



# Financing Sustainable Production among MSME Clusters

## -Experiential Learnings and Policy Recommendations





This paper is based on the learning drawn from Work Package-4 of the project “Scaling Up Sustainable Development of MSME Clusters in India” funded by the European Union and the SIDBI

*Authors:*

Ms. Sangeeta Agasty  
Mr. Amit Tyagi  
Ms. Ruchita Sanwal  
Foundation for MSME Clusters

*Guidance and Inputs:*

Mr. Ramesh Dharmaji,  
CGM, SIDBI  
Mr. Mukesh Gulati, ED,  
FMC  
Mr. Sanjay N. Gowan,  
DGM, SIDBI  
Mr. Karan Butalia, SVP  
& Chief Business  
Relations Officer  
Axis Bank

*Disclaimer:*

*This publication has been produced under the Project “Scaling up Sustainable Development of MSME Clusters in India” with the financial assistance of the European Union. The Project is implemented by the Foundation for MSME Clusters (FMC) along with Global Reporting Initiative (GRI), Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), Indian Institute for Corporate Affairs (IICA), Small Industries Development Bank of India (SIDBI) and the United Nations Industrial Development Organization (UNIDO). This publication is led by FMC & SIDBI. The contents of this publication are the sole responsibility of the authors and can in no way be taken to reflect the views of the European Union or any of the partners.*

*Any part of this report can be reproduced, used, or transmitted, in any form or by any means with due acknowledgement.*





**Financing Sustainable Production among MSME Clusters**  
**-Experiential Learnings and Policy Recommendations**

**April 2016**



## FOREWARD

The Micro, Small and Medium Enterprises (MSME) sector plays worldwide an important and significant catalytic role for economic development through enterprise creation and employment generation. The MSME sector in India covers a wide spectrum of economic activities. With more than 44.7 million enterprises, this sector generates more than 100 million jobs, next only to agriculture sector. It also contributes around 45 percent of total industrial manufacturing and 43 percent of India's total exports. The sector manufactures over 6000 products, ranging from the traditional to hi-tech items, in addition to providing a wide range of services. With the changing scenario, the sector needs to constantly move up in the value chain as well as strengthen its competitiveness in local as well as global markets.



Given the current scenario of energy constraints in India, sustainable development of the MSME sector through appropriate policy initiatives aimed at promoting energy efficiency and reduction in greenhouse gas emissions is an essential part of overall societal development. SIDBI, being the Principal Financial Institution for the MSME sector, has been taking various initiatives for the holistic development of industrial clusters. SIDBI has partnered with Foundation for MSME Clusters (FMC), Global Reporting Initiative (GRI), GIZ and the Indian Institute of Corporate Affairs (IICA) to implement an 'EU-Switch Asia Programme' (2012-16) for enabling adoption of sustainable environment and social business practices across 5 MSME foundry clusters (Batala and Jalandhar in Punjab, Jaipur and Ajmer in Rajasthan and Howrah in West Bengal). The project has targeted 1100 foundry enterprises. It had been realised that availability finance was a major deterrent for enterprises from adopting energy efficient technologies. Hence, one of the work packages of the project focused on enhancement of access of credit to MSMEs through stronger linkages with banks and innovative financial products & delivery mechanisms. SIDBI was the technical lead for this work package while the ground level delivery was undertaken by FMC as per the guidance and backend support by SIDBI.

As a part of the project, SIDBI has taken the initiative to bring out this policy document, with the aim to capture the financial and non-financial needs of this sector and to have a comprehensive understanding of sustainable financing for the MSMEs.

I sincerely believe that this study will be useful for all the stakeholders like international development agencies, Government Departments and commercial banks who are eager to encourage sustainability financing for the promotion of sustainable consumption and production practices in the MSME sector.

A handwritten signature in black ink on a light-colored background. The signature is cursive and appears to read 'Ramesh Dharmaji'.

(RAMESH DHARMAJI)

Chief General Manager, SIDBI



## PREFACE

With the world awakening to the realities of climate change, sustainability has already taken centre stage of development globally and Govt. of India has made several commitments at national and international platforms. The government has also taken several initiatives in the period 2014-16 to have a renewed focus on solar energy and reduce the burden on environment through initiatives such as Zero Defect & Zero Effect. The National Clean Energy Fund has been revised to ensure that the outreach and impact is strong by undertaking several projects that help mitigate environmental implications. The Jan Dhan Yojana, inception of Mudra bank, initiation of Small Finance Banks and provision of social insurance to the uninsured will have a further positive impact at the national level.



The small enterprises that have together almost half of the manufacturing share but significantly higher employment contribution requires a strong policy thrust that must be multipronged and coordinated by a variety of stakeholders. One of the key missing factors has been the financing of small enterprises in general and financing for sustainability in particular. A few national and international banks have taken lead to highlight and support initiatives in this area and notable among them are IFC, SIDBI, KfW (a German Development Bank), State Bank of India and Yes Bank to name a few.

Under an ongoing project, Scaling up sustainable MSME clusters in India, funded largely by the European Union (EU) followed by the Yes Bank and SIDBI, the project during the period 2012-16 reached out to 1100 foundry enterprises across three states of Punjab, Rajasthan and West Bengal. Out of these, almost 500 of them were targeted for direct technical support to help them improve energy efficiency and consequentially save about 25000 MTs of carbon every year. While many of them undertook process oriented changes, 120 of them required to undertake capital equipment upgradation and thus needed institutional credit.

Many of the international donor institutions including European Union, United Nations Industrial Development Organisation, KfW, JICA, World Bank through GEF facility and several others have been alive to integrating technical support with credit financing. The above mentioned project assisted 92 enterprises to seek sustainability linked financing from several banks in India and this policy document probably for the first time tries to capture the experiential learnings and provide policy recommendations. We believe that the document will be of use not only for the international development agencies but also Reserve Bank of India, Indian Bankers Association, Department of Financial Services, Ministry of MSME and several scheduled banks that are keen to promote sustainability financing.

The key to effective implementation of such targeted interventions lies in our ability to design interventions with convergence. Second, the implementation will not be meaningful without coordination among regulatory & development policy makers, enterprises & their representative bodies, service providers and banks. We hope that some of the learnings and recommendations will find their way among the well-meaning development practitioners, regulators and development policy makers in their ongoing and future endeavours.

A handwritten signature in black ink, appearing to read 'Mukesh Gulati'.

**(MUKESH GULATI)**

**Executive Director, Foundation for MSME Clusters**

## List of Acronyms

BDSP:	Business Development Service Provider
BMO:	Business Membership Organizations
CA:	Chartered Accountant
CFKDBL:	Cluster Focused Knowledge Driven Banking
CGTMSE:	Credit Guarantee Trust for Micro & Small Enterprises
CII:	Confederation of Indian Industries
CLCSS:	Credit Linked Capital Subsidy Scheme
CO <sup>2</sup> :	Carbon dioxide
DBC:	Divided Blast Cupola
DIC:	District Industries Centre
ESCOs:	Energy Service Companies
EU:	European Union
FAQ:	Frequently Asked Questions
FI:	Financial Institution
FMC:	Foundation for MSME Clusters
GDP:	Gross Domestic Product
GIZ:	Deutsche Gesellschaft für Internationale Zusammenarbeit
GRI:	Global Reporting Initiative
IFC:	International Finance Corporation
IICA:	Indian Institute of Corporate Affairs
ISTSL:	India SME Technology Services Ltd.
ME:	Micro Enterprise
MSME:	Micro Small and Medium Enterprise
NBFC:	Non Banking Financial Companies
NCEUS:	National Commission for Enterprises in the Unorganized Sector
NOC:	No Objection Certificate
NPA:	Non-Performing Asset
PNB:	Punjab National Bank
RBI:	Reserve Bank of India

SBC: Single Blast Cupola

SCP: Sustainable Consumption and Production

SIDBI: Small Industries Development Bank of India

TEQUP: Technology Upgradation Scheme

UNIDO: United Nations Industrial Development Organisation

WP: Work Package

## Table of Contents

CHAPTER I .....	15
INTRODUCTION .....	15
CHAPTER II.....	18
Status of Existing Institutional Finance among MSMEs .....	18
CHAPTER III .....	19
Project Objectives and Interventions Designed .....	19
CHAPTER IV .....	21
Experiences from the Project and Learnings therefrom.....	21
CHAPTER V .....	33
Way Forward .....	33

## Table of Figures

Figure 1: The Project Output Flowchart .....	22
Figure 2: Area wise distribution of linkages.....	24
Figure 3: Total number of enterprises that availed loans.....	25
Figure 4: Number of enterprises availing loans.....	26
Figure 5: Sequential services provided to the enterprises.....	27
Figure 6: Nature and degree of support .....	27
Figure 7: Relation between First-time loanees and degree of support.....	28
Figure 8: Loan Processing Time in months .....	28
Figure 9: Training Manual .....	29
Figure 10: Schemes Availed .....	31
Figure 11: Linkages with banks as per size of enterprises.....	32



# CHAPTER I

## INTRODUCTION

Manufacturing in the Micro, Small and Medium Enterprise (MSME) sector plays a major role in the Indian economy contributing to 8 percent of the country's GDP, 45 percent to manufacturing sector output and 40 percent to India's total manufactured exports. According to the annual report (2012-13) of Ministry of MSME, there are about 44 million MSMEs in India employing over 100 million people and is the second largest employer in India after agriculture. There are over 7,000 products, ranging from traditional to high-tech, that are manufactured by Indian MSMEs today.

Despite its significant contribution to the economy, MSMEs often find it hard to comply with environmental legislations due to various technical and non-technical limitations leading to poor levels of sustainability. The pollution per unit of production is generally higher in select sectors of MSMEs than that of the corresponding large enterprises partly due to use of obsolete technologies and poor management practices, and partly because many of the enterprises do not come under regulatory ambit (FMC, The Business in Business Responsibility, 2009).

It has been mentioned in Planning Commission's Working Group paper that around **70 per cent of the total industrial pollution is contributed by MSMEs** in India. (Planning Commission, 2014) Although the basis of estimate is not mentioned but the figure is indicative that the volume of pollution is significantly high. The pollution per unit of production is generally higher in select sub-sectors of MSMEs than that of the corresponding large enterprises partly due to the use of obsolete technologies and poor management practices. ("Mapping Energy, Environment and Social Issues among MSME Clusters in India", 2009). Several MSMEs either find it difficult to comply with the environmental regulations resulting in loss of competitiveness or unable to do so due to lack of access to appropriate & affordable green technologies, lack of adequate finances, non-availability of technical guidance from experts, difficulty in procuring alternate land for re-location and so on. On the other hand, regulatory authorities also face difficulties in ordering the closure of polluting and non-complying MSMEs since such action would lead to loss of production, unemployment and social unrest.

In India, according to a study done by Foundation for MSME Clusters (FMC), 11 sub-sectors have been identified which are economically significant, energy intensive and environment sensitive clusters. ("Mapping Energy, Environment and Social Issues among MSME Clusters in India", 2009) Hence, the need for Sustainable Consumption and Production is critical in these sectors. Out of these sectors, foundries occupy the most significant position and have been listed in the "Red Category" industries<sup>1</sup> because of certain pollution-generating operations such as sand preparation, emissions from cupola furnaces, production of waste used and sand,

---

<sup>1</sup> The CPCB has classified 64 types of polluting industries/ industrial activities as "Red Category" industries on the basis of high emissions/ discharge of significant pollutants or generating hazardous wastes. Industries where the degree of pollution is less, are termed as "Orange" category industries and small-scale and cottage/village industries are categorized as "Green" category industries.

slag and sludge. In Small foundry industry, coal is used for metal melting in Cupola furnaces. The energy costs contribute about 25 - 30% of the manufacturing cost in Indian foundry. (BEE, 2011)

Excluding a few large and medium foundries, which are modern and competitive, most small and micro foundries in India—constituting 96.6% of the total number of foundries—suffer from technological obsolescence, production inefficiencies and weak finances. They manufacture predominantly low-value, low-quality products for a saturated market. Foundries supply castings to almost all engineering industries; for example, the infrastructure industry, the government's thrust area, requires ingots and billets.

India ranks third in the world as the producer of castings after China and the US, the domestic industry is unable to meet the increasing demand from the user industries for high-quality and high-value foundry products. Major energy sources being used in foundry sector are electricity and fuels such as Coal, Furnace Oil, and Diesel. This depends on application of technology, process requirement, availability, and economic and safety point of view. The two forms of energy being used in foundry sector in typical foundry enterprises are electrical energy and thermal energy. Electrical energy is being used in melting of iron in induction furnaces; operation of electrical utilities and thermal energy is being used in cupola furnaces operation. (BEE, 2011)

Cleaner production, green technology, energy efficient technologies and resource efficient technology are synonymously used as **sustainable production**<sup>2</sup> and is emerging as an important medium to attain **sustainable development**<sup>3</sup> of MSMEs. It enables increased efficient use of resources and reduced negative impact on environment and thus, leading to greater sustainability. **One of the key factors adversely affecting the adoption of sustainable practices among MSMEs is considered to be the non-availability of institutional finance and this paper deals with this issue in further detail**, building on the experiences of a development project implemented in the foundry sub-sector among 500 MSMEs across 3 states of India during the period 2012-16.

Since, the foundries in India are significantly polluting but have a great scope for energy savings, FMC streamlined foundries from other sectors and have launched their project to intervene and introduce energy efficiency practices. During the duration of Project on energy saving by FMC, there has been an estimated savings of 30,000 tonnes of CO<sub>2</sub> emission on an annual basis against a total opportunity of 150,000 metric tonnes at the national level. The figure of opportunity in financing may work out to be Rs. 300 crores if only 1000 enterprises

---

<sup>2</sup>The Lowell Center for Sustainable Production, 1998 defined Sustainable Production as creation of goods and services using processes and systems that are: non-polluting, conserving of energy and natural resources, economically viable, and safe and healthful for workers, communities, and consumers.

<sup>3</sup>According to the Brundtland Commission of the United Nations (1987), "sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs". This involves the three pillars of environmental, economic, and social sustainability. Sustainable production attempts to establish a solid foundation for all three pillars to achieve a sustainable business practice.

out of 5000, which are the middle and lower enterprises and excludes the 500 enterprises which fall in the higher category, are to be targeted requiring Rs. 30 lacs each on an average.

The project is based on a fundamental assumption that lack of information about availability of clean technologies/ energy efficient methods and their consequential business case associated is the primary reason for MSMEs lagging behind in up gradation and modernization of their facilities. Thus, with technology upgradation through machinery and equipment change, which is capital intensive, it would arise the need of finance in these enterprises. Through this 4-year-long project titled “*Scaling Up Sustainable Development of MSME Clusters in India*” (2012-16) substantially funded by the European Union (EU) under SWITCH Asia component, it contributes towards enhancing the competitiveness of less sustainable MSME clusters, while reducing their environmental and social impacts. In order to achieve the objective, the Project has been designed along five main activities (Work Packages)

- **Work Package 1:** Foster sustainable production through technical and non-technical measures
- **Work Package 2:** Build capacities of Business Membership Organizations (BMOs) for Sustainable Consumption and Production
- **Work Package 3:** Introduce and facilitate Aggregate Sustainability Reporting among Cluster MSMEs
- **Work Package 4:** Enhance access of MSMEs to credit through stronger linkages with Financial Institutions (FIs) and innovative financial products and delivery mechanisms
- **Work Package 5:** Undertake policy advocacy and dissemination

The MSMEs in the foundry sector were provided with missing technical support services in terms of knowledge and handholding to help 500 foundry enterprises adopt and adapt sustainable production practices in 4 clusters across 7 locations in Punjab, Rajasthan and West Bengal. **To facilitate adoption of such sustainable practices, the project also provided special emphasis on credit facilitation with institutional finance.** There has been a constant issue of non-availability of institutional finance, thus WP4 aims that by involving banks as business partners, it can address one of the key problems faced by MSMEs in adopting sustainable practices – namely the limited availability and access to credit for sustainable production and this paper mainly deals with this issue in further detail.

The project was implemented by a consortium of national and international partners viz. Foundation for MSME Clusters (FMC), GIZ (a German bilateral technical development agency), Global Reporting Initiative (GRI), United Nations Industrial Development Organisation (UNIDO), Indian Institute of Corporate Affairs (IICA) and Small Industries Development Bank of India (SIDBI). As a pioneer development financial Institution engaged in promoting sustainable development of MSMEs in the country, **SIDBI has helped design and guide the process of execution of institutional credit financing.** The project had at the design stage targeted institutional credit provision with 100 MSMEs in foundry sector and strengthen credit delivery system for the MSME sub sector in the country. Specific objectives of this work package are given in section III on Project Objectives & Intervention of this paper.

**This learning paper captures the experiences of the project and suggests policy measures to the banks & relevant policy stakeholders to promote sustainable production among less sustainable MSMEs through appropriate financial mechanisms.**

## **CHAPTER II**

### **Status of Existing Institutional Finance among MSMEs**

As reported by the Reserve Bank of India (RBI), 8% of all MSMEs across different sectors in the country have access to banks and financial institutions, while the rest 92% remain excluded and are compelled to raise money through informal channels. (RBI, 2015) Poor households increasingly have access to small loans, usually in the range of Rs. 50,000 and less from microfinance institutions, and medium & large enterprises can get credit through commercial banks and open debt markets. But many micro and small entrepreneurs remain under-served, particularly in the range of Rs. 50,000 to Rs. 10 lacs. Their financial needs are generally too large for microfinance, but too small for commercial banks & open debt markets. This gap inhibits growth and limits the development of micro and small enterprises. It is also a loss to the financial sector, which ignores millions of potential MSME borrower clients.

The government has been trying to push the banks to lend to the MSMEs for several decades. Banks are pushed to lend to MSMEs as per the Priority Sector Lending requirements instituted by Reserve bank of India (RBI) since 1972. In terms of the recommendations of the Prime Minister's Task Force on MSMEs in the year 2010, banks were advised to achieve a 20 per cent year-on-year growth in credit to micro and small enterprises and a 10% annual growth in the number of micro enterprise accounts. As per the more recent RBI circular (2014-15), in order to ensure that sufficient credit is available to micro enterprises within the MSE sector, banks should ensure that: (a) 40 per cent of the total advances to MSE sector should go to micro (manufacturing) enterprises having investment in plant and machinery up to Rs. 10 lakh and micro (service) enterprises having investment in equipment up to Rs. 4 lakh; (b) 20 per cent of the total advances to MSE sector should go to micro (manufacturing) enterprises with investment in plant and machinery above Rs. 10 lakh and up to Rs. 25 lakh, and micro (service) enterprises with investment in equipment above Rs. 4 lakh and up to Rs. 10 lakh. Thus, 60 per cent of MSE advances should go to the micro enterprises. (RBI Circular: RBI/2014-15/93 RPCD.MSME & NFS.BC.No. 3/06.02.31/2014-15).

In contrast, evidence from National Commission for Enterprises in the Unorganized Sector (NCEUS) 2009 shows that in August 2007 and 2008, credit for credit cards increased by 86.3 per cent, all services sector by 35.3 per cent, construction by 48.3 per cent, real estate by 46.3 per cent whereas increase of credit for MSMEs by just 9.7 per cent. Overall availability of credit to MSMEs as percentage of net bank credit of the scheduled commercial banks has declined from 15.5 per cent in 1996-97 to 6.6 per cent in 2007-08. A study undertaken by Intelicap and supported by International Finance Corporation (IFC) in the year 2012 reflected a huge demand supply gap of Rs 20.9 Trillion.

Based on global experiences and various studies done by GIZ, UNIDO, FMC, SIDBI and other organisations, it has been seen that the problems faced by the MSMEs can be analysed primarily from a three-fold perspective: demand-side, supply-side and intermediary channels. On the demand side, most of the MSMEs have very low awareness of relevant financial products and public support schemes and ability of accounting, drawing business plans. Whereas, on the supply side the main bottlenecks include lack of innovative financial products and public schemes that enable cluster enterprises to switch to green technology and adopt broader sustainability issues that help MSMEs bring down their operating costs. Besides, local bankers, credit officers and other actors in the credit delivery channels are often not trained to be sensitive towards the needs of MSMEs for wider sustainability issues. Such differential factors in the demand and supply of credit financing have limited the MSME owners' ability to address sustainable production.

## CHAPTER III

### Project Objectives and Interventions Designed

The objective of this one out of the five work packages of the project was to enhance access of credit to MSMEs through stronger linkages with Financial Institutions (FIs) and innovative financial products & delivery mechanisms.

The **specific sub objectives** were as follows.

- Strengthen existing financial products and credit delivery channels
- Develop new financial products and credit delivery channels
- Link 100 MSMEs to FIs and other public funding options for sustainable production

SIDBI was at the technical lead for this work package while the ground level delivery was undertaken by FMC as per the guidance and backend support by SIDBI. It was expected that credit will essentially be required for those enterprises among the targeted 500 enterprises that would purchase capital equipment needed for adoption of sustainable practices i.e. around 250 enterprises. The enterprises that do not go for capital equipment purchase may only adopt better practices i.e. the remaining 250 enterprises. It was expected at the project design stage that credit provision of INR 15 crore will be undertaken to reach 100 enterprises even though demand may exist among larger numbers. Financial linkages were aimed to be provided by any financial institution that was willing to fund the targeted MSMEs.

Besides the credit provision, the project also targeted to tie up loans with available government's public schemes of assistance available and in particular 2 such credit linked grant based schemes that could be availed of by the enterprises. These 2 schemes in vogue were administered by Ministry of MSME, Govt. of India and are called Credit linked Capital Subsidy Schemes (CLCSS) (15% subsidy) and Technology Upgradation Scheme (TEQUP) (25% subsidy). In order to encourage banks to provide collateral free loans, another instrument was intended to be linked with Credit Guarantee Trust for Micro & Small Enterprises (CGTMSE)

where 75% of the credit provided by the banks would be guaranteed by the Trust if the enterprises pay the requisite fee for the same.

While the above measures were intended to be undertaken using available financial products, government schemes for grant based assistance and credit guarantee; it was felt that the project must also support creation and implementation of at least one financial product that supports sustainable production uptake. It was felt that the creation of innovative financial product will be undertaken sometime in the middle of the project i.e. 2 years from the project start date and it would build on the experiences till then.

The project aimed to capacitate the Business intermediaries, especially Business Membership Organisations (BMO), Business Development Service Providers (BDSPs) and Chartered Accountants (CAs) for bringing synergy between sustainable business and finance for MSME sector by informing MSMEs about innovative Sustainable Consumption and Production (SCP) based financial products and public schemes, and supporting them with application process/procedures as well as linking them to banks and public funding agencies. At the same time, BMOs and BDSPs would be the point of information for FIs about MSMEs' needs and performance with regard to SCP (e.g. communicating relevant data on MSME performance from individual and aggregate MSME reports), and a bridge between MSMEs and FIs.

Hence, activities that have been designed as part of project objective comprise the following:

#### **Undertake assessment of the financial and non-financial requirements of MSME clusters**

- It was envisaged that the project team would gather information to map the clusters' key economic data, mapping of foundry enterprises by name & location and their volume of production to assess their financial/non-financial needs. This would help to better understand the role of credit financing in achieving the project's bigger role to help MSMEs adopt sustainable production practices. It would also enable the project team in providing gross level information to the banks to help them assess the potential aggregated demand for credit offtake at cluster and state level and also to assess the viability to develop and design commercially viable new financial products.

#### **Identify, modify and develop innovative financial products and tools**

- Based on the study undertaken, it was aimed to amend select existing financial products and design and develop new financial products.

#### **Strengthen and create credit delivery channels**

- **Local banks, including the branches of SIDBI**, would be sensitized on the non-financial and financial constraints faced by MSMEs and trained on amended and new financial products.
- **BMOs** would be **capacitated** to support the credit delivery channels. BDSPs and service providers would be linked to MSME through BMOs

- **Financial BDSPs** (i.e. chartered accountants) would be educated about and capacitated to provide support on the innovative financial products, and requirement of the banks for internal documentation/reporting to ensure demand driven services to MSMEs.

#### **Organise Cluster level sensitization and awareness workshops and training programs**

- It was aimed that FMC and SIDBI together would conduct several awareness generation workshops for MSMEs to inform them about the available financial products and delivery channels.

#### **Facilitate and strengthen linkages between MSMEs and banks and public schemes**

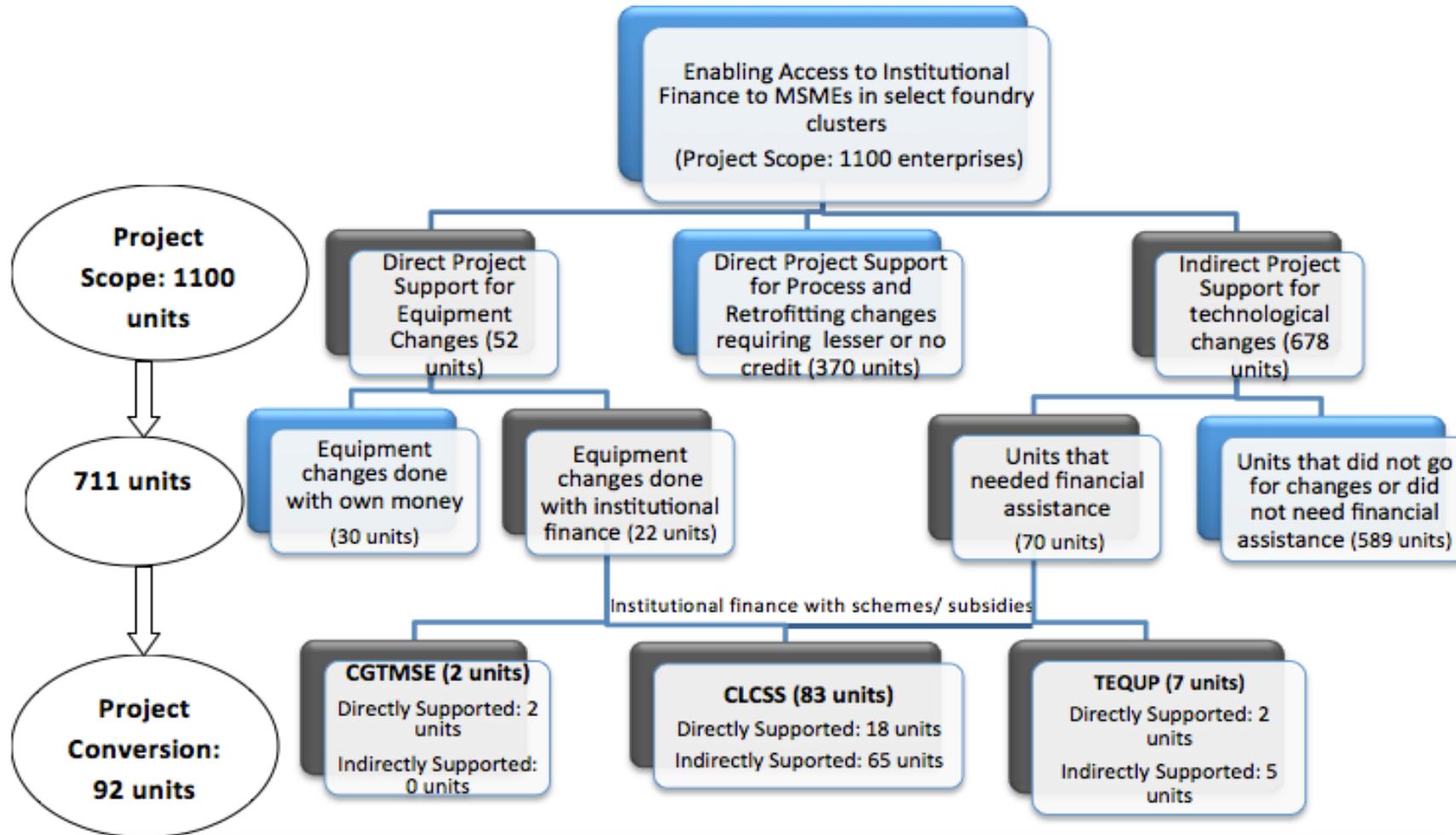
- Local banks would be engaged with BMOs and/or other intermediaries in every cluster to create financial linkages and scale up credit delivery system in the cluster
- Eligible and willing MSMEs will be identified and linked to financial service
- Trained BMOs and BDSPs would start providing financial and non-financial or technical assistance to MSMEs e.g. prepare financial applications along with the detailed project reports

## **CHAPTER IV**

### **Experiences from the Project and Learnings therefrom**

The project had a scope of reaching out to 1100 foundry enterprises spread across four cluster regions. The project provided direct support (Direct involvement) to 422 enterprises and indirect support (reach out of interventions to neighbouring enterprises without direct involvement of FMC) to 678 enterprises. Out of 422 enterprises, 22 units availed institutional finance for technological upgradation. 70 units who were provided indirect support also availed institutional finance. Thus, out of these units, maximum enterprises i.e. 83 enterprises availed CLCSS followed by TEQUP and CGTMSE. CLCSS had maximum number of takers in spite of a lower subsidy as compared to TEQUP because of absence of procedural hassles. Out of the 711 enterprises, 28 are such that could not avail institutional finance. This intervention process has been depicted in the following figure.

Figure 1: The Project Output Flowchart



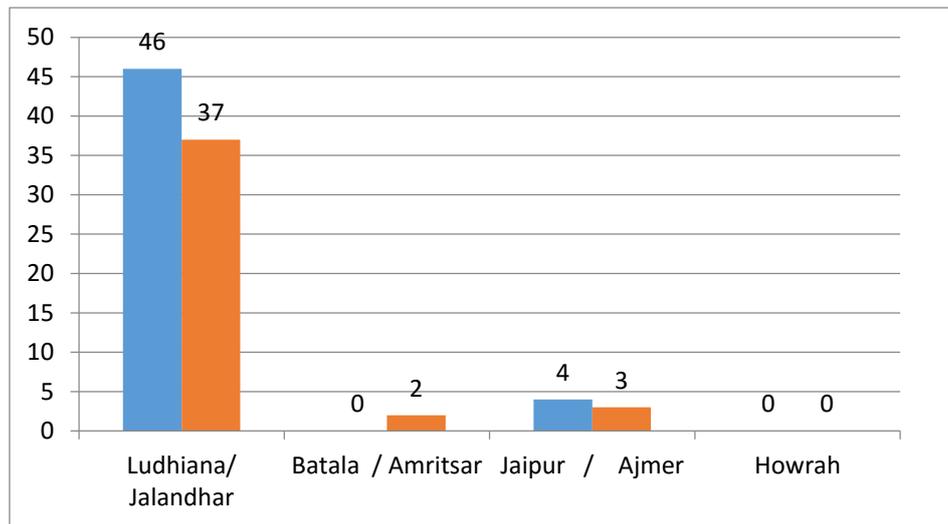
A widespread notion in the policy segment exists that only substantive higher technology equipment changes can lead to energy savings. However it has been realized that there can be substantial savings in energy efficiency by everyday practice which can only be improved through skilling. Generally, the energy savings by habitual practices are ignored and more focus is laid on savings by adoption of new technologies. This is also since most of the government policies and schemes have their primary focus on tangible schemes which can lead to capital infusion by linking up with formal financial institutions. Hence, not much attention is given to the importance of financing for skill training.

For a micro enterprise, changing its existing “inefficient/inappropriate” technology is much more than just a financial decision, since it is not just about installation of the machine alone, but also includes its operational procedures, maintenance and above all its acceptance by labourers since micro enterprises (ME) are relatively labour intensive. Interestingly MEs largely works with highly mobile contractual labourers. Keeping foundries as the sample, 70-80% of the workers are migratory and contractual labourers. The enterprise owners are less willing to invest in training and simultaneously contractual labourers who see a short run engagement with an ME are naturally not willing to trade lower productivity for new technology, unless adequately compensated for the same. Also of importance are the buyers’ expectations on quality, which if met through an existing technology, will give veto against any “efficient/appropriate” technology change. Hence, on the basis of this experience, learning could be gauged out which is highlighted below.

**Learning No. 1: Financial need assessment for sustainable production requires a comprehensive understanding and factoring of the techno-commercial aspects of the targeted businesses. (Supply side issue)**

The Project was carried out in 7 locations across 4 clusters which are tabulated in the diagram below. The total number of linkages developed is 92 enterprises which comprises of 50 micro enterprises and 42 small enterprises with 0 enterprises from the medium type. This document uses the definition laid down by MSMED Act 2006 for classification of enterprises into micro, small and medium enterprises.

Figure 2: Area wise distribution of linkages



Area wise distribution of linkages

Clusters	Ludhiana/ Jalandhar	Batala/ Amritsar	Jaipur/ Ajmer	Howrah
Total outreach (Direct +Indirect)	450	250	200	200
Direct enterprises	278	61	34	38
Enterprises which required financial assistance	83	2	7	0

As observed, the highest number of linkages was established in Ludhiana/ Jalandhar clusters. This is due to the fact that the region has the presence of highest number of foundries, in comparison to other clusters. Also, the Ludhiana intervention team were involved in multi-faceted operations and due to the team’s large size, their degree of involvement was much higher than the rest of the clusters. Howrah had no linkages established as one of the major reasons was that, the foundries were not able to expand owing to the state’s regulations against expansion and modernisation of foundry enterprises in Howrah.

**Learning no. 2: Selection of clusters most conducive for sustainability financing requires judicious selection system (Supply side issue)**

Thus, it is very important for bankers to intervene in clusters which have a huge mass of similar enterprises and the interventions have been intensive.

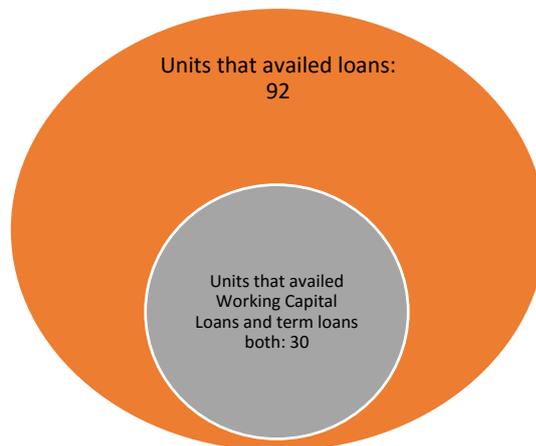
An investment return ratio of the technological improvements (based on a standard production condition) reflected that not only going for better practices (costing only expert fees) and partial technology corrections (costing expert fees and retrofitting) were highly remunerative i.e. investment of Rs 0.5- 0.7 lakhs, the returns to investment period has been 1 to 100 days with a minor coke saving of 5-8 % in the enterprises. Whereas, a complete technology overhaul from Single Blast Cupola (SBC) to Divided Blast Cupola (DBC) demands much higher investment at say, Rs 7 lakhs with a payback period of around 500 days but saving 10-25% of the coke due to higher operating efficiency. As a result, the 92 foundries where the project has worked so far, 90 per cent cases represent technological changes in the form of better practices and retrofitting like fine-tuning and installation of measuring equipment and only 10 per cent represent technology upgradation, i.e. from SBC to DBC against our assumption of 50% at design stage.

**Table: Investment-return of technology changes in foundries**

Type of technology change	Investment	Coke saving (In %)	Payback Period (In days)
SBC to DBC	Upto Rs. 7 Lakhs	10-25	500
Retrofitting	Rs. 0.5-0.7 lakhs	5-8	1-100

The total volume of loans sanctioned under term loans are Rs. 2,894.1 lacs and Rs. 1257 lacs for working capital loan. It was observed that many of them already had access to working capital loan but needed credit for capital expenditure.

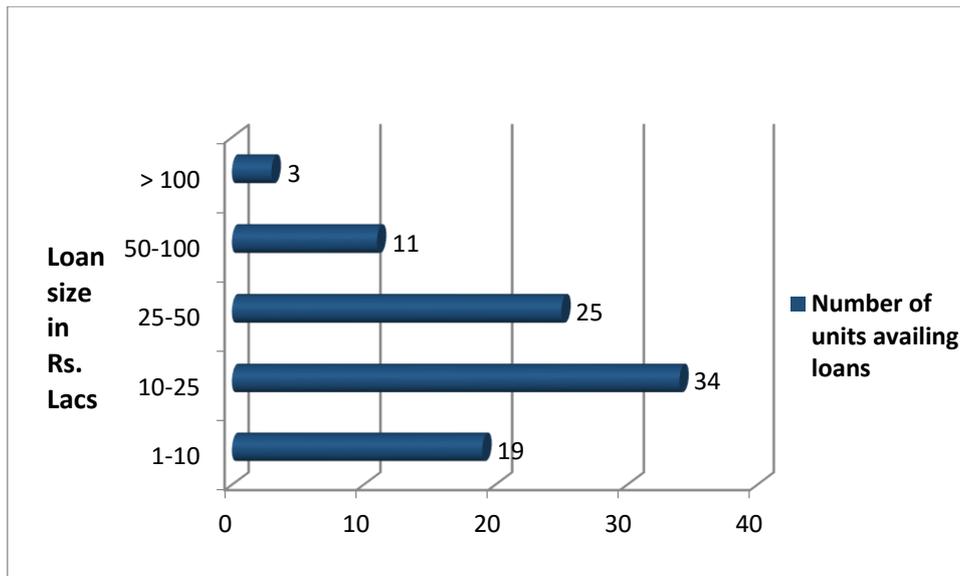
*Figure 3: Total number of enterprises that availed loans*



The enterprises which have upgraded their enterprises from SBC to DBC have taken an average loan of 58.32 lakhs and the enterprises that have carried out retrofitting have taken an average loan of 33.94 lakhs from the bank. It has been seen that 52 enterprises out of 92 have taken loans from banks for the first time.

The table listed below gives a brief description of the number of enterprises availing loans.

Figure 4: Number of enterprises availing loans



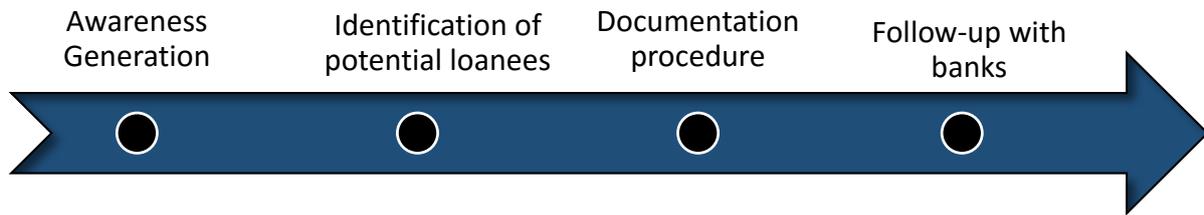
### Degree and Nature of support

Based on FMC's experiences, majority of the micro enterprise owners do cash transactions as a result of which their records don't reflect the true financial viability of the enterprise. Thus, the banks are unable to lend to these enterprises.

To address the above mentioned problems, FMC tried to comprehend the problems faced by the MSME enterprises and provided a two-pronged solution approach- working on both the demand side and solution side. For the demand side, two kinds of interventions were laid down. Firstly, conduct awareness generation meetings for the enterprises providing them hand-holding support, thus building up their capacities. Through 7 cluster level workshops and 4 BMO trainings on new and modified financial products, 200 enterprise owners were sensitized. Secondly, the enterprises were provided with 6 chartered accountants in total (3 in Punjab, 2 in Ajmer and 1 in Howrah), who would facilitate their financial linkage with the banks. The chartered accountant would be responsible for identifying the potential cases, helping the enterprises in arranging their documents, filling up the forms and following up with the banks.

Four sets of sequential services were developed and provided which entails the services provided to the enterprises, which are awareness development, assistance of the consultants through identification of cases, documentation procedure and follow up with banks.

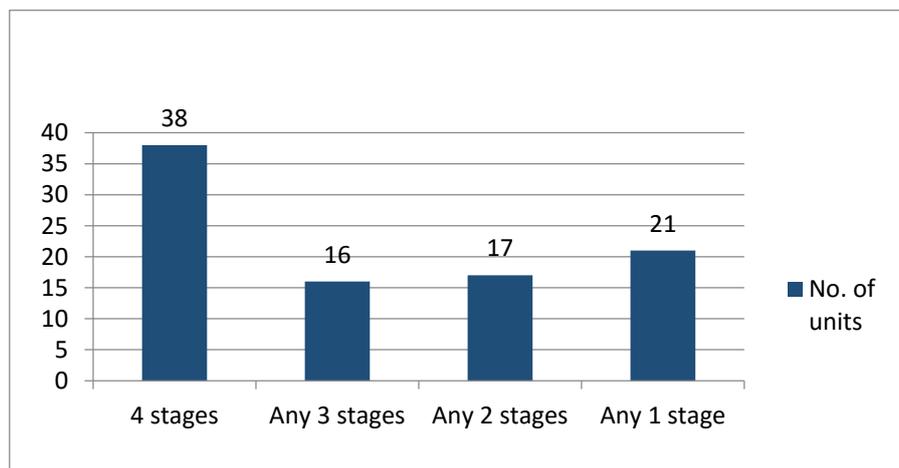
Figure 5: Sequential services provided to the enterprises



For any kind of financial linkage development especially in the MSME sector, it is very important to build the MSME’s capacity in terms of documentation and awareness creation, help them in developing credit discipline (maintaining records like cash flow, balance sheet, repay loans in time). Credit worthiness assessment and requisite due-diligence can be conducted by the financing institution in partnership with the respective buyer. Appointment of specific intermediaries (post training) to provide handholding support during the entire production cycle ensures the enterprise’s self-sufficiency.

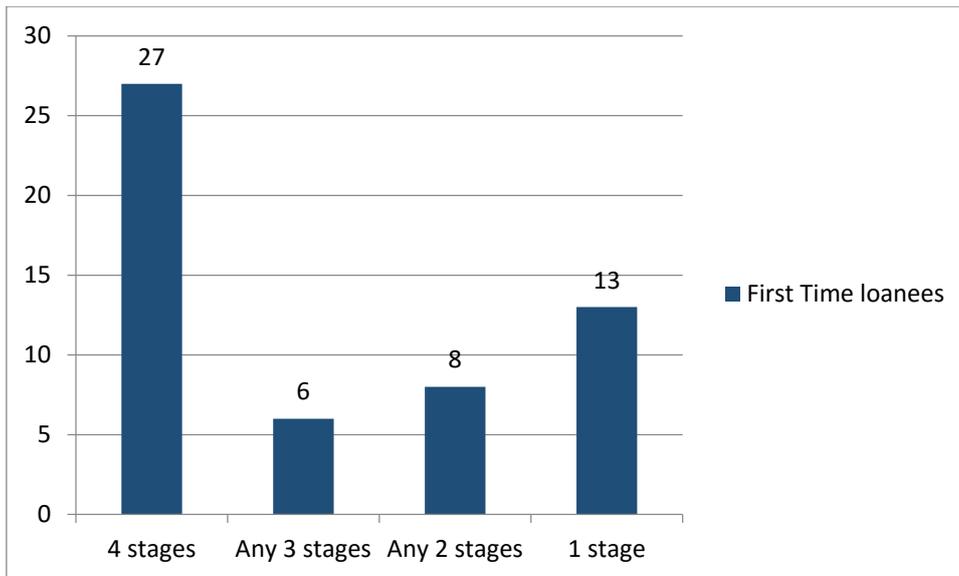
The demand of the enterprises towards these services has been represented in the column chart given below to get a picture of the nature and degree of support for the enterprises for various stages. Here stage connotes the type of service as mentioned in the above figure.

Figure 6: Nature and degree of support



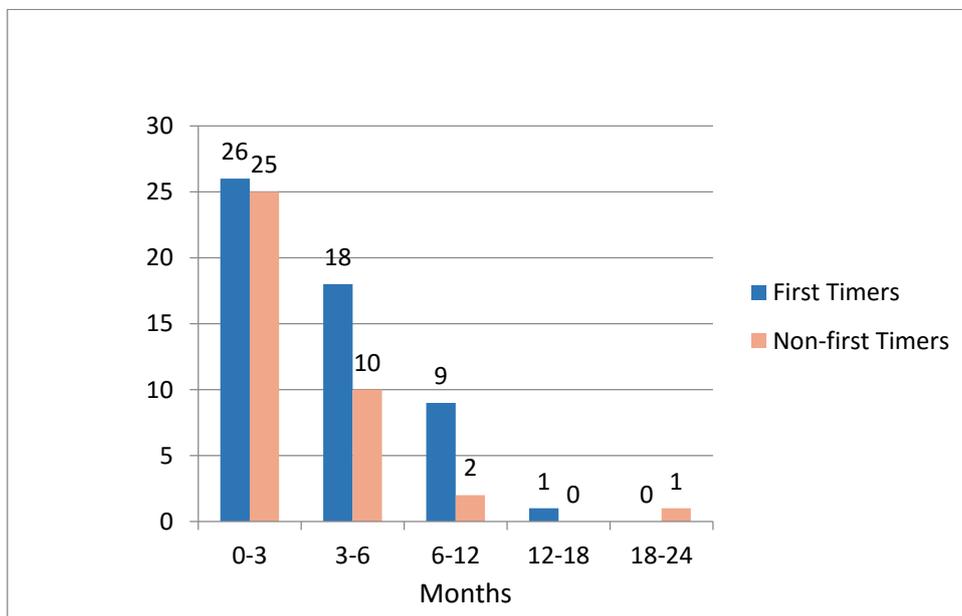
**On the demand side**, it has been seen that 38 enterprises out of 92, required total hand-holding across all the 4 stages. Out of these 38 enterprises, 27 were the first time-loanees which have been depicted in the chart below.

Figure 7: Relation between First-time loanees and degree of support



**Learning 3: First time loanees require more intensive support across different stages of progress (Demand side issue)**

Figure 8: Loan Processing Time in months



**Learning no. 4: There is apparently not much difference between first timers and non-first timers because of the processing system. (Supply side issue)**

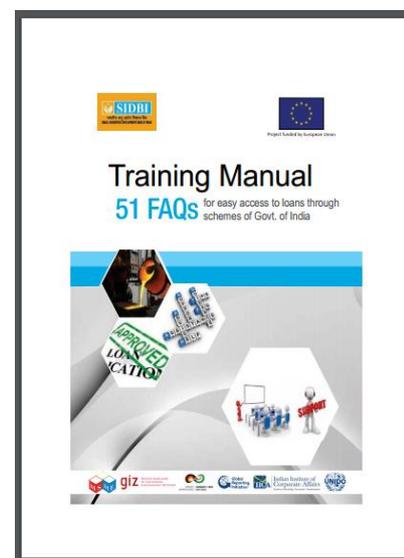
It has been seen that the loan processing time remains the same for first time loanees and non first-timers. This is because the difference lies in the pre-application stage which is before the loan processing begins. The first time loanees take greater amount of time in fulfilling the documentation requirements of the banks as compared to the non-first timers, who are aware

of bank's requirements. Once the document requirements are fulfilled, it takes the same amount of time for first timers and non- first timers to get their loans processed.

Since, a large number of enterprises were provided total hand-holding support, it enabled the enterprises to get their loan processed in less than 6 months due to guidance from chartered accountants and their cases being followed up with banks by the chartered accountant. The CA has enabled credit discipline among the enterprises by helping the enterprises to maintain their vital records and balance sheet, minimizing the delay in repayment of the loans, etc. This emphasizes the need for a sequential package of services over a period of several months, which would help the entrepreneurs to walk through the entire process, thus enabling more people to take loans.

For the purpose of facilitation, 2 banks and 7 bankers and credit officers have been sensitized towards the needs and constraints of MSMEs in foundry sector. Bilateral meetings have been conducted with banks like Punjab National Bank (PNB) and State Bank of India (SBI). Thirdly, delivery channels have been strengthened and developed and facilitators who can help bringing bankers and MSMEs together by way of aggregating the similar MSMEs credit requirements and by adapting selection criteria and loan size to MSMEs needs have been strengthened. More focus has been laid down on schemes and not on loan disbursement. Also 900 copies of 51 FAQ booklets have been distributed which were prepared to firstly, make MSMEs better prepared to become loan-fit and secondly, to make MSMEs aware about various financing schemes of the banks and govt. of India, and in particular detail the two most popular financing schemes- CLCSS and CGTMSE.

Figure 9: Training Manual



The enterprises in the MSME Clusters need to get prepared to face the standard questions by banking fraternity. Thus the FAQ Booklet enabled the MSMEs to get well-versed with the procedural requirements for loan applications, etc. It included broader issues like what are the schemes, eligibility criteria, what are the basic norms, etc. Industry need to be prepared to keep documents ready in advance, else there is loss of crucial time. The three primary documents to be kept ready in advance should be industrial land NOC, DIC registration and balance sheet.

**Learning no. 5: Awareness creation, financial literacy, sectoral inputs and handholding support can facilitate provision of credit from banks for the first time loanees (Facilitation issue)**

**Launch of new financial product by SIDBI:** 4E Financing scheme has been launched in the clusters to promote end-to-end energy efficiency investments in the clusters. 4E was launched at the fag end of the project. This scheme is supposed to help MSMEs to adopt energy

efficiency measures and provide assistance for the implementation of energy efficiency methods to ensure that the MSMEs have access to all the required services of reputed and experienced technical consultants at reasonable costs. The intervention will also look that the services are being delivered with quality and in a timely manner. It has come up with various energy efficiency measures for the betterment of the MSMEs through the steps like executing detailed energy audit and giving suggestions for suitable energy savings measures; providing support for implementation of suggested energy savings measures; and carrying out measurement and verification audit for quantifying the actual energy savings. India SME Technology Services Ltd. (ISTSL), an associate firm of SIDBI has spearheaded the 4E intervention. It also seeks empanelment of consultants or Energy Service Companies (ESCOs) or the promotion and implementation of energy efficiency measures in the MSME enterprises along with channel partners like Confederation of Indian Industries (CII), FMC, etc.

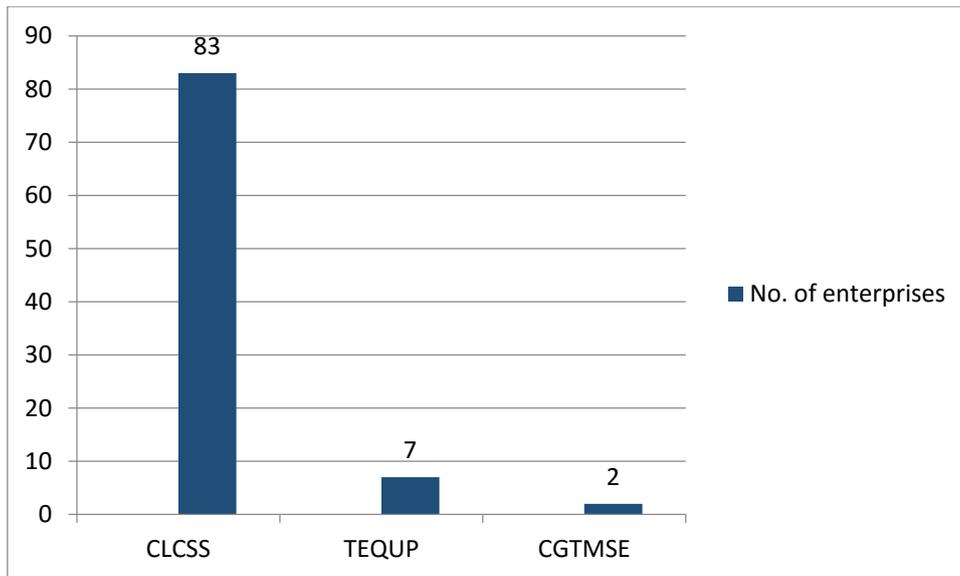
**Learning 6: Modification was not required in the existing financial products. However, there was a felt need for an integrated support mechanism that combined financial instrument with technical assistance. (Supply side)**

Thus, FMC has created linkages by working on both the demand side and the supply side. By linking MSMEs to banks through BMOs, the Project has made an effort to deal with the negative environmental impact clusters have by revamping the lending practices of banks by using a more MSME friendly TBL approach that focuses on sustainable practices. The Project together with SIDBI has capacitated BMOs and other intermediaries to aid MSMEs in prevailing over their key challenges with respect to access to credit.

### **Schemes Availed**

It had been assumed that since credit is a derived demand, technological upgradation in the enterprises would increase the credit offtake, and hence more enterprises would be linked with grant based public schemes of assistance. Considering the augmented demand for better technology in the enterprises, the enterprise owners have started availing government schemes for the technological upgradation. Out of 233 public schemes of assistance provided by different ministries and credit guarantee scheme by CGTMSE trust, 43 schemes are credit linked. Out of the 43 schemes, the 3 schemes i.e. CLCSS, TEQUP and CGTMSE were relevant to our project as they were the most suitable for technological upgradation in this sector. The schemes availed across the enterprises have been represented in the column figure below. Out of 64 enterprises, a significant number of enterprises have availed the Credit Linked Capital Subsidy Scheme (CLCSS) while the other schemes like TEQUP and CGTMSE denote a uniformly low rate.

Figure 10: Schemes Availed



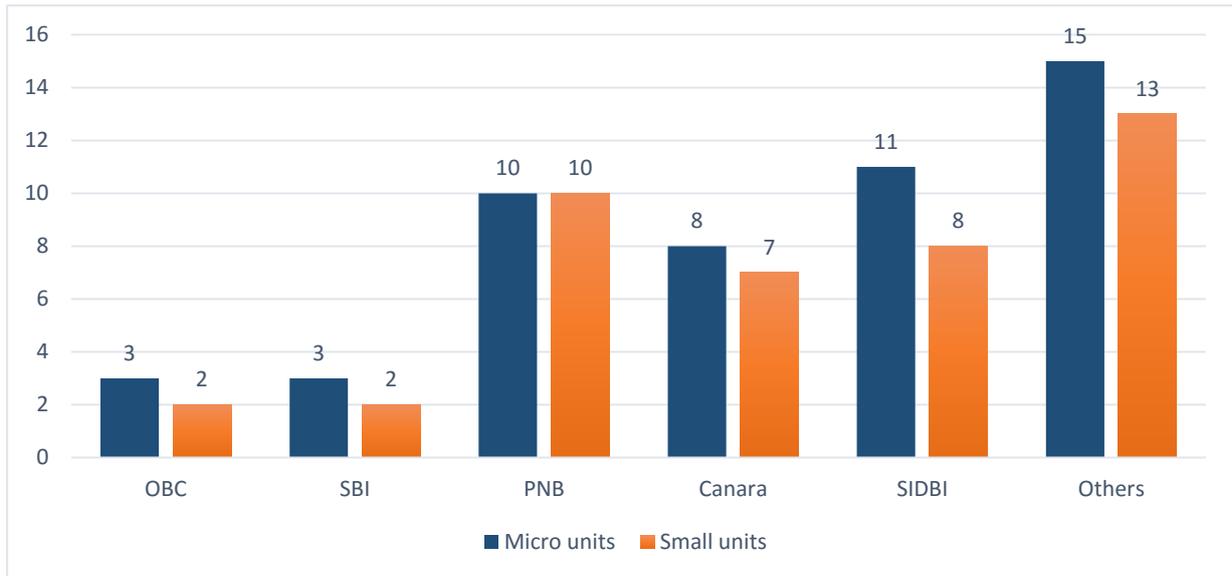
Out of 92 enterprises, 83 enterprises availed for CLCSS, 2 enterprises availed CGTMSE, and 7 enterprises availed TEQUP. The significant difference in the numbers marks an evident preference for CLCSS among enterprises. Although, CLCSS offers a capital subsidy of 15% against TEQUP which offers a higher capital subsidy of 25%, but 90.2% of enterprises have preferred CLCSS since its procedure is hassle-free and does not have to involve auditors, unlike TEQUP. Also, the off-take of schemes by the enterprises has increased due to the awareness generation programme conducted by FMC. According to FMC's learnings based on experience, it has been seen that the bankers shy away from lending under CGTMSE scheme as the bankers opine that once the enterprise owners (typically micro) get credit under the CGTMSE, there is a tendency among these enterprises to not repay their loan resulting in a NPA for the banks.

**Learning no: 7: Transaction cost of availing a grant based scheme is a very strong determining factor for its offtake. Nevertheless offtake of public schemes of assistance can be increased when integrated with a scaled up technical assistance programme. (Supply side issue)**

### Linkages with Banks

The graph below represents the banks accessed by the micro and small enterprises. The micro enterprises have shown higher preference towards SIDBI.

Figure 11: Linkages with banks as per size of enterprises



Out of 50 micro enterprises, 11 enterprises accessed SIDBI (22%), 10 enterprises accessed Punjab National Bank (20%) and 8 enterprises accessed Canara Bank (16%). 3 enterprises accessed Oriental bank of Commerce and State Bank of India each (6%) while the rest 15 enterprises availed from various other banks. The small enterprises have also had higher bank linkages with SIDBI, Punjab National Bank and Canara Bank over the rest of the banks. Out of 92 enterprises, 3 enterprises had availed loans from private banks viz. Axis bank (2) and HDFC (1).

It has been seen that if the bank has a specific credit line for the SME sector or specialized SME Division, they are able to provide more loans to the SME enterprises. Out of the total term loan sanctioned to the 92 enterprises i.e. Rs. 2894.1 Lakhs, banks with specialised SME centres have sanctioned Rs. 2788.1 Lakhs i.e. 96.3% of the total loan sanctioned to 51 enterprises. According to a local Chartered Accountant based in Punjab, “the pro-activeness of the banks in SME Financing is highly influenced by the knowledge and exposure of the branch heads towards SME sector who can accordingly reorient the portfolio of the banks’ lending towards MSMEs.” Also, it is essential to orient the branch’s staff towards SME financing and create awareness regarding the MSME schemes and subsidies. Banks are therefore also able to provide loans for energy efficiency, cleaner production technologies and automation related to improved occupational health & safety. It was felt that capacity building of the bankers also played a positive role in providing loans for sustainable production.

**Learning no. 8: In order to promote bigger offtake of sustainable production loans, banks need to have Specialized SME branches or centres with trained human resource. (Supply)**

This section has tried to capture learnings that have been derived on the basis of FMC’s experiences over the course of the project. These learnings have focussed on the demand side, supply side and facilitation issues that have a major role to play in non-availability of

institutional finance to the enterprises. Hence, the next section is based on the learning of the project and also learning from various best practices to address certain issues which would be beneficial to the policy makers and bankers for laying down a road map for effective outreach of institutional finance to MSMEs.

## CHAPTER V

### Way Forward

Regardless of the huge concentration of MSMEs in India, the country still lacks an overall drive towards provision of institutional credit necessary for improving the competitiveness of this sector in general and fostering sustainable production practices in particular. Such issues of sustainable production are expected to exist in more than 176 clusters across the country across 11 less sustainable sectors where MSMEs are significantly present. To address this, it is important to understand the financial and non-financial needs of the sector.

Based on the project learnings, it is quite imperative to comprehend the necessity to work with both on the supply side by understanding the need as well as developing capacities of the banks and also on the demand side by assessing the need and capacity gaps of the MSMEs. Simultaneously, structural changes and introduction of intermediaries where a strong facilitation is critical and support from banks is necessary. This problem of sustainable financing however cannot be resolved without addressing the issue of general financing to the MSMEs. The following suggested way forward focuses on sustainable financing in particular, however, it also has relevance for general MSME financing. This way forward is based on the learning from the project and also learning from various other best practices outside the project. It also supplements the overarching policy drive on Make in India, Zero Defect-Zero Effect and Clean India initiatives.

#### **1) Systematic Approach to Assess Credit Requirement for Sustainable Production:**

The project with direct experience with 500 foundry enterprises made us learn that, it is not always correct to assume that the MSMEs can produce sustainably with adoption of high end machines and equipment which require huge investment and thus financial linkages are paramount. Sustainable production can be achieved and energy savings can be made with smart alignments, retrofitting, and upgradation of skill level of labour and with other small initiatives. Many projects funded by Multilateral donor agencies and also the public support schemes laid by the government and Banks focus on tangible and substantial machinery changes which can lead to capital infusion. Many of them keep silent on the small need based activities like capacity building of units for retrofitting, creating and linking 'Business Development Service Providers', skill development and other practices that can lead to energy saving and make the MSMEs sustainable and thus the estimates on credit needs do not cover all these requirements, rather it focuses only on the big ticket size loans for major technology changes.

Very often Banks measure existing credit requirement of the enterprises and the supply of credit by the Banks and estimate the gaps. But they do not consider the future growth potential of the sector and likely demand for credit that can pump into the sector. Thus they miss out the potential credit offtake that can become a means to trigger growth of the sector or can be a consequential demand generated through natural growth process of the sector.

It is recommended that financing need assessment should be done by employing a systematic methodology to understand the complete value chain and technology of the enterprise and assess all the stages of production to identify the nodes for intervention that can maximise the benefit with minimum investment. Such intervention can not only lead to energy savings but also will generate greater and quicker interest among the MSMEs to adopt them as it requires low investments. However, all the options of return and investment at different nodes can be captured and compared to make short term, mid-term and long term plan of investment for sustainable growth.

- 2) ***Capacity Building of Banking Staff and Financial Intermediaries:*** As discussed in the above point, a systematic method of credit need assessment of the MSMEs is required given their divergent and complex nature of activities. Therefore the bankers need to be capacitated with such need assessment process. Moreover, the learning based on the experience states that in order to promote bigger offtake of sustainable production related loans, banks need to have specialized MSME branches or centres with trained human resources. The pro-activeness of the banks in MSME Financing is highly influenced by the knowledge and exposure of the branch heads towards MSME sector who can accordingly customize their bank's services and provide tailor-made solutions based on the needs of the enterprises in the region. Moreover, it is essential to orient the attitude of branch office staff towards MSME financing and create awareness regarding the MSME schemes and subsidies. This would enable them to provide alternative financing options. Thus, capacity building of the bankers plays a vital role in creating linkages of the banks with the enterprises. Mini-workshops can be organized for focused dissemination of loan products & processes for MSMEs (e.g. Formats in which documents need to be submitted, key requisites of collaterals like land etc.).
- 3) ***Identifying Proxy Indicators for Identifying and Assessing Credit Worthiness of the Loanees:*** Lack of documented information or information asymmetry burdens the banks significantly as there is a high cost of obtaining credit Information on SMEs which sometimes leads to adverse selection (which means, if lenders perceive the risks of lending to MSMEs to be greater than they actually are, they will charge higher interest rates or refrain from lending to them altogether). Lack of access to third party information like credit profiles and histories by lenders reinforce their perception of the high risk involved in lending to MSMEs.

Given the educational and financial literacy related problems of MSME entrepreneurs coupled with their informality of business and information asymmetry, Banks can come up with more simplified criteria like undertaking loan analysis through Cash flows, Reputation assessment (e.g. linkage with reputed buyers/suppliers) which can provide positive assurance to the banks on their credit worthiness.

- 4) ***Set-up Credit Facilitation bureaus for Outreach in Clusters:*** Setting up of the Credit Facilitation Bureaus will help overcome the excessive cost to lenders for purposes like directly screening and monitoring their clients as they use credit facilitation bureaus for third party information. They lower the cost of lending to SMEs by offering reports/data on the firms' loan repayment histories. This allows lenders to efficiently utilise information on the track record of borrowers in meeting their past debts, which is a better performance predictor to analyse future loan performance than the client behaviour in accordance to their payment of water, electricity, and other miscellaneous utility bills. For prompt repayment of loans, they also offer incentive, as delayed payment to one lender can result in incapability to avail future loans from other lenders. Pilots should be conducted first and based on the learnings, scaling up should be undertaken thereafter by way of first building a business model. Initially these bureaus can be supported through viability gap funding and become a membership-based organization.
- 5) ***Introduce and Strengthen other MSME Financing Channels and Instruments:*** MSME enterprises can also rely on Non-Banking Financial Companies (NBFC) when banks are not willing to finance those who are unable to meet the eligibility criteria. However, these NBFCs need to be supported by large banks or developmental banks. It is also essential to conduct special training programmes and build capacities of NBFCs in MSME financing as suggested for Banks in one of the above recommendations.

Also, innovative lending methodologies are of vital importance to bridge the gap between demand and supply in MSMEs. Structural changes are necessary to be tried if the outreach has to be increased. This necessarily will need aggregation at various levels. Clusters happen to be one form of aggregation. Private enterprises that bring together several enterprises with pre-information such as rating agencies and many more.

- 6) ***Awareness of Government Support schemes among the bankers and their linkages with the loanee MSMEs will help increase credit uptake and reduce credit risk:*** It has been observed that enterprises prefer CLCSS schemes for technological upgradation owing to two factors. This is because the procedural requisites to apply for the CLCSS schemes are simple and easy to comprehend thus convenient for the entrepreneurs. Second, subsidy through Govt. Schemes reduces the cost of financing and also the risk associated with the technology and thus creates the demand for the new technology.

Bankers also need to be sensitised on other public support schemes which can generate credit offtake through technical handholding, solving other non-financial needs and so on.

- 7) ***Create Pools of Empanelled Local Service Providers in Clusters:*** The presence of a Chartered Accountant (CA) reduces the waiting time by leaps and bounds as they are able to communicate the needs of the enterprises to the banks. Also, the banks have a trust factor in providing loans to the enterprises due to a CA being involved in the process. This has played a vital role in lowering the reliance on informal sources of financing among the enterprises like chit funds and hire leasing and purchasing in the said project. Hence, the enterprises have started perceiving the benefits of formal sources of financing (banks) which provide them with bigger category of loan size and charge them lesser rate of interests. Also, Attitude of CAs in favour of MSMEs were triggered through their capacity building.

It is vital to lay equal importance on capacity building of such financial intermediaries since they play a big role in credit facilitation of the MSMEs. Relationships can be established with the CAs by creation of panels for financial intermediaries which maintain transparency for efficient credit linkage between the MSMEs and the banks.

- 8) ***Collaborate with Business Membership Organisation (BMO) for Outreach:*** There is a good scope for linking with scheme support while availing loan but not many enterprises are doing it, because of technical support and follow ups needed. BMOs in the cluster can play a significant role here. Also, as seen from our learnings, first-time loanees require intensive credit facilitation support that can be provided by the BMOs. Efforts have to be taken regarding improvement in the awareness of all central and state government schemes in collaboration with various banks thus educating the enterprise owners about various grants, funds and credit facilities available for them. There are cases where some of the small businesses are not fully aware and oblivious to the funds and grants which are available for them to finance the business requisites and hence, small businesses are incompetent in expanding their business due to lack of capital and access to credit. Most of the micro enterprise owners have low levels of education and little or no exposure. Hence, another learning that elucidates facilitation of support through provision of financial literacy inputs, information on the foundry sector equipment required, support in documentation and providing handholding support for linking up with banks can be done by the BMOs. Also, the government has to work hand in hand with the owner of the enterprises and educate them and guide them on how to manage their business.

**The Suggestive Model:** Encompassing all the learnings and suggestions, a comprehensive method on **“Cluster Focused Knowledge Driven Banking (CFKDB)”** is proposed for the Financial Institutions to improve the competitiveness of MSMEs and make the sector sustainable.

The learnings suggest that not all clusters have the same or similar readiness for adopting sustainable production methods. Accordingly selection of clusters is critical for sustainability linked financing. Bankers need to aware about the factors that are critical for the offtake of technology and therefore institutional financing. These factors put together can be called as **'knowledge driven banking.'** Financial need assessment for sustainable production requires a comprehensive understanding and factoring of the techno-commercial aspects of the targeted businesses which is drawn from an experiential learning of the paper. The problem of high operating cost and perceived higher lending risk can be minimized through leveraging on the social capital measured through the extent and depth of linkages with other relevant stakeholders in the clusters. This social capital can be leveraged by the bankers through active associations of enterprises (BMOs), strong value chain linkages, inter and intra stakeholder relationships, presence of capable consultants & quality of linkages among banks, enterprises and such BDSPs/financial consultants.

For this, bank can create an **approved panel of financial consultants and use other stakeholder linkages in the clusters as soft collaterals for finance.** This will help reduce cost of transaction, reduce risk and increase offtake of institutional credit to the MSMEs through more collateral free loans. The banks can individually and collectively develop systems of **approved list of consultants** who can educate the MSMEs and handhold them in application filing and documentation. Banks should also build the capacity of local associations to educate the entrepreneurs and help maintain financial discipline through external monitoring through innovative mechanisms. Approval of the association can also be used for assessing the credibility of enterprises. The charge for such services can be linked to credit off-take and thus would also become a sustainable revenue source for the associations. **The bankers will however need to be trained on cluster based financing** to go beyond their current methods of individual enterprise based evaluation to focus on value chain and cluster based financing. This is in concurrence with the learning that in order to promote bigger offtake of sustainable production loans, banks need to have specialized SME branches or centres with trained human resource.

Since most of the enterprises in clusters produce same and similar products, their production system/ technology, inputs viz. raw materials, human resources, machineries, etc. and the sources of the same are same. Therefore there is an advantage of **economies of scale in information provision as well as economies of scale of financial market.** Knowing the production process and business requirement, bank can plan appropriate credit instruments and delivery mechanisms through reduced operational costs. Moreover, the social capital and presence of trusted BDSPs, other support institutions like District Industry Centre (DIC), MSME- Development Institute, and Technical Institutes can also be used to ensure increased awareness and higher outreach by better understanding the cluster dynamics and its credit requirements by leveraging upon relevant stakeholder linkages.

Different **innovative ways of cluster financing** can be tried through the Cluster Focused Knowledge Driven Banking (CFKDB), model. However, for doing so, the Bank has to assess the MSME cluster sector and identify the potential ones where the venture could be profitable and can appropriately address sustainability of MSMEs. For this a knowledge based

organisation (KBO) having sufficient knowledge and experience in the MSME clusters can be hired to do the assessment and suggest an appropriate strategy to the Bank through “**Cluster Focused Knowledge Driven Banking (CFKDB)**”.

Given that around **63 %** or approximately two-third of MSMEs are situated in various clusters and it is estimated that, India has over 1157 SME (industrial) and more than 6000 artisan/micro enterprises clusters, this CFKDB model can be an effective model to address the financial need of MSME sector in the country.

