasons are cited below,

- Most of the medium enterprises tend to export their products. As a compliance requirement, these units require to be GMP certified. Good Manufacturing Practices (GMP) has its associated implementation costs.
  - GMP is a process and certification may require 1-2 years once GMP is initiated. Therefore, most of the enterprises seek term credit for GMP implementation
  - GMP also requires machinery to be procured from GMP certified vendors. These machineries are costlier than the regular machineries. Therefore, this increases the existing requirement of term loans
- To avoid contamination and health related risks, most of the medium enterprises are installing automation in production and packaging lines. Computer aided manufacturing (CAM) is becoming a norm in the cluster and hence, term loan requirements are increasing
- Certain medium enterprises are also installing the ETPs within their facilities. For such requirements, term loan is required for the installation and commissioning of the ETP and also for obtaining additional land, if required

It can be stated that the quality of credit received by various enterprises can be judged from three factors viz., time taken for loan processing, loan interest rate, and adequacy of credit. It has been observed in Hyderabad that the cooperative banks and PSBs/RRBs typically tend to take a longer processing time as compared to SIDBI with marginally higher interest rate as well.

The pharmaceutical cluster in Hyderabad is part of the hyper competitive world of global pharmaceutical industry. It can be said that for these units to remain globally competitive they not only need support from various financial institutions to not only setup mechanisms so that they adhere to multiple regulations and also manage their cash credit cycle effectively.

### Recommended Products and Delivery Channels

The Hyderabad Pharmaceutical cluster is a major pharmaceutical manufacturing base of the country with about 161 small units. Being a capital intensive business, no micro player can exist in the pharmaceutical industry.

### Requirement of Capital

The units in the Hyderabad cluster need credit primarily for the following reasons-

- Quality certifications such as GMP
- Setting up Effluent Treatment Plant
- Raw material procurement
- Delay in payment from buyers

Almost all the units in the Hyderabad cluster have to adhere to Good Manufacturing Practices (GMP) program to be able to produce drugs in their units, which could be for the installing new machinery. Units wanting to export to international markets have to adhere to the GMP program of importing countries. Besides the above, according to the latest norms laid by the state pollution control board, all the pharmaceutical units are mandated by the law to install effluent treatment plants for treatment of wastes. Enterprises generally approach the financial institutions for term loans for the same.

A lot of small units are working as sub-contractor for domestic firms. In such a scenario, the buyer generally provides all the raw materials to the seller which manufactures the drug and sends it back to the buyer. But increasingly there are a lot of players who are looking at working for international drug manufacturers. In such cases, the units have to arrange for raw material on their own. Also, in some cases the raw materials have to be imported from outside the country. In such a scenario, the units need financing help from financial institutions to tide over any short term financing needs.

One major problem plaguing this cluster is the non-adherence to payment schedules by drug buyers. As discussed, most of the small units in the cluster are either suppliers or do sub-contracting work for large enterprises and they are totally dependent on them. So because of higher bargaining power of large enterprises they are able to dictate terms to the small enterprises. This is the primary reason for which the financial institutions have stopped providing the bill financing products to the units in this cluster.

### Working of Government Schemes

Though there are no dedicated schemes launched by the government for the pharmaceutical unit in Hyderabad, the units can avail finances under the Credit Linked Capital Subsidy Scheme (CLCSS) and Credit Guarantee Trust Scheme for Micro and Small Enterprises (CGTMSE).

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

Aimed at technology up gradation of the small scale enterprises, the MSME Ministry has been operating the Credit Linked Capital Subsidy Scheme (CLCSS) 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 upfront subsidy with a ceiling of ₹ 1 crore.

The units in Hyderabad cluster are extensively making use of this scheme, though some units have requested that the current cap of ₹ 3 lakh could be increased. Also, if the units have once availed the scheme, they are ineligible for a repeat subsidy.

#### 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 banks tend to distribute funds to projects with good track record or promoters who have successfully implemented other projects in the past. The bank officials are very cautious while extending loan to units under this scheme. The officials also agreed to the fact that the service charges levied by the banks (onetime fee of 1.5% & a yearly service fee of 0.75% of sanctioned amount payable every year till the entire loan amount is paid back) makes it unattractive for the units to avail loan under this scheme.

#### Bills Financing

Bills refinance as a product is not successful in the cluster and a lot of banks have now discontinued this product, because buyers fail to adhere to payment schedule. Most of the small units in the cluster are dependent on large units and the bargaining power of these small units is less. So even though bills financing is one of the requirements of pharma units in this cluster, banks are not currently able to support the need because of existing cluster dynamics.

### Descriptions of Products and Delivery Mechanisms

#### Reverse Factoring

A large proportion of the units in Hyderabad Pharmaceutical cluster are either working as suppliers or are working as sub-contractors for large firms in the cluster. This cluster has been plagued by payment indiscipline on part of the larger player (buyers) who generally tend to delay the payment to the sellers (small units). This has led to the banks almost removing the bill discounting facility from the market, which has impacted the small scale units.

In this sort of scenario, we can look at introducing Reverse factoring, where the bank purchases 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 SME.

The buyers also stand to benefit from reverse factoring. By engineering a reverse factoring arrangement with a lender and providing its customers with working capital financing, the buyer may be able to negotiate better terms with its suppliers. For example, buyers may be able to extend the terms of their accounts payable to suit their convenience. In addition, the buyer benefits from outsourcing its own payables management (e.g. the buyer can send a payment to one lender rather than many small suppliers).

#### Purchase Order Finance

There are a sizeable number of units who are looking at working for international drug manufacturers. In such a scenario, the units in Hyderabad pharmaceutical cluster need to arrange for working capital finance to deliver the products. In some cases, the units have to import raw materials from outside the country, for which they need sizeable amount of capital. Here the units can avail of a pre shipment finance product such as Purchase Order Finance (POF), where the units on back of the order placed by a credible credit worthy foreign buyer is able to receive working capital funds from its bank. The POF mechanism works in the following way:

- The client/customer sends across the purchase order to the manufacturing unit (seller) with all documents
- The seller then submits the purchase order to its bank for POF
- The bank makes a partial advance to the manufacturing unit on the value of the purchase order. The advance is made to the unit or directly to its supplier to cover the costs of materials, trade goods and/or services

- The supplier delivers the materials, goods and/or services to the seller for production of the product or assembly of the trade goods to fill the order
- The manufacturing unit produces or assembles the goods and ships the products to the buyer
- The unit then prepares and submits an invoice for the sale. Depending on the agreement, the invoice will go to the client/buyer or directly to the bank (or factoring company)
- The client pays the invoice according to the payment terms, usually directly to the bank
- When the bank receives payment on the invoice from the client, the bank withholds the amount it advanced to the seller unit as repayment on the POF loan, and also deducts the agreed amount of interest and fees. The balance is then remitted to the seller

The short terms of POF coupled with the transaction specific nature of this type of financing, the high leverage (typically with POF, only 10-40 percent of the total transaction value is advanced), and the resulting diversification of the lending portfolio help lower overall risk and provides greater flexibility. Loans can be structured in a variety of ways including to match payments to the borrower's cash flow cycle.

### Preapproved GMP Implementation Finance Scheme

Most of the units in the cluster need to comply with the GMP norms for they have keep updating their processes and at times have to engage the services of consultants to guide them through the process of adhering to the norms. The expenses incurred towards the same sometimes adversely impacts the working capital finances of the firm.

Towards meeting these expenses the banks can issue a preapproved term loan to the units, which they can avail as and when the units require. While going for GMP certification the units have to upgrade their systems as well as facilities. GMP guidelines typically comprise strong recommendations on quality management, personnel, production facilities and equipment, documentation & records, production, packaging, storage etc. Since this is long and cumbersome process soft loans by way of concessional interest and higher moratorium can help the industry.

This loan can be issued based on the firm's past track record and their promoter's experience. The industry associations such as BDMA or the local associations such as NDMA or PASS can play an active role by assisting the banks in helping in the screening process.

A similar arrangement currently operates in the 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. Banks / SIDBI and BDMA can strike a similar arrangement in the Hyderabad Pharmaceutical Cluster.

However, it is important to note a major potential hurdle in implementing such a scheme in the cluster. The pharmaceutical units in Hyderabad are spread far and wide and an intervention of the kind operative in Faridabad may not be operationally feasible. The units of the cluster do not share the information on products and processes among themselves. Hence, an initiative by the association may not work. To start with, a survey in the cluster can be conducted by the association to gauge the potential cooperation and cost-benefit perception of units, given the proposal of setting up such a scheme.

## Annexure I Estimation Method for Credit Supply

ESTIMATION OF CREDIT SUPPLY TO THE HYDERABAD PHARMACEUTICAL CLUSTER			
	Item	Mar, 2011 Estimate	Remarks/Assumptions
1	Estimated Andhra Pradesh Pharmaceutical Industry Advances Outstanding - March, 2011 (₹ crore, Projected at an expected annual growth rate of 18%)	11,245	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 Andhra Pradesh Pharmaceutical Industry Turnover - Mar, 2011 (₹ crore, Projected at an expected annual growth rate of 17% and 3% for Year 2009-10 and 2010-11)	22,145	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
3	Cluster Sample Turnover (MSEs), Sample Size - 38 units in MSEs Sector (₹ crore)	252	D&B India Survey
4	Total Number of MSE units (161) in Hyderabad Pharmaceutical Cluster		From Hyderabad Pharmaceutical Cluster Diagnostic Study (DS) Report
5	Estimated the Cluster Total Turnover (MSEs, ₹ crore) using (3) & (4) for year ending Mar, 2011	1378	
6	Estimated Proportion (P1) of Cluster Turnover to State Industry Turnover using (2) and (5) [ $P1 = (5) / (2)$ ]	6.2%	
7	Estimated the Cluster Level Credit Supply [(1) * (6)] – ₹ crore	297	
8	State Level Advances – Term Loan Advance (Small Enterprise - SE) to Total Advance (SE) Proportion (P2)	8%	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)].	273	
10	Using (7) and (8) Term Credit Supply is [(P2)*(7)].	24	

## Annexure II Estimation Method for Credit Demand

ESTIMATION OF CREDIT DEMAND IN THE HYDERABAD PHARMACEUTICAL CLUSTER					
	Method		Item	Mar, 2012 Estimate	Remarks/Assumptions
	Nayak Committee Approach - Working Capital	1	Cluster Sample Turnover (MSEs), Sample Size - 38 units in MSEs Sector		D&B India Survey
		2	Total Number of MSE units (161)		Hyderabad Pharmaceuticals Cluster Diagnostic Report
		3	Estimated the Cluster Sample Total Turnover (MSEs, ₹ crore) for year ending Mar, 2011	252	D&B India Survey
		4	Estimated the Cluster Total Turnover (MSEs, ₹ crore) - Mar, 2012, Expected growth rate of 2.6%	1414	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
		5	Basis Nayak Committee Guidelines, Working Capital Funding Requirement is 20% of Projected Turnover calculated in (3)	283	
	D&B India Approach - Term Capital	6	Cluster Sample "Investments in Plant & Machinery", Sample Size - 38 in MSE Sector (₹ crore)	63	D&B India Survey
		7	Total Number of MSE Units (161)		Hyderabad Pharmaceuticals Cluster Diagnostic Report
		8	Estimated the Cluster Total "Investments in Plant & Machinery" (MSEs, ₹ crore) using (1) & (2) for year ending Mar, 2011	332	
		9	Value in (8) projected to Mar, 2012 level using moving average growth rate of fixed capital for Industry-state wise (45%)	482	Source - Annual Survey of Industries (ASI) estimates on Fixed Capital for different industries within a state – MOSPI ASI Report, 2009-10
		10	(9) - (8) gives the growth in fixed capital	150	
		11	80% of (10) is estimated to be Term Credit Funding Requirement	120	
	Total Credit Demand	12	Total Credit Demand [283 + 120] calculated above in [(5) and (11)]	403	

## Annexure A.1 Summary: Recommended Products/Delivery Mechanisms

Scheme, Purpose & Benefits	Implementation Process	Clusters Where Applicable	Pre-requisites
<p><b>Scheme for Financing of Raw Material Procurement</b></p> <p>✓ Raw materials need to be purchased in bulk during certain months of the year                      ✓ Bulk purchase enables MSEs to benefit from discounted prices</p>	<p>↓ Group of banks catering to cluster form a consortium and enter into a common MoU with an implementation agency</p> <p>↓ Forecast of annual production of MSE units and annual raw material requirements to be prepared basis inputs from MSEs, industry associations (say, MCCIA in Pune), large sub-contracting industrial buyers (say, Khadims / Sreeleathers in Kolkata), cluster sector-specific research institutions (say, Central Leather Research Institute – CLRI in Chennai)</p> <p>↓ Implementation agency to procure the raw material with MoU banks / FIs financing the purchase</p> <p>↓ Raw material procured to serve as collateral with implementation agency serving as facilitator / guarantor</p> <p>↓ Implementation agency becomes the primary raw material supplier. Discount obtained by acquiring the raw material in bulk may be passed on to MSEs after deducting fee towards costs of provision of the service by implementation agency</p>	<p>Pune Fruit and Vegetables - Through Agriculture Produce Market Committee</p> <p>Ludhiana Knitwear - Through Knitwear Club / KAMAL / LAKMA</p> <p>Rourkela Engineering - Through Orissa State Industrial Corporation (OSIC)</p> <p>Kolkata Leather Through Indian Leather Products Association (ILPA)</p> <p>Chennai Leather / Central Leather Research Institute</p>	<p>👉 Implementation agency should be an existing integral stakeholder in the raw material procurement process or an agency implementing a cluster-specific government scheme</p> <p>👉 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</p>
<p><b>Factoring (or reverse factoring)</b></p> <p>✓ 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</p> <p>✓ Factoring involves extension of working capital finance on ongoing basis against invoices raised by MSEs on buyers</p> <p>✓ Factoring ensures :</p> <ul style="list-style-type: none"> <li>• Improved cash flows</li> <li>• Fixed assets freed up for collateralization elsewhere</li> <li>• Benefit of sales ledger management</li> <li>• Ability to extend open account terms</li> <li>• Better receivable days &amp; current ratio</li> </ul>	<p>↓ '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</p> <p>↓ Client make an application to factor with last 3 years' statements                      Factor conducts the client's appraisal and approves/disapproves</p> <p>↓ Credit line is based on financial strength of borrowing client's debtors, as well as on the borrower's own financial strength</p> <p>↓ Client submits sales ledger of customers to factor                      Sanction limit is assigned based on the quality of customers</p> <p>↓ Factor sends notification to client buyers. Upon acceptance, a factoring agreement is signed between the client and factor</p> <p>↓ 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</p>	<p>Rajkot and Coimbatore Engineering Clusters</p> <p>Hyderabad Pharmaceutical Cluster</p> <p>Kolkata Leather Cluster</p>	<p>👉 Strong inter-linkages and sub-contracting of manufacturing activities exist</p> <p>👉 Open account sales are preferred between larger buyers and smaller sellers</p> <p>👉 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</p>

Scheme, Purpose & Benefits	Implementation Process	Clusters Where Applicable	Pre-requisites
<p><b>Pre-approved Collateral-free Equipment Finance Scheme</b></p> <ul style="list-style-type: none"> <li>✓ 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</li> <li>✓ 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</li> </ul>	<ul style="list-style-type: none"> <li>↓ A bank / financial institution will enter into an MoU with a local industry association, which is truly representative of the cluster MSMEs</li> <li>↓ 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</li> <li>↓ 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</li> <li>↓ Disbursals can be made within 2-3 days on a pre-approved loan</li> <li>↓ Loans, when availed, can be repaid through PDCs either in the form of EMIs. If required, repayment can be staggered/ ballooned with gestation period</li> </ul>	<p>Rajkot and Coimbatore Engineering units - for upgrading technology</p> <p>Hyderabad Pharmaceutical cluster units - implementation of technology-intensive Good Manufacturing Practices (GMP)</p> <p>Ahmadabad Dyes and Chemicals cluster - compliance with state pollution control norms, that involve acquisition of ETPs</p>	<ul style="list-style-type: none"> <li>👉 Industry association should be representative of the cluster with a large member base</li> <li>👉 Units should not be spread far and wide, as such an intervention may not be operationally feasible</li> <li>👉 Units should share information on products and processes among themselves</li> </ul>
<p><b>Purchase Order Financing</b></p> <ul style="list-style-type: none"> <li>✓ Absence of appropriate collateral common reason for loan applications to be rejected. Many MSEs over leveraged and lack collateral for fresh loans</li> <li>✓ POF is pre-shipment finance that enables an MSE to receive WC funds based on orders placed by their credit worthy buyers</li> <li>✓ 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</li> <li>✓ POF allows the unit to take on multiple orders and deliver them successfully</li> </ul>	<ul style="list-style-type: none"> <li>↓ Buyer send PO to seler and furnishes comfort letter to bank detailing seller information and credibility</li> <li>↓ 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</li> <li>↓ Seller produces or assembles the goods and ships the products to the buyer</li> <li>↓ Seller submits invoice directly to bank and buyer pays according to payment terms, usually directly to the bank</li> <li>↓ 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</li> </ul>	<p>Rajkot and Coimbatore Engineering Clusters</p> <p>Hyderabad Pharmaceutical Cluster</p> <p>Kolkata Leather Cluster</p>	<ul style="list-style-type: none"> <li>👉 Strong linkages exist between large and established buyers and a host of small and medium enterprises that carry out sub-contracted work</li> <li>👉 Payment discipline on the part of large established buyers</li> </ul>

Scheme, Purpose & Benefits	Implementation Process	Clusters Where Applicable	Pre-requisites
<p><b>Working Capital Term Loan (WCTL)</b></p> <ul style="list-style-type: none"> <li>✓CCs &amp; ODs assist MSMEs through transitory (fluctuating) WC requirements. WCTLs cover core (permanent) part of WC</li> <li>✓MSMEs possess lower control over WC and lack expertise in managing loan funds intended for meeting WC requirements; hence WCTL as more appropriate</li> </ul>	<ul style="list-style-type: none"> <li>↓If MSMEs extend credit of &gt; 120 days to clients (like in Ludhinana), 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</li> <li>↓Such shortages of credit in the Ludhiana cluster could be provided through a Working Capital Term Loan (WCTL) accounts</li> <li>↓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</li> </ul>	<p>Ludhinana Knitwear Cluster - Orders booked at buyer-seller meets, but payments realized after goods are sold in end-markets</p>	<ul style="list-style-type: none"> <li>👉 Requirement of credit in excess of sanctioned limit, often for seasonal bulk raw material procurement</li> <li>👉 Expenses financed through WCTL should be permanent component of WC and not transitory</li> </ul>
<p><b>Receivables-linked Bridge Financing Scheme</b></p> <ul style="list-style-type: none"> <li>✓Factor inhibiting Bills Discounting is lack of payment discipline amongst buyers. MSEs are often unable to procure future orders</li> <li>✓Bridge Financing enables temporary loan that maps sales receivables cycle to future order procurement to facilitate continuous operation of MSEs</li> <li>✓Can be used to maintain liquidity in the scenario of anticipated cash inflows.</li> </ul>	<ul style="list-style-type: none"> <li>↓MSEs deliver the previous order goods to customers</li> <li>↓Bills Receivables created on the executed order</li> <li>↓MSEs procures next order</li> <li>↓FIs finance to MSEs for new order based on Bills Receivables as collateral</li> <li>↓New order execution starts after bank finance</li> <li>↓At around the same time, bank may be repaid out a payment received by MSE from an earlier transaction</li> </ul>	<p>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</p>	<ul style="list-style-type: none"> <li>👉 Continuity in terms of execution of past orders, receipt of fresh orders and payments on earlier transactions, is a must</li> </ul>
<p><b>Up-scaling of Micro Finance Programs</b></p> <ul style="list-style-type: none"> <li>✓Can prove potent for unorganized micro units that do not approach banks due to required documentation, site-audits and inspections etc.</li> <li>✓Many do not have any tangible assets which could act as collaterals nor any formal work order and hence banks refuse credit</li> <li>✓May encourage transition from informal to formal enterprise.</li> </ul>	<ul style="list-style-type: none"> <li>↓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)</li> <li>↓MFI can modify microfinance business models to incorporate SME operations by taking advantage of their market knowledge and network, and by adapting their microfinance methodologies</li> <li>↓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</li> </ul>	<p>Unorganized micro enterprises in the Coimbatore, Rourkela and Kolkata clusters that carry out sub-contracted work for larger enterprises</p> <p>Microfinance has made significant inroads into Tamil Nadu, Orissa and West Bengal.</p>	<ul style="list-style-type: none"> <li>👉 Refinancing / on-lending and other support from DFI, etc crucial for helping MFIs adapt current practices to serve MSEs</li> <li>👉 Following to be addressed: <ul style="list-style-type: none"> <li>• Development of suitable loan products and attributes</li> <li>• MFI collection cycle and recovery mechanism to adapt to MSEs Asset Conversion Cycle</li> <li>• Capacity Building / Training for MFIs and Borrowers</li> </ul> </li> </ul>

## **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**

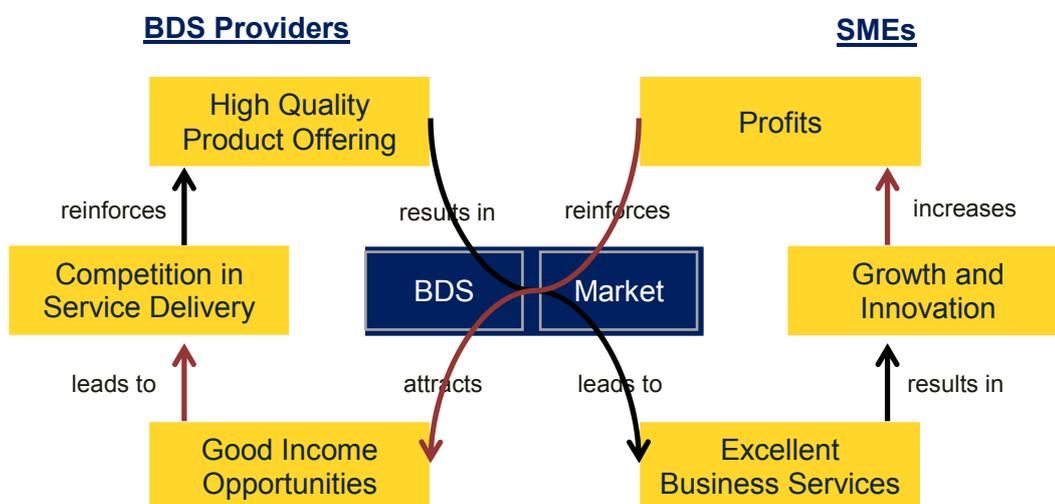
SIDBI is the implementing agency for the MSME Financing and Development Project (MSME-FDP) involving the World Bank, DFID, UK and GIZ, Germany as partners. The project attends to demand and supply side needs of MSMEs through judicious provision of financial and non-financial services. It has reached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

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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  
[http://msme.gov.in/PM\\_MSME\\_Task\\_Force\\_Jan2010.pdf](http://msme.gov.in/PM_MSME_Task_Force_Jan2010.pdf)
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  
<http://www.rbi.org.in/scripts/publications.aspx>
6. RBI – Functions and Working
7. SIDBI Annual Report, 2009-10  
<http://www.sidbi.com/notices/SIDBI%20Annual%20Report%202009-10.pdf>
8. IDBI Annual Report, 2009-10  
[http://www.idbi.com/pdf/AnnualReport\\_2009-2010.pdf](http://www.idbi.com/pdf/AnnualReport_2009-2010.pdf)
9. Annual Survey of Industries (ASI), Government of India  
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