



# DETAILED PROJECT REPORT KARNAL SIGNAGE AND ADVERTISING CLUSTER

Submitted to,  
Department of Industries and Commerce  
Government of Haryana  
And  
Development Commissioner (MSME)  
Government of India  
(For assistance under MSE-CDP scheme)



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Submitted by,  
Karnal Signage CFC Private Limited (SPV)

Prepared by,  
Ernst & Young LLP  
Under the project: MSME Ecosystem  
Transformation in Haryana





25<sup>th</sup> October 2017

Director  
Department of Industries & Commerce,  
Government of Haryana  
1<sup>st</sup> Floor, 30 Bays Building,  
Sector 17, Chandigarh

Dear Sir/Madam,

As part of our engagement for providing consulting services for 'MSME Ecosystem Transformation in the State of Haryana', we hereby submit the Draft Detailed Project Report (DPR) for setting up of Common Facility Centre (CFC) at Karnal Signage & advertising cluster for your kind perusal. The deliverable has been prepared in accordance with our engagement agreement with Directorate of Industries, Govt. of Haryana dated 03 January 2017, and our procedures were limited to those described in that agreement.

This Detailed Project Report is based on studies of and discussions with:

- ▶ Directorate of Industries, Govt. of Haryana
- ▶ MSME-DI, Karnal
- ▶ Members of Karnal Signage CFC Pvt. Ltd.
- ▶ Representatives of SKillTech Consultancy Pvt. Ltd, Karnal
- ▶ Signage & Advertising units located in Karnal
- ▶ Industry experts
- ▶ Secondary research

Our work has been limited in scope and time and we stress that more detailed procedures may reveal other issues not captured here. The procedures summarized in our Draft Detailed Project Report do not constitute an audit, a review or other form of assurance in accordance with any generally accepted auditing, review or other assurance standards, and accordingly we do not express any form of assurance. This Draft Detailed Project Report is intended solely for the information and use of the Office of Director Industries-Haryana or the Office of Development Commissioner, Ministry of MSME and is not intended to be used by anyone other than specified party.

We appreciate the cooperation and assistance provided to us during the preparation of this report. If you have any questions, please contact the undersigned.

Sincerely,



Amar Shankar, Partner – Advisory Services

## Disclaimer

This Draft Detailed Project Report for development of Common Facility Centre (CFC) at Karnal Signage & advertising cluster has been prepared by Ernst & Young LLP (hereinafter referred to as 'EY' or 'Ernst & Young' or 'Us') and delivered to the 'Office of Director of Industries & Commerce – Government of Haryana (O/o of DI-H)' (hereinafter referred to as 'the Client').

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## Abbreviations

AoA	Article of Association
AIPMA	All India Plastic Manufacturer's Association
B2B	Business to Business
BEP	Break Even Point
C.U.	Capacity Utilization
CAGR	Compound Annual Growth Rate
CDCC	Cluster Development Co-ordination Committee
CE	Capital Employed
CEO	Chief Executive Officer
CFC	Common Facility Centre
CGTMSE	Credit Guarantee Fund Trust for Micro and Small Enterprises
CLU	Change of Land Use
CPCB	Central Pollution Control Board
CSSRI	Central Soil Salinity Research Institute
DC-MSME	Development Commissioner, Ministry Of MSME
DIC	District Industries Centre
DPR	Detailed Project Report
DSCR	Debt-Service Coverage Ratio
EPP	Enterprise Promotion Policy
FMCG	Fast-Moving Consumer Goods
FY	Financial Year
GM	General Manager
GoH	Government Of Haryana
Gol	Government Of India
GFR	General Financial Rules
HCCI	Haryana Chamber of Commerce & Industry
HPCB	Haryana State Pollution Control Board
HSIIDC	Haryana State Industrial & Infrastructure Development Corporation Limited
HUDA	Haryana Urban Development Authority
IBEF	India Brand Equity Foundation
INR	Indian Rupee Rates
IPR	Intellectual Property Rights
IRR	Internal Rate Of Return

KFPCL	Karnal Food Pack Cluster Limited
MINT	Mexico, Indonesia, Nigeria and Turkey
MNC	Multinational Corporation
MoA	Memorandum Of Association
MSE-CDP	Micro & Small Enterprises - Cluster Development Programme
MSME-DI	Micro, Small & Medium Enterprises-Development Institute
NCR	National Capital Region
NDRI	National Dairy Research Institute
NID	National Institute of Design
NPV	Net Present Value
NSIC	National Small Industries Corporation
PAT	Profit After Tax
PMC	Project Management Committee
PNB	Punjab National Bank
POP	Point of Purchase
POS	Point of Sale
ROCE	Return On Capital Employed
SIDBI	Small Industries Development Bank Of India
SL	Straight Line
SLPSC	State Level Project Steering Committee
SPV	Special Purpose Vehicle
SWOT	Strength Weakness Opportunity Threat
UAM	Udyog Aadhaar Memorandum
UHBVNL	Uttar Haryana Bijli Vitran Nigam Limited
USA	United States Of America
USD	United States Dollar
WC	Working Capital
WDV	Written Down Value



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## Executive summary

Government of Haryana is keen to transform the MSME sector of the state and put it on a growth trajectory. Several Incentives have been offered under the state's ambitious 'Enterprise Promotion Policy (EPP) 2015' to give an impetus to growth of the MSME sector. Department of Industries and Commerce, Govt. of Haryana is working toward strengthening of technology infrastructure to enhance productivity and competitiveness of various MSME clusters across the state by leveraging funding under the Micro and Small Enterprises Cluster Development Program (MSE-CDP) scheme of Ministry of MSME (led by the office of DCMSME) along with grant available under EPP 2015.

In this context, a Detailed Project Report (DPR) has been prepared to seek grant-in-aid assistance under the MSE-CDP to set up a state-of-the art Common Facility Centre (CFC) in Signage & advertising cluster at Karnal District, Haryana.

### About the Karnal Signage & Advertising Cluster

Signage & Advertising is a multi-million value industry and forms part of everyday culture, often adding color to our streets. It is a good indicator of business health, can be a valuable source of information and is viewed by many as a form of entertainment in itself. Outdoor advertising is a key element of the industry and contributes to the creation of a vibrant and competitive economy.

All advertisements affect the appearance of the building or place where they are displayed. Given the potential impact of outdoor advertising on amenity, both positive and negative, there is a need to balance the requirements of the industry with the protection and, where possible, enhancement of the character and appearance of our city and its environs.

Karnal in Haryana is the leading district in terms of Signage & Advertising with more than 144 micro signage & advertising units. These units provide employment to over 1600 persons directly and have a collective turnover of about INR 150.00 crore per annum. 21 manufacturing units have come forward to form SPV alongwith other units for undertaking Cluster Development initiatives in Karnal.

The presence of number of food processing, pharma, textile and rice mills in and around Karnal and the increase in demand of signage and advertising products led to genesis of this cluster. Units of Karnal Signage & advertising cluster have been existing for more than 40 years. All units in the cluster belong to micro category. Presently, the cluster is catering the demand of Signage & advertising requirement of Karnal and adjoining districts. Lack of quality printing machines, limitation of printing on flex, poor finishing and low production capacity are key challenges to these units. Due to lack of capital these units have not been able to employ advance machineries to address these challenge.



## Diagnostic Study and Interventions

The diagnostic study was undertaken by the cluster members during July to September 2016 to map the existing business processes, identify the gaps and understand the requirements of the Signage & advertising cluster. The diagnostic study report (DSR) was compiled by Skilltech Consultancy Pvt. Ltd. in co-ordination with cluster SPV and with inputs from DIC, MSME-DI and other key stakeholders. Cluster members have actively participated during the need assessment process and suggested the remedial measures to prepare an action plan.

Diagnostic study revealed that use of obsolete technologies has led to poor quality of the products and receding market share. Quality printing of Signage is main concern leading to restricting markets. Cluster units are also incurring higher production cost due to job work currently being delegated to bigger firms in Delhi for quality and bulk printing.

DSR for Signage & advertising cluster was presented to the State Level Project Steering Committee (SLPSC) on 6<sup>th</sup> October 2016 and was subsequently approved. The SPV was granted permission to take up the soft intervention activities as per action plan and preparation of DPR. Subsequently, EY PMU was entrusted with the task of preparation of DPR.

## Proposed Common Facility Centre

The proposed CFC will have following common facilities:

1. Advanced Super Wide-Format 5 meter (16.4 feet) dedicated Roll-to-Roll UV Printing Machine
2. 3 Meter (10.5 feet) Digital Dye sublimation printing machine for fabric
3. Rotary Thermo processing equipment (Calendar/heat press) for Dye-sublimation transfer facility
4. Value added Print & Cut rigid media manufacturing facility - Flatbed 3 meter by 2 meter cutting Table with Structural design , Editing and nesting software

The proposed common facility centre will enable these firms to address their key challenges and boost the cluster firms expand their market. There is no similar facility available in the district to cater cluster micro enterprises. The proposed common facilities will be utilized by the SPV members by paying user fee. Non-members units in and outside the cluster will also be eligible to avail the services of common facilities by paying user fee to CFC as decided by SPV. The facility will provide a much needed infrastructural push to these units and will enable them to become more competitive.

## Special Purpose Vehicle for Project Implementation

The cluster units came together to form a Special Purpose Vehicle (SPV) by the name and style of 'Karnal Signage CFC Pvt Ltd' to meet the eligibility criteria as per MSE-CDP guidelines. The SPV has been registered as a private limited company under section 7 of the Companies Act, 2013 and rule 8 of the Companies (Incorporation) Rules, 2014. The SPV was incorporated in 2016 and includes

about 46 members, subscribing to the necessary equity base of the company. The proposed CFC will be realised on public-private partnership basis by availing support from Government of Haryana (under EPP 2015), Government of India (under MSE-CDP scheme of DCMSME) and SPV's contribution.

The SPV members have worked on initiatives in a cooperative manner in the past. They also have collectively undertaken soft intervention activities to understand technological advancement requirement of cluster Signage units. The activities included exposure visit to cluster development initiatives in other clusters, participation in trade fairs, UAM registration and awareness programs on new technology in signage & advertising industry, IPRs and innovations etc. These programs were conducted in collaboration with DIC, MSME-DI and BDS providers.

### Project Parameters, Viability and Sustainability

The Karnal Signage CFC Private Limited with support from DCMSME (under MSE-CDP) and Department of industries and commerce is willing to set up a Centre of Excellence– a Common Facility Centre having state-of-the-art Signage facilities to undertake job work of cluster units with a total project cost of INR 1805.97 Lakhs. The cost of the project and proposed means of finances is tabulated below:

#### Project Cost

S. No.	Particulars	Total Project Cost (Rs. Lacs)
1	Land	
	a. Land cost	146.36
2	Building & Other Civil Works	185.64
3	Plants & Machinery	
	a. Indigenous	977.04
	b. Imports	256.25
	c. Secondary Machines	46.69
	d. Electrification & Installation Exp. (5% of P&M Cost)	64.00
4	Miscellaneous fixed assets (fixture, furniture, firefighting equipment, first aid equipment, backup power supply, etc.)	5.00
5	Preliminary Expenses (DSR, DPR, legal & administrative expenses, registration, civil engineering drawings with estimates & tender forms, telephone, stationery, etc.)	17.00
6	Pre-Operative Expenses (establishment cost, travel, overheads during construction period including salaries, machine testing cost and other services, PMC etc.)	22.88
7	Contingency	
	a. Building @ 2%	3.71
	b. Plant & Machinery @ 5%	64.00
8	Margin money for working capital (Working capital required @ 80% C.U.)	17.40
	<b>Total</b>	<b>1805.97</b>

The total project cost is estimated to be Rs. 1805.97 lakh. The total contribution of SPV members will amount to Rs. 302.99 lakh. Support from MSE-CDP of the DC-MSME is envisaged for Rs. 1050.00

lakh and from the government of Haryana is Rs. 452.99 lakh. Promotion of MSMEs has been priority for Government of Haryana and in its strive towards same the state government launched Enterprise Promotion Policy 2015 which envisages additional grant to CDP projects to the tune of 50% above project cost of 15 Cr.

The assistance to the project from the Govt. of India is envisaged to the tune of 58.14 per cent of the project cost, SPV contribution is to the tune of 16.78 per cent of the project cost and 25.08 per cent of project cost will be contributed by GoH.

#### Means of finance

S. No.	Source of finance	Project cost up to INR 1500.00 lacs		Project cost over INR 1500.00 lacs		Total Amount (INR in lacs)
		Percentage Contribution	Amount (INR in lacs)	Percentage Contribution	Amount (INR in lacs)	
1	Grant-in-aid under MSE-CDP (Govt. of India)	70	1050	0	0	1050.00
2	Grant-in-aid (Govt. of Haryana)	20	300	50	152.99	452.99
3	Contribution of SPV	10	150	50	152.99	302.99
	<b>Total</b>	<b>100</b>	<b>1500</b>	<b>100</b>	<b>305.97</b>	<b>1805.97</b>

The viability and sustainability of the project is evident from the project economics as well as the co-operative spirit and profile of the SPV. Some indicators of the viability are as follows:

#### Project's financial indicators

S. No.	Particulars	Estimates
1	BEP (cash BEP at operating capacity of 80%)	57.78%
2	Av. ROCE (PAT/CE) sans Grant	23.21%
3	Av. ROCE (PAT/CE) with Grant	55.44%
4	Internal Rate of Return (IRR)	53.16%
5	Net Present Value (at a discount rate of 10 per cent) - incorporating viability gap funding (grant) by Gol and GoH	NPV is positive and high (Rs.1860.16 lakh) at a conservative project life of 10 years
6	Payback period	2.25 years with Grant-in-aid assistance from Gol
7	DSCR	Not Applicable (non-availment of term loan in this project)

As evident from the financials above, with viability gap funding under the MSE-CDP and under EPP of GoH, the project is highly viable and sustainable. The project is expected to generate surplus from



the first year of operation. Risk and sensitivity analysis considering a decline in user charge/ capacity utilization also validates the project sustainability.

### **Project Implementation**

Project implementation is envisaged to involve a time-frame of about 12 months upon receipt of final approval of grant-in-aid assistance from the Government of India under MSE-CDP. The project will be implemented by the SPV in close association with DIC, Karnal and MSME-DI Karnal. Cluster Development Co-ordination Committee (CDCC) under the chairmanship of Director of Industries, Government of Haryana shall supervise cluster development projects in Haryana.

In addition to CDCC, a Project Management Committee (PMC) comprising the GM, DIC, Karnal; representatives of SPV; representative of Punjab National Bank and EY experts shall be formed to oversee effective monitoring and implementation on regular basis. The project will be executed by SPV, while PMC will report the progress of implementation to the CDCC, SLPSC and DC-MSME.

There is an increasing demand of signage and advertising products across the country due to increasing market competition, focus on attracting customers and improving technology. Aesthetic and looks has started to matter in terms of advertising materials, content and household luxuries. Increased urbanization has also fuelled the demand of Signage materials in urban areas. Availability of advanced printing and advertising facility with increasing market demand of Signage products clearly claim the potential of cluster's growth and need of common facility at Karnal Signage & advertising cluster. Strategic location of Karnal (both geographically & industrially) is another favourable strengths of the Karnal Signage & advertising cluster. It is located 130 km from Delhi, 125 km from Chandigarh and is well connected with states of northern India. If supported, these units have potential to export Signage products due to less production cost, better storage facilities and quality of products.

Against this backdrop, the proposed CFC shall provide improved signage and advertising facilities to micro and small units of the cluster. This will enable to improve product quality and increase production capacity. These units will also be able to garner bulk orders from hospitality and advertising industry. The proposed facility will be open to all cluster firms to get job work done by paying user charges. The facility will provide a major infrastructural push to the units reeling under high competition. Last but not the least, the CFC will enhance the co-operation and joint action among cluster stakeholders to improve their competitiveness to meet the demands of domestic and international markets.

## Expected outcome of the CFC

Area	Current Scenario	Expected Out Comes in 3 years
Production Units	About 144 MSEs	About 200 SMEs
Markets	Mostly local retail shops, political parties and showrooms situated in and around Karnal district	Hospitality industry, MNCs, shopping malls & construction industry
Employment	About 1600 direct employees	About 2500 direct employment
Technology	Lack of advanced printing facility for quality printing & finishing, lack of designing & cutting facility for moulded plastic products and lack of printing facility on various substrate including fabric	Availability of CFC with advance facilities printing of super wide format for roll-to-roll UV printing, Value added Print & Cut rigid media manufacturing facility, Digital printing facility for fabric and dye sublimation printing shall enable cluster units to improve their product and expand their market
Production	Less production capacity Increased production time Material wastage Increased transportation cost	Improved quality Increased production Minimal material wastage Quick production Competitive prices
Exports	Current exports from cluster units are negligible	25% of units shall explore international markets and start exporting
Turn Over	About 150 crore	Increase of 10% each year and expected to double within 5 year
ISO certification	None	100 units



# 1. Introduction

## 1.1 Overview of the Cluster

Signage are visual graphics to display information to a particular audience and manifested in the form of expansive banners, billboards, and mural etc. in places such as streets or on the inside and outside of buildings. The use of signage has been increasing among retailers and for advertising purposes in indoor and outdoor locations. Signage advertising has become one of the most powerful sources of display and advertising.

Signage industry is a part of printing industry, which has changed dramatically over the past decade. Presently vinyl, plastic and paper have been used as primary substrates of choice for signage industry. With advent of technology and taking environmental concerns into account, textiles have begun to take centre stage. This has generated a new world of opportunity for local and regional print shops. It also presents learning curves and challenges as printers make the transition to textile media, and as they incorporate a new generation of printers and inks specifically designed to perform in this.

Signage and advertising cluster has around 144 micro units involved in various activities from designing content, printing flex & banners and advertising. More than 25 units of this cluster are also engaged in manufacturing and supplies of wooden frames for flex boards, hoardings. Some of the units are also involved in installing LED for backlit and frontlit for billboards & displays etc. Units of cluster are also availing services for maintenance of the machinery and equipment, transportation of the raw materials and delivery of intermediate and finished products, testing, training of the workforce, accountancy and marketing support, etc.



Signage Industry products are used for displaying the products, directions, information, news, canvassing for elections, etc. One purpose of the signage is also to advertise the products to attract the customers to buy the products. The main purpose of signage is to communicate, to convey information about the product, company & Information: signs conveying information about services and facilities, such as maps, directories, or instructional signs.

Major usage of signage products are:

- ▶ Branding of products and company
- ▶ Display of products functions and purpose
- ▶ Indoor branding & gift novelties

The size and type of the signage depends upon the purpose. Some Signage are required to be permanent in natures for telling the identification of a place, where as some signage may be temporary for a particular event only.



Units of Karnal Signage & advertising cluster are involved in manufacturing of various advertising products as mentioned in table 1.

Table 1: Products of Signage & Advertising Cluster, Karnal

1	Flex Boards, Hoardings	13	Translates
2	Road Signs	14	Banners/Posters
3	Novelties, Gift items	15	Wooden & Hard Board Boxes
4	LED, LCD Signage, Display boards	16	Floor Graphic Corporate Gifts
5	Floor Lighting	17	Bill Boards
6	LED Lamp/ Lawn Lights/ Panels	18	Electric Signage
7	LED Rope Light	19	Exhibition Displays
8	LED Video Walls	20	Motion Displays
9	LED Wall Washer Lights	21	Portable Signs
10	Revolving Signs	22	Tin Boards
11	Nature & Sign Switch	23	Kiosks
12	3D Boards & Posters	24	Awnings

The cluster units are involved in manufacturing and installation of above mentioned products using machines and manual processes. 35% of the units of the cluster are involved in printing of flex banners, while 40% of the units are involved in designing, mounting of flex banners on frame and installation at specified locations and rest 25% units are manufacturing gift items, novelties for corporates. Signage & advertising cluster provides direct employment to about 1600 persons and indirect employment to about 500 persons. Cluster units have a combined turnover of over Rs. 150 crores per annum. At present, micro units of the cluster are not exporting their products. But with the efforts the cluster is making for improving its technological capabilities under MSE CDP, it is expected that the cluster will be able to enter export markets also.



Karnal signage and advertising industry is functional over 40 years. Signage industry started with hand painted banners & boards for advertisement of products. The industry has gradually progressed toward manufacturing of various signage products to cater both traditional and upgraded market segment over the decades. Signage & advertisement industry has created a separate market niche in this region. Proximity to NCR has boosted the industry due to increasing brand promotion and advertisement by retail industry, telecommunication industry, government agencies, MNCs and political parties, etc. Inclusion of Karnal in the list of smart cities by ministry of urban development, Govt. of India is another key factor ensuring sustainable growth of this industry by creating additional demand of signage products. Entrepreneurs of the region are making maximum out of the opportunities available in the signage industry.

However, with constant technology upgradation in signage industry micro units have not been able to match the pace and lagging behind. These are in need of support to upgrade the facilities and improve the product quality to match the market requirements. All the entrepreneurs of the signage & advertising cluster want to adopt new innovative products like UV, Latex coated displays, 3D printing products and digital display products etc. for increased value addition to cluster products.

## 1.2 About the district

Karnal is one of the most industrialized and historical districts of Haryana. It is famously known as a city of 'Daanveer Karna', as per the ancient Indian epic Mahabharata. Karnal district is known as the 'Rice bowl of India' due of production of huge quantities of for production of rice. It is also famous for presence of premier research institutions such as National Dairy Research Institute (NDRI), Central Soil Salinity Research Institute (CSSRI), Wheat Research Directorate, National Bureau of Animal Genetics Resources, Sugarcane Breeding Institute etc.



Figure 1: District map of Haryana

Karnal district is prominently located on the Sher Shah Suri Marg (G.T.Road), and Delhi Ambala rail line which connects Karnal with all important places in the country. It is centrally located between Delhi and Chandigarh at a distance of about 125 kms from each. Karnal district is strategically located and connects with five different states in proximity, this has fuelled the growth of district by enabling industries to tap market of 5 states. Karnal district lies on the western bank of river Yamuna and forms eastern boundary of the district. The river Yamuna separates Haryana from Uttar Pradesh. The Karnal district is surrounded by Kurukshetra district on its north-west, Jind & Kaithal district on its west, Panipat district on its south and Uttar Pradesh on east (figure 1 and 2).



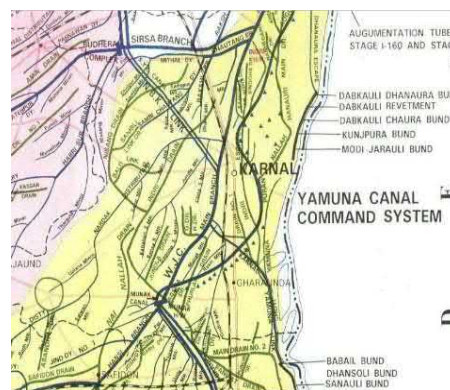
Figure 2: Karnal map

### 1.3 Industrial scenario of Karnal

By late sixties, this region had started feeling the impulses of development. Regions adjacent to GT road (NH-1) recorded considerable economic growth, especially due to industrial development in areas around Delhi. The onset of green revolution, progress in Signage farming, and expansion of agro-based & agriculture oriented industries (particularly rice mills in large numbers) provided an impetus to the growth of the region. Subsequently, the region witnessed a transition from agriculture to industrialization. The Haryana government also undertook several initiatives to promote industrial development in the region. The state ensured creation of massive infrastructure in terms of complete electrification, provision of road transport, expansion of administrative, educational and health facilities in small towns, and establishment of many new industrial townships and urban estates. Presence of NDRI in Karnal coupled with enabling policies of the government led to establishment of several milk processing and Signage plants in the region. At present, Karnal has become the major industrial hub with presence of a large number of industries across various segments such as and several industrial sectors such as Signage, food processing, rice milling, pharma, packaging, agriculture implements and so on.

## 1.4 Geographical Traits

The Karnal district lies between 29°09'50" and 29°50' North latitude and 76°31' 15" and 77°12'45" East longitude. The topography of Karnal district is almost plain and well irrigated through tube wells and canals. It has an elevation of 235 to 252 meters (748 feet). Irrigated area is about 205627 hectare, while the gross irrigated area is 388917 hectare. Percentage of the gross irrigated area to total cropped area is 98.72 % while the cropped area is 387111 hectare.



River Yamuna forms eastern boundary of the district and flows from north to south. The district is a part of the Ganga-Sindhu (Indo-Gangetic) plains and has a well spread network of western Yamuna canal. Its geographical area has been divided in to three agro climatic regions, Khadar, Bhangar and Nardak belt. Khadar starts from Indri-Karnal road one mile away from Karnal covering the area in between Yamuna River and NH-1 up to Patti-Kalyana village. Bhangar area starts from west of Khadar area covering Gharaunda, development block. The nardak area lies in Nissing, Nilokheri and Assandh development block.

## 1.5 Demographic Trends and Economic Structure

According to the 2011 census, Karnal district had a population of 1,505,324 (of which male and female were 797,712 and 707,612 respectively), making it the 5<sup>th</sup> largest district of Haryana in terms of population<sup>1</sup>. The district has a population density of about 600 inhabitants per square km. Karnal has a sex ratio of 887 females for every 1000 males, and a literacy rate of about 75%. Overall penetration of higher education in Karnal is lower than the state average.

The percentage of Cultivators to total Workers in 2011 in the district was about 22% whereas during 2001 it was 27%<sup>2</sup>. This infers that people have moved away from farming due to lesser profits. However, the district's economy is still predominantly agriculture based owing to the existence of good irrigation system across the district. Industrial activities have started increasing in the district with due to pro-business environment in the state. This had led to generation of employment in secondary and tertiary sectors.

The existing area under industrial use is approximately 102 hectare including the major industrial estate of HSIIDC in Sector 3 of Karnal. Keeping in view the location, available infrastructure, topography and drainage, an industrial area of 466 hectare has been allocated by Government of Haryana in sectors 1, 2, 37, 40 and 43-A of Karnal district. This units that will be setting up here are expected to provide employment to about 35,000 workers.

<sup>1</sup> <http://www.census2011.co.in/census/district/213-karnal.html>

<sup>2</sup> Census 2011: District Census Handbook, Karnal

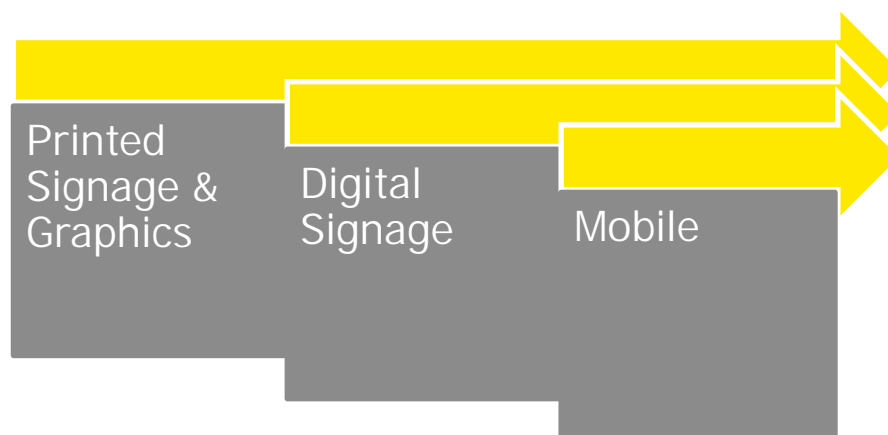
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## 2. Overview of the Signage Industry

Signage industry flourished with advent of plastics after W.W. II. Flexible printing materials arrived in the industry in the 70's and today plastic, in its many different forms, and flexible materials are the most common sign facing materials used by sign manufacturers. The industry witnessed another major revolution in the sign industry with the arrival of the computer. Introduction of vinyl films for application to almost any surface gave the signage manufacturer tremendous space, lower cost and significantly improved quality of production. Soon digital printing technology was being introduced for the production flex and banners. The most recent introduction into signage industry has been the L.E.D. as a light source.

Printed signage has been one of the primary signage solutions available in the market for a very long time. Most of the users deploying signage solutions have been identified to have better knowledge of printed signage, which played a huge role in influencing the first-time consumers. Initial users have been identified to avail printed signage solutions, owing to the simplicity and lower maintenance cost of the products. Owing to innovations in printing technologies, the cost of these solutions is further expected to lower gradually over the forecast period, thus supporting the growth of the market globally.

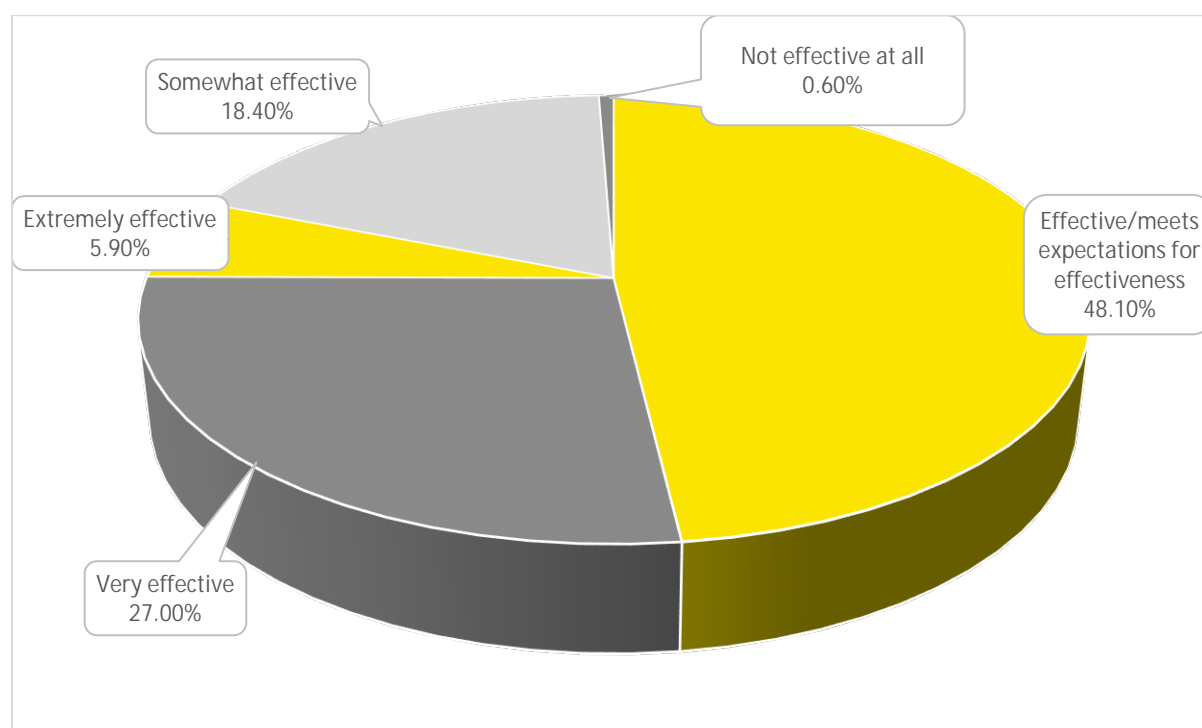
Figure 3: Advertising channels available in current scenario



Over 99% of the print signage buyers surveyed by InfoTrends reported that printed signage and graphics are at least somewhat effective and over 80% reporting that printed signage is "effective," "very effective," or "extremely effective."



Figure 4: Effectiveness of Wide Format in Meeting Marketing Goals



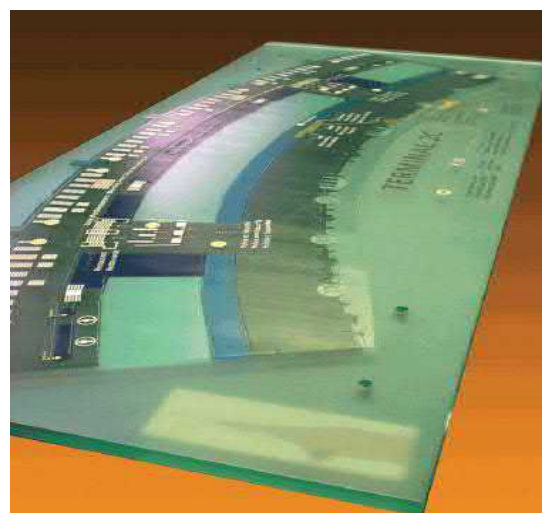
N=526 Respondent

Source: Wide Format Printing: Critical Elements in the Communication Mix, InfoTrends 2013

## Printing technologies

### 1. Screen Printing: Direct To Substrate and Layered Printing

Screen printing involves application of ink through a fine mesh onto a variety of materials including fabric, wood and steel. It is the oldest method used by industry of craftsmen, schools and publishers. In some industries that require large scale manufacturing processes like product packaging, screen printing still plays a leading role. Even though screen printing is being replaced by digital technologies in a variety of areas, the process still plays a large role in the signage and graphics industry.



### 2. Digital Flatbed: Direct To Surface Printing

Inkjet printer for commercial use was started during 1970s and became hugely popular in the 1990s as a low cost color printing technology. Flatbed printers can print on different materials and very thick



surfaces but every material is different and requires a different ink alchemy. Large flatbed printers have the capacity for printing on 2-inch thick materials and this has enabled signage industry to print on a wide variety of surfaces from different grained woods to textured metals.



Flatbed printing utilizes two primary ink applications: Solvent inks, which are generally waterproof and durable for outdoor use, it requires extensive heating of the ink and material during the printing process; and UV inks, which are cured when exposed to sunlight. UV inks are more environmentally friendly but are susceptible to cracking (which flatbed printers minimize) and are less durable. Recent advancement has made UV inks effective for outdoor applications.

### 3. Direct printing To Vacuum Formed Plastic

Recent development in software and hardware has enabled vacuum forming graphics to successfully print to these surfaces. Software allows control of distortions that occur when the plastic is moulded into a dimensional shape allowing for perfectly printed dimensional graphics. New innovations have enabled integration of flatbed printing and routing technologies to create printed signs into a seamless, efficient process. This technology has been developed primarily for the packaging industry, producing the advanced packaging fixtures being utilized in supermarkets and department stores. High end specialized printers can both print and cut, streamline the production process for fixtures. This has enabled a merger between packaging and fixture development.



### 4. Direct Printing to Vinyl and Fabric

This is most common method for printing of large format graphics on vinyl and fabric. This technology has brought together a complex ecosystem of fabricators, print companies, ink and material manufacturers. This community has lowered the barriers to digitally printed signage and has allowed the small fabricators to enter the market. Vinyl and fabric printing finds itself as a medium for covering large exterior and interior wall and window surfaces.

Printing over white Adhesive Vinyl have been in use for quite a long time. White adhesive vinyl serve as a base surface applied to multiple materials. This part of the market has grown quickly with the growth of glass facades in retail applications. Sign fabricators have begun to implement large graphic surfaces as a replacement for traditional sign installations.



Printing over mirrored, transparent, mesh and translucent Vinyl based on internal illumination is now becoming a key driver of sign graphics, lighted walls and facades. This has encouraged the development of vinyl that can support graphics and images. Vinyl substrates come in a variety of opacity levels as films or meshes. The ability to change colour and appearance between day and night also has been a key area of focus with new vinyl materials.



#### 5. Direct Printing to Fabric

Fabric manufacturers have made enormous strides in recent years in making fabrics and meshes that can be directly printed. While these fabrics do not have the same level of durability as dye sublimated graphics, the gap between the two processes have been narrowing in recent years with improved inks and coatings that can enhance the longevity of the material in the environment. Direct printed fabrics have become more and more prevalent in longer term uses due to environmental concern. Signage industry is moving from vinyl to fabric as printing substrate.

Benefits of Direct printing to Vinyl & Fabric:

- ▶ Cost effective and easy access
- ▶ Dependable materials with extensive research and support
- ▶ Can be combined with multiple substrates from glass to brick
- ▶ Variable durability dependent on material quality and application

## 6. Embedded and Sublimated Digital Graphics

Embedded and sublimated digital graphics use heat and electrostatic methods to bind ink with substrate material. Embedded printing approaches are used in locations where graphics must withstand vigorous environmental conditions for long periods of time or when the graphics need to be seamlessly integrated into a building or interior.

Dye sublimation uses heat to transfer a digitally printed film to fabric and vinyl creating a durable surface that can withstand the elements. Dye sublimation is used extensively where outdoor durability is important, such as banners, awning and building wraps. Dye sublimated graphics are a key component of high-tech fabric structures. Dye sublimated fabrics can take on fantastic shapes. Dye sublimated fabrics are durable, light and flexible.



High Pressure Lamination process presses graphics into paper using heat and pressure. High pressure laminates are used extensively in exhibition, park, and transit signs where tactility and durability are important attributes. Laminates can be fabricated at multiple thicknesses and can be thin enough to curve around surfaces.

Benefits of Embedded and Sublimated Digital Graphics:

- ▶ Durable and able to withstand harsh outdoor conditions for years
  - ▶ Can be integrated into architecture and interiors
  - ▶ Difficult to manufacture and usually outsourced
- Can often be combined with a second surface coating for additional protection



### 2.1 World overview

The global printed signage market was valued at USD 40.12 billion in 2016. This market is expected to reach a value of USD 47.40 billion by 2022, at a CAGR of 2.66% over the forecast period (2017–2022).<sup>3</sup> Cost-effectiveness of printed signage compared to digital solutions, and growing demand from the retail industry have been identified as the key factors influencing the growth of the market. Although the market is facing high competition from digital signage, the foothold of the printed

<sup>3</sup> Source: Global Printed Signage Market - By Product (Billboards, Backlit Displays, Pop Displays, Others), By Type (Indoor, Outdoor), End-Users, Region, Trends, Forecast - (2017 - 2022)

signage market will remain strong. Increase in the volume of investments in advertising and surging expenditure on infrastructure will also support the overall market growth.

The retail industry requires high volumes of printed signage, much of which has a short life span. Therefore retail trends have a significant impact on printed signage demand. These retailers have limited budgets compared to the large companies, and SMEs are inclined toward one-time installation solutions with lower maintenance costs. Grocery retail has the highest concentration of printed signage. Global retail sales totalled over \$22 trillion in 2014, of which some 6% was through e-commerce sales.<sup>4</sup> The growth in retail sales is currently highest in India, Indonesia, China and Russia respectively. Africa's fast growing population will provide good retail opportunities. The number of retail stores is also expected to grow over the forecast period, assisting the growth of the market. Large retailers are focusing towards other emerging markets such as the MINTs (Mexico, Indonesia, Nigeria and Turkey) with new interest.

Asia-Pacific has been dominating the global printed signage industry, with 37% of the market. The region is projected to expand its market dominance further to 41% by the end of 2022<sup>5</sup>. The large population of the continent has pushed the growth of the market significantly. Additionally, lower digital signage penetration is also driving the growth of the printed signage market in Asia-Pacific. On the other hand, North America, which holds the second largest share in the global printed signage market, is expected to witness slowdown in growth, owing to increasing adoption of digital signage solutions in the market.

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<sup>4</sup> Source: Smithers Pira -The Future of Signage in an Electronic World to 2020

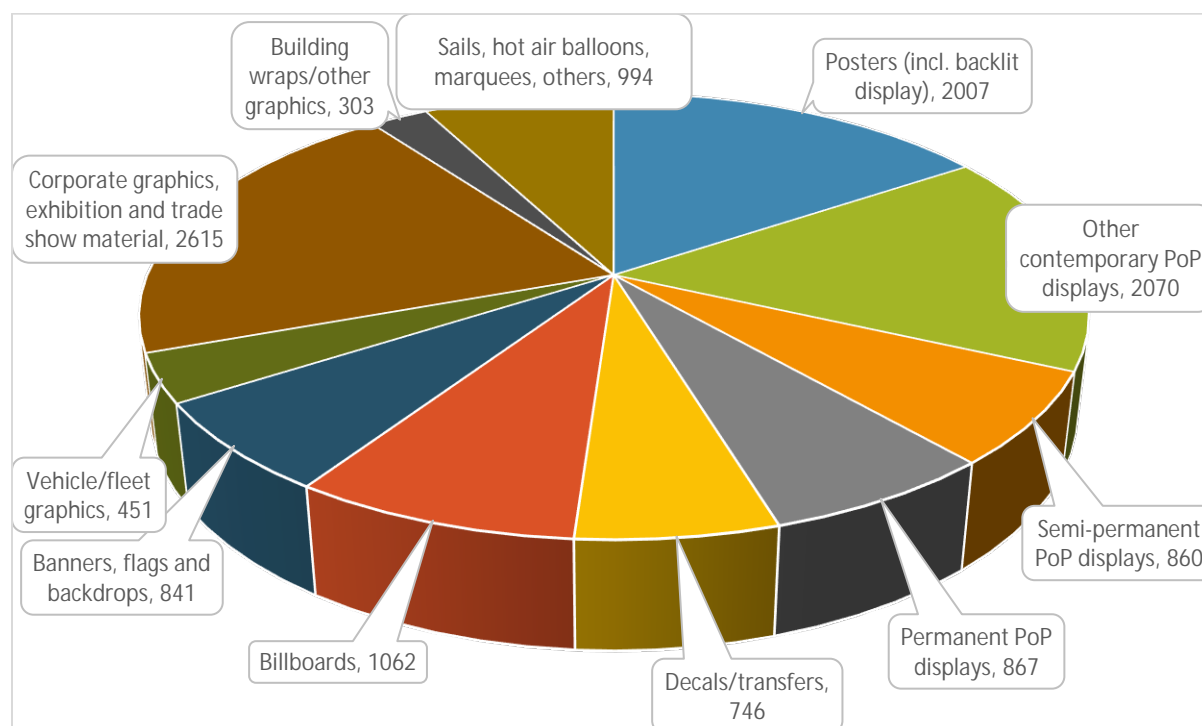
<sup>5</sup> Source: Global Printed Signage Market - By Product (Billboards, Backlit Displays, Pop Displays, Others), By Type (Indoor, Outdoor), End-Users, Region, Trends, Forecast - (2017 - 2022)



Figure 5: Global market for printed signage industry



According to a new market report by Smithers Pira, the global printed signage market amounted to 12.8 billion square metres of material in 2014 and was worth over \$49.4 billion. Indoor signage has emerged as much larger market, accounting for 72% of the volume output whilst outdoor signage accounted for 28%. The growth of digital displays is set to have a market impact upon outdoor printed PoS/signage. Total output of printed signage is expected to reach 13.6 billion square metres, valued at \$49.8 billion by 2020.

Figure 6: Global printed PoS/signage output by product, 2014 (million m<sup>2</sup>)

Source: Smithers Pira

## 2.2 India overview

The signage industry of India is now going through a transformation phase. From the traditional signboard manufacturing techniques to several technological advancements, the industry is becoming more organized day-by-day. In this respect, certain factors like growing retail and infrastructure industry, increasing need of advertising and growing number of MNCs in the country are providing a further boost to the signage sector. According to an RNCOS report, Indian signage industry is anticipated to surge at a CAGR of around 10 percent during 2013 to 2016<sup>6</sup>. Signage hold majority of the market shares in terms of both value and volume. The scenario in the industry is going to bring a new change into the industry. The manufacturers of signage boards are upgrading to newer and better technologies, in order to enhance the profitability. Growth in the online services, new printing technologies and laser engraved sign boards are some of the trends prevalent in the signage board industry. The Signage Industry is witnessing robust growth in India with strong and steady economic growth. More and more MNC's are coming to India, branding has become an important aspect in every segment. Signage, LED & Showroom Display plays a very important role in each and every business. In India advertising industry is worth more than 3.5 billion US dollars annually with a growth rate of approximately 20% per annum<sup>7</sup>.

Print contributes a significant portion to the total advertising revenue, accounting for almost 41.2 per cent, whereas TV contributes 38.2 per cent, and digital contributes 11 per cent of the total revenue. Outdoor, Radio and Cinema make up the balance 10 per cent.<sup>8</sup> There are more options available for retailers who want to move beyond traditional vinyl graphics. Retail environments are shifting rapidly, and retailers expect their printing partners to keep up with their needs. One of the trends in signage is the printed fabric. There are a number of reasons to embrace fabric signage. Fabric signs lightweight, easily packaged and reduced transportation cost. Additionally fabric signage are more environmentally friendly. Fabric signage has a premium look, and is easy to store and re-use if needed. In fact, the World Textile Information Network has predicted that there will be a 25% growth in digital textile printing—this trend isn't going anywhere anytime soon!

New Delhi is the epicentre of North Indian Signage Market with availability of printers, cutters, fabricators, and media and ink sellers of all quality and quantity levels to meet every customer's demand in the Indian signage market. Shopping malls and other infrastructure projects are also contributing to higher consumption, as printed signage is the most preferred form of signage in these places. Increasing investments in these sectors will have a significant impact on the demand. On the other hand, reducing the cost of digital signage solutions could hamper the overall market growth.

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<sup>6</sup> Source: RNCOS - Opportunities in Indian Signage Industry

<sup>7</sup> Source: [http://www.businesslive.in/Sign\\_India\\_2017\\_Chennai/index.html](http://www.businesslive.in/Sign_India_2017_Chennai/index.html)

<sup>8</sup> Source: IBEF - Advertising and Marketing Industry in India



India signage & advertising industry is one of the emerging sector and hold lot of opportunity during next decade. With increased number of shopping malls & MNC's in India, branding has become an important aspect in every segment. There have been technological advancements through new machines with improved quality of products. Additionally, the country has availability of workforce at economic prices. These favourable factors have enabled the industry to display its capabilities nationally and internationally to get more business and to create employment opportunity for workforce.



### 2.3 Haryana overview

Regional levels of the Indian signage industry has been an unexplored treasure so far. However, signage industry in Haryana still functions in contemporary settings and dominated by printers at large. Signage segment in the region is growing with increasing demand of advertising and holds a brighter future. While the world cries economic slowdown and news of companies downsizing making headlines, Leaders of the signage industry are making contributions to make Haryana a leader in the country's signage industry.

Selection of Karnal for development under smart cities by Ministry of Urban Development, Govt. of India has provided great thrust to the development of signage & advertising cluster. As the city goes Smart, it will need new displays, new sign boards, hoardings, video walls, etc. Government of Haryana has also given a lot of thrust for development of industries in the state. The government has come out with a new industrial policy. Development of clusters is the focus area for the Government of Haryana to provide large scale employment and expanding the industrial base in the state. Karnal being on the G T Road and strategically located between New Delhi and Chandigarh will have its share in the development drive of the Government of Haryana.



### 3. Diagnostic Study Findings

The diagnostic study was undertaken by the cluster members during July to September 2016 to map the existing business processes in the cluster, identify the gaps and understand the requirements of the Signage & advertising cluster. The diagnostic study report (DSR) for Signage & advertising cluster was compiled by Skilltech Consultancy Pvt. Ltd. in co-ordination with cluster SPV and with inputs from DIC, Karnal; MSME-DI, Karnal; and Punjab National Bank. Cluster members have actively participated during the need assessment process and suggested the remedial measures to prepare an action plan. Diagnostic study revealed that cluster units have been using obsolete technologies due to lack of capital and this has led to poor quality of the signage and advertising products. Poor quality and unavailability of modern printing technologies has led to decreased market share of Karnal signage & advertisement cluster.

The cluster units are also incurring higher production cost as majority of high quality and bulk printing is being sublet on job-work basis to a unit having high end technological machines at Delhi. The cluster is also not able to cater market demand of better printed advertisement materials on fabric, as none of the unit has machineries to conduct digital printing on fabric. The cluster has also not been able to undertake product and market diversification because of limited access to technology for advance printing.

DSR for Signage & advertising cluster was presented to the State Level Project Steering Committee (SLPSC) on 21<sup>st</sup> October 2016 and was subsequently approved. The minutes of the SLPSC meeting highlighting the approval of DSR and permission to undertake DPR is provided as Annexure 1. The SPV had been suggested to take up the soft intervention activities as per mentioned action plan and state government shall provide assistance to SPV to prepare the Detailed Project Report (DPR) for the cluster. The major findings of the DSR are presented below:

#### 3.1 Cluster Actors and their role

Many support institutions and agencies such as industry associations, government agencies, academic/R&D institutes, financial institutions, BDS providers etc. situated within and outside the cluster play a key role in developing the cluster as well in complementing initiatives of the cluster SPV. The key stakeholders of Karnal Signage & advertising cluster are:

##### District Industries Centre (DIC)

DIC in Karnal comes under the Dept. Of Industries and is headed by General Manager who is assisted by functional managers and technical field officers. DIC promotes and routes subsidy to micro and small enterprises in the region. DIC is key stakeholder in promoting cluster development initiative in the district. The Karnal DIC has been instrumental in preparation of the DSR of the cluster, formulation

of the SPV and registration of members under Unique Aadhar Memorandum (UAM) and the organization of several awareness programs in the cluster.

Joint Director, DIC, Karnal will also be member of the Project Management Committee (PMC), which shall spearhead the project implementation under MSE-CDP in the Karnal signage & advertising cluster.

#### MSME - Development Institute, Karnal

MSME-DI is a field office of the Development Commissioner (MSME), Ministry of MSME. The institute is an apex body for promoting, coordinating and monitoring the policies and programs of DCMSME in the state. MSME -DI, Karnal along with its Branch office at Bhiwani provides a wide range of extension / support services to the MSMEs in Haryana. The MSME-DI, Karnal has been actively conducting several initiatives in Karnal cluster such as organizing awareness programs on MSE-CDP, collateral free loans under Credit Guarantee Fund Trust for Micro and Small Enterprises (CGTMSE), design clinic scheme, IPRs, technical trainings etc. It has also been involved in supporting several 'soft interventions' in the Signage & advertising cluster at Karnal. The Director, MSME-DI will also be a member of the PMC for the project and will be guiding force to the SPV for project execution.

#### Banks/Financial Institutions (FIs)

Banks like Small Industries Bank of India, (SIDBI), commercial banks etc. serve the financial needs of the cluster units. The lead bank in Karnal district is Punjab National Bank (PNB). SIDBI is the apex financial institution responsible for the growth and development of the MSME sector. Almost all the government subsidy schemes and bilateral lines of credit are implemented through SIDBI. SIDBI has an office in Chandigarh whose services are envisaged to be used for appraisal of this DPR. Punjab National Bank, Karnal has been proactive in extending financial assistance to micro units of signage & advertising Cluster and has agreed to support the cluster by providing assistance for working capital requirement.

#### Haryana State Industrial and Infrastructure Development Corporation (HSIIDC)

HSIIDC is an autonomous body, set up by the Government of Haryana in 1967, is headquartered at Panchkula. HSIIDC has been playing a progressive role in the industrial development of various districts of Haryana. Over the years, it has greatly accelerated the pace of its activities by facilitation land allocation to industries, creating industrial areas and required infrastructure. Entrusted fundamentally with the task of establishing industrial areas, HSIIDC has also taken the responsibility of providing a continued assistance to the units which come up in these industrial areas. HSIIDC provides a total package of assistance at a single point to the entrepreneurs and disburses incentives of behalf of State Government. HSIIDC has provided Change of Land Use (CLU) permission from agriculture land to industrial land for acquired land by Signage & advertising Cluster, Karnal.

### Karnal Food Pack Cluster Ltd. (KFPCL)

KFPCL is an infrastructure developmental body set up to promote the growth and development of the MSMEs of Karnal. It was formed by a group of visionary entrepreneurs from Signage & advertising, print & packaging and dairy industry with a common vision of enabling MSME growth through cluster development. KFPCL aims to achieve the target of inclusive growth not only for themselves at individual level but for the Karnal industry as a whole.

KFPCL has developed an industrial region with required infrastructure facilities like roads, water, street lights, drainage, etc. at Mogul Majra in Karnal. Many food processing, Signage and advertising units are setting up production facilities in the industrial township of KFPCL. KFPCL also intends to provide and maintain public utility, civic amenities, R&D and Skill Development Centre in the region. Karnal Signage CFC Pvt. Ltd. is in the process of purchasing land from KFPCL for setting up the CFC. KFPCL will play a key role in setting up the proposed CFC as a model of complimentary facilities at a single location in Karnal. They are also working on providing marketing support to the units setting up base in Mogul Majra.

### Haryana Chamber of Commerce & Industries, Karnal Chapter (HCCI)

HCCI is the apex industry association of the MSMEs of Haryana and has presence in all major industrial districts of Haryana. HCCI raises and addresses the problems faced by industries in the state in a coordinated manner through its chapters. It also liaisons closely with the State and the Central Government to raise its concerns for development of industries in the state in a collective manner. It has a chapter in Karnal district that takes cares of the interest of MSMEs of Karnal. Recently, HCCI has also been invited by the government to assist in the budget formulation of the state to promote industries in the state. HCCI has 133 registered members in the Karnal chapter. Members of Karnal Signage & advertising Cluster are also members of HCCI.

### Laghu Udyog Bharti (LUB)

With 1000s of registered members, Laghu Udyog Bharti is India's largest industry network in India. LUB has presence in every state and district of India, it has been working towards the welfare of MSMEs in India. LUB has played an important role in giving grass root level insights regarding challenges faced by the MSMEs as well as changing industry trends & practices to the policy makers. LUB is supporting industries associations of Karnal for promotion of cluster development programs.

### Raw material suppliers

The most important raw materials used for the manufacture of signage industry products are flex rolls, inks and materials required for framing etc. Some of the raw materials are available locally while rest are procured from bigger markets like NCR due to cost effectiveness and bulk purchasing. In addition to these, dealers, manufacturers and service provides for various inputs used by cluster units are also available in the region.

- a) Printing substrate – Vinyl, paper and fabric roll are available in NCR and procured by units as per their requirements.
- b) Ink: Every printing material is different and requires a different ink alchemy. Printing utilizes two primary inks: Solvent inks, which are generally waterproof and durable for outdoor use; and UV inks, which are cured when exposed to sunlight. Inks are procured in bulk quantity by these units from Delhi and NCR.
- c) LEDs & materials for erecting frames: Cluster units require LEDs, electrical fittings, wooden & iron, frames, paints etc. for mounting of signage for advertising purposes. These materials are available abundantly in local market.

### Technical Institutions

There is a good presence of technical institutions in and around the Karnal district. These institutes will be engaged for necessary technical assistance and capacity building support to Signage & advertising cluster, Karnal.

### NID (National Institute of Design)

NID is a national design institute which can help the signage & advertising cluster for designing new signage products. Product design is one of the key aspects of signage & advertising industry as it builds connect between products, systems and user. The product design program at NID shall be conducted to inculcate user-centric approach and processes. The product design program assimilates inputs in diverse domains such as human factors, studio skills, advance CAD, design management, materials & manufacturing processes.

### Budha College of Education

The institute is based in Karnal and aims to provide education for development for skilled workforce to be absorbed by industries. Further, the Institute has helped to train and provide quality workforce for development of signage & advertisement industry in the country. Experts from institute has been consulted during finalization of hard interventions, particularly during the technical specification of machines required at CFC.

### Haryana State Pollution Control Board (HPCB)

HPCB is a major stakeholder for the industries operating in the region from the environmental viewpoint. The main functions of the board are (a) to make sure that the units comply with the environmental regulations; (b) to collect and disseminate information relating to pollution and the prevention, control or abatement thereof; (c) to encourage, conduct and participate in investigations and research relating to problems of pollution. The board also has to implement the regulations laid out by Central Pollution Control Board (CPCB).

Signage industry usually don't contribute to any pollution directly and hence falls under 'Green' (non-polluting) category as declared by the Ministry of Environment & Forests, Govt. of India.



### Other key stakeholders located outside the cluster

There are a number of other service providers and institutions located outside the cluster but they are important stakeholders in the business environment of cluster units. Some of these are mentioned below:

#### National Small Industries Corporation (NSIC)

NSIC is a Government of India enterprise under Ministry of MSME. NSIC was established in the year 1955 with a view to promote, aid and foster growth of small industries in the country. Some of the services and schemes offered by NSIC are:

- ▶ Helping entrepreneurs in purchasing machinery and equipment
- ▶ Equipment leasing and working capital finance
- ▶ Raw material assistance and information on technological up gradation
- ▶ Composite loan scheme and export assistance

The nearest NSIC office is in Panipat district of Haryana and extends guidance to SPV members to support their activities.

The key stakeholders of the Karnal signage & advertisement cluster are presented in figure 10:

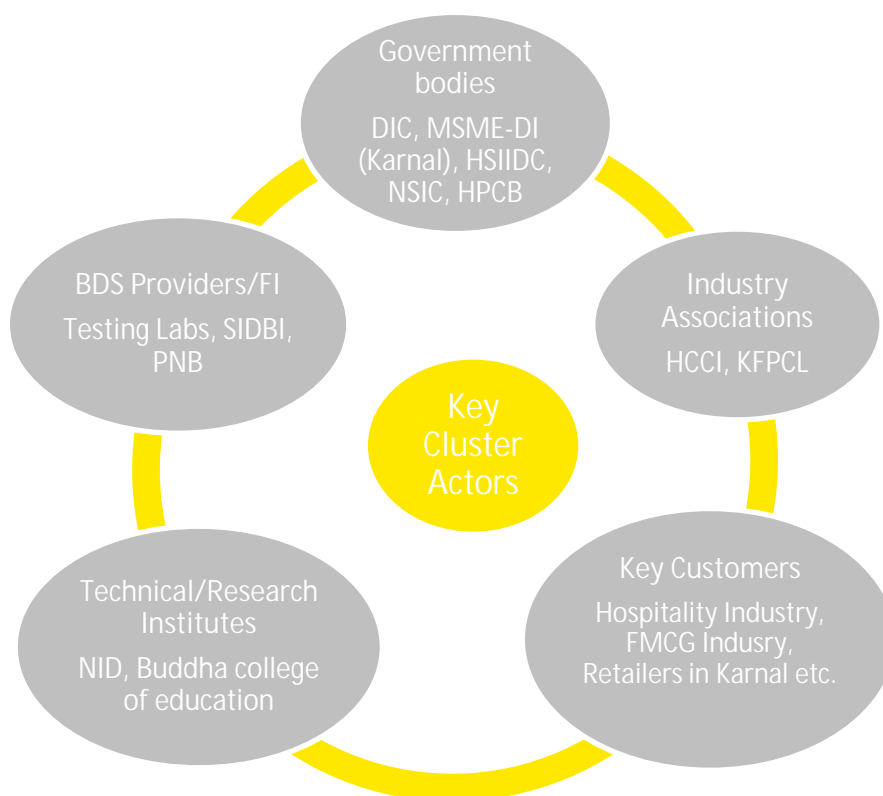


Figure 7: Stakeholders of Signage & advertising Cluster, Karnal

### 3.2 Cluster Turnover, Market, Employment

The cluster units are mainly concentrated in & around Karnal. There are about 144 units in the cluster and all of which are micro in nature. The classification of units in terms of size is shown in figure 8. Cluster units are providing direct employment to 1600 workers and around 500 workers are engaged indirectly to facilitate various activities in the cluster. Most of the workers in these units are migrants from adjacent states particularly Uttar Pradesh. Women workers are few in number and primarily works as auxiliary labour. Employment status of Karnal Signage & advertising Cluster is shown in figure 9.

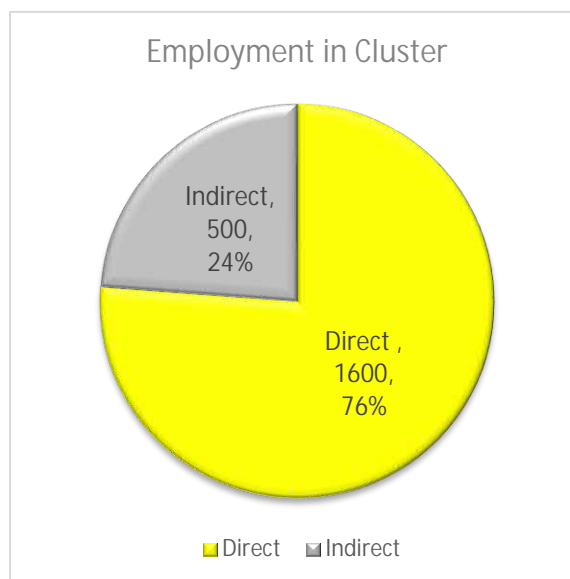
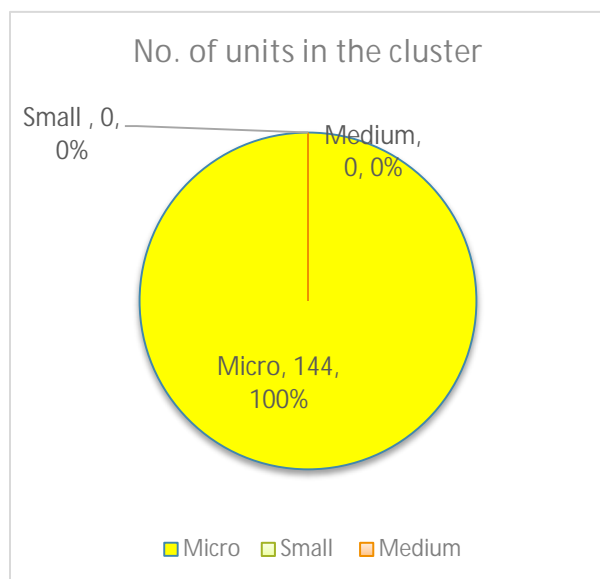


Figure 8: Classification of units

Figure 9: Employment status in Cluster

The total turnover of the cluster is estimated to be INR 150.00 crores and units have not been exporting Signage products. Turnover of cluster during last five years is as follows:

Table 2: Turnover of Karnal Signage & advertising cluster

S. No.	Financial Year	Turnover of Signage & advertising cluster (in Rs. crores)	Export of Signage & advertising cluster (in Rs. crores)
1	2015-16	150.00	0.00
2	2014-15	140.00	0.00
3	2013-14	145.00	0.00
4	2012-13	125.00	0.00
5	2011-12	120.00	0.00

Source: Karnal Signage CFC Pvt. Ltd.

Most of the signage & advertising units are catering to the demand of local retailers and other customers' requirements at Karnal and adjoining areas. There are very few units with availability of modern printing facilities and rest of the units are dependent on printers based in Delhi for printing purpose. Units of Karnal Signage & advertising cluster lack quality and production capacity due to technological backwardness. Cluster units are unable to compete with bigger players to garner bulk orders from large customers such as telecommunication industries, retailers etc.

The major products manufactured by the cluster units along with the number of units engaged in producing these products is mentioned in table 5.

Table 3: Products manufactured by cluster units

S. No.	Products	No. of units
1	Flex boards & hoardings	25
2	Banners	30
3	LED, LCD Signage, Display boards	15
4	Awnings	20
5	Kiosks/exhibition displays	30
6	Bill boards	10
7	3D boards & Posters	20
8	Novelties, Gift items	18

This cluster has potential to increase its production and market share through manufacturing of quality Signage & advertising products at competitive prices. The proposed CFC will be open to all cluster firms and provide an opportunity to micro units in getting job work done using advanced UV printer, advanced software based printing & cutting machine and high-end digital printing machine. This will in turn increase individual capacity utilization and profitability of cluster units. The facility will provide a major infrastructural push to the units reeling under high competition. The CFC will also lead to creation of number of jobs for supervisors, machine operators and unskilled workers like helpers at CFC and individual units.

### 3.3 Production Processes

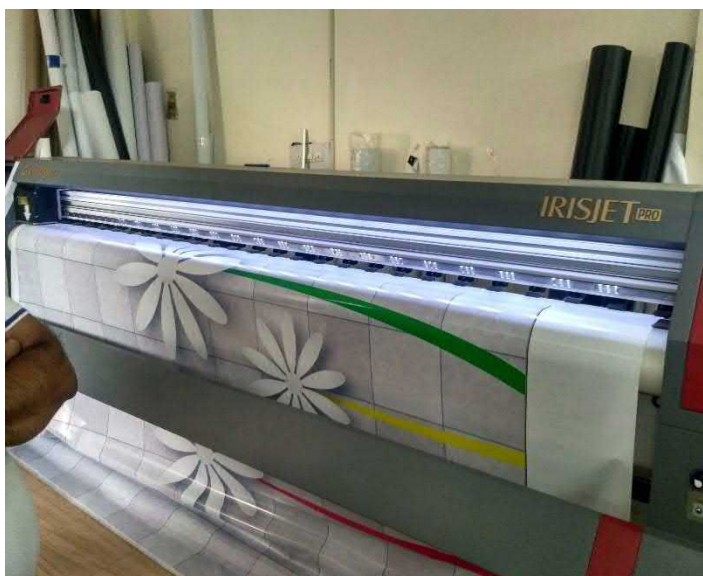
The production processes in signage are very much varied and involves use of varied technologies. The main production processes involve designing, printing flex, cutting, coating, assembly of display boards, 3D printing, installations, welding of posts, etc. Few of the works like designing and printing is done by skilled labor while cutting and mounting involves semi-skilled workforce. Major activities involved in production process are as follows:

1. Designing: Designing the content on the flex, banner or substrate is the first step of signage and advertising industry. Large customers and retailers provide the content of printing as well as design while others provide only content for printing and designing is done by the units themselves. Designing require computers, internet connection and designing software along with trained manpower.

Few of the units have also set up mini design studio while other with lack of capital to invest for securing the retail space, manpower and some designing tools use the services of designing studios.

2. Printing: Printing of content & design on substrate is key activity of the signage and advertisement industry. There are various methods of printing for outdoor hoardings and banner which varies in terms of substrate, ink and size. Cluster units have limitations in terms of printing size and substrate for printing. Presently, cluster units have printing facility for the flex banner of 9 feet size and printing substrates as paper, vinyl and plastic.

There has been sizable innovation in printing technology in terms of quality, ink, size and printing substrate. Digital textile printing technology enables printing of flex banners on textile substrate. Digital textile signage applications provides an attractive opportunity for sign printers that are looking to expand their offerings and clientele. Recent advancements in ink types, mainly in LED UV and latex, have lowered the barrier to entry and offer a wide choice of printing media. Other advantages of digital textile printing include its positive environmental impact, the ability to expand product offerings, improved operating cost structure, and greater flexibility in production.



3. Heat Fixation: Heat fixation is required for dye transfer work. Most units generally use electric heating coils, while the more sophisticated types use heated oil for a more consistent temperature across the transfer substrate.

4. Finishing & Sewing: Finishing is an important part of the digital soft signage and textile printing works. Machines are used to cut, attach, light and frame a printed fabric product. The router/cutter segment is becoming an important growth area in wide format printing.

Sewing is required to piece together large-scale printed fabric panels. Seaming and attaching a tensioning bead that is sewn into display fabrics is a necessary part of the workflow.



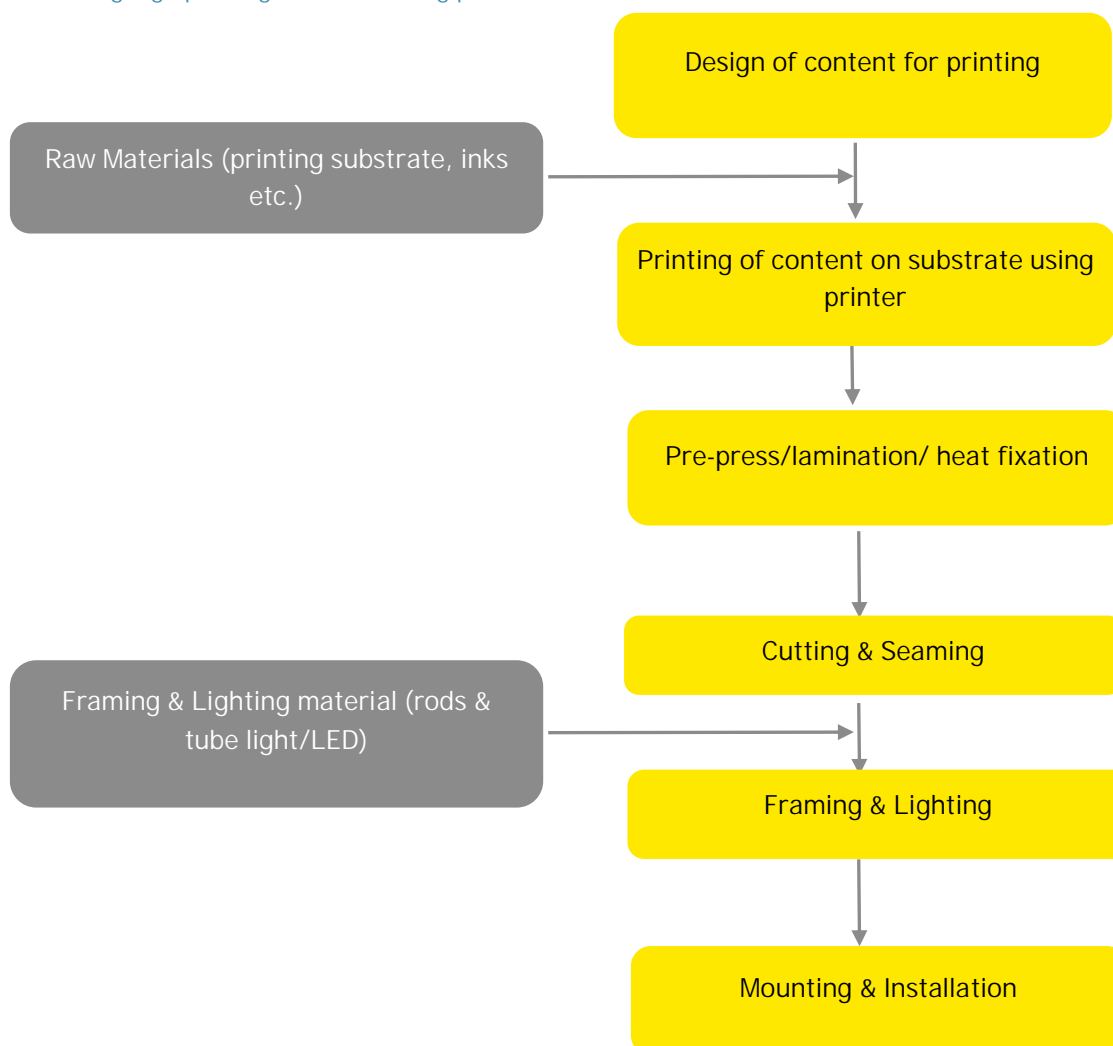
5. Framing & Lighting: Frames are the basis requirement for installation of outdoor flex & banners for advertisement purpose. The material used for framing varies depending on the duration for which the banners/hoarding are installed. Cluster units procure the framing material for local vendors and fabrication is done locally.

Lighting is next activity performed after assembly of frames. Lighting have evolved from fluorescent tubes to LED lit frames. Lighting of flex is done through various lighting methods including front, side, and rear. LED Lighting greatly improves presentation quality. Cluster units purchase LED lights from local vendors and avail services of local electrician for installation of lighting.

6. Mounting and Installation of signage products: Mounting of printed substrate is done after frames are erected and lightings are fitted onto frame. Mounting and installation of signage products require specialized skills. Signage & advertising cluster avails services of labour contractor for installation and fitting of signage products.



Figure 10: Signage printing and advertising process



Signage & advertising industry involves various raw material for manufacturing of products. During the manufacturing process different equipment/facilities are being availed as per requirement of printing substrate and other specifications. List of raw material required and equipment used is mentioned in table 4. Some of the facilities are in-house facilities of these units while other are availed from various services providers based in Delhi and Karnal.

Table 4: Raw material and facilities used by Signage &amp; advertising units

Raw Material	Facilities/Equipment
Vinyl Sheets, Ink	Graphic Design Studios
Sign (Plastic etc.)	CAD/CAM Software
Neon Sign	Digital Printer
Sticker	Screen Printer
P.O.P	Inkjet Printers
PVC Rigid Sheets	UV Flatbed Printer
Dispensers	Multi-Colour Printers
Scroller	Pre-Press
Metal Letters	Lamination Equipment



Iron/ aluminium Pipes	Cutting Plotters
Paper, Plastic Sheets	Seaming Machines
Hard Board	Laser Engraving Machines
Wooden Board	CNC Routers

### 3.4 Value Chain Analysis

Value chain analysis is a strategic tool used to analyse internal firm activities. Its goal is to recognize, which activities are the most valuable to the firm and which ones could be improved to provide competitive advantage. The analysis also reveals a firm's competitive advantages and disadvantages. The units of Karnal signage & advertising cluster intend to perform some production activities at lower costs to enhance their competitiveness.

Value chain analysis of most commonly produced cluster product (i.e. manufacturing and installing one 10' x 6' Flex Board) has been conducted to analyse the internal activities to propose corrective measure to increase competitiveness. The same is provided in table 5.

Table 5: Value chain analysis for manufacturing and installing one 10' x 6' Flex Board

Particulars	Value Added	Total Value (Rs.)	% of Cost of production
Flex vinyl sheet	150	150	15%
Flex design	10	160	1%
Flex printing	240	400	24%
Flex cutting	50	450	5%
Framing	190	640	19%
Lighting	180	820	18%
Transportation	90	910	10%
Installation cost (including labour)	90	1000	9%
Total Cost	1000		
Profit Margin	200		20%
Selling Price	1200		

It is evident from the above table that printing of flex (24%) and framing & lighting (37%) contributes maximum to the cost of production. The basic aim is to improve the quality and printing of the product through deployment of modern machines. These improvements will make the product more competitive and cater new market.

Implementation of modern printing and finishing machines on CFC basis, will reduce printing cost from Rs. 4 per sq ft from Rs. 1 per sq ft. This shall reduce manufacturing cost by Rs. 200 per flex manufactured. This in turn shall ensure enhanced competitiveness of the cluster. The turnaround time for printing shall reduce and production capacity of units will increase.

### 3.5 SWOT Analysis of cluster

A SWOT (Strength, Weaknesses, Opportunity and Threat) analysis of the Signage units has been carried out keeping in mind the technology, marketing, product quality, skills, inputs, production, & business environment of the units. This has helped to understand the real situation of the cluster and the same has been presented in table 6.

Table 6: SWOT Analysis of the cluster

	Current situation		Future	
	Strengths	Weaknesses	Opportunities	Threats
Markets	<p>Increasing local demand for signage and advertising products by telecommunication industries, political parties, retailers etc. in Karnal district</p> <p>Proximity to the Delhi and well connected to all major cities of North India</p>	<p>Sales only confined to local consumers due to inability to meet product specification required by large buyers</p> <p>Lower production capacity of units due to use of out-dated machineries</p> <p>Lack of product diversification of Signage products like digital textile printing etc.</p> <p>No Systematic Marketing effort</p> <p>Marketing efforts limited to Karnal and adjoining areas only</p>	<p>Increasing demand of signage &amp; advertising products due to increasing trend of advertisement and brand building campaigns by MNCs and domestic companies</p> <p>Improvement in printing technology to increase the quality of Signage products</p> <p>Increasing preference to Signage and advertisement products among retailers, showrooms, malls and other sectors</p> <p>Government support available for buyer-supplier contacts through fairs, meets, web portal etc.</p>	<p>Intense competition from large units based in Delhi NCR deploying automatic machines</p> <p>Reducing cost of digital signage solutions may hamper the overall market growth of print signage market</p> <p>Squeezing margins may drive many micro Signage &amp; advertising units out of the market</p>
Technology/ Product quality	<p>Units are able to manufacture low volumes of products economically</p> <p>Entrepreneurs aware about new technological developments in Signage industry</p> <p>Availability of high end printing and finishing technology in Delhi for getting job works completed</p>	<p>Most of the units are using obsolete machines leading to poor quality of printing and unable to manufacture large size products with desired specifications</p> <p>Cluster units lack capability to install advance facilities to produce quality products and diversify product line</p> <p>Inability to execute large orders due to lower printing capacity of machines</p>	<p>Availability of advanced UV printing technology suitable for printing of varied substrate (vinyl, plastic, textiles etc.)</p> <p>Availability of advance software based printing, moulding, cutting and finishing facility for manufactured for plastic moulded products</p> <p>Extended support from government to improve the technology used by MSE</p> <p>Process automation for increased quality and productivity to provide economic viability</p>	<p>Micro units may not able to garner bulk orders from large scale buyers such as telecommunication sector and retailers due to their lower turnover</p> <p>Reluctance to share good practices with other units</p> <p>Automated Production process to increase efficiency &amp; product quality may drive micro</p>

				players out of the market
Skills/ Manpower	<p>Most of the workers have acquired skills on-the-job</p> <p>Educated &amp; experienced entrepreneurs</p> <p>Availability of economic labour</p> <p>Engagement of NID and Buddha College of Education</p>	<p>Shortage of skilled manpower in the cluster</p> <p>Lack of interaction between SMEs and academic institutes to bridge the gap of technology transfer and process improvement in the industry</p>	<p>Availability of government sponsored advanced training programs on designing (outdoor and interior) through software</p> <p>Upcoming specialised courses &amp; trainings on signage and advertising industry in academic institutes</p>	<p>Non-availability of skilled manpower</p> <p>Migration among local youth to Delhi for better opportunities</p>
Inputs	<p>Availability of printing substrates and inks from Delhi</p> <p>Local availability of lighting &amp; fabrication materials for framing purpose</p> <p>Availability of power</p>	<p>Cluster units have no web portal displaying their products and option to enquire &amp; receive orders</p> <p>High transportation cost for procurement of raw material from Delhi</p>	<p>Opportunity for bulk procurement of raw materials by cluster units to strike a better deal with suppliers</p> <p>Developing a portal displaying requirements of raw material and furnishing details of suppliers</p>	<p>Increased cost of raw material may force customers to opt for digital signage over print signage</p>
Business Environment	<p>Steady growth in branding and advertising activities by retailers, manufacturers, industries etc. leading to increasing demand of signage &amp; advertising products</p> <p>State industry department is proactively undertaking several developmental initiatives for MSMEs</p> <p>Active industry associations and cluster SPV, have good knowledge about government schemes</p>	<p>High cost of industrial land in the cluster</p> <p>Lack of common infrastructure/CFC facilities</p> <p>Lack of amenities for workers</p>	<p>Establish CFC with latest technologies for high quality printing facilities, plastic moulding &amp; printing facilities and finishing facilities for improved quality of product and increased efficiency</p> <p>Create better awareness of government schemes and regulations</p>	<p>Signage &amp; advertising is a dynamic industry and large firms with modern technologies are capturing major market share, leading to a declining market trend for micro and small industries</p>

### 3.6 Major issues/problem areas of the cluster

- ▶ Use of obsolete technologies and limited access to advanced technologies: Almost all the micro and small scale units in the cluster deploy manual practices and obsolete technologies for manufacturing of signage & advertising products. Cluster units are presently relying on vinyl and plastic as substrate for printing while digital textile printing has started replacing the vinyl substrate. Digital textile printing also known as soft signage, provides an attractive new service opportunity for sign printers that are looking to expand their offerings and clientele. Other advantages of digital textile printing include its positive environmental impact, the ability to expand product offerings, improved operating cost structure, and greater flexibility in production.

The cluster units do not have printing facility soft signage printing which has led to reduced market for these units. Lack of access to advance printing facility and infrastructure to manufacture value added signage products has been main obstacle of the cluster in expanding the market and compete with bigger players. These units also lack availability proper technology to improve the quality of signage products. The present machineries are obsolete with low production capacity while Quality is another major concern with existing machinery & technologies. This has led to reduced market share of these in units in signage and advertising market.

- ▶ Production inefficiencies: Deployment of obsolete machines has led to increased dependency on manual operations, it leads to operational inefficiencies and lower production capacity. Micro units incur higher cost of production for manufacturing signage & advertising products compared to their bigger counterparts due to lack of economy of scale. Lack of efficiency has hindered the ability of micro and small firms to obtain bulk orders from telecommunication sector and retail industry. Consequently, the units are witnessing plunging market shares and their sustainability is also in jeopardy.
- ▶ Inability to capture the market segment: The cluster units are smaller in size with lesser production capacity. Individually they have not been able to garner bulk orders. Moreover, these units do not have appropriate technology for printing on various substrate as per demand of the market. In order to increase the production capacity, units require modern efficient printing machineries with reduced printing time. Lack of capital to purchase these machines has limited the competitiveness of these units.

Besides, there have been no effort by these units to export their Signage products to other countries. Screen printing and ink jet printing enabled these units to print flexes and banners at economic rates and economic labour has resulted in lower cost of production as compared to other leading signage & advertising industry in other countries. Support is available from government to signage & advertising products manufacturing units for training of manpower.

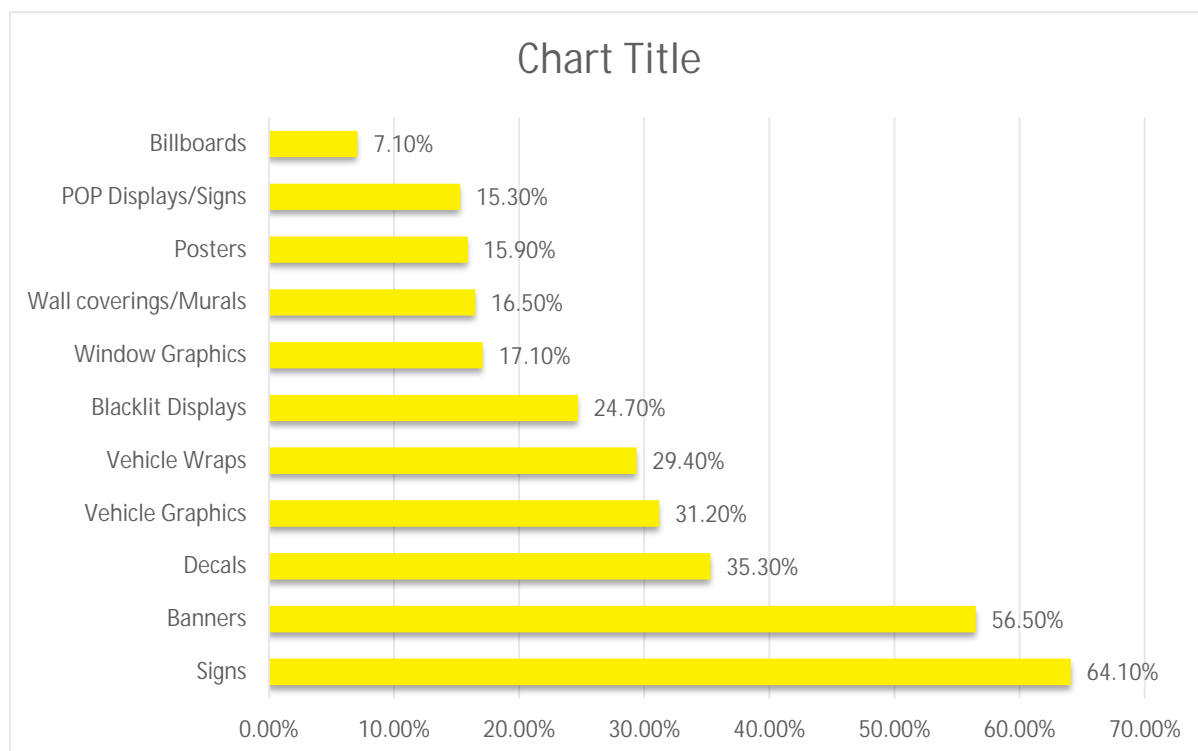
- Absence of cluster portal for e-commerce and dissemination of information: In today's market, e-commerce has evolved as a major tool to increase the visibility of products in the market and attract potential buyers. Several Business to Business (B2B) e-commerce sites have capitalized on this aspect of technology and have been successful so far. In coming time this is going to increase even more. Cluster units need to catalogue their products and publish on a common e-commerce site to expand their buyer base. The portal shall also enable units to receive enquiries of their products online and provide a platform to interact with new buyers. At the same time this can also be used to disseminate information among the members of the cluster regarding availability of market, promotional events, new regulations etc.

Due to inexistence of these facilities, the units are facing cost inefficiencies, material wastages and poor quality of products. This has resulted in losing market shares for these units. Facilities proposed at CFC with government support will help these units become more competitive and move up the value chain.

### 3.7 Key technologies missing

There are various signage & advertising products manufactured by cluster units, some of these products are more prominent than rest. Commonly produced applications drive the majority of wide format digital printing volume. Figure 11 represents the most frequently produced applications in wide format application across world.

Figure 11: Most frequently produced application in signage & advertising industry

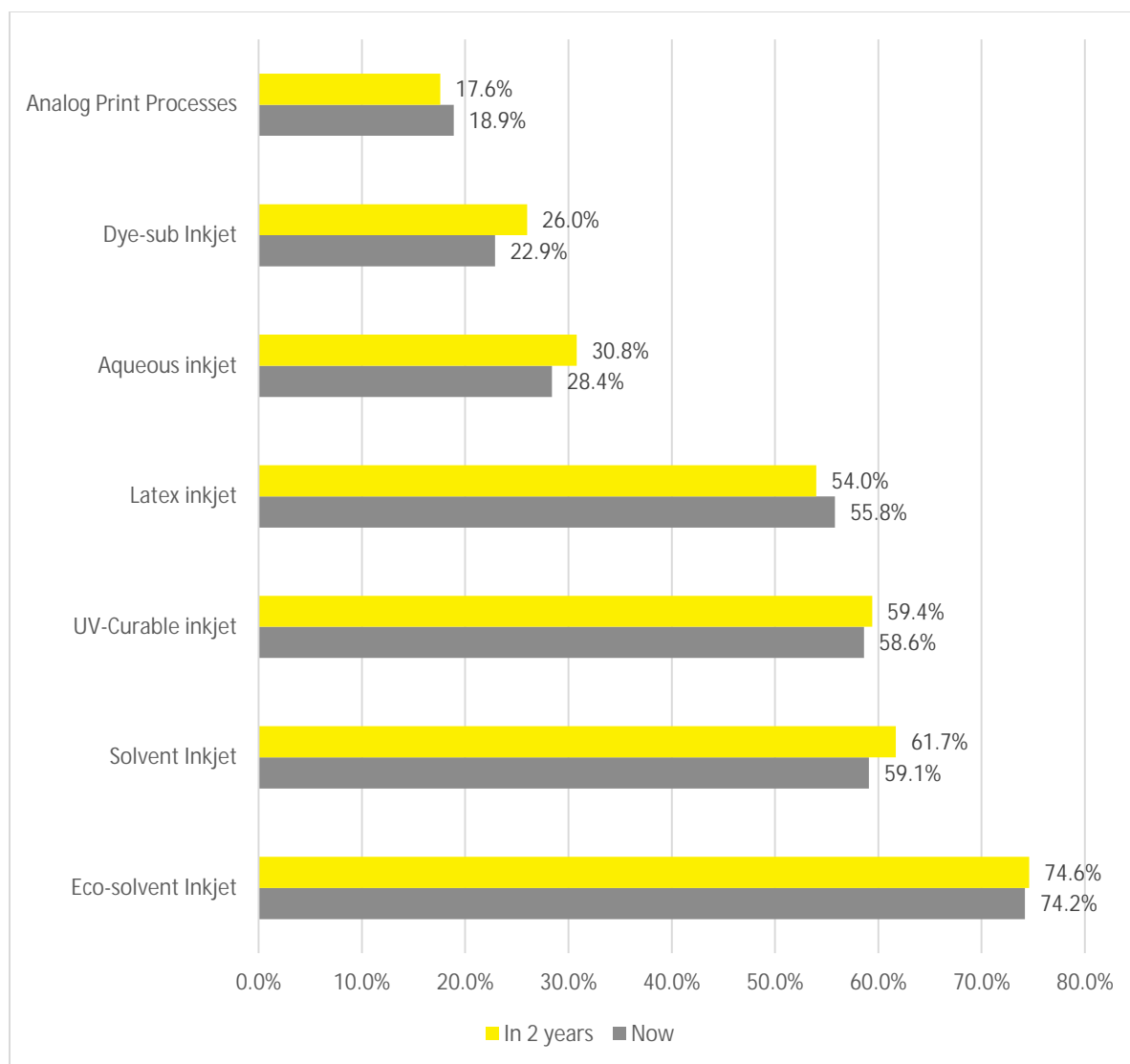


Source: ISA Wide Format Print & Media Mix Survey, 2013

Signs and banners are most common application produced in signage & advertisement industry across the world. Companies manufacturing signs consider them to be a growing application in the wide format digital printing market. Wall coverings/wall murals have been rated as a growing application by almost 70% of respondents. Wall covering/wall mural market is also being fuelled by latex's emergence as a wide format printing technology. Textiles represent a particularly interesting area of the market. According to InfoTrends, 60% respondents agreed that textile printing is growing.

Companies that are investing in higher-end wide format digital printing technologies are becoming more competitive, both in terms of running costs and in the types of applications they are able to produce. As per survey, respondents expect to make subtle shifts into various technologies. The expectations are that there would be slight growth in eco-solvent, solvent, UV and aqueous production. There is also expected to be a notable increase in the dye-sub market as shown in figure 12.

Figure 12: Wide format print & media mix



Source: ISA Wide Format Print & Media Mix Survey, 2013



The technological gaps on various fronts that the CFC proposes to target, along with scope and illustration of major facilities is provided in table 7.

Table 7: Current technologies, gaps and scope of upgradation

Critical technology gaps in the cluster	Scope of upgrading through enhancing technological infrastructure on CFC mode
<b>Advanced printing technology for varied substrate</b>	
<p>Printing technology plays an important role in print signage &amp; advertising industry. With advent of technology, printing technology has considerably evolved in terms of size, ink and substrate. Presently cluster has 3 limitations in printing technology: a) cluster units rely solely on vinyl and plastic as substrate for printing while fabric has started been replacing vinyl; b) cluster units do not have facility to print substrate beyond 3m width and market is progressively demanding super-wide prints; &amp; c) cluster units do not have UV curable inkjet printing facility</p> <p>These limitations have hindered the cluster units to meet the market standards and manufacturing of quality products. Signage units have been unsuccessful to expand their offerings and clientele.</p>	<p>In order to meet the technology gap in terms of printing technology, cluster require 2 advanced printing facilities: a) Advanced super Wide-Format Dedicated Roll-to-Roll UV Printer &amp; b) Digital Printer for Direct Printing on Fabric</p> <p>Availability of these printing facility in cluster will enable the micro units to print the signage as per market requirement. The printer also has additional facility of inline sheet cutting, slitters and a sheet collector to improve output by reducing the need of separate finishing jobs. This shall also enable these units to target the untapped market by diversifying their product line and improving the product quality.</p> <p>Soft signage is the recent advent in the Indian signage and advertising industry. The demand for digital textile printed advertising material is increasing due to environment friendly and easily manageable property of textile. There is a lot of demand of textile advertising material in and around Delhi and other key markets.</p>
<b>Dye-sublimation transfer facility</b>	
<p>Dye Sublimation transfer is a simple and economic process to print image on various substrates ranging from polyester fabric to ceramics and metals using three main ingredients: sublimation ink, heat and pressure. Immediate transfer a digitally printed image onto a range of synthetic substrates is creating a totally different approach and new opportunities in the production of advertising materials.</p> <p>While, the cluster has been successfully using the dye sublimation transfer technology on paper, plastic, fiber, board etc., it has been unable to install advanced dye sublimation transfer facility for printing on polyester fabric. With increased application of paper-printed images and direct fixation to textile for advertising, exhibition displays, banners and flags, towels, bedding</p>	<p>Installation of dye sublimation transfer facility as a common facility shall enable cluster units to transfer printing (paper to textile) as well as for dye fixation of direct printed dispersed dyes or pigments. Sublimation ink is unique in its ability to convert from a solid to a gas without going through a liquid form. The conversion is initiated by heat and controlled with pressure and time. There is no need of protective coating when applied directly to the 100% polyester fabric.</p> <p>The machines shall enable these units to transfer printing on all kind of polyester fabric like woven – stretch – knits - non woven. The facility shall be equipped with fabric unwinder and tensioning device; contact-winder for</p>

products, sportswear, the cluster is willing to use this facility to diversify their product line.	finished fabric; unwinder and winder for printed paper; unwinder and winder for protection paper.
Value added Print & Cut rigid media manufacturing facility	
Rigid media have displayed rapid growth in the sign and display market due to increased demand of signs and plastic moulded products by retailers, showrooms and MNCs. Manufacturing of moulded products has been used as gifts by corporates as well. Presently, cluster units use manual operations and perform heat based moulding for manufacture of rigid media & advertising products.	<p>With recent advancement in sign plastic moulded products, there has been an increased demand for fast precision contour cutting and milling of a wide range of materials. New technology has enabled integration of software enabled designing of products while cutting tables tackle the production of signage, displays and the finishing of normal printed materials.</p> <p>Availability of advance software based facility for designing and moulding shall enable cluster units to manufacture the rigid media with great precision. Cutting and finishing facility is also guided through software and enable manufacturing of plastic moulded products. This shall also provide cluster units an opportunity to manufacture corporate gifts, novelties, cut outs, digital displays, sign, display POS etc. through software based designing and cutting on job work basis.</p>

### 3.8 Cluster growth potential

Karnal Signage & advertising cluster has enormous potential to grow with increasing demand of signage & advertising products across the country. One of the key strengths of the Karnal Signage & advertising cluster is strategic location (both geographically & industrially) of the district. It is located 130 km from Delhi, 125 km from Chandigarh and is well connected with states of northern India. There is potential of export of signage & advertising products to neighbouring countries due to better quality and lower production cost.

Shopping malls and other infrastructure projects are also contributing to higher consumption of signage & advertising products. Printed signage is the most preferred application of signage in these places. Increasing investments in these sectors will have a significant impact on the demand of cluster products. Awareness of POP advertising as a marketing tool is growing among brand owners and FMCG companies. The rural part of India is also fuelled the growth of signage products due to

installation of hoardings and signage along with film industry and the political segment. Metropolitan cities, malls and large cities use this kind of outdoor advertising.

The advertising and marketing sector across the country is expected to grow at a fast pace during next decade. Retail advertisement is expected to grow due to entry of several new players in the food and beverages segment and e-commerce gaining more popularity in the country. The rural region is a potentially profitable target. For instance, in the automobiles sector, the focus of two-wheelers is now in rural areas, which shall realize through higher advertising expenditure. The telecom sector is witnessing fastest growth in recent times due to better smartphone penetration and service providers cutting down on prices.



## 4. Diagnostic Study Recommendations

During the course of preparation of DSR, members of signage cluster realized the need for undertaking soft interventions for cluster interventions. Based on soft interventions proposed under the diagnostic study report and subsequent intense discussions with various cluster stakeholders, cluster members have been continuously undertaking various soft intervention activities to prepare themselves for hard intervention under MSE-CDP. Some of these activities have been undertaken with government support while other have been undertaken by cluster members. The recommendations and action taken for both soft and hard interventions have been elaborated in subsequent sections.

Cluster enterprises have also been undertaking several soft interventions (before, during and after the DSR) by themselves and have been active in enhancing their awareness and exposure to signage & advertising industry. The units have conducted several awareness programs and trainings in collaboration with DIC, MSME-DI, Karnal and BDS providers. They have also conducted exposure visits to other developed clusters, participated in national and international exhibitions and facilitated UAM registrations.

### 4.1 Soft Interventions recommended and action taken

1. Capacity Building and Awareness Generation: One of the primary recommendation for soft intervention was to build the capacities of cluster units and generate awareness among stakeholders regarding cluster development (collective approach to address their issues) and benefits available to them in the form of cluster. Towards this, the cluster units had organized a series of workshops, the details of which are provided below:

- An orientation program of cluster stakeholders was organized by KFPCL during August 2015 under Make in India initiative of government. One of the key focus of this program cluster development of Micro and small enterprises through various initiatives and schemes. The orientation program was inaugurated by the Principal Secretary, Department of Industries; Director, Industries; Vice Chancellor, NDRI; Chief Manager, Oriental bank of Commerce; OSD to Chief Minister; Zonal head, Laghu Udyog Bharti; and members of Signage & advertising cluster. Cluster members were given an opportunity to present the





challenges faced by them in order to upgrade the facilities present. Members of cluster raised their concerns regarding lack of credit facility, absence of high end technology, training facility, lack of government support etc. Participants were informed about the scheme of MSE-CDP to promote the clustering approach and provide a common facility at cluster. Members were also informed about the proactive role of state government to implement this scheme in the state of Haryana. Director Industries informed the participants about the benefits available to MSME entrepreneurs under state Enterprise Promotion Policy (EPP) 2015. He informed that state government has increased its contribution under MSE-CDP from existing 10% to 20% of the project cost up to 15 crores. Other stakeholders present during the meeting informed the cluster members about the support available to cluster from their respective organizations to the signage & advertising cluster.

- ▶ Cluster members organized a meeting with Laghu Udyog Bharti to discuss the functioning and operations of SPV under MSE-CDP and to capture inputs for DSR during the month of September 2015. The main objective for this meeting was to educate members regarding the roles and responsibilities of SPV. The



members were informed regarding the formation of legal entity in the form of SPV to manage and operate CFC for Signage & advertising cluster, Karnal. It was also explained that SPV shall have minimum 25 members and contribution of each members cannot exceed more than 10%. Technical details for selection of Directors, equity contribution and role of members in functioning of SPV were also discussed among the participants.

- ▶ Confidence Building and trust Building programme amongst the cluster Member was organized during November 2015 to undertake joint initiatives to reap benefits of collective actions. Mutual Trust among members of cluster is key for undertaking joint initiative under cluster



development. The meeting was organized at Karnal Agro Park and key objective was to



address the issues and question raised by cluster members. Members of cluster pointed out that individual units of signage & advertising units are unable to employ high end machines to improve the quality of products. It was realized that collective effort is the future to develop industry through common availability of high end technology. The meeting was presided by Sh. Karan dev Kamboj, Minister (Food and Supply) Government of Haryana. Shri Parveen Gulati, Zonal head Laghu Udyog Bharti and Shri Bhushan Goyal, Chairman, HCCI were also present during the meeting. The members appear to be confident about the success of the proposed cluster development.

- ▶ Meeting for SPV formation: A meeting of members of signage and advertising cluster was conducted during March 2016 at King classic Hotel to form a SPV (Special Purpose Vehicle). During the meeting more than 25 members of Signage cluster agreed to form SPV and be a shareholder. Participants also discussed the operations of SPV under cluster development programme. Tentative list of members was also prepared and



members also selected directors of SPV by mutual consent. In order to take the clustering activities forward sub teams were formed and assigned tasks to explore the opportunities of the cluster. The selected members were assigned task to interact with Haryana Govt. officials to take necessary actions required for availing benefits of CFC under cluster Development Programme. Cluster members also agreed to extend their support to SPV for realizing signage and advertisement cluster in Karnal District.

- ▶ Identification of problem with MSMEDI at Manka Resort (Karnal) dated 10.07.2016: a meeting was held in the chairmanship of Mr. Parveen Gulati (Zonal Head of North India). Other dignitaries were Mr. Vijay Chopra (MD Punjab Kesari), Mr. Sanjay Nigam (Deputy Director, MSME), JE (UHBVNL), SDO and delegates of Haryana chamber of commerce. Mr. Naresh Saluja stated about the signage & advertising cluster and the problems such as lack of printing quality to meet demands of large customers, lack of ability to adopt environment friendly substrates, transportation of raw material etc. being faced by units



of cluster. He also informed the participants about the collective initiative being undertaken and identification of land at Mugal Majra for CFC. Their effort were appreciated by dignitaries present in the meeting. They also invited suggestion regarding the development of signage & advertising cluster at Karnal. Representatives of MSME-DI, Mr. Vijay Kumar and Mr. Sanjay Nigam assured their full support for cluster development.

2. **Exposure Visits and Participation in Trade Fairs:** In order to enhance the exposure of cluster units on new and emerging technologies in the signage & advertising industry as well as new product development, number of exposure visits were recommended. The aim was to understand technological innovations required for developing their cluster. Additionally, recommendations for participation in trade fairs and exhibitions were made to provide a platform to cluster units to promote their products as well as witness innovative products being brought out in the market. The following actions were taken in this regard:

- ▶ **Visit to Plastivision India trade fair:** Plastivision India is organized by All India Plastic Manufacturer's Association (AIPMA), the largest non-profit apex body working towards welfare of the plastic industry. The event was attended by members of signage & advertising cluster at Mumbai. They interacted with different exhibitors present to understand the latest development in printing substrate and technology in signage & advertising industry. Sh. Naresh saluja, Sh. Jatinder Khurana, Sh. Mahesh Virmani & Sh. D. P. Wadhwa attended the fair and had a detailed discussion with machinery manufacturers for upgradation of their cluster by use of modern technologies. The members interacted with Mathan machinery manufacturers about flex printing. The members also visited the Glass expo exhibition and interacted with various machinery manufacturers to understand recent development in glass printing technology.



- ▶ **Meeting with Machinery manufacturers:** A meeting was organized with leading machinery manufacturers to identify suitable technology & upgradation of machine during August 2016. The various expert persons from machinery manufactures gave their presentation about machinery cost, technology, high production profile and other necessary evidence. They assured about best service and maintenance for their

machinery. They also explained the usage of Laser Cutter, Edge Bending, Channel Cutter, Router Moulding and Textile printer etc. Another supplier presented the details of 3-D printing also known as additive manufacturing which turns digital 3D models into solid objects by building them up in layers. Another meeting with machinery suppliers was organized during August 2017 to identify and finalize appropriate machinery to be installed at CFC to provide a boost to the cluster.



3. Technical Trainings of Members: The third major soft recommendation was around enhancing the knowledge of the entrepreneurs through technical trainings on various aspects of technology, quality and regulatory issues. The actions taken in this regard are detailed below:

- ▶ Training on technology upgradations in signage & advertising industry. This was organized by the SPV with support from MSME-DI, Karnal during July 2016. The training aimed at enhancing technological awareness of cluster units as well as guiding the participants on quality and product development to increase their competitiveness and market share.

- ▶ Awareness/sensitization programme on Intellectual Property Right (IPR) by Ministry of MSME, Govt. of India during August 2016. Ministry of MSME had launched series of programs for creating awareness on IPR. Member of Signage & advertising cluster, Karnal participated in the awareness program. Training aimed to create awareness



regarding IPR, GI tagging and trademarks among cluster members. The units were encouraged to apply for IPRs to enhance their brand proposition.

- ▶ Regular follow up by MSME-DI for cluster development: Director, MSME-DI has been proactive in promotion of cluster in the region. In this regard, a review meeting of proposed cluster has been organized by MSME-DI during August 2016 to understand the preparedness of signage & advertising cluster. The meeting was attended by Director HSIIDC & Director Industries. Mr. Naresh Saluja explained the dignitaries about progress regarding formation of SPV and identification of land for CFC. Subsequently, DSR was prepared and submitted to Director Industry for approval.



## 4.2 Hard Interventions (Machines/Technology in the proposed CFC)

The signage & advertising units at Karnal need technological support to enhance their competitiveness and ensure their survival. The units are reeling under bitter competition margins and require modern high capacity automatic machines and other related equipment to get their job work done and reduce their costs of production.

The following common infrastructural facilities are being proposed to be set up with support from the state industry department and DCMSME:

### 1. Advanced Super Wide-Format 5 meter (16.4 feet) dedicated Roll-to-Roll UV Printing Machine

Signage and advertising industry of Karnal is primarily based on printing based signage and involves a lot of printing process. With advent of technology, market demands have been continuously changing in terms of substrates, printing ink & colour, size etc. Telecommunication industry and other large buyers have changed preference toward super wide high quality print signage.



Lack of access to advance printing facility and infrastructure to manufacture value added signage products has been main obstacle of the cluster in expanding the market. Presently available roll-to-roll printers are slower and less-efficient, these printer are used to printing substrate with maximum width of 3m. These printers have conventional heat- and air-drying works by solvent evaporation.



This process shrinks the initial application of coatings by more than 50% and creates environmental pollutants. Besides these units also employ separate finished facility with roll-to-sheet cutting, slitters and a sheet collector to handle printed jobs on separate finishing tables.

Cluster units are in need of advanced Super Wide-Format Dedicated Roll-to-Roll UV Printing technology with 5 m-wide prints, roll-to-roll option, LED curing and advanced 3D Lens Technology with print quality in six colours (CMYKLcLm) and white. The proposed facility shall enable the cluster units to print highest image quality at the highest rated throughput speeds, with a range of options for choosing printing substrate. Ultraviolet light is used to instantly cure or “dry” inks, coatings or adhesives. UV curing increases production speed, reduce reject rates, improve scratch and solvent resistance, and facilitate superior bonding. LED based curing technology that delivers both cost savings and environmental benefits. The printer shall also have facility to print on varied substrate like vinyl, textile and plastic etc.



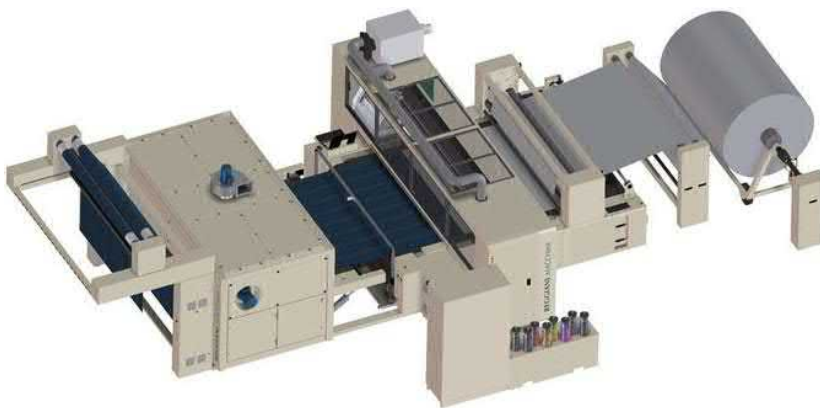
The propose facility shall also have inline roll-to-sheet cutting, slitters and a sheet collector kit to improve output by reducing the need to handle printed jobs on separate finishing tabs.

An advanced Super Wide-Format Dedicated Roll-to-Roll UV Printer has been proposed to install at the CFC to offer an opportunity to cluster units to get high definition prints done on job work basis. Cluster units shall be required to bring their own printing content, design and printing substrate at CFC to get their work done. CFC shall provide the colours and printed roll to units, which will be further processed for mounting on frames and installation by individual units to manufacture final signage and advertising product.

## 2. 3 Meter (10.5 feet) Digital Dye Sublimation Printing Machine for Fabric

Digital textile printing have made enormous strides in recent years due to manufacturing of fabrics and meshes that can be directly printed. While these fabrics do not have the same level of durability as dye sublimated graphics, the gap between the two processes have been narrowing in recent years with improved inks and coatings that can enhance the longevity of the material in the environment. Direct printed fabrics have become more and more prevalent in longer term uses due to environmental concern. Signage industry is moving from vinyl to fabric as printing substrate.

In recent trends textile entrepreneurs are also venturing into digital printing technology to capture innovate textile printing market in the country and abroad. The digital printing market is today driven by technological advancements in inkjet printers such as direct-to-fabric printers. Digital printing technology enables printing of designs over fabric for indoor application and outdoor application as mentioned above. The demand for digital textile printed advertising material is increasing due to environment friendly and easily manageable property of textile. There is a lot of demand of textile advertising material in and around Delhi and other key markets.



Digital printing facility for direct printing on fabric is most suitable for fashion, home textile, automotive as well as outdoor with a product range suitable for small business and complete industrial plants. The facility shall have better productivity, accuracy and performance coupled with low ink consumption leads to cost effectiveness. The facility shall also enable low printing cost per meter to minimize cost of production. High performance inks specifically designed for direct printing on fabric ensure better quality to meet customer requirements and expand market.

A Digital Textile Printer has been proposed to install at the CFC to offer an opportunity to cluster units to get high definition prints on textile substrate on job work basis. Cluster units shall be required to bring their own printing fabric, design and printing substrate at CFC to get their work done. CFC shall provide the colours and printed fabric, which will be further processed by cutting and sewing in



the desired shape. Further it shall be mounted on frames and installed at specified location by individual units to manufacture textile print based signage and advertising products.

Factors to be considered for above mentioned two machines at CFC:

- ✓ The Advanced Super Wide-Format Dedicated Roll-to-Roll UV Printing Machine & Digital Dye Sublimation Printing Machine for Fabrics proposed at CFC cater to following limitations in printing technology:
  - The present capabilities of cluster units are limited to printing on vinyl and plastic only, whereas, the market is also oriented towards fabric printing which the units are unable to perform at present.
  - Cluster units do not have facility to print substrate beyond 3m width and market is progressively demanding super-wide prints
  - Cluster units do not have UV curable inkjet printing facility that enhances shelf life of the printed product.
  - The higher production cost being incurred by cluster units in sub-letting the job work to advanced printing facility at Delhi is a major issue hampering growth of the cluster.

#### Viability

- Such a facility (with similar machines as proposed in CFC) is available at a single location in Delhi and is used by cluster units on job work basis. Hence, Karnal units have no such facility to get in house high quality printing.
- Absence of advanced printing technology in neighbouring states (anywhere in North) provide a great opportunity for cluster units to expand their markets by deploying modern machines.

#### Activities to be performed by above mentioned machines

- The UV Printer will be used for printing designs on Fabric/PVC/Vinyl/Wallpapers/Canvas/Soft signage at the CFC.
- Subsequent to printing, labour in individual units will paste the printed material onto frames and install it at respective place
- Digital printing facility for direct printing on fabric is most suitable for fashion, home textile, automotive as well as outdoor with a product range suitable for small business and complete industrial plants.
- The facility shall have better productivity, accuracy and performance coupled with low ink consumption leads to cost effectiveness.
- The facility shall also enable low printing cost per meter to minimize cost of production.
- High performance inks specifically designed for direct printing on fabric ensure better quality to meet customer requirements and expand market.

## Existing machines and their applications



Designing



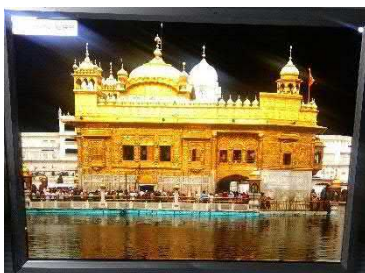
Low end technology -  
Inkjet printers currently  
being used in cluster



Printing



Framing



Installation of  
final product



## Proposed Machines and their applications

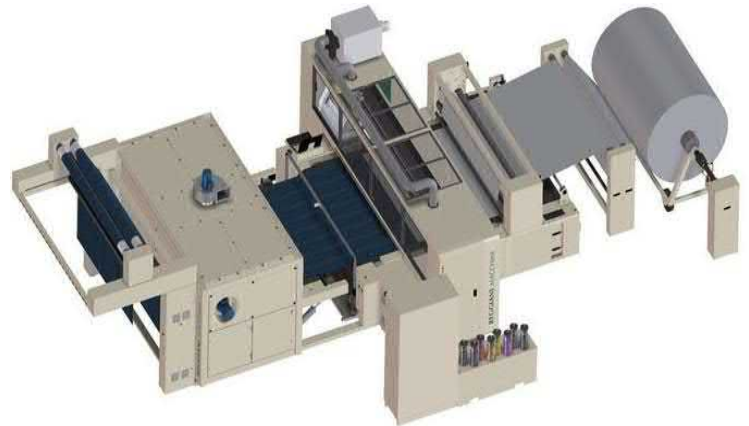
Structural Design Software  
CAD



Advanced Super Wide-Format Dedicated Roll-to-Roll UV  
Printing technology



Digital Printing facility for Direct Printing on  
Fabric



End Product



### 3. Rotary Thermo Processing Equipment (Calendar/Heat Press) for Dye-sublimation transfe

Dye sublimation by means of transfer printing is a well proven technology for manufacturing of high definition print products. The process transfer an image from printed paper onto various synthetic fabrics, simply by using heat, time and pressure. This is possible because the Disperse dye applied to the printed paper get sublimated and fix itself to the adjacent fabric at temperatures around 200°C. Fabrics suitable for printing in this way include 100% polyester, nylon and acrylic and synthetic rich blends of these fibres.

Dye sublimation transfer require calendar to fix the dye to the substrate, using heat and time. This provides a very economical and consistent process unlike other methods like direct fabric printing. Immediate transfer a digitally printed image onto a range of synthetic substrates is creating a totally different approach and new opportunities in the production of advertising materials. An image can be quickly created on computer and digitally printed onto paper. This printed paper can be transferred fabric. Dye sublimation transfer ensure excellent print quality with high colour yield, good light and wash fastness. This also makes these prints very suitable for outdoor use. Dye sublimation transfer printing are used for wide format transfer of paper-printed images and direct fixation to textile for advertising, exhibition displays, banners and flags, towels, bedding products, sportswear etc.



The end result of the sublimation process is a nearly permanent, high resolution, full colour print. Because the dyes are infused into the substrate at the molecular level, rather than applied at a topical level (such as with screen printing and direct to garment printing), the prints will not crack, fade or peel from the substrate under normal conditions.





The dye sublimation printer is be used for dye-sublimation transfer printing (paper to textile) as well as for dye fixation of direct printed dispersed dyes or pigments. The precision guiding of the long belt and the lack of lateral movement of the paper and fabric make it possible to print with the highest degree of edge sharpness. The stable temperature of the thermal oil and the electrically heated drum



are designed to give you excellent colour brilliance. The machines are suitable for all kind of materials like woven – stretch – knits - non woven. The facility shall be equipped with fabric unwinder and tensioning device; contact-winder for finished fabric; unwinder and winder for printed paper; unwinder and winder for protection paper.

A dye-sublimation transfer printing facility has been proposed to install at the CFC to offer an opportunity to cluster units to transfer a digitally printed image onto a range of synthetic substrates for production of advertising materials through economic and fast means. Cluster units shall be required to bring their own calendar (printed image), printing fabric at CFC to get their work done. CFC shall transfer the image to fabric through sublimation process. The printed fabric will be further processed by cutting and sewing in the desired shape by individual units. Further it shall be mounted on frames and installed at specified location by individual units to manufacture signage and advertising products.

Factors to be considered for above mentioned machine at CFC:

- Cluster units are currently using dye sublimation transfer on paper, plastic, fibre and boards, but it is hardly able to diversify product line to fabrics (few of the units are catering to fabrics but are totally dependent over job-work).
- The cluster is not able to tap increased application of paper-printed images and direct fixation to textile for advertising, exhibition displays, banners and flags, towels, bedding products, sportswear.

### Viability

- These machines shall enable these units to transfer printing on all kind of polyester fabric like woven – stretch – knits - non woven.
- Increased market demand for printed fabrics for advertising purpose is the potential market to be tapped by cluster.

### Activities performed by above mentioned machines

- Installation of dye sublimation transfer machines as a common facility shall enable cluster units to transfer printing (paper to textile) as well as for dye fixation of direct printed dispersed dyes or pigments. Sublimation ink is unique in its ability to convert from a solid to a gas without going through a liquid form.
- The conversion is initiated by heat and controlled with pressure and time. There is no need of protective coating when applied directly to the 100% polyester fabric.

### Proposed Machines and their applications



### 4. Value added Print & Cut rigid media manufacturing facility with Flatbed 3 meter by 2 meter Cutting Table with Structural Design , Editing and Nesting software

Sign manufacturing is used for advertising media, displays for points of sale, signs and signage plates, printed media, acrylic letters and other numerous applications. Recent development in software and hardware has enabled manufacturing of exceptional shapes for Point of Sale (POS), pop-up displays, illuminated advertising or advertising signs make an end product more interesting and high-quality. The creative finishing with a precision cutting machine makes a printed acrylic sheet or wooden board into a finished, and thus saleable, product. From simple rectangular advertising signs to complex contours and markings, anything is possible with high end cutting machines. Software allows control of distortions that occur when the plastic is moulded into a dimensional shape allowing for perfectly printed dimensional graphics. New innovations have enabled integration of flatbed printing and routing technologies to create printed signs into a seamless, efficient process. This technology has been developed primarily for the packaging industry, producing the advanced packaging fixtures being utilized in supermarkets and department stores. But it can also be used as





high end specialized printers can both print and cut, streamline the production process for fixtures. This has enabled a merger between packaging and fixture development.

Table 8: Suitable materials for printed sign manufacturing

Rigid Materials	Flexible Materials
<ul style="list-style-type: none"> <li>• Acrylic</li> <li>• Foam</li> <li>• Polystyrene</li> <li>• Wood</li> <li>• MDF</li> <li>• Plywood</li> <li>• Plexiglas</li> </ul>	<ul style="list-style-type: none"> <li>• Card</li> <li>• Corrugated Cardboard</li> <li>• Polyester Film</li> <li>• Polycarbonate Film</li> <li>• Textiles</li> <li>• Canvas/Carpet</li> <li>• Polyester</li> </ul>

The rapid growth in the sign and display market has resulted in an increased demand for fast precision contour cutting and milling of a wide range of materials. New technology has enabled integration of software enabled designing of products while cutting tables tackle the production of signage, displays and the finishing of normal printed materials. Dedicated software allows you to work faster without sacrificing quality. The cutter comes with a wide range of specialty tools. These tools offer speed, power and flexibility to automatically handle a wide variety of materials, such as corrugated, folding carton, solid board, foam, and a long list of plastics.

#### Structural Design Software – CAD

- ▶ 2D design feature with multiple tools for copying, moving, trimming, splitting, adjusting and stretching geometry.
- ▶ New designs for POP displays – enables the designer to build new designs from any style in the style catalogue. Designed POP displays instantly with parametric design templates.
- ▶ Artworks Graphics can be used to automatically carry artwork into 3D, print cards, layouts, etc.
- ▶ 3D folding - Single click access to 3D from 2D design



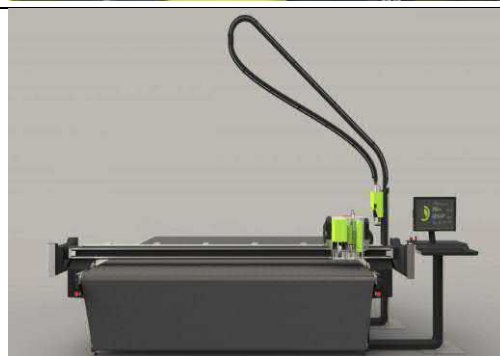
## Design Editing &amp; Nesting Software : i-Cut Layout

- ▶ Creating a cutting path is a time consuming process. i-cut Layout through software makes the process a lot easier. Specific tools allow you to create and clean up cutting contours, even on images.
- ▶ The application enable to create exact edges through markings tools. The technology is even so powerful that it also clone image pixels if there is no image data available outside the cut contour.
- ▶ i-cut Layout optimizes sheet layout. Rectangular shapes, irregular shapes, double sided jobs, oversized jobs etc.
- ▶ i-cut Layout optimally uses the substrate through a maximum fill setting. This enables the user to get the absolute most out of the substrate and reduce the wastage.



## Cutting table

- ▶ Wide format world has been changing with higher volumes and faster turnaround times on a vast selection of materials.
- ▶ Digital finishing solution fits today's digital production requirements without compromising on size, versatility or finishing quality. The technology enables digital finishing for signage, display and packaging applications.



## Routing, Cutting &amp; Creasing Tools

- ▶ This tool unit mounts in the heavy duty tool position. It allows for milling, contour cutting, routing, drilling and engraving directly from CAD/graphics designs.
- ▶ Materials with thickness up to 50mm (2") can be milled.



Value added Print & Cut rigid media manufacturing facility has been proposed to install at the CFC to offer an opportunity to cluster units to manufacture corporate gifts, novelties, cut outs, digital displays, sign, display POS etc. through software based designing and cutting on job work basis. Cluster units shall be required to bring their own design, raw material for moulding and cutting at CFC to get their job work done. CFC shall provide the designed and cut parts to units. Units will be required to assemble the components, fit the lighting and decorating material to manufacture the final product. Packaging and marketing of final sign and products will also be done by the member units.



The machines caters to limitations of

- Cluster units use manual operations and perform heat based moulding for manufacture of rigid media & advertising products.
- Not being able to tap emerging market of corporate gifts, novelties, cut outs, digital displays, sign, display POS etc.

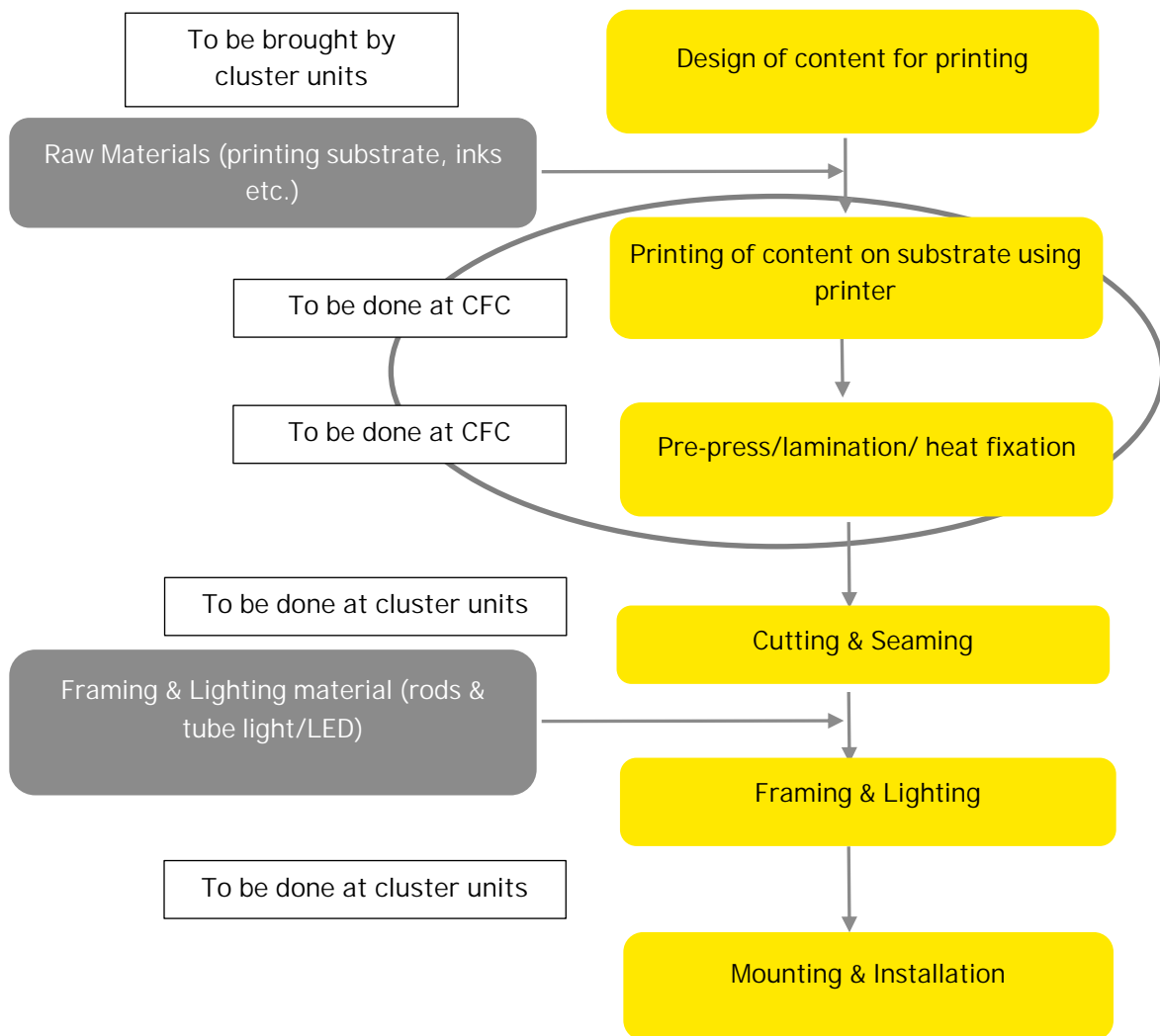
Viability

- Rigid media have displayed rapid growth in the sign and display market due to increased demand of signs and plastic moulded products by retailers, showrooms and MNCs.
- Manufacturing of moulded products has been used as gifts by corporates as well. Presently, cluster units are willing to tap this market through his facility.

Activities performed by above mentioned machines

- The facility will provide fast precision contour cutting and milling of a wide range of materials. New technology has enabled integration of software enabled designing of products while cutting tables tackle the production of signage, displays and the finishing of normal printed materials.
- Availability of advance software based facility for designing and moulding shall enable cluster units to manufacture the rigid media with great precision. Cutting and finishing facility is also guided through software and enable manufacturing of plastic moulded products.

Production process post intervention:



### 4.3 Expected Outcome after Intervention

The project will be beneficial both for individual units and the cluster as a whole. The setting up of CFC is expected to generate the following benefits for the cluster units:

- ▶ Cluster units shall have ability to print on range of substrate including fabric. Cluster will also be able to venture into manufacturing of gifts items. This shall enable individual units to diversify their products and increase their market share.
- ▶ Cluster signage & advertising products have an improved quality and enhanced value addition leading to meeting of market requirements set by bigger players.
- ▶ Progressively tapping local industry demand for quality signage & advertising products with increase competitiveness of cluster enterprises vis-à-vis medium and large sized enterprises.
- ▶ Significant reduction in cost of production and higher capacity utilization by each unit to utilize the full capacity of CFC, other units shall also avail the facilities present at CFC.
- ▶ The CFC shall generate more job opportunities both at the CFC and at individual units due to enhanced capacity utilization.
- ▶ The CFC shall enhance the levels of co-operation and joint-action among cluster stakeholders and SPV members to co-operate in other areas such as joint marketing initiatives, common raw material procurement and so on.
- ▶ Also, it will complement the efforts of state government in promoting clusters in the state and serve as a model for upgrading micro enterprise clusters.

The expected outcome after commissioning of CFC vis-a-vis the current situation is mentioned in table 10.

Table 9: Expected outcome of CFC

Area	Current Scenario	Expected Out Comes in 3 years
Production Units	About 144 MSEs (46 units form member base: 25 manufacturing units in SPV & 21 allied units)	About 200 SMEs
Markets	Mostly local retail shops, political parties and showrooms situated in and around Karnal district	Hospitality industry, MNCs, shopping malls & construction industry
Employment	About 1600 direct employees	About 2500 direct employment
Technology	Lack of advanced printing facility for quality printing & finishing, lack of designing & cutting facility for moulded plastic products and lack of printing facility on various substrate including fabric	Availability of CFC with advance facilities printing of super wide format for roll-to-roll UV printing, Value added Print & Cut rigid media manufacturing facility, Digital printing facility for fabric and dye sublimation printing shall enable cluster units to improve their product and expand their market

Production	Less production capacity Increased production time Material wastage Increased transportation cost	Improved quality Increased production Minimal material wastage Quick production Competitive prices
Exports	Current exports from cluster units are negligible	25% of units shall explore international markets and start exporting
Turn Over	About 150 crore	Increase of 10% each year and expected to double within 5 year
ISO certification	None	100 units



[illegible]

## 5. Special Purpose Vehicle (SPV) for Project Implementation

The micro and small units at Karnal Signage & advertising cluster came together to form a Special Purpose Vehicle (SPV) as a private limited company under section 7 of the Companies Act, 2013 and rule 8 of the Companies (Incorporation) Rules, 2014. The SPV is named as 'Karnal Signage CFC Private Limited' with CIN being U74999HR2016PTC064577. The SPV was registered on 15<sup>th</sup> June 2016. The certificate of registration along with Memorandum of Association (MoA) and Articles of Association (AoA) is provided in Annexure – 2 (a) & 2 (b). The company has an authorized paid up capital of Rs. 1.00 Lakhs which shall be enhanced in near future. The members are largely micro-sized firms (registered units) involved in Signage related activities, predominately based in Karnal.

DIC, Karnal and MSME-DI both played an important role in SPV formation by cluster stakeholders. The SPV was incorporated in 2016, has 41 members and already includes about 41 shareholders who are subscribing to the necessary equity base of the company. The SPV shall be open for new members to join and for the existing members to leave while maintaining a minimum member base of at least 20 at all times. The proposed CFC will be implemented on public-private partnership basis through SPV 'Karnal Signage CFC Private Limited' by availing support from Government of Haryana (under EPP 2015) and Government of India (under MSE-CDP scheme of DCMSME).

The SPV members have a track record of cooperative initiatives. SPV members are also members of prominent cluster associations. Cluster members have independently undertaken several soft interventions to enhance knowledge and exposure of latest technologies of signage & advertising industry to enhance productivity of their units as mentioned in the previous sections. These include exposure visits to cluster development initiatives in other clusters, participation to trade fairs, registration under UAM and awareness programs on new trends in signage & advertising industry, IPRs and new technologies. These programs were conducted in collaboration with DIC, MSME-DI and BDS providers.

The SPV has conducted a series of stakeholder consultations (with various members, DIC, MSME-DI Karnal and EY experts) during finalization of project components, selection of technologies and development of Detailed Project Report. The SPV has been instrumental in spreading the awareness about cluster development under MSE-CDP in Karnal and has also helped in validation of DSR. It has kept the state government and the MSME-DI Karnal engaged during the entire period of development of DSR and DPR.

## 5.1 Shareholder profile and Shareholding mix

List of Directors: The SPV has four directors. The details of the directors are furnished in table 11. The SPV shall further add two more directors among the shareholders. Other than these directors, the SPV will have provision of having one director each from state government (DIC) and centre government (DCMSME/MSME-DI). The SPV comprises members from micro and small Signage manufacturing units. Units are homogeneous in nature in terms of products manufacturing and activities performed by the cluster units.

Table 10: List of Directors

Sl. No.	Director Name	Name of the unit	Address
1	Naresh Saluja	Rajshree Signage	H. No. 66, Old Char Chaman, Karnal – 132001
2	Jatinder Khurana	Kartikay Graphics	485, Old Char Chaman, Karnal – 132001
3	Sanjay Bathla	Bathla Computers	H. No. 338(4), Railway road, Opposite Prem Plaza Subhash Marg, Karnal
4	Himanshu Bharti	4 G Digital Art	Bharti Villa, Kunjupura Road, Budha Khera, Karnal – 132001

The lead promoters/ shareholders have several years of successful experience in Signage processing and they are also well versed with the benefits of cluster developmental initiatives. These units are financially viable in nature. Post the DSR validation, the MSME DI also acknowledged the genuineness and enthusiasm of the SPV members to undertake project initiative under MSE-CDP.

### Members and contribution to paid-up capital

Members of the SPV have been engaged in manufacturing of signage & advertising products at Karnal for more than 40 years. SPV directors/ members of the SPV also have considerable experience in marketing and manufacturing of signage products. Directors/members have been in close interactions with technical experts, government institutions and machinery suppliers.

The SPV was formed with the objective to take up cluster level activity in a joint and coordinated manner, wherein all units have equal say. Details of SPV members along with their contact persons, unit details, UAM numbers and products manufactured are provided in table 11.

Table 11: Details of members of SPV

S. N o.	Name of Firm	Name Of Person	Mobile No.	Address	E-mail ID	Udyog Aadhar
1.	Rajshree Signage	Naresh Saluja	9896347333	66 Old Ramesh Nagar Karnal	rajshreekarnal@gmail.com	HR10B0000440
2.	Digitech Sign & Graphics	Varun Hans	99962-74111	Plot-158 G First Floor Hsidc Sector-3, Karnal	digitech06@gmail.com	HR10B0002452
3.	Spectrum Printers	Vijay Gandhi	9896667535	Opp Sawan Public School Dayal Singh Colony Karnal	spectrumprinters11@gmail.com	HR10A0000413
4.	System Print Line	Sanjay	98963-52333	04 New Ramesh Nagar Karnal	salujasanjay1971@gmail.com	HR10A0000418
5.	Kritika Graphics	Surinder Kumar	9896020867	Link Road, Shop No.4, Guru Nanak Market, Opp. Bus Stand, Karnal, Karnal	graphics.kritika@gmail.com	HR10A0004117
6.	Ahuja Adtronix Pvt Ltd	Baldev Raj Ahuja	8607102000	18/177 New Char Chaman, Karnal, Haryana, 132001	ahujaadtronix@gmail.com	HR10A0004116
7.	Swastik Advertiser	Gobind Singh Rawat	92532 80020	A-496, Timber Road, Sadar Bazar, Karnal, Haryana, 132001	swastik2advertiser@gmail.com	HR10E0002193
8.	Prayag Sales	Baldev Raj	92155 67840	Kfpcl, Mugal Majra Road, Karnal, Haryana, 132023	paryagsalesknl@gmail.com	HR10A0003685
9.	Aerocon Décor	Harshit	9996664356	Near New Anaj Mandi Gate. Gt Road. Karnal. Pin 132001.	aerocondecord@gmail.com	HR10B0004418
10.	Yadvi Graphics	Deepak Kumar	7015168562	Shop No 6, Railway Road, Ibrahim Mandi, Karnal, Haryana, 132001	Yadvigraphics45@gmail.com	HR10A0004123
11.	Sehgal Graphics	Naresh Kumar Sehgal	98960 29695	Shop No. 1, Guru Nanak Market, Link Road, Opp. Bus Stand, Karnal, Haryana	sehgal.graphics@gmail.com	HR10A0003917
12.	Hans Graphics	Vijay Kumar	98965 93387	Hno- 370a, Opp Dyal Singh College, Karnal, Haryana, 132001	Hanspub@gmail.com	HR10A0003922
13.	Kanhiya Graphics	Munish Chawla	9416573176	Hno- 6 Extension, Chaman Garden, Karnal, Haryana, 132001	kanhiya.graphics@gmail.com	HR10A0004119
14.	Sancast Prints	Sanjeev Makkar	94160-31224	Gaushala Road Karnal	sancastcluster@gmail.com	HR10A0000123
15.	Sapphire media services	Sahil Mangla	9992551111	Plot No. 96 Phase 2 Kaithal B/O 17 Red Cross Mkt Karnal	sapphiremediaservices@gmail.com	HR09B0000216
16.	Raj Advertisers	Rajinder Kumar	9416406918	Link Road Karnal	rajadv123@gmail.com	HR10B0005882
17.	Sanjay Graphics	Sanjay Atreja	9996825675	37 Mahabirdal Marcket		HR10A0005929
18.	Shagun	Pankaj Sharma	7988061976	Main Bazar Nilokheri		HR10A0005905
19.	Bhatia Graphics	Rakesh Kumar	9896057803	Indri Karnal Haryana 132001		HR10A0005931
20.	Hardik Signage	Vikas Gupta	9215144402	464 Behind Sec 16 New Sabzi Mandi Karnal	hardiksignage@gmail.com	HR10A0005904
21.	Rangoli Graphics	Rosy	999604336	56 Nehra Place Karnal	rangoliad@rediffmail.com	HR10A0000443
22.	Bathla Computers	Sanjay Bathla	98123-11975	Inside Vivekanand School Mandir Market Karnal	bathla.sanjay@yahoo.com	HR10A0000415
23.	Prashant Print Graphics	Sunil Lamba	94160-00402	Kunjpura Road Budha Khara Karnal	parshantgraphic@gmail.com	HR10A0002444
24.	Satish Painter	Yatin	9729630082	Mahabir Dal Market Karnal		HR10A0000419

25.	Shivam Card	Alkesh	92151-66654	Shop - 3, Jain Market Railway Road, Karnal	shivamcards@gmail.com	HR10A0000409
26.	Jawa Printers	Gouri Shankar	98131 09040	24 Mahila Ashram Karnal	jawaprintersknl@gmail.com	HR10A0000404
27.	Prabhuraj Graphics	Rajan Sachdeva	95014 16660	Shop No 2 Jain Complex Railway Road Karnal	prabhurajgraphic skarnal@gmail.com	HR10A0003684
28.	Luxmi Arts	Rajesh	98962 38961	Firm Luxmi Arts 24a Khalsa School Market Rly Road, Karnal, Haryana, 132001	Rajeshganotra11@gmail.com	HR10A0003921
29.	Painter Venus	Nand Kishore	9896029386	19, Guru Nanak Sr. Secondary School, Link Road, Karnal, Haryana- 132001	Ankitsachdeva73@gmail.com	HR10A0003924
30.	Kartikay Graphics	Jitender Khurana	95419-08802	485 Old Char Chaman, Karnal	karthikay.knl@gmail.com	HR10B0000651
31.	Roop Graphics	Sunil Arora	9811150687	Sales Office # Gaushala Road Karnal	sunil@roopgraphics.com	DL06B0000384
32.	Bathla Printers	Jugal	98123-11974	Basement Vivekanad Sr Sec School Mandir Market, Karnal	bathlaprinters96@gmail.com	<u>HR10A0000417</u>
33.	Limelight Media	Ravit	8816830683	Near Rangila Banquet Hall, Vpo Mangalpur, Karnal	llmkarnal@gmail.com	HR10A0000442
34.	Guru Kirpa Advertising Agency	Gurpreet	9896365784	Plot No1, Opp. Khushboo Garden Near Bhiwani Chungi Rohtak	gkartwork9@gmail.com	HR16A0001042
35.	Competent Ad Service	Harish Hans	99964-46000	Nirankari Bhawan Market, Railway Road Karnal	compitenthans@gmail.com	HR10A0000592
36.	Naveen Enterprises	Naveen Verma	8528528527	#222A, Platinum Floors, Motiyaz Royal Citi,	naveen.verma.org@gmail.com	PB20A0003337
37.	Prashant Graphics	Vivek	9416008802	246 Shakti Puram Karnal		HR10A0000654
38.	Virmani Enterprises	Mahesh Kumar	94162-02600	57 Nehru Palace Karnal		HR10A0000452
39.	Dhingra Trading Co.	Rajesh Dhingra	9416211800	Shop No. 1 Radha Swami Mkt M.T. Karnal	rajud1107@gmail.com	HR10A0002437
40.	Aircon Décor	Happy Wadhwa	99961-45678	Plot No. 389 HSIDC Industrial Estate Rahi Sonipat	arrowcondecor@gmail.com	HR18B0000885
41.	Vishnu Arpit Graphics	Himanshu Madan	78380-48018	Basement Vivekanand School Market, Karnal	himanshumadan@live.com	HR10A0000450
42.	4 G Digital Art	Himanshu Bharti	9888889951	Mangalpur Road, Vill. Mangalpur, Budakhera, Karnal-132001	himanshu@bharti.es.com	HR10A0002445
43.	Mehta Brothers	Satish	9812800010	Neelkanth Resort, Karnal	Satish_mehta_1971@yahoo.com	HR10B0000412
44.	UM Advertising and Marketing	Vishesh seth	99925 51111	Shop No 1, Vijaya Bank Building, Ambala Road, Aggarsain Puram, Kaithal, Haryana	Seth_vishesh85@yahoo.com	HR09A0004332
45.	Vineet Graphics	Vineet	8607777703	Shop No. 7 Kunjpura Road Opp Gian Bushan Hospital Road Karnal	vineetchoudhary86@icloud.com	HR10A0004413
46.	AR Associates OPC Pvt. Ltd.	Rajan Arora	9911200000	98-99, Gernaily Kothi, Gernaily Colony Karnal Haryana-132001	lionrajanarora@gmail.com	HR10D0004426

The shareholding pattern of members of the registered SPV includes the contribution from every member of SPV and no individual shareholder holds more than 10 per cent equity stake in the capital

of the company. Details of SPV shareholders along with shareholding percentage is provided in table 12.

Table 12: Shareholding Pattern

S. No	Name of Firm	Name Of Person	Mobile No.	Address	Shareholding Pattern
1.	Rajshree Signage	Naresh Saluja	9896347333	66 Old Ramesh Nagar Karnal	8
2.	Digitech Sign & Graphics	Varun Hans	9996274111	Plot-158 G First Floor Hsidc Sector-3, Karnal	0.5
3.	Spectrum Printers	Vijay Gandhi	9896667535	Opp Sawan Public School Dayal Singh Colony Karnal	8
4.	System Print Line	Sanjay	9896352333	04 New Ramesh Nagar Karnal	0.5
5.	Kritika Graphics	Surinder Kumar	9896020867	Link Road, Shop No.4, Guru Nanak Market, Opp. Bus Stand, Karnal, Karnal	0.5
6.	Ahuja Adtronix Pvt Ltd	Baldev Raj Ahuja	8607102000	18/177 New Char Chaman, Karnal, Haryana, 132001	0.5
7.	Swastik Advertiser	Gobind Singh Rawat	9253280020	A-496, Timber Road, Sadar Bazar, Karnal, Haryana, 132001	0.5
8.	Prayag Sales	Baldev Raj	9215567840	Kfpcl, Mugal Majra Road, Karnal, Haryana, 132023	0.5
9.	Aerocon Décor	Harshit	9996664356	Near New Anaj Mandi Gate, Gt Road, Karnal. Pin 132001.	8
10.	Yadvi Graphics	Deepak Kumar	7015168562	Shop No 6, Railway Road, Ibrahim Mandi, Karnal, Haryana, 132001	0.5
11.	Sehgal Graphics	Naresh Kumar Sehgal	9896029695	Shop No. 1, Guru Nanak Market, Link Road, Opp. Bus Stand, Karnal, Haryana	0.5
12.	Hans Graphics	Vijay Kumar	9896593387	Hno- 370a, Opp Dyal Singh College, Karnal, Haryana, 132001	0.5
13.	Kanhiya Graphics	Munish Chawla	9416573176	Hno- 6 Extension, Chaman Garden, Karnal, Haryana, 132001	0.5
14.	Sancast Prints	Sanjeev Makkar	9416031224	Gaushala Road Karnal	4
15.	Sapphire media services	Sahil Mangla	9992551111	Plot No. 96 Phase 2 Kaithal B/O 17 Red Cross Mkt Karnal	8
16.	Raj Advertisers	Rajinder Kumar	9416406918	Link Road Karnal	0.5
17.	Sanjay Graphics	Sanjay Atreja	9996825675	37 Mahabirdal Marcket	0.5
18.	Shagun	Pankaj Sharma	7988061976	Main Bazar Nilokheri	0.5
19.	Bhatia Graphics	Rakesh Kumar	9896057803	Indri Karnal Haryana 132001	0.5
20.	Hardik Signage	Vikas Gupta	9215144402	464 Behind Sec 16 New Sabzi Mandi Karnal	0.5
21.	Rangoli Graphics	Rosy	999604336	56 Nehra Place Karnal	8
22.	Bathla Computers	Sanjay Bathla	9812311975	Inside Vivekanand School Mandir Market Karnal	5
23.	Prashant Print Graphics	Sunil Lamba	9416000402	Kunjpora Road Budha Khera Karnal	0.5
24.	Satish Painter	Yatin	9729630082	Mahabir Dal Market Karnal	0.5
25.	Shivam Card	Alkesh	9215166654	Shop - 3, Jain Market Railway Road, Karnal	0.5
26.	Jawa Printers	Gouri Shankar	9813109040	24 Mahila Ashram Karnal	0.5
27.	Prabhuraj Graphics	Rajan Sachdeva	9501416660	Shop No 2 Jain Complex Railway Road Karnal	0.5



28.	Luxmi Arts	Rajesh	9896238961	Firm Luxmi Arts 24a Khalsa School Market Rly Road, Karnal, Haryana, 132001	0.5
29.	Painter Venus	Nand Kishore	9896029386	19, Guru Nanak Sr. Secondary School, Link Road, Karnal, Haryana- 132001	0.5
30.	Kartikay Graphics	Jitender Khurana	9541908802	485 Old Char Chaman, Karnal	0.5
31.	Roop Graphics	Sunil Arora	9811150687	Sales Office # Gaushala Road Karnal	4
32.	Bathla Printers	Jugal	9812311974	Basement Vivekanad Sr Sec School Mandir Market, Karnal	4
33.	Limelight Media	Ravit	8816830683	Near Rangila Banquet Hall, Vpo Mangalpur, Karnal	0.5
34.	Guru Kirpa Advertising Agency	Gurpreet	9896365784	Plot No1, Opp. Khushboo Garden Near Bhiwani Chungi Rohtak	4
35.	Competent Ad Service	Harish Hans	9996446000	Nirankari Bhawan Market, Railway Road Karnal	0.5
36.	Naveen Enterprises	Naveen Verma	8528528527	#222A, Platinum Floors, Motiyaz Royal Citi,	4
37.	Prashant Graphics	Vivek	9416008802	246 Shakti Puram Karnal	0.5
38.	Virmani Enterprises	Mahesh Kumar	9416202600	57 Nehru Palace Karnal	5
39.	Dhingra Trading Co.	Rajesh Dhingra	9416211800	Shop No. 1 Radha Swami Mkt M.T. Karnal	5
40.	Aircon Décor	Happy Wadhwa	9996145678	Plot No. 389 HSIDC Industrial Estate Rahi Sonipat	0.5
41.	Vishnu Arpit Graphics	Himanshu Madan	7838048018	Basement Vivekanand School Market, Karnal	0.5
42.	4 G Digital Art	Himanshu Bharti	9888889951	Mangalpur Road, Vill. Mangalpur, Budakhera, Karnal-132001	4
43.	Mehta Brothers	Satish	9812800010	Neelkanth Resort, Karnal	0.5
44.	UM Advertising and Marketing	Vishesh seth	9992551111	Shop No 1, Vijaya Bank Building, Ambala Road, Aggarsain Puram, Kaithal, Haryana	0.5
45.	Vineet Graphics	Vineet	8607777703	Shop No. 7 Kunjpura Road Opp Gian Bushan Hospital Road Karnal	0.5
46.	AR Associates OPC Pvt. Ltd.	Rajan Arora	9911200000	98-99, Gernaily Kothi, Gernaily Colony Karnal Haryana-132001	0.5

## 5.2 Initiatives undertaken by the SPV

As mentioned in detail in section 4.1 (Soft interventions recommended and action taken), the SPV members have proactively undertaken a lot of capacity building initiatives to promote the cooperation among cluster units and enhance knowledge and exposure of the units. These initiatives have been undertaken in collaboration with DIC, MSME-DI, NDRI, KFPCL, IDA etc. The major initiatives are:

- ▶ Pursuing initiatives in close coordination with MSME-DI and DIC, Karnal to facilitate understanding of cluster development, common procurement, marketing, available government support, latest technology for common facility etc.

- ▶ Exposure visits to trade fairs and machinery fairs for Signage industries in NCR and large factories at other locations to understand the technology, market requirement and available opportunities.
- ▶ Conducting various programs for capacity building, awareness generation and technological advancement in the cluster as well as participation in similar programs organized by stakeholders.
- ▶ Identification of land for construction of CFC and collective acquisition of land in the name of SPV.
- ▶ The preparation of DSR was led by the SPV and the presentation of the DSR in the SLPSC was also done by the SPV members.

### 5.3 SPV Roles and Responsibilities

The SPV will play an important guiding role in the overall management and operations of the CFC. It will provide direction to the management of the CFC and will monitor usage and performance of the CFC. The SPV will constantly report to the state and the centre government about the performance of the CFC. The major roles and responsibilities that are envisaged to be performed by the SPV post the submission of this DPR are mentioned below:

- ▶ Coordinating with the state industry department and the MSME-DI for DPR approvals in the SLPSC
- ▶ Accompanying EY experts to various meetings at the state and central government departments
- ▶ Execution of land purchase in the name of SPV
- ▶ Garnering the SPV project contribution from the members
- ▶ Assisting the EY team in providing inputs to the DCMSME technical committee, if required
- ▶ Formation of purchase committees for procurement of goods and services
- ▶ Establishing, operating and maintaining all common facilities as mentioned in the DPR
- ▶ Obtain any statutory approvals/clearances from various government departments
- ▶ Recruit appropriate professionals to ensure smooth execution of the CFC
- ▶ Collection of user charges from members and other users of the facilities as per the decided rates so as to meet the recurring expenses and future expansions of the CFC. While various estimates on user charges / service fee are presented in this DPR, all decisions including usage priority of facilities by members will be made on the basis of decision by members of SPV.
- ▶ Preparation and submission of progress reports to state industry department and DCMSME

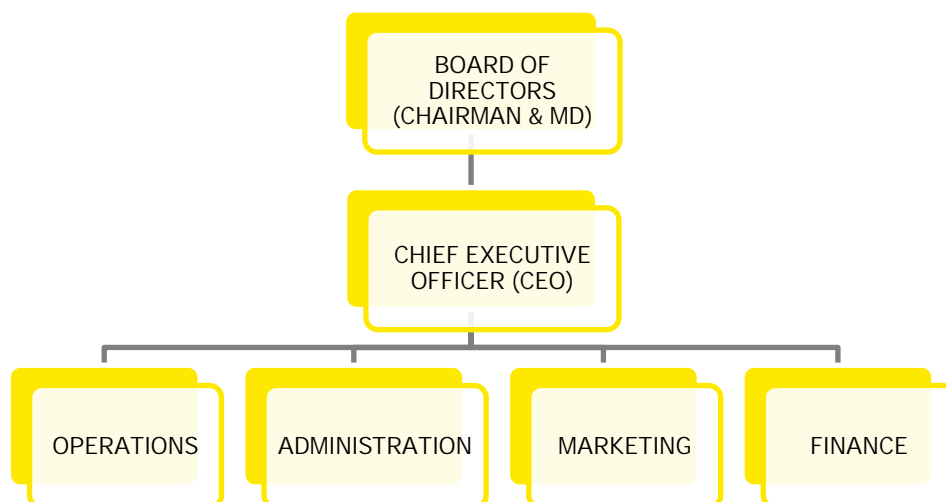
The Memorandum and by-laws of the Cluster SPV indicates the democratic process in terms of decision making on the basis of votes. All members of SPV will meet once every fortnight/month to discuss/resolve operational issues. The management of the CFC will be a two tier structure for smooth and uninterrupted functioning. The executive body i.e. Board of Directors; will include office bearers

elected/nominated from time to time including one nominee of State Government (DIC) and DC-MSME, they will also remain present during meetings.

While various estimates on user charges/service fee are presented in this DPR, all decisions including usage priority of facilities by members will be made by unanimous decision of the members. The CFC will seek direction and guidance from the SPV Board of Directors and the day to day administration will be taken care of by the management that shall be appointed by the SPV BoD. Their role is detailed below:

- **Board of Directors:** The BoD will be the main governing body and will oversee the operations of the CFC. They will have the decision making power in terms of fixation of user fees (for members and non-members) and usage of reserves etc. for future expansion. The Chairman and Managing Director will oversee the entire operations; each Director will be entrusted with specific responsibility like marketing, technical, finance, public relations etc. based on their interests and experience.
- **Managerial, Technical and Administrative staff:** A competent and well qualified professional with background in Signage industry will be appointed as the Chief Executive Officer (CEO), who will look after day to day operations of CFC and shall be directly reporting to the Board of Directors. Each facility will have its own technical staffs (supervisors, operations and helpers) as per the requirement. The details of manpower and other requirements are already mentioned in the DPR in the Project Economics section. There shall be provisions for administrative staff such as accounts personnel, marketing professional and store keepers etc. to ensure effective functioning of the CFC. The proposed organizational structure of the CFC is given in figure 15:

Figure 13: Organizational Structure of CFC





## 6. Project Economics

### 6.1 Project Cost and Means of Finance

#### 6.1.1 Project Cost

The total project cost is estimated at Rs. 1,805.97 Lakhs (INR 18.05 crores). The project cost for setting up a CFC Karnal Signage & advertising cluster includes the following:

1. Land and site development
2. Building and civil works
3. Machinery and equipment
4. Miscellaneous fixed assets
5. Preliminary & Pre-operative expenses
6. Contingency
7. Margin money for working capital

The detail of each project component is provided below:

#### 1. Land and Building

##### Land

The proposed CFC would require space for construction of buildings, pre-fabricated structure for installation of machinery and provision for stocking material. A lot of space also needs to be left open considering the industry FAR norms in the state. Considering the space requirements of the proposed facilities in the CFC and the FAR norms, it is estimated that a plot of about 18,000 sq. ft. (2000 square yards) shall be required.

The cluster SPV has identified a plot of land at village – Mugal Majra, 8 kms away from the Karnal city. The land is in an industrial township with power availability developed by KFPCL. Many Signage units are also coming up in that industrial estate. The land is appropriately located and only 10 kms away from the major existing industrial estate in Karnal.

SPV has identified a plot 17,982 sq. ft. (1998 sq. yards), which shall be purchased in the name of SPV. As per the Haryana Urban Development Authority (HUDA) Erection of Buildings Regulations, 1979, maximum permissible coverage on ground (built up area) is 60% of area of an industrial site. This shall allow an area of 10789.20 sq. ft. (1199 sq. yards) for CFC construction.

Cluster members are in the process of purchase of land from KFPCL and registration of land in the name of SPV. KFPCL has also agreed to sale and register the plot in the name of SPV. Land shall be registered in the name of SPV subsequent to in-principle approval of DPR by DC-MSME. The document

highlighting the same and establishing the proof for availability of land is provided in Annexure 4. Stamp duty charges at the rate of 5% and land development cost to the tune of 10 Lakhs has been added in the land cost and will be borne by SPV. The value for the land is estimated to be Rs. 146.36 Lakhs.

#### Building

The built up area of the facility will comprise of two storied building with a total floor area of 19500 sq. ft. Indicative building layout plan is provided in Annexure 5. The total cost of construction of the building including partitioning and ceiling is estimated to Rs. 185.64 Lakhs. The building estimate duly certified is provided in Annexure 6. Hence, the total cost of land, site development, stamp duty as well as construction of building is estimated at Rs. 332.00 lakhs (see table 13).

Table 13: Requirement in terms of land and buildings

Particulars	Sub total	Amount (INR in Lakhs)
Land (1998 sq. yards (18000 sq. ft.) @ Rs. 6500 per sq. yard) Stamp Duty Charges Land Development Cost	129.87 6.49 10.00	146.36
Building and civil works (shop-floor area of 19500 sq ft.)		185.64
<b>TOTAL</b>		<b>332.00</b>

## 2. Plant and Machinery

As detailed in section 4.2 (Hard interventions), 4 facilities including testing facility have been recommended to enable cluster units enhance their competitiveness. The machines have been categorized as primary and secondary. Primary machines shall be primarily used for job work, whereas the auxiliary/supporting machines for functioning of primary machines have been categorized as secondary machines. The facilities proposed at CFC are Advanced Super Wide-Format Dedicated Roll-to-Roll UV Printing technology, Digital Printing facility for Direct Printing on Fabric, Dye-sublimation transfer facility and Value added Print & Cut rigid media manufacturing facility. The total cost of plant and machineries including taxes has been estimated at Rs. 1279.98 lakhs, while total cost of plant & machineries including taxes and electrification & installation expenses works out to Rs. 1343.98 Lakhs.

The details of the proposed machinery items are presented in the table 14. The detailed specifications and quotations of the machines are provided in Annexure 7. The SPV has considered quotations for machinery from suppliers based on the manufacturer's reputation, service support, price and quality. However, an open tendering system shall be followed as per Government Financial Rules (GFR) for



procurement of these machineries during project execution and selected vendors will be further invited to negotiate.

Table 14: List of proposed plant and machinery

S. No.	Machine Name	Quantity	Total Price Rs. in lacs (Including taxes)	Proposed Supplier
Primary Machines				
1	Advanced Super Wide-Format 5 meter (16.4 feet) dedicated Roll-to-Roll UV printing Machine	1	595.90	Arrow Digital Pvt. Ltd./ EFI
2	3 Meter (10.5 feet) Digital Dye sublimation printing machine for fabric	1	265.50	Arrow Digital Pvt. Ltd./ EFI Reggiani
3	Rotary Thermo processing equipment (Calendar/heat press)	1	115.64	Arrow Digital Pvt. Ltd./ Klieverik
4	Value added Print & Cut rigid media manufacturing Facility			
4a	Structural design , Editing and nesting software	1	21.84	Esko-Graphics Pte Ltd
4b	Flatbed 3 meter by 2 meter cutting Table	1	234.41	Esko-Graphics Pte Ltd
Secondary Machines				
1	Genset (100 kVa)	1	8.09	Kirloskar
2	Computer/desktop	15	10.80	Horizon Systems & Comm. Pvt. Ltd.
3	HP Laserjet MFP 1005 Printer	2	0.35	Horizon Systems & Comm. Pvt. Ltd.
4	HP Scanjet Enterprise 7000 S3	1	0.88	Horizon Systems & Comm. Pvt. Ltd.
5	UPS with Battery Circuit Breaker and Inbuilt Isolation Transformer (1) Battery 12V, 150AH (34) Battery Rack, Battery Interconnecting Cable, UPS to Battery Cable 4m along with Installation (1)	1	14.80	Indian Transformers & Electricals , Gurgaon
6a	Screw Air Compressor (SXC 8 SCB – 8 bar)	1	4.28	Competent Pneumatic Pvt. Ltd.

	With Integrated Ref. Air Dryer & Air Receiver of 215 ltr capacity			
6b	Carbon Combination Filters	2	0.40	Competent Pneumatic Pvt. Ltd.
7	Air conditioners	10	7.08	Electronic World Karnal
	<b>Total</b>	<b>45</b>	<b>1279.98</b>	

### 3. Miscellaneous Fixed Assets

The CFC would also require fixed assets such as furniture, fixtures, fire-fighting equipment and power backup etc. for smooth running of operations. The total estimated capital expenditure for purchase of miscellaneous fixed assets is estimated to be Rs. 5.00 Lakhs. Details are provided in table below.

Table 15: Miscellaneous fixed assets

Particulars	Amount (INR in Lakhs)
Office items and allied items, furniture, fixtures, firefighting equipment etc.	5.00
<b>Total</b>	<b>5.00</b>

### 4. Preliminary Expenses

The preliminary expenses are envisaged as expenses incurred for registration of SPV, legal and administrative expenses, detailed civil engineering drawings with estimates, tendering forms, tendering cost and preparation of DSR & DPR of the cluster.

Table 16: Preliminary Expenses

Sl. No.	Particulars	Amount Rs. in lakhs
1	Company Registration	5.00
2	Civil engineering design with estimates	1.00
3	Tender forms & tendering cost	1.00
4	Project Report Preparation (DSR & DPR)	10.00
<b>Total</b>		<b>17.00</b>

### 5. Pre-operative Expenses

Pre-operative expenses include expenses for administrative establishment, stationery, telephone, overhead expenses during construction period including salaries, machine testing cost, bank charges, traveling, etc. It also includes the expenses for professional project management charges as

consultancy fee. The PMC have been taken @1% of project cost. The total expenditure for pre-operative expenses are estimated at Rs. 22.88 Lakh (table 17).

Table 17: Pre-operative expenses

Sl. No.	Particulars	Amount Rs. in lakhs
1	PRE-OPERATIVE EXPENSES	Project Management Charges (@1% of Project cost)
2		17.88
3		Telephone & Stationary items
4		1.00
5		Establishment & Travelling Cost
		1.00
		Overheads during Construction Period
		1.00
		Machine testing cost
		2.00
Total		22.88

## 6. Provision for Contingencies

As per the guidelines of MSE-CDP a provision for contingencies has to be made on plant/machinery and buildings. Contingencies estimated @2% on building and civil works (totalling Rs. 185.64 lakh) amounts to Rs. 3.71 lakh while contingencies on plant and machinery (totalling Rs. 1279.98 lakh) have been estimated as 5% that amounts to Rs. 64.00 lakh.

## 7. Margin Money for Working Capital

The total working capital requirement during the first year of operation at 80% capacity utilization is estimated at Rs. 69.60 lakh with margin money requirement of Rs. 17.40 Lakh (25% of working capital requirement as margin). The working capital requirement has been calculated based on requirement of one month of operational expenses and the calculation has been provided in the subsequent section.

## 8. Summary Project Cost:

A summary of total estimated project cost is presented in table below.

Table 18: Project Cost

S. No.	Particulars	Total Project Cost (Rs. Lacs)
1	Land	
	a. Land cost	146.36
2	Building & Other Civil Works	185.64
3	Plants & Machinery	
	a. Indigenous	977.04
	b. Imports	256.25
	c. Secondary Machines	46.69
	d. Electrification & Installation Exp. (5% of P&M Cost)	64.00

4	Miscellaneous fixed assets (fixture, furniture, firefighting equipment, first aid equipment, backup power supply, etc.)	5.00
5	Preliminary Expenses (DSR, DPR, legal & administrative expenses, registration, civil engineering drawings with estimates & tender forms, telephone, stationery, etc.)	17.00
6	Pre-Operative Expenses (establishment cost, travel, overheads during construction period including salaries, machine testing cost and other services, PMC etc.)	22.88
7	Contingency	
	a. Building @ 2%	3.71
	b. Plant & Machinery @ 5%	64.00
8	Margin money for working capital (Working capital required @ 80% C.U.)	17.40
	<b>Total</b>	<b>1805.97</b>

The total project cost is estimated to be Rs. 1805.97 lakh. The total contribution of SPV members will amount to Rs. 302.99 lakh. Support from MSE-CDP of the DC-MSME is envisaged for Rs. 1050.00 lakh and from the government of Haryana is Rs. 452.99 lakh. Promotion of MSMEs has been priority for Government of Haryana and in its strive towards same the state government launched Enterprise Promotion Policy 2015 which envisages additional grant to CDP projects to the tune of 50% above project cost of 15 Cr.

#### 6.1.2 Means of Finance

The project will be financed from three sources: equity from SPV, grant-in-aid from Govt. of India (under MSE-CDP) and grant-in-aid from Govt. of Haryana (under EPP 2015). Working capital loan will be secured from Corporation Bank. The assistance to the project from Govt. of India under MSE-CDP is envisaged to the tune of 70% of the project cost for project up to 1500.00 lakhs. As per Enterprise Promotion Policy 2015 of Govt. of Haryana, it will contribute 20% of project cost for project up to Rs. 1500.00 lakh and 50% of project cost for project exceeding Rs. 1500.00 lakh up to Rs. 2000.00 lakhs. SPV will be required to contribute 10% of project cost for project cost up to Rs. 1500.00 lakh and 50% of project cost for project exceeding Rs. 1500.00 lakh. Table 19 summarizes the means of finance for the project:

Table 19: Means of Finance

S. No.	Source of finance	Project cost up to INR 1500.00 lacs		Project cost over INR 1500.00 lacs		Total Amount (INR in lacs)
		Percentage Contribution	Amount (INR in lacs)	Percentage Contribution	Amount (INR in lacs)	
1	Grant-in-aid under MSE-CDP (Govt. of India)	70	1050	0	0	1050.00

2	Grant-in-aid (Govt. of Haryana)	20	300	50	152.99	452.99
3	Contribution of SPV	10	150	50	152.99	302.99
	<b>Total</b>	<b>100</b>	<b>1500</b>	<b>100</b>	<b>305.97</b>	<b>1805.97</b>

### 1. Share Capital

The contribution of the SPV members will be the way of subscription to shares in the SPV registered as a Private Limited Company. The extent of paid-up share capital/equity contribution would be Rs. 302.99 lakh contributed by the cluster SPV.

The authorised share capital of the company is Rs. 1.00 lakhs. SPV has further received contribution of Rs. 36.20 lakh for pursuing cluster development activities. The SPV shall also increase the authorized paid capital in due course to received grants from government. The extent of share capital/equity contribution by each member will be restricted to a maximum of 10% of total contribution to the share capital of the company.

### 2. Grant-in-Aid

Grant-in-aid of Rs. 1050.00 lakh is expected from Government of India. The grant received under MSE-CDP will only be utilized to procure plant and machinery for the project. In addition, grant-in-aid of Rs. 452.99 is expected from Government of Haryana under EPP 2015. The grant received as per EPP (MSE-CDP) will be utilized to bridge the gap funding in plant & machinery and building for CFC.

## 6.2 Expenditure estimates

In this section, a detailed estimate of expenditure of the CFC has been conducted on eight hour single shift operation basis. This has been estimated based upon extensive inputs by the cluster members and the prevalent rates of consumables, utilities and manpower in the cluster. This section considers annual cost of undertaking job work and expenditure estimates. The critical components related to expenditure comprise consumables, manpower, electricity and also expenditure on repair and maintenance of assets, insurance and administrative overheads.

Other elements comprise expenditures by the way of interest toward working capital loans, miscellaneous expenses and non-cash depreciation expenditure.

## 1. Consumables

Machines installed at the CFC shall require consumables during operations and completion of the job work. Consumables are critical components of project facilities and may be understood in terms of inks, wipes, cleaning solution, paper and blades etc.

The annual requirement of consumables is provided in table 20.

Table 20: Annual requirement of consumables

S. No.	Machine Name	Hours available daily	Particulars (requirement of consumables for undertaking usage)	Amount (@ 80% C.U. in Rs. Lakh)	Amount (@ 85% C.U. in Rs. Lakh)
1	Digital Printing facility for Direct Printing on Fabric	8	The machine will require consumables by way of inks, wipes and cleaning solution @ Rs. 15000 per hour	201.6	214.2
2	Digital Printing facility for Direct Printing on Fabric	8	The machine will require consumables by way of inks, wipes and cleaning solution @ Rs. 8000 per hour	107.52	114.24
3	Dye-sublimation transfer facility	8	The machine will require consumables by way of paper and cleaner @ Rs. 500 per hour	6.72	7.14
4	Value added Print & Cut rigid media manufacturing facility	8	The machine will require consumables by way of blades and wipes @ Rs. 500 per hour	6.72	7.14
5	Administrative Facility	NA	Stationery, office equipment related consumables @ Rs. 30000 per month	2.88	3.06
6	Computer & Printers	NA	For PCs and Software consumables include stationery, toner @ 10000 per month	0.96	1.02
	<b>Total</b>			<b>316.80</b>	<b>336.60</b>

## 2. Manpower Requirements

Another major expenditure head is the manpower, facilities installed at CFC will require manpower to function effectively as mentioned in section 5.3 of the report. The total manpower requirement for the project would be about 26 persons. The manpower required under project has been divided



under two categories: Direct & Indirect. Direct manpower is required for operation of machines while indirect manpower is required for administrative purposes. The annual expenditure on salary component for direct manpower is estimated at Rs. 37.20 lakh and for indirect at 22.20 lakhs at 80% C.U. The total expense on manpower is projected at Rs. 4.95 lakh per month or Rs. 59.40 lakh per annum.

The details of monthly and yearly expenses for manpower required for running the project is provided in table 21 and 22.

Table 21: Expenditure related to salary (Direct manpower-machine operators and helpers)

Category	No. of Manpower Required	Details of Manpower Required	Salary per month per person (INR)	Total Salary per month (INR)	Total salary & wages per Year (INR lakh)
Machine manpower requirement (Direct)					
Advanced Super Wide-Format Dedicated Roll-to-Roll UV Printing technology	1	Main Operator	23000	23000	2.76
	1	Helper	12000	12000	1.44
Digital Printing facility for Direct Printing on Fabric	1	Main Operator	23000	23000	2.76
	1	Helper	12000	12000	1.44
Dye-sublimation transfer facility	1	Main Operator	23000	23000	2.76
	1	Helper	12000	12000	1.44
Value added Print & Cut rigid media manufacturing facility	1	Main Operator	23000	23000	2.76
	1	Helper	12000	12000	1.44
Production In charge	1	1	40000	40000	4.80
Procurement & Dispatch In charge	1	1	23000	23000	2.76
HR Manager	1	1	23000	23000	2.76
Store Keeper	1	1	12000	12000	1.44
Electric Operator	1	1	12000	12000	1.44
Electric Assistant	1	1	12000	12000	1.44
Generator Operator	1	1	10000	10000	1.20
Generator Attendant	1	1	8000	8000	0.96

Helper (loading & unloading)	3	3	10000	30000	3.60
<b>Sub total</b>			<b>290000</b>	<b>310000</b>	<b>37.20</b>

Table 22: Expenditure related to salary (Indirect manpower-administrative and support staff)

Category	No. of Manpower Required	Details of Manpower Required	Salary per month per person (INR)	Total Salary per month (INR)	Total salary & wages per Year (INR lakh)
<b>Administration &amp; accounting (Indirect)</b>					
CEO/Director	1	1	75000	75000	9.00
CFO	1	1	40000	40000	4.80
Accountant	1	1	30000	30000	3.60
Sweeper	1	1	10000	10000	1.20
Watchman	2	2	10000	20000	2.40
Pantry	1	1	10000	10000	1.20
<b>Sub total</b>			<b>175000</b>	<b>185000</b>	<b>22.20</b>
<b>Total</b>			<b>465000</b>	<b>558000</b>	<b>59.40</b>

### 3. Utilities

The most important utilities required by the project are power supply and water. Proposed CFC requires power for operation of machinery as well as other supporting equipment for smooth operations. The total connected load requirement has been estimated at 180 kW including a buffer of 10%. Table 23 depicts the machine and equipment wise power requirement in the CFC. The drawn power is conservatively assumed at 60% of the connected load in the case of operating facilities and shop floor.

Table 23: Machine &amp; equipment (facility) wise power requirement

S. No.	Machine Name	Power Requirement (kW)/ Connected Load	Total power requirement (60% of drawn power) kWh
1	Advanced Super Wide-Format Dedicated Roll-to-Roll UV Printing technology	25	15
2	Digital Printing facility for Direct Printing on Fabric	20	12
3	Dye-sublimation transfer facility	45	27

4	Value added Print & Cut rigid media manufacturing facility	20	12
5	Computer/desktop & Printers	5	3
6	Air Compressor	5	3
7	Air conditioners	20	12
8	Administrative facilities	20	12
	<b>Total Connected Load for the CFC</b>	<b>160</b>	<b>96</b>
	Buffer Connected Load (10% of Total Connected Load)	16	
	<b>Total Connected Load for the CFC</b>	<b>180.00*</b>	

\* Rounded off to the nearest value

The power requirement for operation of core machinery and equipment, testing lab and administrative facilities is 160 kWh. Electricity required for shop floor activities in terms of operation of core machinery and equipment is 140 kW. The facility is heavily dependent on electricity for operations and will also require additional 10% connected load as buffer to get the electricity connection. The total connected load for the CFC is estimated to be 180 kW.

Fix charges for connection of 650 kW @ Rs. 173 per kW = Rs. 31,140 and monthly consumption charge @ 96 kWh yields a consumption of 19,200 units which amounts to Rs. 1.72 lakh. This has been calculated based on the prevalent rates of the power charges.

Envisaged annual expenditure in terms of power related charges is represented in table 24.

Table 24: Annual expenditure statement vis-à-vis power charges

S. No.	Expenditure component	Particulars	Amount per annum (@ 100% C.U. in Rs. Lakh)	Amount per annum (@ 80% C.U. in Rs. Lakh)	Amount per annum (@ 85% C.U. in Rs. Lakh)
1	Fixed monthly connection charge (total connected load)	Shop-floor, support facilities & administrative (Rs. 0.31 Lakh per month)	3.74	3.74	3.74
2	Variable charges (as per consumption of units)	Shop-floor, support facilities & administrative (Rs. 1.72 Lakh per month)	20.74	16.59	17.63
	<b>Total</b>		<b>24.47</b>	<b>20.33</b>	<b>21.36</b>

Water supply is another utility required for operation of CFC. Water shall be primarily required for cooling of moulding machines installed at CFC and for consumption by manpower. The water requirement is envisaged at 7000 litre/day for consumption and washing purposes and 10,000 litres for machinery purposes. Water charges have been estimated at Rs. 15/KL. This amounts to a total consumption of approximately Rs. 0.60 lakh per annum. Expenses on sewage is also estimated to be approximately Rs. 0.60 lakh per annum. Hence, total cost of water and sewerage services is Rs. 1.20 lakh per annum.

#### 4. Annual Repairs and Maintenance Expenses

The annual repairs and maintenance expenses have been estimated to be Rs. 43.28 lakh. The details are presented in the table 25:

Table 25: Annual repairs and maintenance expenditure

S. No.	Expenditure component	Particulars	Amount per annum (@ 100% C.U. in Rs. Lakh)	Amount per annum (@ 80% C.U. in Rs. Lakh)	Amount per annum (@ 85% C.U. in Rs. Lakh)
1	Repairs & maintenance	Building: repair & maintenance @ 2%	4.88	3.90	4.14
2		Plant & machinery: repair & maintenance @ 3%	38.40	30.71	32.63
	<b>Total</b>		<b>43.28</b>	<b>34.81</b>	<b>36.77</b>

#### 5. Insurance and miscellaneous Administrative Expenses

Insurance shall be a critical component of asset protection at CFC. Insurance is computed on the basis of 0.5 per cent on the fixed assets. Cost of insurance shall vary with depreciation of asset and varies as per depreciated value calculated on the basis of WDV. Miscellaneous administrative expenses are estimated at a lump-sum of Rs. 5.00 lakh per year. The cost of miscellaneous expenses is considered to be fixed irrespective of scale of operation. The details are presented in the table 26:

Table 26: Insurance and miscellaneous administrative expenses

S. No.	Expenditure component	Particulars	Amount for 1 <sup>st</sup> year (in Rs. Lakh)	Amount for 2 <sup>nd</sup> year (in Rs. Lakh)	Amount for 3 <sup>rd</sup> year (in Rs. Lakh)
1	Insurance	Estimate @ 0.5% on fixed assets (such as buildings, civil works, and Plant & machinery, including	8.31	7.11	6.09

		related contingency expenses of approx. Rs. 1655.24 Lakh)			
2	Miscellaneous administrative expenditure	Stationery, communication, travelling, and other misc. overheads	5.00	5.00	5.00
	<b>Total</b>		<b>13.31</b>	<b>12.11</b>	<b>11.09</b>

### 6.3 Working Capital Requirements

Working capital has been calculated in terms of one month's operating expenses required for the CFC. The operating expenses includes in form of consumables, salaries, utilities, repair & maintenance, insurance and miscellaneous administrative expenses. The details are presented in the table 27.

Table 27: Assessment of working capital

Sr. No.	Particulars	No. of Month	Annual Expenditure at installed capacity of 100% (in Rs. Lakh)	Annual Expenditure at installed capacity of 80% (in Rs. Lakh)	Annual Expenditure at installed capacity of 85% (in Rs. Lakh)
1	Consumables	1	26.4	21.12	22.44
2	Utilities (Power)	1	1.69	1.352	1.4365
3	Utilities (Water)	1	0.1	0.08	0.085
4	Working Expenses (Manpower Expenses )	1	4.33	3.464	3.6805
5	Bills Receivable (Sales Value)	1	37.08	29.664	31.518
	<b>Working capital (Total expenses)</b>		<b>69.6</b>	<b>55.68</b>	<b>59.16</b>
	<b>Working Capital Margin</b>		<b>17.4</b>	<b>13.92</b>	<b>14.79</b>

The working capital requirement of the project for the one month of operation has been considered for consumables and expenses. The SPV will contribute the margin money for working capital and rest of working capital will be borrowed from Oriental Bank of Commerce, Karnal. While calculating the project cost 25% of working capital is shown as margin for working capital and the remaining will be borne by SPV as borrowings. The working capital required is estimated to Rs. 55.68 lakh during the first year of operation (80% C.U.). Further, total working capital required at an operating capacity of 85% comes out to Rs. 59.16 lakh. The corresponding margin money for working capital requirement at 80% & 85% capacity utilisation amounts to Rs. 13.92 lakh and Rs. 14.79 lakh

respectively, and the corresponding loan amounts at Rs. 52.44 lakh and Rs. 55.61 lakh respectively. Punjab National Bank has agreed to finance working capital upon approval of project under MSE-CDP. The interest on bank loan (@11.0% per annum) amounts to Rs. 4.59 lakh at 80% capacity utilisation and Rs. 4.87 lakh at operating capacity of 85%. Computation of working capital and margin money requirement for 10 years is presented in table 28.



Table 28: Computation of Working Capital and Margin Money requirements

Sr. No.	Particulars	No. of Month/day	As per Capacity Utilisation									
			1st Yr.	2nd Yr.	3rd Yr.	4th Yr.	5th Yr.	6th Yr.	7th Yr.	8th Yr.	9th Yr.	10th Yr.
1	Consumables	1	26.40	28.05	28.05	33.00	33.00	33.00	33.00	33.00	33.00	33.00
2	Utilities (Power)	1	1.69	1.78	1.78	2.04	2.04	2.04	2.04	2.04	2.04	2.04
3	Utilities (Water)	1	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
4	Working Expenses (Manpower Expenses )	1	4.33	4.49	4.49	4.95	4.95	4.95	4.95	4.95	4.95	4.95
5	Bills Receivable (Sales Value)	1	37.08	39.40	39.40	46.35	46.35	46.35	46.35	46.35	46.35	46.35
6	Working capital (Total expenses)		69.60	73.81	73.81	86.44	86.44	86.44	86.44	86.44	86.44	86.44
7	Working Capital Margin		17.40	18.45	18.45	21.61	21.61	21.61	21.61	21.61	21.61	21.61
8	Working Capital Loan		52.20	55.36	55.36	64.83	64.83	64.83	64.83	64.83	64.83	64.83
9	Interest on Working capital loan @11% p.a.		5.74	6.09	6.09	7.13	7.13	7.13	7.13	7.13	7.13	7.13

## 6.4 Depreciation Estimates

Estimates of depreciation are non-cash expenditure and presented in this section on the basis of Written down Value (WDV) method as per Income Tax act. Accounting for depreciation would facilitate sustainability of operations in terms of developing a fund for replacement of assets. The surplus fund that is accumulated over the years could facilitate the replacement of such assets toward the end of the envisaged asset life of 10 years. Depreciation of building is considered at the rate of 10% per year, depreciation of plant and machinery at 15% a year, depreciation of computer at 60% a year, depreciation of furniture at 10% a year and depreciation of miscellaneous fixed assets at the rate of 15% a year as per the WDV method. Depreciation based on Written down Value method (WDV) has been used for computation of net profit. The computation as per WDV method is provided in table 29.

Table 29: Depreciation employing WDV method<sup>9</sup>

Particulars	1st Year	2nd Year	3rd Year	4th Year	5th Year	6th Year	7th Year	8th Year	9th Year	10th Year
Land	146.36	146.36	146.36	146.36	146.36	146.36	146.36	146.36	146.36	146.36
Building and Civil work										
Opening Balance <sup>10</sup>	189.35	170.42	153.38	138.04	124.23	111.81	100.63	90.57	81.51	73.36
Less: Depreciation @ 10%	18.94	17.04	15.34	13.80	12.42	11.18	10.06	9.06	8.15	7.34
Closing Balance	170.42	153.38	138.04	124.23	111.81	100.63	90.57	81.51	73.36	66.02
Machinery and Supporting equipment										
Opening Balance <sup>11</sup>	1397.17	1189.22	1010.84	859.21	730.33	620.78	527.66	448.51	381.24	324.05
Less: Depreciation @ 15%	207.96	178.38	151.63	128.88	109.55	93.12	79.15	67.28	57.19	48.61
Closing Balance	1189.22	1010.84	859.21	730.33	620.78	527.66	448.51	381.24	324.05	275.44
Computers										
Opening Balance <sup>12</sup>	10.80	4.32	1.73	0.69	0.28	0.11	0.04	0.02	0.01	0.00
Less: Depreciation @ 60%	6.48	2.59	1.04	0.41	0.17	0.07	0.03	0.01	0.00	0.00
Closing Balance	4.32	1.73	0.69	0.28	0.11	0.04	0.02	0.01	0.00	0.00
Furniture										
Opening Balance <sup>13</sup>	3.00	2.70	2.43	2.19	1.97	1.77	1.59	1.43	1.29	1.16
Less: Depreciation @ 10%	0.30	0.27	0.24	0.22	0.20	0.18	0.16	0.14	0.13	0.12
Closing Balance	2.70	2.43	2.19	1.97	1.77	1.59	1.43	1.29	1.16	1.05
Misc. Fixed Assets										

<sup>9</sup> Amount in Rs. Lakh.<sup>10</sup> Opening balance includes provision for contingencies<sup>11</sup> Opening balance includes provision for contingencies<sup>12</sup> Opening balance includes provision for contingencies<sup>13</sup> Opening balance includes provision for contingencies

Opening Balance <sup>14</sup>	2.00	1.70	1.53	1.38	1.24	1.12	1.00	0.90	0.81	0.73
Less: Depreciation @ 15%	0.30	0.17	0.15	0.14	0.12	0.11	0.10	0.09	0.08	0.07
Closing Balance	1.70	1.53	1.38	1.24	1.12	1.00	0.90	0.81	0.73	0.66
Total Depreciation	233.97	198.46	168.40	143.46	122.46	104.65	89.50	76.58	65.55	56.13
Depreciated value	1514.72	1316.26	1147.87	1004.41	881.95	777.30	687.80	611.22	545.67	489.54

## 6.5 Income/Revenue estimates

The CFC is expected to generate revenue by way of user charges that shall be levied based upon the hours a machine is operated for a particular job. The user charges shall vary based upon the user i.e. the SPV members and non SPV members. The user charges will be less for the SPV members as compared to non-members. Firms based outside Karnal can also avail the facility at CFC based on availability and payment of charges. The major income sources for CFC are envisaged by the way of provisioning Advanced Super Wide-Format Dedicated Roll-to-Roll UV Printing technology, Digital Printing facility for Direct Printing on Fabric, Dye-sublimation transfer facility and Value added Print & Cut rigid media manufacturing facility.

The user charges have been estimated based upon the operational expenses of the CFC and the prevalent market rates in Karnal. User charges for supporting/ auxiliary machineries have not been considered as a part of revenue. Estimation of user charges for availing services at CFC has been done on a conservative basis for 10 years. The idea behind the CFC is not to make profits but to benefit cluster units increase their competitiveness. The surplus generated will enable the CFC to meet the operational expenses and provision for replacement of assets toward the end of the envisaged asset life of 10 years. The relevance and appropriateness of user charges is also evident from the fact that the rates fixed help meet operating expenditures and provide sustainable replacement of assets. It is also envisaged that the CFC will generate enough income to sustain and grow, making it an absolutely viable project.

The estimated user charges for various machineries are presented in table 30.

<sup>14</sup> Opening balance includes provision for contingencies

Table 30: Projected annual income statement

S. No.	Facilities	User Charge Per Hour (In Rs.)	Hours available daily (single shift)	Amount (@ 80% C.U. in Rs. Lakh)	Amount (@ 85% C.U. in Rs. Lakh)	Amount (@ 100% C.U. in Rs. Lakh)
1	Advanced Super Wide-Format Dedicated Roll-to-Roll UV Printing technology	25000	8	480.00	510.00	600.00
2	Digital Printing facility for Direct Printing on Fabric	9150	8	175.68	186.66	219.60
3	Dye-sublimation transfer facility	6100	8	117.12	124.44	146.40
4	Value added Print & Cut rigid media manufacturing facility	6100	8	117.12	124.44	146.40
	<b>Total</b>			<b>889.92</b>	<b>945.54</b>	<b>1112.40</b>

Total gross revenue in-flow is estimated to Rs. 889.92 lakhs per annum on an operating capacity of 80%. For projection purposes, operating capacity of 80% is considered during first year, 85% during next two years and 100% from 4<sup>th</sup> year onwards.

## 6.6 Estimation of profitability: Income and Expenditure statement

The projections for income and expenditures of the CFC has been conducted for ten years. The projections have been undertaken based upon the income and expenditure heads mentioned in previous sections. The projected statements highlight income, expenses, profits earned, income tax and net profit etc. The details are presented in the table 31.

Table 31: Estimation of Profitability - Income &amp; Expenditure Statement

Particulars	1st Year	2nd Year	3rd Year	4th Year	5th Year	6th Year	7th Year	8th Year	9th Year	10th Year
Number of working days	300	300	300	300	300	300	300	300	300	300
Number of shift	1	1	1	1	1	1	1	1	1	1
Capacity Utilisation in %	80%	85%	85%	100%	100%	100%	100%	100%	100%	100%

Particulars	1st Year	2nd Year	3rd Year	4th Year	5th Year	6th Year	7th Year	8th Year	9th Year	10th Year
A. Income (User/ Service Charge)	889.92	945.54	945.54	1112.40	1112.40	1112.40	1112.40	1112.40	1112.40	1112.40
B. Cost of Production :										
1. Utilities Power (Fixed + Variable)	20.33	21.36	21.36	24.47	24.47	24.47	24.47	24.47	24.47	24.47
2. Utilities Water (Fixed consumption)	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
3. Direct labour and wages	29.76	31.62	31.62	37.20	37.20	37.20	37.20	37.20	37.20	37.20
4. Consumable	316.80	336.60	336.60	396.00	396.00	396.00	396.00	396.00	396.00	396.00
5. Repair and Maintenance	34.62	36.78	36.78	43.27	43.27	43.27	43.27	43.27	43.27	43.27
6. Depreciation	233.97	198.46	168.40	143.46	122.46	104.65	89.50	76.58	65.55	56.13
Total Cost of production (B)	635.75	625.03	594.97	644.44	623.44	605.64	590.48	577.56	566.54	557.12
C. Administrative expenses :										
7. Manpower (Indirect)	22.20	22.20	22.20	22.20	22.20	22.20	22.20	22.20	22.20	22.20
8. Insurance	8.31	7.11	6.09	5.22	4.48	3.85	3.31	2.85	2.45	2.11
9. Misc. Expense	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Total Administrative Expenses (C)	35.51	34.31	33.29	32.42	31.68	31.05	30.51	30.05	29.65	29.31
D. Financial expenses :										
10. Interest on Working capital loan @ 11% per annum	5.74	6.09	6.09	7.13	7.13	7.13	7.13	7.13	7.13	7.13
Total Financial Expenses (D)	5.74	6.09	6.09	7.13	7.13	7.13	7.13	7.13	7.13	7.13
E. Total Expenses (B+C+D)	676.70	665.17	634.11	683.78	662.07	643.65	627.97	614.60	603.19	593.45
F. Profit A – E	213.22	280.37	311.43	428.62	450.33	468.75	484.43	497.80	509.21	518.95
G. P & P Written Off	7.98	7.98	7.98	7.98	7.98	0.00	0.00	0.00	0.00	0.00
H. Income before Tax (F-G)	205.24	272.40	303.45	420.64	442.36	468.75	484.43	497.80	509.21	518.95
I. Adjustment of Loss	-	-	-	-	-	-	-	-	-	-
J. Income Tax (Provision @ 26%)	53.36	70.82	78.90	109.37	115.01	121.88	125.95	129.43	132.39	134.93

K. Net Profit for the year	151.88	201.57	224.55	311.28	327.34	346.88	358.48	368.37	376.81	384.02
L. Cumulative Surplus	151.88	353.45	578.01	889.29	1216.63	1563.51	1921.99	2290.36	2667.17	3051.20

Income tax implication is computed at the rate of 26% per cent i.e. 25 per cent plus education cess @ 3 per cent. The incidence of tax ranges from Rs. 53.36 Lakh per annum for year 1 to Rs. 134.93 lakh per annum in year 10. As evident from the table above, the project is financially viable. A cumulative surplus of about Rs. 3051.20 Lakh shall be earned by the SPV even after accounting for taxation and depreciation at the end of ten years. This surplus generated shall be used for further addition in the machinery or improvement and up-gradation of facilities. Additionally, the SPV intends to conduct other development activities in the cluster that shall be funded through the surplus generated by CFC.

## 6.7 Projected Balance Sheets

The annual balance sheets for the CFC have been projected based upon estimates in the earlier sub-sections with regard to various current and fixed liabilities and also current and fixed assets. As evident from the projections, a considerable amount of reserves and surplus gets accumulated. These shall also be utilized for expansion of CFC and undertaking other cluster developmental activities. Decision on deployment of reserves and surplus' accumulated will be based on the performance of the project and requirements of cluster firms and members of SPV. The projected balance sheets are as under Table 32).



Table 32: Projected Balance Sheets<sup>15</sup>

PROJECTED BALANCE SHEET											
Particulars	At the end of implementation period	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> Year	4 <sup>th</sup> Year	5 <sup>th</sup> Year	6 <sup>th</sup> Year	7 <sup>th</sup> Year	8 <sup>th</sup> Year	9 <sup>th</sup> Year	10 <sup>th</sup> Year
A. Fixed Assets :											
Gross Block	1748.69	1748.69	1514.72	1316.26	1147.87	1004.41	881.95	777.30	687.80	611.22	545.67
Less : Depreciation (WDV)		233.97	198.46	168.40	143.46	122.46	104.65	89.50	76.58	65.55	56.13
Total Fixed Assets (A)	1748.69	1514.72	1316.26	1147.87	1004.41	881.95	777.30	687.80	611.22	545.67	489.54
B Current Assets :											
Cash & bank Surplus (B.F)	17.40	376.35	775.20	1164.12	1614.95	2055.45	2486.25	2909.34	3324.43	3730.96	4128.12
Sundry Debtors		37.08	39.40	39.40	46.35	46.35	46.35	46.35	46.35	46.35	46.35
Other Assets		50.00	60.00	72.00	86.40	103.68	124.42	149.30	179.16	214.99	257.99
C. P&P Exp.	39.88	31.90	23.93	15.95	7.98	0.00	0.00	0.00	0.00	0.00	0.00
Total current Assets (B)		87.08	99.40	111.40	132.75	150.03	170.77	195.65	225.51	261.34	304.34
Total Assets (A+B)	1805.97	2010.06	2214.79	2439.34	2760.09	3087.43	3434.31	3792.79	4161.16	4537.97	4922.00
D. Current Liabilities :											
Working Capital Loan		52.20	55.36	55.36	64.83	64.83	64.83	64.83	64.83	64.83	64.83
Total Current Liabilities (C)		52.20	55.36	55.36	64.83	64.83	64.83	64.83	64.83	64.83	64.83
E. Fixed Liabilities											
Shareholders' Contribution	302.99	302.99	302.99	302.99	302.99	302.99	302.99	302.99	302.99	302.99	302.99
Grant under MSE-CDP	1050	1050.00	1050.00	1050.00	1050.00	1050.00	1050.00	1050.00	1050.00	1050.00	1050.00

<sup>15</sup> Amount in Rs. lakh

Grant from GoH	452.99	452.99	452.99	452.99	452.99	452.99	452.99	452.99	452.99	452.99	452.99
Reserves and Surplus		151.88	353.45	578.01	889.29	1216.63	1563.51	1921.99	2290.36	2667.17	3051.20
Total Fixed Liabilities (D)		1957.85	2159.43	2383.98	2695.26	3022.60	3369.48	3727.96	4096.33	4473.14	4857.17
Total Liabilities (C+D)	1805.97	2010.06	2214.79	2439.34	2760.09	3087.43	3434.31	3792.79	4161.16	4537.97	4922.00

## 6.8 Cash flow statement

Cash flow statement indicates the cash balance and the liquidity position of the project over the years. Table 33 presents the sources and disposal/uses of funds statement of the project.

Table 33: Cash flow statement

CASH FLOW STATEMENT											
Particulars	Construction Period	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> Year	4 <sup>th</sup> Year	5 <sup>th</sup> Year	6 <sup>th</sup> Year	7 <sup>th</sup> Year	8 <sup>th</sup> Year	9 <sup>th</sup> Year	10 <sup>th</sup> Year
A. Source Funds :											
Cash Accruals (Net Profit + Interest paid)		218.96	286.46	317.52	435.75	457.47	475.88	491.56	504.93	516.34	526.08
Increase in capital	302.99	-	-	-	-	-	-	-	-	-	-
Depreciation		233.97	198.46	168.40	143.46	122.46	104.65	89.50	76.58	65.55	56.13
Increase in WC Loan		52.20	3.16	-	9.47	-	-	-	-	-	-
Increase in Grant-in-aid from GoH	452.99	-	-	-	-	-	-	-	-	-	-
Increase in Grant-in-aid under MSE-CDP	1050.00	-	-	-	-	-	-	-	-	-	-
Total Sources	1805.97	505.14	488.08	485.91	588.68	579.92	580.54	581.06	581.51	581.89	582.22
B. Use of Funds :											
P&P Expenses	39.88	-	-	-	-	-	-	-	-	-	-
Increase in fixed assets	1748.69	-	-	-	-	-	-	-	-	-	-

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Increase in other Assets		50.00	10.00	12.00	14.40	17.28	20.74	24.88	29.86	35.83	43.00
Increase in Sundry Debtors		37.08	2.32	0.00	6.95	0.00	0.00	0.00	0.00	0.00	0.00
Interest		5.74	6.09	6.09	7.13	7.13	7.13	7.13	7.13	7.13	7.13
Taxation		53.36	70.82	78.90	109.37	115.01	121.88	125.95	129.43	132.39	134.93
Total Use of Funds	1788.57	146.19	89.23	96.99	137.85	139.42	149.74	157.97	166.42	175.36	185.06
C. Net Surplus (A -B)	17.40	358.95	398.85	388.93	450.83	440.50	430.79	423.09	415.09	406.53	397.16
D. Cumulative Balance	17.40	376.35	775.20	1164.12	1614.95	2055.45	2486.25	2909.34	3324.43	3730.96	4128.12

The cash flow statement showcases the available net surplus for 10 years of the CFC operations. Depreciation is also considered under WDV method for cash flow calculations along with adjusted preliminary expenses. As most of the capital expenditure is being supported as grant under the MSE-CDP scheme and EPP 2015, therefore it does not have any negative effect on the Cash flow, in terms of interest, etc.

## 6.9 Break-even analysis

The break-even (BE) estimates of the project indicate the level of activity at which the total revenues of the project equals the total costs. From this point, a project is expected to start generating profits. As per the calculations, the CFC achieves break even in the third year itself as no major interest costs are being incurred. Hence, BE estimates at level of activity relevant to the first year and subsequent year of activity are provided in table 34.

Table 34: Break-even estimates

Particulars	Amount at operating capacity (80%)	Amount at operating capacity (85%)
A. Total Earning by way of user charges	889.92	945.54
B. Variable costs		
Consumables	316.80	336.60
Utilities (power- variable charge)	16.59	17.63
Interest on WC Loan	5.74	6.09
Repair & Maintenance	33.69	35.80
Utilities (Water) + Sewage	1.20	1.20
Manpower (Direct)	29.76	31.62
Total Variable Cost	403.78	428.93
C. Contribution (A-B)	486.14	516.61
D. Fixed Overheads (Cash)		
Manpower (Indirect)	22.20	22.20
Utilities (Power - fixed charges)	3.74	3.74
Insurance	8.01	6.84
Misc. Expenditure	5.00	5.00
Sub-total	38.95	37.78
F. Fixed Overheads (Non-cash)		
Depreciation	233.97	198.46
Preliminary & Pre-operative expenses written off	7.98	7.98
G. Total Fixed Overheads	280.90	244.21
Break-even point (G/C)	57.78%	47.27%

Book break-even is achieved at 57.78% of capacity utilization. The operation of the CFC is expected to realise profit from 1<sup>st</sup> year of operation. Therefore, very low risk is involved in the project.

Moreover, the SPV members have the potential to run the facility for longer than one shift resulting in enhanced capacity utilization and generation of more revenues. In that case, project will break even earlier than estimated. Additionally, the approach has been to develop projections based upon conservative estimates (costs on a higher side and user charge/ revenues on a lower side) whereas, in real the revenues may be far higher.

## 6.10 Feasibility analysis summary and sustainability indicators

A summary of the financial analysis in terms of key financial indicators such as ROCE (Return on Capital Employed), Net Present Value (NPV), Break Even Point (BEP) and the Internal Rate of Return (IRR) is presented in table 35. The indicators validate the financial viability and sustainability potential of the proposed project.

Table 35: BEP, ROCE, NPV and IRR

S. No.	Particulars	Estimates
1	BEP (cash BEP at operating capacity of 80%)	57.78%
2	Av. ROCE (PAT/CE) sans Grant	23.21%
3	Av. ROCE (PAT/CE) with Grant	55.44%
4	Internal Rate of Return (IRR)	53.16%
5	Net Present Value (at a discount rate of 10 per cent) - incorporating viability gap funding (grant) by Gol and GoH	NPV is positive and high (Rs.1860.16 lakh) at a conservative project life of 10 years
6	Payback period	2.25 years with Grant-in-aid assistance from Gol
7	DSCR	Not Applicable (non-availment of term loan in this project)

The annual estimates in the context of ROCE estimation are presented in table 36 as below:

Table 36: Annual estimates of ROCE

S. No.	Particulars	1 <sup>st</sup> Year	2nd Year	3rd Year	4th Year	5th Year	6th Year	7th Year	8th Year	9th Year	10th Year
1	ROCE (PAT/CE) in % without grant-in-aid	11.68%	15.42%	17.14%	23.69%	24.89%	26.35%	27.22%	27.96%	28.59%	29.13%
2	ROCE (PAT/CE) in % Adv. with grant from Gol	27.91%	36.84%	40.95%	56.59%	59.46%	62.95%	65.02%	66.79%	68.30%	69.59%

The average value of ROCE (with grant-in-aid) is 55.44%. This indicates the high techno-economic viability of the project on significant contribution from government of India as grant toward project cost. Capital employed are those essentials excluding the grant component to the project. Ignoring the possibility of grant assistance from the Gol, the ROCE works out to an unviable 23.21%.

NPV is positive and high indicating strong financials: Estimate at a discount rate of 10% = Rs. 2616.13 lakh (PV of cash inflow) – Rs. 755.97 lakh (PV of cash outflow) = Rs. 1860.16 lakh. This estimate incorporates the benefit of grant in effectively reducing outflow.

The Net Present Value is estimated at a discount rate of 10%. However, as reflected from the high values of NPV, it is positive at even 11%, the rate at which bank offers debt capital facility and even at higher discount rates. Project IRR is high at over 53.16% (at a conservative project life of 10 years). This substantiates the viability of the project.

## 6.11 Additional revenue sources

Additional sources of revenue shall also be explored by the SPV by offering procurement and marketing services in future to more enterprises. The SPV members are strong believers of the cluster concept and would like to explore potential of undertaking cluster initiatives to improve the backward and forward linkages of the cluster units.

However, in order to ensure conservativeness in income estimates, in the initial years, the income earning possibilities of such revenues are not captured in this DPR.



## 6.12 Risk analysis & Sensitivities

Risk in the project is relatively low in the context of the following:

- ▶ Promoters are experienced: Risk in the project is quite low given the strength and profile of the SPV members. They have considerable experience not only in the Signage industry but also of undertaking cluster developmental initiatives.
- ▶ Facility is pre-marketed: Evidently, complete capacity of the core facility to be established in terms of various facilities may be easily availed of by members of the SPV themselves, thus the facility already have a captive market.
- ▶ Sustainability indicators in terms of the strength of the SPV and the economics of the project: Evidence of cooperative initiatives of SPV members as articulated in previous chapters; for instance, in terms of pursuing several joint efforts, registering the SPV and proceeding towards procurement of land, and securing commitment from members, vis-à-vis progressively mobilizing necessary paid up capital, all reflect the strength of the SPV.

High economic viability indicators upon considering the benefits of grant-in-aid under the MSE-CDP and EPP 2015 also serve as evidence of techno-economic viability and sustainability of the project. A sensitivity analysis has been carried out to ascertain the impact on the project should there be any loss of revenue. This has been calculated assuming drop in user charges. Major financial parameters are still attractive. The important parameters related to the sensitivity analysis are presented in table 37.

Table 37: Sensitivities vis-à-vis ROCE and project payback period

S. No.	Particulars	Base case	With 5% decline in user charge	With 10% decline in user charge	With 15% decline in user charge
1	BEP (cash BEP at operating capacity of 80%)	57.78%	65.15%	72.44%	81.56%
2	Av. ROCE (PAT/CE)	55.44%	44.28%	37.82%	31.36%
3	Internal Rate of Return (IRR)	53.16%	44.78%	40.23%	35.55%
4	Net Present Value in Rs. Lakh (at a discount rate of 10 per cent) - incorporating viability gap funding (grant) by Gol and GoH	1860.16	1566.35	1331.94	1097.54

Even assuming a fall in user charge, ROCE is favourable. From the above it is evident that the project is very viable even under (unlikely) risky environment circumstances.

### 6.13 Assumptions for financial calculations

The financial statements and project profitability estimates in this DPR are based on the following assumptions:

1. The total project cost is pegged @ Rs. 1805.97 Lacs on the basis of estimates and quotations.
2. To finance the project, a total of Rs. 1805.97 Lacs is required. The financing will consist of grant from central government, government to Haryana and contribution by SPV.
3. In the financial projections and analysis, year 2018 is the envisaged period of project implementation also involving construction of buildings and installation of plant, machinery and other equipment. This period will commence from the date of final approval by DCMSME under MSE-CDP. The financial projections thereafter are prepared for 10 years of operation starting 2019.
4. The Registered SPV will manage CFC, and these services are to be used by the SPV for member as well as non-member units. The common facility will benefit registered SPV as well as non-member firms who (in some cases) may not afford to contribute to necessary equity capital.
5. The CFC will operate for 25 days a month, that is, for 300 days a year on an eight hour single-shift basis. Operation on single shift basis is assumed for purposes of projecting income estimates.
6. Capacity utilization is assumed at 80% in the first year; 85% for second & third year and 100% thereafter. This is a conservative estimate for first 3 years as SPV members alone could avail over 100 per cent of the installed capacity on single-shift basis.
7. The workings with regard to expenses related to the project have been tabulated and categorized in terms of those related to consumables, manpower, electricity, and miscellaneous administrative expenditures.
8. Repairs and maintenance is provided @ 2% of building cost and @ 5% of plant and machinery cost at varying capacity utilization.
9. Insurance is provided @ 0.5% on fixed assets including building & civil works, machinery, contingency as fixed cost at all capacity utilization.
10. Fixed charges per kW of electric connection shall be charged @ Rs. 173 and variable charges @ Rs. 9 per unit consumed.
11. Income estimates have been projected most conservatively. The prescribed user charges are competitive vis-à-vis charges for similar services in other regions.

12. Depreciation on fixed assets is calculated on Written down value (WDV) Method as per Income Tax Act.
13. Provision for income tax has been made @ 26% including surcharge. This is the rate prescribed for Private Limited Companies as per the recent Budget 2017.
14. Profitability estimates in terms of ROCE, NPV, and IRR are computed considering operating results for first 10 years of operation.



## 7. Project Implementation and Monitoring

### 7.1 Envisaged Implementation Framework

I. Time frame: Project implementation is envisaged to involve a time-frame of about 12 months upon receipt of final approval of grant-in-aid assistance from the Government of India under MSE-CDP.

II. User Base: The facilities may be used SPV members and non-members. However, the charges will vary. The SPV will also be open for new entrants subject to them subscribing to the shareholding of the SPV, and them being genuinely pro-active and interested in cluster initiatives. The BoD of SPV can decide on same or differential user charges for both members and non-members or based upon the volume of the output.

III. Project implementation schedule: The project implementation schedule envisaged over a period of 12 months involves several activities. They are elaborated upon in the table 37.

Table 38: Project Implementation Schedule

Activity/Month	1	2	3	4	5	6	7	8	9	10	11	12
Collecting Contribution from SPV members												
Transfer of land in the name of SPV												
Receipt of final sanction from Govt												
Preparation of detailed drawings												
Formation of purchase committee												
Inviting E tenders for building construction and purchase of machines												
Construction of facilities												
Obtaining statutory clearances and approvals												

Purchase of machinery and equipment												
Installation and trial run of machinery and equipment												
Arrangement of working capital												
Monitoring of the project by BoD												
Monitoring of the project by PMC												
Commencement of operations of the facility												

As indicated in the table above, the facility is expected to be operational in 12 months' time.

IV. Contractual agreements/MoU with member units: Agreements have been indicatively finalized in terms of utilisation of assets in respect of shareholders.

A total of 29 units are participating in the SPV and all these units have agreed to contribute towards the SPV share of the project cost. The utilization of common facility will be in line with the proposed shareholding pattern. The consent letter wherein the member units agree for payments of 10% share of cost of CFC as member of SPV is under process and will be submitted in due course of time and as per in-principal approval from DCMSME.

V. Memorandum and By-Law of Registered Company: MOA, AOA and bye laws are indicative of the management and decision making structure of the SPV. All the members of SPV have paid an advance and are members of the Registered Private Entity. Few other units are also willing to be members of the SPV and once the CFC is approved and sanctioned from GoI, many more members will be interested to subscribe to the shares of the SPV.

VI. Availability of Land & Status of Acquisitions: Land is being procured by the SPV for the proposed CFC at Mogul Majra in Karnal district. A plot of land of area 0.6 acre has already been identified by the SPV and shall be taken by SPV on a 90+ year lease.

VII. Availability of Requisite Clearances: SPV is in the process of procuring land with all required clearances. Electricity is already available in the area and the proposed CFC can easily be connected to the grid. The other required clearances (environment, labour etc.) shall be obtained in due course.

VIII. O & M Plan: The revenue stream for O&M is dependent on realization of user charges from the SPV members and other users/MSMEs in the case of various facilities. As detailed in the financial section, the cash incomes are sufficient to meet operating expenditures, overheads as well as depreciation for sustainable replacement of assets. The SPV will also have to keep a track of maintenance of assets through collection of user charges from the members/ users.

## 7.2 Monitoring Mechanism

As mentioned in the implementation schedule, the following key activities shall be conducted during establishment of the CFC:

- ▶ Civil Alterations
- ▶ Electrical works
- ▶ Purchase of machinery & commissioning
- ▶ Trial production
- ▶ Commercial production

The successful implementation of above activities will depend on the following aspects:

- ▶ Implementation of above within the time frame
- ▶ Supervising and overseeing the implementation of the proposals and fine tuning and advocating more measures, if needed depending on the site conditions
- ▶ Project level monitoring indicators to evaluate the implementation of the CFC proposal at recommended intervals
- ▶ Suitable purchase mechanisms for proposed plant & Machinery Periodical reporting of the status of implementation and monitoring of the results of key performance indicators, and
- ▶ Constant evaluation of the measures implemented based on the data available from project level monitoring and status reports and providing directions accordingly.

It is proposed to constitute a governance mechanism in the form of a Cluster Development Co-ordination Committee (CDCC) under the chairmanship of Director of Industries, Government of Haryana to oversee all cluster development projects in Haryana under MSE-CDP. The CDCC can also look after the project under Mini Cluster Scheme to be implemented under the state's Enterprise Promotion Policy 2015.

The committee may operate under the overall monitoring of the State Level Project Steering Committee (SLPSC). Other key stakeholders such as representatives of cluster SPV, related government departments, support institutions, cluster level industry associations and consultants may be inducted as members under the committee.



The members may comprise the following:

- ▶ Director, Industries and Commerce, Government of Haryana (Chairman)
- ▶ Concerned Joint Director, Department of Industries and Commerce
- ▶ Director, MSME-DI Karnal
- ▶ HSIIDC state officer
- ▶ SIDBI general Manager
- ▶ President of related industry association
- ▶ Directors of Signage CFC Pvt. Ltd.
- ▶ EY Cluster Development Expert under MSME project

The meeting of CDCC may be held on quarterly basis to review performance of the clusters. The CDCC will guide monitoring and implementation of the project.

In addition, for implementing the Karnal Signage & advertising cluster CFC project, a Project Management Committee (PMC) comprising the GM, DIC, Karnal, and representatives of SPV, Punjab National Bank and EY experts shall be constituted to directly oversee effective monitoring and implementation.

The project will be implemented through SPV and PMC will report progress of implementation to the CDCC as well as State Level Steering Committee and DC-MSME.

[illegible]

## 8. Conclusion

The main goal of signage and graphics is to visually communicate promotional messages to influence consumer behaviour or to improve brand recognition by spending a reasonable sum. Many retailers, telecom and consumer goods companies are investing in well-planned promotional and merchandising campaigns. These industries also work on identifying the best locations and design of promotional materials. In India, advertising industry is worth more than 3.5 billion US dollars annually with a growth rate of approximately 20% per annum. Mass-customization is the driving force behind growth of digital printed signage & advertising industry. Textile soft signage and digitally printed materials used in retail environments are most used signage & advertisement application for creating a strong brand message. The soft signage market has also evolved to offer a wide range of signage applications, including a wide range of store decor items. Retail environments offer a rich opportunity for inkjet-printed items like wall coverings, curtains, backlit & front-lit tension fabric displays, branded umbrellas and flags.

Micro signage & advertising units of Karnal are heavily dependent on manual, low capacity and obsolete technologies for manufacturing and are barely surviving the intense competition from large firms. The micro units do not have advanced printing technologies and software based designing & cutting machines and hence losing market share to bigger players. In order to sustain these industries, it is imperative to identify the common challenges and opportunities. Cluster development shall enable these units to access of newer technologies through CFC that can make the units more cost competitive, while offering a better product. The CFC shall provide a win-win situation to all the people involved – consumers (in terms of better quality products), producers (in terms of profit generation) and society (in terms of generating employment and environmental safety).

There is an increasing demand of signage & advertisement applications across the country. Increased consumption of signage applications in urban & rural areas by retailers, telecom companies, government agencies and political parties etc. has also fuelled the demand of signage & advertisement products. Karnal has also evolved a major centre for economic and industrial development in the state of Haryana. Karnal has also been selected as one of the smart cities to be developed by Ministry of urban development, Govt. of India, which has been another key factor in ensuring sustainable growth of this industry by creating additional demand of signage products. The only constraint is the lack of technologies and related infrastructure which can be addressed by setting up a CFC. The technologies required for upgradation are extremely expensive and the same cannot be adopted by any individual units in the cluster. Hence, the following facilities have been proposed in the CFC:

- ▶ Advanced Super Wide-Format Dedicated Roll-to-Roll UV Printing technology
- ▶ Digital Printing facility for Direct Printing on Fabric
- ▶ Dye-sublimation transfer facility
- ▶ Value added Print & Cut rigid media manufacturing facility

The total project cost (including plant/machinery and buildings) is estimated to be INR 1841.55 crores. The project shall be implemented by the SPV 'Karnal Signage CFC Private Limited' which has been constituted by the cluster firms. The SPV has proactively undertaken a number of initiatives and have acted upon the proposed soft interventions in the DSR. A number of capacity building programs and exposure visits have been organised by the SPV for the benefit for its members.

The CFC will be set up with support from DCMSME and the state government (Department of Industries) under a PPP mode. The land for the project has already been identified by the SPV and shall be acquired immediately upon in principle approval by DCMSME. The central government and the state industry department is envisaged to provide grant for setting up of the modern machines under the MSE-CDP scheme and the EPP 2015. The SPV members have proposed to contribute 17.84% of the project cost. The total contribution of SPV members will amount to Rs. 302.98 lakh. Support from MSE-CDP of the DC-MSME is envisaged for Rs. 1050.00 lakh (56.28%). And from the GoH is Rs. 482.92 lakh (25.88%). Working capital requirement for the project will be provided by Punjab National Bank. The project is financially viable and is expected to generate enough revenue to ensure its sustainability.

# Annexures







## 9. Annexures

### Annexure 1: Minutes of State Level Project Steering Committee

From  
The Director of Industries & Commerce, Haryana.

To

1. Managing Director, HSIIDC  
E-mail:- mdhsiidchry@gmail.com.
2. Special Secretary, Finance Department, Haryana.  
e-mail:- asse-hry@nic.in
3. Director, MSME-Development Institute, Karnal  
MSME, Development Institute, 11-A,  
Industrial Development Colony, Near ITI, Kunjpura Road,  
Karnal-132001, Haryana.  
E-mail:- gmdickarnal@dcmsme.gov.in.
4. Joint Director, DIC, Karnal  
E-mail:- gmdickarnal@yahoo.in
6. Sh. Bagnal Takshak,  
Joint Director, DIC, Karnal.
7. Sh. R.K Rana,  
Joint Director, DIC, Panipat.
8. Sh. Sandeep Aggarwal, Assistant Director,  
MSME, Development Institute, 11-A,  
Industrial Development Colony, Near ITI, Kunjpura Road,  
Karnal-132001, Haryana.
9. Sh. Deepak Sharma, Consultant,  
M/s Access Consultancy Services,  
# 952, Sector-2, Panchkula.

Memo No. Kc/Cluster/MSE-CDP/2016-17/ 13954-14  
Dated:- 21/10/16

Subject:- Minutes of the 1<sup>st</sup> Meeting of State Level Project Steering Committee held on 06.10.2016 under the Chairmanship of Sh. Devender Singh, IAS, Principal Secretary to Government of Haryana, Industries & Commerce Department at knowledge Centre, 9<sup>th</sup> Floor, Haryana Civil Secretariat, Chandigarh for approval of DSRs/DPRs under MSE-CDP scheme of MoMSME, Government of India.

Kindly refer to the subject cited above.

Please find enclosed herewith a copy of Minutes of the 1<sup>st</sup> State Level Project Steering Committee Meeting held on 06.10.2016 under the Chairmanship of Principal Secretary, Industries & Commerce for approval of DSRs/DPRs under MSE-CDP scheme of MoMSME, Government of India for information & taking further necessary action.

Encl: As above.

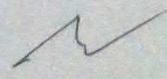
R.C. (Dahra)  
Consultant (Cluster)  
for Director of Industries & Commerce, Haryana.



Endst. No. KC/Cluster/MSE-CDP/Review Status/ 13955-A Dated:- 21/11/16

A copy of the above alongwith enclosure is forwarded to the following for information:-

1. PS to The Development Commissioner Ministry of Micro, Small & Medium Enterprises, Govt. of India, Mirman Bhawan 7<sup>th</sup> floor, Mullana Azaad Road, New Delhi-110108 for kind information of DC, MSME.
2. PS to PSI for kind information of PSI.
3. PS to DI & C. for kind information of DI&C.
4. M/s Karnal Plastic CFC Pvt. Ltd. Agro Park, Plot No. 52, Block-C, Mugal Majra Road, Karnal for kind information.
5. M/s Karnal Signage CFC Pvt. Ltd. Agro Park, Plot No. 8-9, Block-C, Mugal Majra Road, Karnal for kind information.
6. M/s Karnal Dairy CFC Pvt. Ltd. Agro Park, Plot No. 35, Block-C, Mugal Majra Road, Karnal for kind information.
7. M/s Textile Printing Cluster Panipat Plot No. 13, Sector-29, P-II, HUDA, Panipat.
8. M/s Electro Plating Cluster, Small Scale Pollution Control Co-op. Society, Faridabad.

  
R.C. Dahra  
Consultant (Cluster)  
for Director of Industries & Commerce, Haryana

Minutes of the meeting held on 06.10.2016 at 12.30 PM under the Chairmanship of Sh. Devender Singh, IAS, Principal Secretary to Government of Haryana, Industries & Commerce Department at Knowledge Center, 9<sup>th</sup> Floor, Haryana Civil Secretariat, Chandigarh for approval of DSRs/DPRs under MSE-CDP scheme of MoMSME, Government of India.

The following officers were present:-

S.N o.	Name of the Officers	Designation
1.	Sh. Sudhir Rajpal	Managing Director, HSIIDC
2.	Sh. Wazeer Singh Goyat	Director of Industries & Commerce.
3.	Sh. Bagmal Takshak	JD, DIC, Karnal
4.	Sh. R.K. Rana	JD, DIC, Panipat
5.	Sh. Sandeep Agarwal	Asstt. Director,
6.	Sh. Arun Rishi	Dy. Secretary, Finance
7.	Sh. Deepak Sharma	Principal Consultant, M/s Access Consultancy.

The detail of representatives of the various clusters who attended the meeting is annexed as Appendix 'A'.

Sh. R.C. Dahra, Consultant O/o Director of Industries & Commerce welcomed all the members of the first State Level Project Steering Committee. Initiating the discussions, he briefed the members about the modifications made in the guidelines of Micro & Small Enterprises-Cluster Development Programme (MSE-CDP) of Government of India. After introduction of the members and other representatives, the agenda of the meeting was taken up as under:-

#### 1.1 DSR in case of M/s Karnal Plastic CFC Pvt. Ltd.

The consultant informed the committee that M/s Karnal Plastic CFC Pvt. Ltd. has submitted Diagnostic Study Report duly validated in the stakeholders meeting held on 15.09.2016. It was also informed by him that the proposal duly verified and recommended to conduct DSR was received through Joint Director, DIC, Karnal.

Sh. Viney Taneja, representative of the Cluster gave power point presentation on the DSR. He informed that there were approximately 60 units in the cluster manufacturing various plastic products like plastic coated foils for pharma sector, pet bottles and buckets for paint & chemical industry, plastic bags for rice millers etc. with a total turnover of Rs. 250 crores. He further informed that the cluster provided direct employment to more than 1300 persons. He informed that scope of their business was changing day by day and new requirements of products like double side plastic coated foils and multi layer



plastic packaging was coming up. The main constraint of the cluster are lack of automation of various processes and there is a need of installation of various machinery items like pet pre-form making machine, multilayer plastic layer packaging, blow moulding machine. The existing units in the cluster are facing problems due to demand of various products manufactured from these types of machinery by the corporate houses. The cluster is unable to cater the needs of multi-national companies(MNCs).

After detailed deliberations, the committee decided to approve the DSR submitted by the cluster and allowed them to prepare DPR strictly as per the guidelines of Government of India. The representatives of the cluster were also advised to undertake soft interventions on account of technical assistance, capacity building, exposure visits, market development, trust building etc. for the cluster units.

2. DSR in case of M/s Karnal Signage CFC Pvt. Ltd.

The consultant informed the committee that M/s Karnal Plastic CFC Pvt. Ltd. has submitted Diagnostic Study Report duly validated in the stakeholders meeting held on 15.09.2016. It was also informed by him that the proposal duly verified and recommended to conduct DSR was received through Joint Director, DIC, Karnal.

Sh. Naresh Saluja, representative of the cluster presented the brief facts about the cluster and submitted that M/s Signage and Advertisement cluster was making efforts to address the emerging challenges before them and to put the cluster on growth path. There are approximately 120 units in the cluster manufacturing various signage products particularly e.g. Flex board, LED Boards, Indoor Branding, Gift Novelties etc. The cluster provides direct employment for more than 1600 persons. Mr. Saluja further informed that most of the units in their Cluster were Micro Units and are facing problems in the absence of advanced machinery items. Most of the MNCs customers are demanding products manufactured on branded machines. The cost of machinery required is very high. There is a huge market for indoor branding, flex printing, UV coating, LED Board and 3D Board. They are meeting the demands of the customer by arranging intermediate products from Delhi and NCR areas. For survival of their member units they need to adopt advanced technology and marketing strategies similar to the units who have installed such machines. For enhancing the productivity and competitiveness as well as capacity building of Micro units, CFC is urgently required.

After detailed deliberations, the committee decided to approve the DSR submitted by the cluster and allowed them to prepare DPR strictly as per the

guidelines of Government of India. The representatives of the cluster were also advised to undertake soft interventions on account of technical assistance, capacity building, exposure visits, market development, trust building etc. for the cluster units.

#### 4.3 DSR in case of M/s Karnal Dairy CFC Pvt. Ltd.

The consultant informed the committee that M/s Karnal Dairy CFC Pvt. Ltd. has submitted Diagnostic Study Report duly validated in the stakeholders meeting held on 15.09.2016. It was also informed by him that the proposal duly verified and recommended to conduct DSR was received through Joint Director, DIC, Karnal.

Mr. Pankaj Bhatti, Representative of the cluster informed that there were approximately 250 units in the Cluster which were engaged in the manufacturing of Paneer, Butter, Ghee, Khoya and Ice-cream. The cluster has provided direct employment to more than 5000 persons and the annual turnover of the Cluster is around Rs. 700 crores per annum. The Cluster units are engaged in manufacturing of their products by adopting traditional technology. The major constraints of the Cluster are lack of standardization, wastage of whey low shelf life of packaged milk and other milk products. The requirement of the Cluster is mainly for aseptic milk packaging, cheese processing and whey drying. The SPV members were keen to set up Common Facility Centres by availing financial assistance under MSE-CDP scheme of Ministry of MSME. The Cluster members have already arranged a piece of land for the purpose of setting up of CFC.

After detailed deliberations, the committee decided to approve the DSR submitted by the cluster and allowed them to prepare DPR strictly as per the guidelines of Government of India. The representatives of the cluster were also advised to undertake soft interventions on account of technical assistance, capacity building, exposure visits, market development, trust building etc. for the cluster units.

#### Item discussed other than Agenda

#### 4 DSR in case of M/s Textile Printing Cluster Pvt. Ltd.

Mr. R.C. Dahra, Consultant O/o Director of Industries informed that the office has received DSR in case of Textile Printing Cluster, Panipat. He further informed that the case was discussed in the review meeting held at MSME-DI, Karnal under the Chairmanship of Sh. Sudhir Rajpal, IAS, the then Director General of Industries & Commerce on 15.07.2016 wherein the representatives



Annexure 2: SPV Certificate of Incorporation, Copy of Memorandum of Association (MoA) and Article of Association (AoA)

  
सत्यमेव जयते

**GOVERNMENT OF INDIA**  
**MINISTRY OF CORPORATE AFFAIRS**  
Central Registration Centre

**Certificate of Incorporation**

[Pursuant to sub-section (2) of section 7 of the Companies Act, 2013 and rule 8 the Companies (Incorporation) Rules, 2014]

I hereby certify that KARNAL SIGNAGE CFC PRIVATE LIMITED is incorporated on this Fifteenth day of June Two thousand sixteen under the Companies Act, 2013 and that the company is limited by shares.

The CIN of the company is U74999HR2016PTC064577.

Given under my hand at Manesar this Fifteenth day of June Two thousand sixteen .

  
LATHA PARIMALAVADANA K  
Deputy Registrar of Companies  
Central Registration Centre  
For and on behalf of the Jurisdictional Registrar of Companies

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Mailing Address as per record available in Registrar of Companies office:  
KARNAL SIGNAGE CFC PRIVATE LIMITED  
66 OLD RAMESH NAGAR, KARNAL, Karnal, Haryana, India, 132001



(THE COMPANIES ACT, 2013)

SCHEDULE-I

(See Section 4 and 5)

TABLE-A

MEMORANDUM OF ASSOCIATION OF A COMPANY LIMITED BY SHARES

**KARNAL SIGNAGE CFC PRIVATE LIMITED**

1st. The Name of the Company is **KARNAL SIGNAGE CFC PRIVATE LIMITED**

2nd. The Registered Office of the Company will be situated in the State of Haryana.

3rd. The objects for which the Company is established are :-

**(A) THE OBJECTS TO BE PURSUED BY THE COMPANY ON ITS INCORPORATION ARE:**

1. To function as Special Purpose Vehicle (SPV) and Set up Common Facilities Centre(CFC) and other infrastructure activities for the benefits of its members and Industry/concerned stake holders following the guidelines and notifications for MSE-CDP under DC(MSME), New Delhi.
2. To undertake works/scheme/programs of Government relating to growth and development of Signage Industry and carry out/conduct soft and hard intervention activities under MSE-CDP.
3. To act as a resource centre for development and strengthening network as Business development Services related to Technology, Market, Capacity building, Hand holding support etc. for the purpose of growth and development of the Signage Industry under MSE-CDP.
4. To available packing material to all members' at competitive rates by installing printing press for labels printing and pet bottle plant and raw material to all members by opening of raw material bank.
5. To undertake and to do trading, manufacturing, import, export of all type of Signage products and research work in connection with development of Signage Industry.

**B. Matters which are necessary for furtherance of the objects specified in clause 3(A) are:-**

1. To purchase and otherwise acquire, own, import, all materials, substances, appliances, machines, containers and such other articles and apparatus and things capable of being used in any of the main business and to own, otherwise acquire and use facilities of whatever kind as may be convenient or useful or conducive to the effective working of the main business of the Company.
2. To acquire, build, alter, maintain, enlarge, remove or replace and to work, manage and control any buildings, offices, factories, mills, shops, machinery and conveniences which may seem necessary to achieve the main objects of the company.
3. To carry on and transact every kind of guarantee, corporate guarantee and counter guarantee business and to guarantee the payment/repayment of loans, borrowings of any nature whatsoever granted by any institutions and/or any person to any individual, firm(s), HUF, company(s), association of person and money secured by or payable under or in respect of stocks, bonds, debentures, debenture stocks, contracts, mortgages, charges, obligations and securities of any company whomsoever whether incorporated or not.
4. To purchase or in exchange, hire, take, options over or otherwise acquire any estate or interests, whatsoever and to hold, develop work, concessions, grants, decrees, licences, privileges, claims, options, property real or personal or rights or powers of any kinds which may appear to be necessary for the main business of the Company.
5. To pay for preliminary and pre-incorporation expenses of the Company.
6. To exchange, mortgage, royalty or tribute, grant licences, easements, options and such other rights over and dispose of the whole or any part of the undertaking, property assets, rights and effects of the Company for such consideration as may be thought fit and in particular for stocks, shares debentures whether fully or partly paid up or securities of any other such company having objects whole or in part similar to those of the Company.
7. To pay for any rights or property acquired by the Company and to remunerate any person, firm or body corporate rendering services to the Company either by cash payment or by allotment to him or them of shares or securities of the Company as paid up in full.
8. To open account or accounts with any individual, firm or Company or with any Bank or Banks or Bankers or shroffs and to pay into and to withdraw money from such account or accounts.
9. To undertake financial and commercial obligations, transactions and operations of all kinds.
10. To guarantee the performance of any contract or obligations and the payment of money or dividends and interest on any stock, shares or securities of any company, corporation, firm or person in any case in which such guarantee may be considered directly or indirectly to further the main objects of the Company.



11. To guarantee the payment of money unsecured or secured or payable under or in respect of promissory notes, bonds, debenture stocks, contracts, mortgages, charges, obligations, instruments and securities of any company or of any Authority, Supreme, Municipal, Local or of any persons whether incorporated or not incorporated and to guarantee or become sureties for the performance of any contracts or obligations as may be necessary for the main business of the Company.
12. To subscribe for, acquire shares, share-stock, debentures, bonds, debenture-stock, mortgages, obligations, securities of any kind issued or guaranteed by any company (Body corporate undertaking) of whatever nature and whatsoever constituted or carrying on the main business and to subscribe for, acquire shares, debentures and debenture-stocks and debenture-bonds, mortgages, obligations and such other securities issued or guaranteed by any Government, trust, Municipal, local or such other authority or body of whatever nature, whether in India or elsewhere as may be conducive to the main business of the Company.
13. To negotiate and/or enter into agreements and contracts with individuals companies, corporations and such other organizations, foreign or Indian, for obtaining or providing technical, or any other assistance for carrying out all or any of the main objects of the Company and also for the purpose of activating financial participation and for technical collaboration and to acquire or provide necessary formulae and patent rights for furthering the main objects of the Company.
14. Subject to the provisions of the Companies Act, 2013 and borrow or raise money in such manner as the Company shall think fit and in particular by the issue of debentures or debenture-stock (perpetual or otherwise) and to secure the payment of any money borrowed, raised or owing on the mortgage, charge or lien upon all or any of the property or assets of the Company (both present or future) including its uncalled capital and also by similar mortgage, charge or lien to secure and guarantee the performance by the Company, or any other such person or Company, of any obligation undertaken by the Company.
15. To draw, make, accept, endorse, discount, negotiate, execute and issue bills of exchange, promissory notes, bills of lading, debentures and other negotiable or transferable instruments or securities.
16. To apply for, purchase or otherwise acquire and protect, prolong and renew in any part of the world, any patents, patent rights, brevets d'inventions, trademarks, designs, licences, protections, and concessions conferring any exclusive or non-exclusive or limited right to their use of information as to any invention, process or privileges which may seem capable of being used for the main objects of the Company or the acquisition of which may seem calculated directly or indirectly, to benefit the company and to use, exercise, develop or grant licences or privileges in respect of the property, rights and information so acquired.
17. To spend money in experimenting upon and testing and improving or seeking to improve any patents, rights, inventions, discoveries, processes or information of the Company or which the Company may acquire or propose to acquire.
18. To do all or any of the main objects either as principals, agents, trustees, contractors or otherwise and either alone or in conjunction with others and either by or through agents, sub-contractors, trustees or otherwise.

19. To acquire and take over the whole or any part of the business, goodwill, trade-marks properties and liabilities of any person or persons, firm, companies or undertakings either existing or new, engaged in or carrying on or proposing to carry on business; this Company is authorized to carry on, possession of any property or rights suitable for the purpose of the Company and to pay for the same either in cash or in shares or partly in cash and partly in shares or otherwise.
20. To procure the registration or recognition of the company in or under the laws of any place outside India.
21. To form, incorporate or promote any company or companies whether in India or elsewhere having amongst its or their objects the acquisition of all or any of the assets or controls, management or development of the Company or any other such objects which in the opinion of the Company could or might directly or indirectly assist the Company in the management of its main business or the development of its properties or otherwise prove advantageous to the Company and to pay all or any of the costs and expenses incurred in connection with any such promotion or incorporation and to remunerate any person or company in any manner it shall think fit for services rendered or to be rendered in or about the formation or promotion of the Company or the conduct of its main business or in about the promotion of any other such company in which the Company may have any interest.
22. Subject to the provisions of the Companies Act, 2013, to amalgamate or to enter into partnership or into any arrangement for sharing profits, union of interest, co-operation, joint venture or reciprocal with any person or persons of company or companies carrying on or engaged in the main business of the Company.
23. To enter into any arrangements and take all necessary or proper steps with Governments or with other such authorities, supreme, national, local, municipal or otherwise of any place in which the Company may have interests and to carry on any negotiations or operations for the purpose of directly or indirectly carrying out the objects of the Company or effecting any modification in the constitution of the company or for furthering the interests of the members and to oppose any such steps taken by any other such company, firm or person which may be considered likely, directly or indirectly, to prejudice the interest of the Company or its members, and to assist in the promotion whether directly or indirectly of any legislation which may seem advantageous to the company and to obtain from any such Government Authority and company any charters, contracts, decrees, rights, grants, loans, privileges, or concessions which the company may think it desirable to obtain and carry out, exercise and comply with any such arrangements, charters, decrees, rights, privileges or concessions.
24. To adopt such means of making known the main business of the Company as may seem expedient and in particular by advertising in the press by circulars, by purchase and exhibition of works of art or interest, by publication of books and periodicals and by granting prizes, and rewards.
25. (a) To undertake and execute any trust, the undertaking of which may seem to the Company desirable and either gratuitously or otherwise and vest any real or personal property, rights or interests acquired by or belonging to



the company in any person of Company on behalf of or for the benefit of the company and with or without any declared trust in favour of the Company.

- (b) To accept gifts including by way of awards/prizes from Govt. and semi-Govt. bodies and to give gifts to create trust for the welfare of employees, members, directors and/or their dependents, heirs and children and for deserving object for and other persons.
26. To apply the assets of the Company in any way or towards the establishment, maintenance or extension of any association, institution or fund in any way connected with any particular trade or business or with trade or commerce and particularly with the trade, including any association, institution or fund for the interests of masters, owners and employers against loss by bad debt, strike, combustion, fire, accident or otherwise or for the benefit of any employee workman or others at any time employed by the Company or any of its predecessors in business or their families or dependents and whether or not in common with such other persons or classes of persons and in particular of friendly, co-operative and such other societies, reading rooms, libraries, educational and charitable institutions, dining and recreation rooms, churches, chapels, schools, and hospitals and to grant gratuities, pensions and allowances and to contribute to any funds raised by public or local subscription for any purpose.
27. To distribute as dividend or bonus among the member or to place to reserve or otherwise to apply, as the Company may, from time to time, determine any money received by way of premium on debentures issued at a premium by the Company and any money received in respect of forfeited shares, money arising from the sale by the Company of forfeited shares, Subject to the provisions of the Act, 2013.
28. To aid pecuniarily or otherwise, any association, body or movement having for an object the solution, settlement of industrial or labour problems or troubles or the promotion of industry or trade.
29. To subscribe or guarantee money for any national, charitable, benevolent, public, general or useful object of and for exhibition, subject to the provisions of the Companies Act 2013.
30. To establish and maintain or procure the establishment and maintenance of any contributory or non-contributory pension or superannuation funds for the benefit of, and give, or procure the giving of donation, gratuities, pensions, allowances or emoluments to any person who are or were at any time in the employment or service of the Company or is allied to or associated with the company or with any such subsidiary Company or who are or were at any time Directors or officers of the company as aforesaid and the wives, widows, families and dependants of any such persons and also establish and subscribe to any institutions, associations, clubs or funds calculated to be for the benefit of or to advance the interest and well-being of the Company or of any such other Company as aforesaid and make payments to or towards the protection of any such persons as aforesaid and do any of the matters aforesaid, either, alone or in conjunction with any such other company as aforesaid.

31. To agree to refer to arbitration any dispute, present or future between the Company and any other company, firm, individual or any other body and to submit the same to arbitration in India or abroad either in accordance with Indian or any foreign system of law.
32. To appoint agents, sub-agents, dealers, managers canvassers, sales representatives or salesmen for transacting all or any kind of the main business of which this Company is authorized to carry on and to constitute agencies of the Company in India or in any other country and establish depots and agencies in different parts of the world.
33. To guarantee the payment or performance of any contracts or obligations or become surety for any person, firm or company for any purpose and to act as agents for the collection, receipt or payment of money and to act as agents for and render services to customers and others and to give guarantees and indemnities. To give surety/mortgage/pledge of the property for raising fund/loan for and on behalf of the company/associates concern/person/any other company.
34. To establish and run units, sister concerns operate for any of the main at places in or outside India as the Company may deem expedient.
35. To do all such other things as may be deemed incidental or conducive to the attainment of the main objects.
36. To collaborate, merger and acquisition, joint venture with Indian and foreign experts, companies, firms, to start industry and business in or outside India on such terms and conditions as the company may deem fit.
- 4th. The liability of the member(s) is limited and this liability is limited to the amount unpaid, if any, on the shares held by them.**
- 5th. The Authorised share capital of the company is Rs. 1,00,000/- ( Rupees One Lac) divided into 10,000 (Ten Thousand) Equity shares of Rs.10/- ( Rupees Ten) each.**

VI. We, the several persons, whose names and addresses, are subscribed, are desirous of being formed into a Company in pursuance of THIS MEMORANDUM OF ASSOCIATION, and we respectively agree to take the number of shares in the Capital of the Company, set against our respective names :

S. No.	Names, Addresses, Description and Occupation of subscriber	No. of shares taken by each subscribers	Signature of Subscriber	Signature, name, addresses, description and occupation of witnesses
1.	Naresh Saluja S/o Amir Chand Saluja Address: H. N 66, Old Char Chaman, Karnal-132001 Occupation: Business	2500 Equity Shares of Rs. 10/-	Sd/-	<p>I witness to subscribers, who has subscribed and signed in my presence on 21/05/2016 at Karnal. Further I have verified their identity details for their identification and satisfied myself of their identification particulars as filled in.</p> <p>Sd/- Garima Punshi S/o Jagdish Kumar Punshi Chartered Accountant M. No. 526372 344/14 Urban Estate Karnal</p>
2.	Jatiender Khuran S/o Nanad Lal Khurana Address: 485, Old Char Chaman, Karnal-132001 Occupation: Business	2500 Equity Shares of Rs. 10/-	Sd/-	
3.	Sanjay Bathla S/o Chaman Dass Bathla Address: H. No. 338(4), Railway Road, Opposit Prem Plaza Subhash Marg, Karnal Occupation: Business	2500 Equity Shares of Rs. 10/-	Sd/-	
4.	Himanshu Bharti S/o Yogesh Bharti Address: Bharti Villa, Kunjpora Road, Budha Khera, Karnal-132001 Occupation: Business	2500 Equity Shares of Rs. 10/-	Sd/-	
Total		10,000 Shares (Ten Thousand)		

Place : Karnal

Dated : 21<sup>st</sup> May 2016



(THE COMPANIES ACT, 2013)

TABLE-F

ARTICLES OF ASSOCIATION OF A COMPANY LIMITED BY SHARES  
**KARNAL SIGNAGE CFC PRIVATE LIMITED**

**PRELIMINARY**

1. Subject as hereinafter provided the Regulations contained in Table 'F' in the Schedule I to the Companies Act, 2013 shall apply to the Company.

**INTERPRETATION**

2. (1) In these Regulations :-
  - (a) "Company" means **KARNAL SIGNAGE CFC PRIVATE LIMITED**
  - (b) "Annexure" means the Annexure to these rules.
  - (c) "Act" means the Companies Act, 2013, and any statutory modification thereof.
- (2) Unless the context otherwise requires words or expressions contained in these Articles shall be the same meaning as in the Act, or any statutory modification thereof in force at the date at which these Articles become binding on the Company.

**PRIVATE COMPANY**

3. The Company is a Private Company within the meaning of Section 2(68) of the Companies Act, 2013 and accordingly:-
  - (i) restrict the right to transfer its shares.
  - (ii) except in case of One Person Company, limits the number of its member to Two Hundred:

Provided that where two or more persons hold one or more shares in a company jointly, they shall, for the purposes of this clause, be treated as a single member:

Provided futher that;

- (a) persons who are in the employment of the company; and
- (b) person who, having been formerly in the employment of the company, were member of the company while in that employment and have continued to be members after the employment ceased, shall not be included in the number of members :and
- (iii) Prohibits any invitation to the public to subscribe for any securities of the company.



#### SHARE CAPITAL AND VARIATION OF RIGHTS

4. The Authorised Share Capital of the Company shall be such amounts and be divided into such shares as may, from time to time, be provided in Clause V of the Memorandum of Association with power to increase or reduce the capital in accordance with the Company's regulations and legislative provisions for the time being in force in that behalf with the powers to divide the share capital, whether original increased or decreased into several classes and attach thereto respectively such ordinary, preferential or special rights and conditions in such a manner as may for the time being be provided by the Regulations of the Company and allowed by law.
5. The business of the Company may be commenced soon after the incorporation of the Company as and when the Directors shall think fit notwithstanding that part of the shares have been allotted.
6. The shares shall be under the discretionary control of the Directors who may allot or otherwise dispose of the same.
7. The Company in general meeting may decide to issue fully paid up bonus share to the member if so recommended by the Board of Directors.
8. The certificate to share registered in the name of two or more person shall be delivered to first named person in the register and this shall be a sufficient delivery to all such holders.
9. (i) Every person whose name is entered as a member in the register of members shall be entitled to receive within two months after incorporation, in case of subscribers to the memorandum or after allotment or within one month after the application for the registration of transfer or transmission or within such other period as the conditions of issue shall be provided,—
  - (a) One certificate for all his shares without payment of any charges; or
  - (b) Several certificates, each for one or more of his shares, upon payment of twenty rupees for each certificate after the first.
- (ii) Every certificate shall be under the seal and shall specify the shares to which it relates and the amount paid-up thereon.
- (iii) In respect of any share or shares held jointly by several persons, the company shall not be bound to issue more than one certificate, and delivery of a certificate for a share to one of several joint holders shall be sufficient delivery to all such holders.
10. (i) If any share certificate be worn out, defaced, mutilated or torn or if there be no further space on the back for endorsement of transfer, then upon production and surrender thereof to the company, a new certificate may be issued in lieu thereof, and if any certificate is lost or destroyed then upon proof thereof to the satisfaction of the company and on execution of such indemnity as the company deem adequate, a new certificate in lieu thereof shall be given. Every certificate under this Article shall be issued on payment of twenty rupees for each certificate.
- (ii) The provisions of Articles (9) and (10) shall *mutatis mutandis* apply to debentures of the company.

11. Except as required by law, no person shall be recognised by the company as holding any share upon any trust, and the company shall not be bound by, or be compelled in any way to recognise (even when having notice thereof) any equitable, contingent, future or partial interest in any share, or any interest in any fractional part of a share, or (except only as by these regulations or by law otherwise provided) any other rights in respect of any share except an absolute right to the entirety thereof in the registered holder.
12. (i) The company may exercise the powers of paying commissions conferred by sub-section (6) of section 40, provided that the rate per cent or the amount of the commission paid or agreed to be paid shall be disclosed in the manner required by that section and rules made there under.  
(ii) The rate or amount of the commission shall not exceed the rate or Amount prescribed in rules made under sub-section (6) of section 40.  
(iii) The commission may be satisfied by the payment of cash or the allotment of fully or partly paid shares or partly in the one way and partly in the other.
13. (i) If at any time the share capital is divided into different classes of shares, the rights attached to any class (unless otherwise provided by the terms of issue of the shares of that class) may, subject to the provisions of section 48, and whether or not the company is being wound up, be varied with the consent in writing of the holders of three -fourths of the issued shares of that class, or with the sanction of a special resolution passed at a separate meeting of the holders of the shares of that class.  
(ii) To every such separate meeting, the provisions of these regulations relating to general meetings shall *mutatis mutandis* apply, but so that the necessary quorum shall be at least two persons holding at least one-third of the issued shares of the class in question.
14. The rights conferred upon the holders of the shares of any class issued with preferred or other rights shall not, unless otherwise expressly provided by the terms of issue of the shares of that class, be deemed to be varied by the creation or issue of further shares ranking *pari passu* therewith.
15. Subject to the provisions of section 55, any preference shares may, with the sanction of an ordinary resolution, be issued on the terms that they are to be redeemed on such terms and in such manner as the company before the issue of the shares may, by special resolution, determine.

#### LIEN

16. The Company shall have a first and paramount lien upon all the shares (not being a fully paid up share) registered in the name of such member (whether solely or jointly with others) and upon the proceeds of sale thereof for his debts, liabilities and engagements (whether presently payable or not) solely or jointly with any other person, to or with the Company, whether the period for the payment, fulfilment or discharge thereof shall have actually alien or not and such lien shall extend to all dividends, from time to time, declared in respect of shares, subject to section 124 and bonuses declared from time to time in respect of such shares under the Act. The Board of Directors may at any time declare any shares to be wholly or in part exempt from the provisions of this clause.

#### CALLS ON SHARES AND TRANSFER OF SHARES

17. The Directors are empowered to make call on members of any amount payable at a time fixed by them.



18. Any member desiring to sell any of his shares must notify the Board of Directors of the number of shares, the fair value and the name of the proposed transferee and the Board must offer to the other shareholders the shares offered at the fair value and if the offer is accepted, the shares shall be transferred to the acceptor and if the shares or any of them, are not so accepted within one month from the date of notice to the Board the members proposing transfers shall, at any time within three months afterwards, be at liberty, subject to Articles 19 and 20 hereof, to sell and transfer the shares to any persons at the same or at higher price.

In case of any dispute, regarding the fair value of the share it shall be decided and fixed by the Company's Auditor whose decision shall be final.

19. No transfer of shares shall be made or registered without the previous sanction of the Directors, except when the transfer is made by any member of the Company to another member or to a member's wife or child or children or his heirs and the Directors may decline to give such sanction without assigning any reason subject to Section 58 and 59 of the Act.
20. The Directors may refuse to register any transfer of shares (1) where the Company has a lien on the shares or (2) where the shares are not fully paid up shares, subject to Section 58 and 59 of the Companies Act, 2013.
21. Subject to Section 58 and 59 of the Act, the Directors may in their discretion, without assigning any reason, refuse to register the transfer of any shares to any person, whom it shall, in their opinion, be undesirable in the interest of the Company to admit to membership.
22. At the death of any members his or her shares be recognised as the property of his or her heirs upon production of reasonable evidence as may required by the Board of Directors.
23. The instrument of transfer must be accompanied by the certificates of shares.

#### TRANSMISSION OF SHARES

24. (i) On the death of a member, the survivor or survivors where the member was a joint holder, and his nominee or nominees or legal representatives where he was a sole holder, shall be the only persons recognised by the company as having any title to his interest in the shares.
- (ii) Nothing in clause (i) shall release the estate of a deceased joint holder from any liability in respect of any share which had been jointly held by him with other persons.
25. (i) Any person becoming entitled to a share in consequence of the death or insolvency of a member may, upon such evidence being produced as may from time to time properly be required by the Board and subject as hereinafter provided, elect, either—
- (a) to be registered himself as holder of the share; or
- (b) to make such transfer of the share as the deceased or insolvent member could have made.
- (ii) The Board shall, in either case, have the same right to decline or suspend registration as it would have had, if the deceased or insolvent member had transferred the share before his death or insolvency.
26. (i) If the person so becoming entitled shall elect to be registered as holder of the share

himself, he shall deliver or send to the company a notice in writing signed by him stating that he so elects.

- (ii) If the person aforesaid shall elect to transfer the share, he shall testify his election by executing a transfer of the share.
  - (iii) All the limitations, restrictions and provisions of these regulations relating to the right to transfer and the registration of transfers of shares shall be applicable to any such notice or transfer as aforesaid as if the death or insolvency of the member had not occurred and the notice or transfer were a transfer signed by that member.
27. A person becoming entitled to a share by reason of the death or insolvency of the holder shall be entitled to the same dividends and other advantages to which he would be entitled if he were the registered holder of the share, except that he shall not, before being registered as a member in respect of the share, be entitled in respect of it to exercise any right conferred by membership in relation to meetings of the company:

Provided that the Board may, at any time, give notice requiring any such person to elect either to be registered himself or to transfer the share, and if the notice is not complied with within ninety days, the Board may thereafter withhold payment of all dividends, bonuses or other monies payable in respect of the share, until the requirements of the notice have been complied with.

#### FORFEITURE OF SHARES

28. If a member fails to pay any call, or installment of a call, on the day appointed for payment thereof, the Board may, at any time thereafter during such time as any part of the call or installment remains unpaid, serve a notice on him requiring payment of so much of the call or installment as is unpaid, together with any interest which may have accrued.
29. The notice aforesaid shall —
- (a) Name a further day (not being earlier than the expiry of fourteen days from the date of service of the notice) on or before which the payment required by the notice is to be made; and
  - (b) State that, in the event of non-payment on or before the day so named, the shares in respect of which the call was made shall be liable to be forfeited.
30. If the requirements of any such notice as aforesaid are not complied with, any share in respect of which the notice has been given may, at any time thereafter, before the payment required by the notice has been made, be forfeited by a resolution of the Board to that effect.
31. (i) A forfeited share may be sold or otherwise disposed of on such terms and in such manner as the Board thinks fit.
- (ii) At any time before a sale or disposal as aforesaid, the Board may cancel the forfeiture on such terms as it thinks fit.
32. (i) A person whose shares have been forfeited shall cease to be a member in respect of the forfeited shares, but shall, notwithstanding the forfeiture, remain liable to pay to the company all monies which, at the date of forfeiture, were presently payable by him to the company in respect of the shares.



- (ii) The liability of such person shall cease if and when the company shall have received payment in full of all such monies in respect of the shares.
- 33. (i) A duly verified declaration in writing that the declared is a director, the manager or the secretary, of the company, and that a share in the company has been duly forfeited on a date stated in the declaration, shall be conclusive evidence of the facts therein stated as against all persons claiming to be entitled to the share.
- (ii) The company may receive the consideration, if any, given for the share on any sale or disposal thereof and may execute a transfer of the share in favor of the person to whom the share is sold or disposed of.
- (iii) The transferee shall thereupon be registered as the holder of the share.
- (iv) The transferee shall not be bound to see to the application of the purchase money, if any, nor shall his title to the share be affected by any irregularity or invalidity in the proceedings in reference to the forfeiture, sale or disposal of the share.
- 34. The provisions of these regulations as to forfeiture shall apply in the case of non-payment of any sum which, by the terms of issue of a share, becomes payable at a fixed time, whether on account of the nominal value of the share or by way of premium, as if the same had been payable by virtue of a call duly made and notified.

#### ALTERATION OF CAPITAL

- 35. The company may, from time to time, by ordinary resolution increase the share capital by such sum, to be divided into shares of such amount, as may be specified in there solution.
- 36. Subject to the provisions of section 61, the company may, by ordinary resolution,—
  - (a) Consolidate and divide all or any of its share capital into shares of larger amount than its existing shares;
  - (b) Convert all or any of its fully paid-up shares into stock; and reconvert that stock into fully paid-up shares of any denomination;
  - (c) sub-divide its existing shares or any of them into shares of smaller amount than is fixed by the memorandum;
  - (d) Cancel any shares which, at the date of the passing of the resolution, have not been taken or agreed to be taken by any person.
- 37. Where shares are converted into stock,—
  - (a) the holders of stock may transfer the same or any part thereof in the same manner as, and subject to the same regulations under which, the shares from which the stock arose might before the conversion have been transferred, or as near thereto as circumstances admit:

Provided that the Board may, from time to time, fix the minimum amount of stock transferable, so, however, that such minimum shall not exceed the nominal amount of the shares from which the stock arose.

  - (b) the holders of stock shall, according to the amount of stock held by them, have the same rights, privileges and advantages as regards dividends, voting at meetings of the company, and other matters, as if they held the shares from which the stock arose;

but no such privilege or advantage (except participation in the dividends and profits of the company and in the assets on winding up) shall be conferred by an amount of stock which would not, if existing in shares, have conferred that privilege or advantage.

- (c) Such of the regulations of the company as are applicable to paid-up shares shall apply to stock and the words "share" and "shareholder" in those regulations shall include "stock" and "stock-holder" respectively.
38. The company may, by special resolution, reduce in any manner and with, and subject to, any incident authorised and consent required by law,—
- (a) Its share capital;
  - (b) Any capital redemption reserve account; or
  - (c) Any share premium account.

#### CAPITALISATION OF PROFITS

39. (i) The company in general meeting may, upon the recommendation of the Board, Resolve—
- (a) that it is desirable to capitalise any part of the amount for the time being standing to the credit of any of the company's reserve accounts, or to the credit of the profit and loss account, or otherwise available for distribution; and
  - (b) that such sum be accordingly set free for distribution in the manner specified in clause (ii) amongst the members who would have been entitled thereto, if distributed by way of dividend and in the same proportions.
- (ii) The sum aforesaid shall not be paid in cash but shall be applied, subject to the provision contained in clause (iii), either in or towards—
- (A) paying up any amounts for the time being unpaid on any shares held by such members respectively;
  - (B) Paying up in full, unissued shares of the company to be allotted and distributed, credited as fully paid-up, to and amongst such members in the proportions aforesaid;
  - (C) Partly in the way specified in sub-clause (A) and partly in that specified in sub-clause (B);
  - (D) A securities premium account and a capital redemption reserve account may, for the purposes of this regulation, be applied in the paying up of unissued shares to be issued to members of the company as fully paid bonus shares;
  - (E) The Board shall give effect to the resolution passed by the company in pursuance of this regulation.
40. (i) Whenever such a resolution as aforesaid shall have been passed, the Board shall —
- (a) make all appropriations and applications of the undivided profits resolved to be capitalised thereby, and all allotments and issues of fully paid shares if any; and
  - (b) generally do all acts and things required to give effect thereto.



- (ii) The Board shall have power—
  - (a) to make such provisions, by the issue of fractional certificates or by payment in cash or otherwise as it thinks fit, for the case of shares becoming distributable in fractions; and
  - (b) to authorise any person to enter, on behalf of all the members entitled there to, into an agreement with the company providing for the allotment to them respectively, credited as fully paid -up, of any further shares to which they may be entitled upon such capitalisation, or as the case may require, for the payment by the company on their behalf, by the application thereto of their respective proportions of profits resolved to be capitalised, of the amount or any part of the amounts remaining unpaid on their existing shares;
- (iii) Any agreement made under such authority shall be effective and binding on such members.

#### **BUY-BACK OF SHARES**

- 41. Notwithstanding anything contained in these articles but subject to the provisions of sections 68 to 70 and any other applicable provision of the Act or any other law for the time being in force, the company may purchase its own shares or other specified securities.

#### **GENERAL MEETINGS**

- 42. All general meetings other than annual general meeting shall be called extraordinary general meeting.
- 43. (i) The Board may, whenever it thinks fit, call an extraordinary general meeting.
  - (ii) If at any time directors capable of acting who are sufficient in number to form a quorum are not within India, any director or any two members of the company may call an extraordinary general meeting in the same manner, as nearly as possible, as that in which such a meeting may be called by the Board.

#### **PROCEEDINGS AT GENERAL MEETINGS**

- 44. (i) No business shall be transacted at any general meeting unless a quorum of members is present at the time when the meeting proceeds to business.
  - (ii) Save as otherwise provided herein, the quorum for the general meetings shall be as provided in section 103.
- 45. The chairperson, if any, of the Board shall preside as Chairperson at every general meeting of the company.
- 46. If there is no such Chairperson, or if he is not present within fifteen minutes after the time appointed for holding the meeting, or is unwilling to act as chairperson of the meeting, the directors present shall elect one of their members to be Chairperson of the meeting.
- 47. If at any meeting no director is willing to act as Chairperson or if no director is present within fifteen minutes after the time appointed for holding the meeting, the members present shall choose one of their members to be Chairperson of the meeting.
- 48. (i) The Chairperson may, with the consent of any meeting at which a quorum is present, and shall, if so directed by the meeting, adjourn the meeting from time to time and from place to place.

- (ii) No business shall be transacted at any adjourned meeting other than the business left unfinished at the meeting from which the adjournment took place.
- (i) When a meeting is adjourned for thirty days or more, notice of the adjourned meeting shall be given as in the case of an original meeting.
- (ii) Save as aforesaid, and as provided in section 103 of the Act, it shall not be necessary to give any notice of an adjournment or of the business to be transacted at an adjourned meeting.

#### VOTING RIGHTS AND PROXY

49. Subject to any rights or restrictions for the time being attached to any class or classes of shares,—
- (a) on a show of hands, every member present in person shall have one vote; and
  - b) on a poll, the voting rights of members shall be in proportion to his share in the paid-up equity share capital of the company.
50. A member may exercise his vote at a meeting by electronic means in accordance with section 108 and shall vote only once.
51. (i) In the case of joint holders, the vote of the senior who tenders a vote, whether in person or by proxy, shall be accepted to the exclusion of the votes of the other joint holders.
- (ii) For this purpose, seniority shall be determined by the order in which the names stand in the register of members.
52. A member of unsound mind, or in respect of whom an order has been made by any court having jurisdiction in lunacy, may vote, whether on a show of hands or on a poll, by his committee or other legal guardian, and any such committee or guardian may, on a poll, vote by proxy.
53. Any business other than that upon which a poll has been demanded may be preceded with, pending the taking of the poll.
54. No member shall be entitled to vote at any general meeting unless all calls or other sums presently payable by him in respect of shares in the company have been paid.
55. (i) No objection shall be raised to the qualification of any voter except at the meeting or adjourned meeting at which the vote objected to is given or tendered, and every vote not disallowed at such meeting shall be valid for all purposes.
- (ii) Any such objection made in due time shall be referred to the Chairperson of the meeting, whose decision shall be final and conclusive.
56. The instrument appointing a proxy and the power-of-attorney or other authority, if any, under which it is signed or a notarised copy of that power or authority, shall be deposited at the registered office of the company not less than 48 hours before the time for holding the meeting or adjourned meeting at which the person named in the instrument proposes to vote, or, in the case of a poll, not less than 24 hours before the time appointed for the taking of the poll; and in default the instrument of proxy shall not be treated as valid.
57. An instrument appointing a proxy shall be in the form as prescribed in the rules made under section 105.



58. A vote given in accordance with the terms of an instrument of proxy shall be valid, notwithstanding the previous death or insanity of the principal or the revocation of the proxy or of the authority under which the proxy was executed, or the transfer of the shares in respect of which the proxy is given:

Provided that no intimation in writing of such death, insanity, revocation or transfer shall have been received by the company at its office before the commencement of the meeting or adjourned meeting at which the proxy is used.

#### **BOARD OF DIRECTORS**

59. The number of Directors shall not be less than two and not more than fifteen.
60. The following shall be the First Directors of the Company.
- |                            |                    |
|----------------------------|--------------------|
| 1. Naresh Saluja           | 2. Sanjay Bathla   |
| 3. Jatiender Kumar Khurana | 4. Himanshu Bharti |
61. The Directors may from time to time, appoint one or more of their body to the office of the Managing Director for one or more of the divisions of the business carried on by the Company and to enter into agreement with him in such terms and conditions as they may deem fit.
62. Subject to the provisions of section 149, the Board of Directors, at any time and from time to time, to appoint any person as additional Director in addition to the existing Director so that the total number of Directors shall not at any time exceed the number fixed for Directors in these articles, Any Directors so appointed shall hold office only until the next following Annual General Meeting but shall be eligible thereof for election as Director.
63. The Managing Director may be paid such remuneration as may, from time to time, be determined by the Board and such remuneration as may be fixed by way of salary or commission or participation in profits or partly in one way or partly in another subject to the provisions of the Companies Act, 2013.
64. The quorum necessary for the transaction, of the business of the Board meeting subject to Section 174 of the Act, shall be one third of the total strength or at least two whichever is higher. The participation of the directors by video conferencing or by other audio visual means shall also be count for the purpose of quorum.
65. Subject to section 175 of the Act, a resolution in writing signed by the Director except a resolution which the Act specifically required it to be passed at a Board meeting shall be effective for all purposes as a resolution passed at a meeting of Directors duly called, held and constituted.

#### **PROCEEDINGS OF THE BOARD**

66. (i) The Board of Directors may meet for the conduct of business, adjourn and otherwise regulate its meetings, as it thinks fit.
- (ii) A director may, and the manager or secretary on the requisition of a director shall, at any time, summon a meeting of the Board.
67. (i) Save as otherwise expressly provided in the Act, questions arising at any meeting of the Board shall be decided by a majority of votes.

- (ii) In case of an equality of votes, the Chairperson of the Board, if any, shall have a second or casting vote.
68. The continuing directors may act notwithstanding any vacancy in the Board; but, if and so long as their number is reduced below the quorum fixed by the Act for a meeting of the Board, the continuing directors or director may act for the purpose of increasing the number of directors to that fixed for the quorum, or of summoning a general meeting of the company, but for no other purpose.
69. (i) The Board may elect a Chairperson of its meetings and determine the period for which he is to hold office.
- (ii) If no such Chairperson is elected, or if at any meeting the Chairperson is not present within five minutes after the time appointed for holding the meeting, the directors present may choose one of their number to be Chairperson of the meeting.
70. (i) The Board may, subject to the provisions of the Act, delegate any of its powers to committees consisting of such member or members of its body as it thinks fit.
- (ii) Any committee so formed shall, in the exercise of the powers so delegated, conform to any regulations that may be imposed on it by the Board.
71. (i) A committee may elect a Chairperson of its meetings.
- (ii) If no such Chairperson is elected, or if at any meeting the Chairperson is not present within five minutes after the time appointed for holding the meeting, the members present may choose one of their members to be Chairperson of the meeting.
72. (i) A committee may meet and adjourn as it thinks fit.
- (ii) Questions arising at any meeting of a committee shall be determined by a majority of votes of the members present, and in case of an equality of votes, the Chairperson shall have a second or casting vote.
73. All acts done in any meeting of the Board or of a committee thereof or by any person acting as a director, shall, notwithstanding that it may be afterwards discovered that there was some defect in the appointment of any one or more of such directors or of any person acting as aforesaid, or that they or any of them were disqualified, be as valid as if every such director or such person had been duly appointed and was qualified to be a director.
74. Save as otherwise expressly provided in the Act, a resolution in writing, signed by all the members of the Board or of a committee thereof, for the time being entitled to receive notice of a meeting of the Board or committee, shall be valid and effective as if it had been passed at a meeting of the Board or committee, duly convened and held.

**CHIEF EXECUTIVE OFFICER, MANAGER, COMPANY SECRETARY OR CHIEF FINANCIAL OFFICER**

75. Subject to the provisions of the Act,—
- (i) A chief executive officer, manager, company secretary or chief financial officer may be appointed by the Board for such term, at such remuneration and upon such conditions as it may think fit; and any chief executive officer, manager, company secretary or chief financial officer so appointed may be removed by means of a resolution of the Board;



- (ii) A director may be appointed as chief executive officer, manager, company secretary or chief financial officer.
76. A provision of the Act or these regulations requiring or authorising a thing to be done by or to a director and chief executive officer, manager, company secretary or chief financial officer shall not be satisfied by its being done by or to the same person acting both as director and as, or in place of, chief executive officer, manager, company secretary or chief financial officer.

#### **COMMON SEAL**

77. (a) The Common Seal of the Company may be made either of metal or of rubber as the directors may decide.
- (b) The Board shall provide for the safe custody of the Company's Common Seal.
- (c) The Seal shall not be affixed to any instrument except by the authority of a resolution of the Board or of a Committee of the Board authorised by it in that behalf and except in the presence of at least one director who shall sign every instruments to which the seal of the Company if so affixed. The share certificate will, however, be signed and Sealed in accordance with Rule prescribed by Central Government in this regard.

#### **BORROWING POWERS**

78. Subject to section 73 and 179 of the Companies Act, 2013, and Regulations made there under and Directions issued by the RBI the directors may, from time to time, raise or borrow any sums of money for and on behalf of the Company from the member or other persons, companies or banks or they may themselves advance money to the company on such interest as may be approved by the Directors.
79. The Directors may, from time to time, secure the payment of such money in such manner and upon such terms and conditions in all respects as they deem fit and in particular by the issue of bonds or debentures or by pledge, mortgage, charge or any other security on all or any properties of the Company (both present and future) including its uncalled capital for the time being.

#### **OPERATION OF BANK ACCOUNTS**

80. The Directors shall have the power to open bank accounts to sign cheques on behalf of the Company and to operate all banking accounts of the Company and to receive payments, make endorsements, draw and accept negotiable instruments, hundies and bills or may authorise any other person or persons to exercise such powers.

#### **DIVIDENDS AND RESERVE**

81. The company in general meeting may declare dividends, but no dividend shall exceed the amount recommended by the Board.
82. Subject to the provisions of section 123, the Board may from time to time pay to the members such interim dividends as appear to it to be justified by the profits of the company.
83. (i) The Board may, before recommending any dividend, set aside out of the profits of the company such sums as it thinks fit as a reserve or reserves which shall, at the discretion of the Board, be applicable for any purpose to which the profits of the company may be properly applied, including provision for meeting contingencies or for equalizing dividends; and pending such application, may, at the like discretion,



either be employed in the business of the company or be invested in such investments (other than shares of the company) as the Board may, from time to time, think fit.

- (ii) The Board may also carry forward any profits which it may consider necessary not to divide, without setting them aside as a reserve.
84. (i) Subject to the rights of persons, if any, entitled to shares with special rights as to dividends, all dividends shall be declared and paid according to the amounts paid or credited as paid on the shares in respect whereof the dividend is paid, but if and so long as nothing is paid upon any of the shares in the company, dividends may be declared and paid according to the amounts of the shares.
- (ii) No amount paid or credited as paid on a share in advance of calls shall be treated for the purposes of this regulation as paid on the share.
  - (iii) All dividends shall be apportioned and paid proportionately to the amounts paid or credited as paid on the shares during any portion or portions of the period in respect of which the dividend is paid; but if any share is issued on terms providing that it shall rank for dividend as from a particular date such share shall rank for dividend accordingly.
85. The Board may deduct from any dividend payable to any member all sums of money, if any, presently payable by him to the company on account of calls or otherwise in relation to the shares of the company.
86. (i) Any dividend, interest or other monies payable in cash in respect of shares may be paid by cheque or warrant sent through the post directed to the registered address of the holder or, in the case of joint holders, to the registered address of that one of the joint holders who is first named on the register of members, or to such person and to such address as the holder or joint holders may in writing direct.
- (ii) Every such cheque or warrant shall be made payable to the order of the person to whom it is sent.
87. Any one of two or more joint holders of a share may give effective receipts for any dividends, bonuses or other monies payable in respect of such share.
88. Notice of any dividend that may have been declared shall be given to the persons entitled to share therein in the manner mentioned in the Act.
89. No dividend shall bear interest against the company.

#### ACCOUNTS

90. (a) The Board shall, from time to time, determine whether and to what extent and at what, times and places and under what conditions or regulation the accounts and books of the Company or any of them shall be open to the inspection of members (not being Director).
- (b) No members (not being Director) shall have any right of inspecting any accounts or books of account of the Company except as conferred by law or authorised by the Board or by the Company in General Meeting.
91. The Directors shall in all respect comply with the provisions of Section 128, 134, 137, 206, 207 and 208, of the Act, and profits and Loss Account, Balance Sheet and Auditors Report and every other document required by law to be annexed or attached as the case may be, to

the Balance Sheet, to be sent to every member and debenture holder of the Company and every trustee for the holders of the debentures issued by the Company at least twenty one days before the date of Annual general meeting of the Company at which they are to be laid, subject to the provisions of section 136 of the Act.

#### AUDIT

- (a) The first Auditor of the Company shall be appointed by the Board Of Directors within one month from the date of registration of the Company and the Auditors so appointed shall hold office until the conclusion of the first Annual General Meeting.
- (b) At first annual General Meeting the Company shall appoint an Auditor to hold Office from the conclusion of the Meeting till the conclusion of its sixth Annual General Meeting and thereafter till the conclusion of every six meeting.
- (c) The remuneration of the Auditor shall be fixed by the Company in the Annual General Meeting or in such manner as the Company in the Annual General Meeting may determine. In case of an Auditor appointed by the Board his remuneration shall be fixed by the Board.

#### WINDING UP

Winding up when necessary will be done in accordance with the requirements of the Companies Act, 2013 or statutory modification thereto.

#### SECRECY

Subject to the provisions of law of land and the act, every manager, auditor trustee, member of a committee, officer servant, agent accountant or other persons employed in the business of the company shall, if so required by the Board of Directors before entering upon his duties, sign, declaration, pledging himself to observe strict secrecy respecting all transactions of the Company with its customers and the state of account with individuals and in matters relating thereto and shall by such declaration pledge himself, not to reveal any of the matters which may come to his knowledge in the discharge of his duties except when required to do so by the directors or by any court of law and except so far as may be necessary in order to comply with any of the provisions in these presents.

#### INDEMNITY

Every officer of the company shall be indemnified out of the assets of the company against any liability incurred by him in defending any proceedings, whether civil or criminal, in which judgment is given in his favour or in which he is acquitted or in which relief is granted to him by the court or the Tribunal.

Note: The Articles shall be signed by each subscriber of the memorandum of association who shall add his address, description and occupation, if any, in the presence of at least one witness who shall attest the signature and shall likewise add his address, description and occupation, if any, and such signatures shall be in form specified below:

S. No.	Names, Addresses, Descriptions and Occupations of subscriber	Signature of Subscriber	Signature, names, addresses, descriptions and occupations of witnesses
1.	Naresh Saluja S/o Amir Chand Saluja Address: H. N 66, Old Char Chaman, Karnal-132001 Occupation: Business	Sd/-	<p>I witness to subscribers, who has subscribed and signed in my presence on 21/05/2016 at Karnal. Further I have verified their identity details for their identification and satisfied myself of their identification particulars as filled in.</p> <p>Sd/- Garima Punshi S/o Jagdish Kumar Punshi Chartered Accountant M. No. 526372 344/14 Urban Estate Karnal</p>
2.	Jatiender Khuran S/o Nanad Lal Khurana Address: 485, Old Char Chaman, Karnal-132001 Occupation: Business	Sd/-	
3.	Sanjay Bathla S/o Chaman Dass Bathla Address: H. No. 338(4), Railway Road, Opposit Prem Plaza Subhash Marg, Karnal Occupation: Business	Sd/-	
4.	Himanshu Bharti S/o Yogesh Bharti Address: Bharti Villa, Kunjpura Road, Budha Khera, Karnal-132001 Occupation: Business	Sd/-	

Place : Karnal


Dated : 21<sup>st</sup> May 2016



Annexure 3: Letter from MSME-DI Karnal to Director of Industries,  
Haryana

3737

भारत सरकार  
सूक्ष्म, लघु एवं मध्यम उद्यम मंत्रालय  
एमएसएमई-विकास संस्थान  
(पूर्ववर्ती लघु उद्योग सेवा संस्थान)  
11-ए, औद्योगिक विकास कालोनी,  
नवदीप आई.टी.आई, कुनपुरा रोड,  
कुरुनाल-132001 (हरियाणा)  
Tel- 0164-2230882 Telefax- 0184-2231862 | E-mail- dcdi-karnal@dcmse.gov.in | Website- www.msmedikarnal.gov.in

  
सूक्ष्म, लघु एवं मध्यम उद्यम  
MICRO, SMALL & MEDIUM ENTERPRISES  
GOVERNMENT OF INDIA  
MINISTRY OF MICRO, SMALL & MEDIUM ENTERPRISES  
MSME-DEVELOPMENT INSTITUTE  
(Formerly Small Industries Service Institute)  
11-A, Industrial Development Colony  
Near I.T.I, Kunjpura Road,  
KARNAL-132001 (Haryana)

No. MSMEDI/KNL/SA/HR-Govt. Cluster/2016-17 **SPEED POST** Dated: 22.09.2016

The Director of Industries,  
Govt. of Haryana, 3o Bays Building,  
Sector-17 C, Chandigarh

641

28 SEP 2016

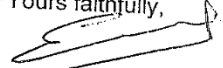
Kind Atten : Sh. R.C. Dahra, Consultant

Sub: Forwarding of comments/views in respect of proposed cluster in Karnal – reg.

This has ref. to validation workshop of DSR in respect of Signage and Advertisement Cluster, Karnal, Dairy and Ice Cream Cluster, Plastic Product Cluster, Karnal under the Chairmanship of Sh. Major Singh, Director, MSME Development Institute, Karnal, Sh. R.C. Dahra Consultant, Haryana Govt., Sh. Hemraj Singh from CIPET, Jhathal, Sonapat, Sh. Gyan Mutreja from Modei Dairy, Karnal, bankers from OBC and SPV members of all cluster at Gym Khana Club, Sector-8, Karnal.

Comments by Technical Team are forwarded for further necessary action at your end please.

This issues with the approval of Director.

Yours faithfully,  
  
(Sandeep Agarwal)  
Asstt. Director (Chem)  
for Director

Ends: As above

Copy to:

Sh. K. Newar, Dy. Director (Cluster) O/o the DC(MSME), 7<sup>th</sup> floor, Nirman Bhawan,  
Mahatma Azad Road, New Delhi-110108 for kind information please.

(Sandeep Agarwal)  
Asstt. Director (Chem)

#### Annexure 4: Land availability proof







CIN No. : U15122HR2015PLC056460

**Karnal FoodPack Cluster Limited**  
(A role model of rural development Growth)

Letter No. :- 41/Aug-17-18

Date:- 22.08.2017

To,

The President  
Karnal Signage CFC Pvt. Ltd.  
Karnal(HR)

**Subject:- Regarding allocation of Land for Common Facility Centre(CFC) at village-Kunjpura,Karnal to Karnal Signage CFC Pvt. Ltd**

Dear Sir,

With Reference to your expression of interest for purchasing a plot for construction of CFC for Signage Cluster,we have received your request for allocation of a plot of 18000 Sq. ft. (1998 sq. yards) in industrial area developed by KFPCL at Kunjpura,Karnal to Karnal Signage CFC Private Limited .The Plot number 52 has been identified.

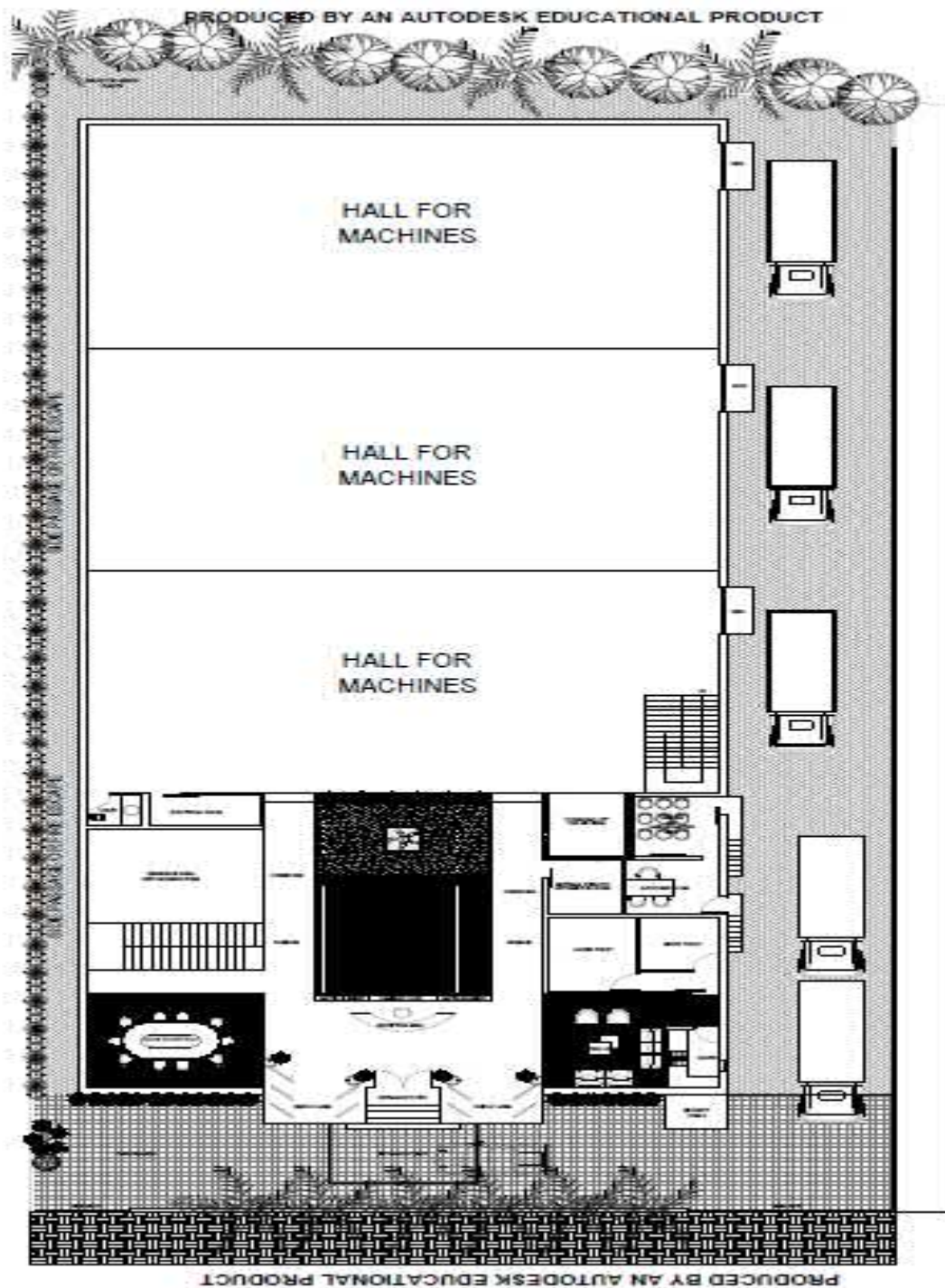
We would like to inform you that KFPCL is willing to sell the identified plot to Karnal Signage CFC Pvt. Ltd. at an agreed amount of rs. 6500 per square yard.The total cost of plot to be paid by the buyer shall be Rs. 129.87. Demand draft or cheque shall be prepared in favour of "Karnal FoodPack Cluster Ltd.(KFPCL)"

We would request you to provide us a tentative date to make the payment and register the plot in the name of Karnal Signage CFC Pvt. Ltd..KFPCL is committed to extend all the required support for setting up CFC,construction of complimentary facilities and also providing marketing support to the units setting up base in Kunjpura.

Yours Sincerely,

Karnal FoodPack Cluster Ltd.(KFPCL)  
Kunjpura,Karnal,Haryana

## Annexure 5: Building layout plan







## Annexure 6: Building estimate



WE CREATE ART TO LIVE IN...

TO WHOM IT MAY CONCERN

23 MARCH, 2018

The following is the estimate of New Construction of Karnal Signage CFC Pvt Ltd. for Mr. Naresh Saluja at Plot No.52, Mughal Majra, Kunjpura Road, Karnal, Haryana-132023, having total covered area of 19500 sq.ft. The estimate of construction of the said Industry is as follows –

ESTIMATE OF COST

S.NO	PARTICULARS	QUANTITY	RATE	AMOUNT
1	<b>Civil work</b>			
a)	4½"th. Brick Wall super structure Mortar 1:4	4500 sq.ft	Rs. 45/cu.ft	Rs.2,02,500
b)	9"th. Brick Wall super structure Mortar 1:6	15500 cu.ft	Rs. 75/cu.ft	Rs.11,62,500
c)	Plaster on wall with Mortar 1:4	24600 sq.ft	Rs.25 sq.ft	Rs.6,15,000
d)	R.C.C Work	15800 sq.ft	Rs.350 sq.ft	Rs.55,30,000
	<b>Total Civil work</b>			Rs.75,10,000
2	Electrical	Labour – Rs.15/sqft Material – Rs. 120/sqft Cost of panel	Rs.2,25,000 Rs.6,75,000	Rs. 9,00,000
3	Toilet & Kitchen a) Plumbing b) Sanitary	Labour – Rs.50/sqft Material – Rs.125/sqft Cost of panel	Rs.1,30,000 Rs. 4,35,000	Rs. 5,65,000
4	Joinery & Aluminum & Hardware	Labour – Material –	Rs.1,80,000 Rs. 10,25,000	Rs. 12,05,000
5	P.O.P. Ceilings and Punning a) On Walls	8000 sq.ft 15700 sq.ft	Rs 75 sq.ft Rs 15 sq.ft	Rs. 8,35,500
6	Flooring / Stone work	19500 sq.ft	Rs.90 sq.ft	Rs. 17,55,000
7	Wood work	Material – Labour –	Rs. 8,50,000 Rs. 1,70,000	Rs. 10,20,000
8	Glass work (Material & fittings)	11650.00 sq.ft	Rs. 180/sqft	Rs. 20,97,000
9	Furniture and Interiors (Accessories & Wood work)	9800.00 sq.ft	Rs. 275/sqft	Rs. 26,95,000
	<b>TOTAL</b>			Rs. 1,85,82,500

TOTAL Rs. 1,85,82,500/-

**(Rupees One Crore Eighty Five Lakh Eighty Two Thousand and Five Hundred Only)**

(AVI GARG)  
Architect  
For ARCHERA DESIGN STUDIO

SCO 389, 2nd FLOOR, SECTOR 8 - PANCHKULA (HARYANA ) PHONE - +91-9779772244  
archeradesignstudio@gmail.com

## Annexure 7: Machinery Quotations

## I. Advanced Super Wide-Format Dedicated Roll-to-Roll UV Printing technology

**ARROW** **ARROW DIGITAL PVT. LTD.**  
 1005-6, "ADITYA", 10th floor, Nr. Sardar Patel Seva Samaj, Mithakhali, Navrangpura, Ahmedabad-380 006.  
 Ph: +91 79 2640 4017/18, Email: support@arrow-digital.com, CIN No. U29294GJ2003PTC042332 DTD-02/05/2003

**COMMERCIAL PROPOSAL**

**Date: 22<sup>nd</sup> August, 2017**

**To,**  
 Kind Attn: Mr. Naresh Saluja  
**Karnal Signage CFC Pvt. Ltd.**  
 Mugal Magra  
 Karnal (Haryana)  
 E-mail: rajshreekarnal@gmail.com

**Subject: Quotation of Quantum LXr 5M**

**Dear Sir,**

We are pleased to introduce ourselves as the channel partners for EFI Products, the world renowned manufacturer of the state-of-art equipment's related to the signage Industry.  
 As discussed with you, please find quotation for Quantum LXr 5M which suits your requirement:

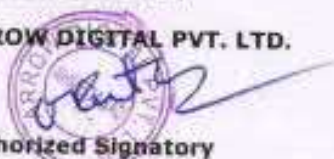
Make	Model	Printing width	Description	Price in INR
EFI	Quantum LXr	5 Meter	7pl Drop Size, LED Curing Technology, CMYK, LC, LM, White Automatic Backlit Kit	Rs.5,05,00,000 + 18% GST

Hope, you will find the quoted price very attractive. We can assure you of our best after sales services & business support also.

**TERMS & CONDITIONS:-**

- Payment: 100% Advance with confirmed Purchase Order.
- Delivery: TBD after placing confirmed Purchase Order.
- 18% GST will be extra as applicable.
- Quote is valid till 30 Days.
- Limited Warranty for 1 Year (2 Printheads during 1 Year Warranty)
- Ink Price: Basic Colors-Rs.4300, White-Rs.5300
- The above prices are inclusive of On-site installation and training charges and exclusive GST.

*Thanking you meanwhile in anticipation of good business relations, we remain...*

**For & on Behalf of,**  
**ARROW DIGITAL PVT. LTD.**  
  
**Authorized Signatory**



## II. Digital Printing facility for Direct Printing on Fabric



To,  
Kind Attn. Mr Naresh Saluja  
Karnal Signage CFC Pvt Ltd.  
Mugal Majra, Karnal (Haryana)

[rajshreekarnal@gmail.com](mailto:rajshreekarnal@gmail.com)

Our ref.: AR/01/112  
Date: 22<sup>nd</sup> August, 2017

**Subject:** Quotation for Digital Printing Machine EFI Reggiani Next 340 / 4 / 4 - **Piezo DOD multi array technology.**

Dear Sir,

We are glad to offer you the quotation for EFI Printer which suits your requirement. We appreciate the confidence you are placing in our company and its products and we want you to know that we will do our best to exceed your expectations.

We believe that EFI are the best digital solution you have opted for, and will generate great profits for you.

With the supply of our EFI machines, will be seriously increased the limits for designs and developments of your products as well as their added value on the market.

We offer you our total collaboration, knowledge in high tech, and a constant support by our engineers. We are sure about success, giving to our customers/contributors not only an Digital Printer, also a technology for the future, with our human and technical team support.

Thanks to the constant development, we can offer to our contributor's innovation, improvements and updates in our systems.

We again, thank you for choosing EFI. We look forward to work with you during the years to come.

Best Regards,  
Arrow Digital



## Technical Specification :

Max printing width	3450 mm
No. of "process" colours	4
No. of printing heads	4
DOT	variable, 4 levels
Native resolution of print head	300 x 600 dpi
Media feed	max Ø 320 mm roll
Media take-up	max Ø 320 mm roll
Type of substrate	paper and fabric
Paper weight	57÷120 gr/m <sup>2</sup>
Fabric weight	40÷300 gr/m <sup>2</sup>
Type of yarn	cotton, polyester, blends
Fabric requirement	low stretchable fabric (max 4%)
Dryer	electrically heated plate
Application	advertisement, apparel, home furnishing, sportswear
Print requirement	pass through print possible with appropriate color profile
Inks	reactives, direct/sublimation disperse, pigment

.....

**Customer Needs to Arrange**

- PC desktop with graphic software licence.
- Power connections from the mains to the electrical cabinet
- Container collecting waste water
- Air and water distribution piping from the mains

2

**Arrow Digital Pvt. Ltd.** – 1005, 1006, "Aditya", Opp. Sardar Patel Seva Samaj, Mithakali, Navrangpura, Ahmedabad – 380006.  
Email : [sales@arrow-digital.com](mailto:sales@arrow-digital.com)



#### TECHNICAL DATA

Voltage of the electrical cabinet: 360 ÷ 440V – 50 Hz  
 Voltage of the PC line : 230V – 50 Hz  
 Admissible fluctuation : ± 10%

#### UTILITIES

Installed electrical power : 38 kW  
 Water consumption : 5 L/h  
 Air consumption : 0.5 Nm<sup>3</sup>/1'

#### ENVIRONMENTAL CONDITIONS

Temperature : 18÷26° C  
 Humidity : 40÷60% RH  
 Powders : absent

#### WATER

Pressure : Min 1,5bar, Max 2bar  
 Delivery : 5 L /1

#### WATER PER MAINTENANCE

pH value	value	6,5 < pH < 8,0
Conductivity	µS/cm (a 20°C)	< 300
Hardness	ppm CaCO <sub>3</sub> (°T)	< 200 = 20 (°f)
Sulfate	ppm SO <sub>4</sub> <sup>2-</sup>	< 10
Chloride	ppm Cl <sup>-</sup>	< 2
Fluoride	ppm F <sup>-</sup>	< 0,05

Temperature min 20°C max 25°C  
 Otherwise the water MUST BE demineralized and degassed.

#### PAPER ADMITTED AT THE ENTRY

Max ø 450 mm roll  
 Roll alignment ± 0.5 mm

#### FABRIC ADMITTED AT THE ENTRY

Fabrics on batches (no folds), max ø 450 mm roll  
 Alignment of the selvages ± 3mm  
 Max shrinkage 3% in damp conditions

#### GENERAL CONDITIONS

All the fabrics need a specific pre-treatment and a finishing process. We can supply all the technological equipment for the entire process on demand.

**3** | Arrow Digital Pvt. Ltd. – 1005, 1006, "Aditya", Opp. Sardar Patel Seva Samaj, Mithakali, Navrangpura, Ahmedabad – 380006.  
 Email : [sales@arrow-digital.com](mailto:sales@arrow-digital.com)



Ready to print (chemical preparation for textile printing).

#### TECHNICAL DOCUMENTATION

Technical documentation is delivered via electronic media, in accordance with the attached "TECHNICAL DOCUMENTATION DELIVERY POLICY". Instruction for the machine use are provided electronically ONLY (that is, no print version available).

Technical documentation delivered via physical media is not included in the supply (hard copy of documentation on paper form, CD, DVD) and cannot be included in this order.

#### EU CONFORMITY

Our products are in conformity with the relevant Union harmonization legislation.

#### WARRANTY

The warranty period of the Reggiani printer will be of Twelve months beginning on the date of Invoice. During the warranty period the seller warrants that the equipment supplied to the purchaser hereunder shall substantially conform to the applicable specifications set forth in the documentation provided by the seller at the time of installation of the equipment.

This Limited warranty does not apply to any non-conformity resulting from (a) repair, alteration, misuse, negligence, abuse, accident, mishandling, operation, or storage or operation in an improper environment, or (b) use, handling, storage or maintenance other than in accordance with applicable documentation, or (c) operation of the printer by someone other than a certified operator. Without limiting the generality of the foregoing, this warranty does not apply to damage from use of non-approved inks, "Expired" Inks, or improperly inserted inks.

The seller's sole obligations with respect to any components of the printer which do not meet the limited warranty is limited to replacement of such components, but only if the seller determines that such components are defective, subject to other terms and conditions of this warranty. This warranty is in lieu of all other warranties, expressed or implied, and set forth the seller's sole obligation and the purchaser's exclusive remedy in connection with the warranty. Except as expressly set forth in this warranty, the seller expressly disclaim and make no representation or warranty of any kind, either express or implied, including without limitation, warranties of merchant liability, title, non-infringement, or fitness for a particular purpose, and warranties based upon course of dealing or trade usage. The seller shall not be liable for any loss of profits, loss or interruption of business, loss of use or loss of data, nor for any indirect, special, incidental, consequential or exemplary damage of any kind, regardless of the form or cause of action, whether under this agreement or otherwise, even if the seller has been advised of the possibility of such loss.

During the said warranty period the Seller shall have the right to visit and inspect the said Reggiani Printer through his technical experts and mechanics so as to keep the same in working condition and the purchaser shall provide all facilities required in that connection. The purchaser shall carry out the instructions and directions given by the Seller or his technical experts from time to time.

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**4** | **Arrow Digital Pvt. Ltd.** – 1005, 1006, "Aditya", Opp. Sardar Patel Seva Samaj, Mithakali, Navrangpura, Ahmedabad – 380006.  
Email : [sales@arrow-digital.com](mailto:sales@arrow-digital.com)





The warranty period mentioned-above will cease to exist if during the said period, the purchaser either sells the said Reggiani printer to anybody else or shifts the Reggiani printer to any other place in the said place of business or otherwise or mutually agreed.

The purchaser has agreed to take insurance of the printer and has agreed to provide a copy of the same to the seller until the payment is made in full by the purchaser.

However, if the Purchaser uses any parts, inks or consumables other than recommended by the seller, the he will loose the warranty also and will have to bear the cost of engineers as per the applicable rate.

If any dispute arises between the parties hereto in respect of this agreement or in connection with any claim by one against the other the same will be referred to arbitration of a common arbitrator if agreed upon failing which, to two arbitrators one to be appointed by each party to the dispute and the arbitration will be governed by the Arbitration Act, 1940. If the matter is not settled by arbitration and referred to the court of Law, it shall be Subject to Ahmedabad Jurisdiction only.

This offer is subject to the execution of a binding purchase agreement pursuant to Reggiani's standard terms and conditions for Reggiani printers.

#### PRICE SUMMARY


SR. NO.	PRINTING MACHINE	TOTAL AMOUNT in INR
ITEM A	EFI Reggiani Next 340/4/4	<b>Rs.2,25,00,000 + 18% GST</b>

#### TERMS AND CONDITIONS

- Payment : 100% Advance with confirmed Purchase Order
- Delivery Terms : TBD after placing confirmed Purchase Order
- The Above Price is excluding onsite installation and Training.
- All Octroi, Vat and GST is Extra as applicable
- Quotation Validity : 30 Days
- Limited Warranty : 1 Year (Without Printheads and Consumables)



III. Dye-sublimation transfer facility



**ARROW DIGITAL PVT. LTD.**  
1005-6, "ADITYA", 10th floor, Nr. Sardar Patel Seva Samaj, Mithakhali, Navrangpura, Ahmedabad-380 006.  
Ph: +91 79 2640 4017/18, Email: support@arrow-digital.com, CIN No.U29294GJ2003PTC042332 DTD-02/05/2003

**COMMERCIAL PROPOSAL**

**Date: 23<sup>rd</sup> Aug, 2017**

**To,**  
**Kind Attn. Mr Naresh**  
**Karnal Signage CFC Pvt**  
Ltd. Mugal Majra, Karnal  
Email ID: rajshreekarnal@gmail.com  
Mobile no: 9896347333

**Subject: Quotation for Klieverik GTC81/3400**

**Dear Sir,**

We are pleased to introduce ourselves as the channel partner of **Klieverik**, the world renowned manufacturer of the state-of-art equipments related to the textile Industry. **Klieverik** is complete solution for true digitalizing of textile printing!

As discussed with you, we are making offer of the best and reliable textile printer which suits your requirement, as follows:

Make	Model	Technical Information	Price
Klieverik	GTC81/3400 (Transfer)	Drum Diameter:195 mm/7.7" Drum Width:3400 mm/133.9" Working Width:3200 mm/125.9" Throughput(30Sec.dwell):134m <sup>2</sup> /hr1,446 ft <sup>2</sup> /hr Linear Speed(30Sec.dwell):0.7m/min, 2,3 ft/min	Rs.98L+18% GST


Hope, you will find the quoted price very attractive. We can assure you of our best after sales services & business support also.

**TERMS & CONDITIONS:-**

- Payment: 100% Advance with a confirmed Purchase Order.
- Delivery: TBD after placing confirmed Purchase Order
- The above prices are inclusive of the On-site installation charges as well as the training charges.
- GST will be charge extra as applicable.
- Quote is valid till 30 Days.
- Warranty:1 year

Thanking you meanwhile in anticipation of good business relations, we remain....

**For & on Behalf of,**  
**ARROW DIGITAL PVT. LTD.**



**Authorized Signatory**

IV. Value added Print & Cut rigid media manufacturing facility



Esko-Graphics Pte Ltd  
8 Changi Business Park Ave 1  
UE BizHub East #07-51  
South Tower  
Singapore 486018

T: +65 6420 0399  
F: +65 6420 0377  
  
www.esko.com

## 2. Price proposal

### Software and Services

Product Code	Product Description	Qty	List price in Eur (ex-works)
	<b>Software</b>		
	<b>Structural Design Software</b>		
96AR159Y	ArtiosCAD 3D Drafting Solution	1	10,810.00
	<b>Design Editing &amp; Nesting - i-Cut Layout</b>		
9648855W	i-cut Layout bundle	1	6,760.00
	1 9648364U i-cut Layout		
	1 9648366 Graphics Preparation		
	1 9648367 True Shape Nesting		
EXTWARSW	Software Supreme Care Plan	9	1,902.00
	<b>On-site Services</b>		
9641820	On-site Training - Software - per day	7	2,870.00
9641829	Accommodations fee - per day	7	714.00
9641828	Travel - Within Country (incl. Malaysia)	2	310.00
9641831	Daily Expenses - Within Country	7	147.00
<b>TOTAL in EUROS (CIP, New Delhi airport)</b>			<b>€ 23,513.00</b>
<b>Contract Split-up &amp; Payment terms:</b>			
	<b>Software</b> : 100% advance by T.T.		EUR 19,472.00
	<b>Services</b> : 100% advance alongwith Purchase Order		INR 301,135.00
	a) Service Tax extra @ approx.15% on Software value		
	b) Service Tax extra @ approx. 15% on Services value		
	c) Order confirmation on receipt of INR advance and Euro advance		
	d) Inspection clause is not applicable for Software		
	e) Delivery time is 2 weeks from the date of Euro payment		
	f) Validity of the offer is 90 days		
	g) Service of installation & training included		
	h) Warranty is 12 months from the date of installation		
	i) Networking & Computer Hardware are customer's responsibility		



Esco-Graphics Pte Ltd  
8 Changi Business Park Ave 1  
UE BizHub East #07-51  
South Tower  
Singapore 486018

T: +65 6420 0399  
F: +65 6420 0377

www.esko.com

## Hardware + Services : Kongsberg C64

Product Code	Product Description	Qty	List price in Eur (ex-works)
	<b>Hardware</b>		
	<b>Kongsberg C64 (3210 x 3200mm)</b>		
97AR5529Y	Kongsberg C64 for Sign Production	1	177,020.00
	1 97AR5545 Basic Table C64 Sign (3210x3200 mm) (incl. PC)		
	1 97AR5527 i-camera kit		
	1 97AR5558Z i-cut Production Console Sign Production		
97AR6001	7.5 kW Pump - Power supply 3x380V	1	4,030.00
9643642	Table mains 230V	1	0.00
97AR5456	HCU-C (Heavy-Duty Unit) tool package	1	5,790.00
97AR5457	HPMU-C (Hi-Power Milling Unit) tool package	1	25,930.00
97AR5458	FCU-C (Foam Cutting Unit) tool package	1	7,870.00
97AR5730	Psalligraphy knife Tool-C	1	3,490.00
97AR5459	RotaCut Tool-C tool package	1	4,720.00
97AR5460Z	RM Knife Tool-C tool package, for DR8xxx blades	1	2,960.00
97AR5462	PressCut Knife Tool-C for Adhesive Vinyl	1	2,660.00
97AR5463	HF VibraCut-C tool package	1	4,720.00
G02728004	Starter bit kit, Acrylic. 10x assorted single-flute bits	1	490.00
G02728012	Starter bit kit, Multi-P. 10x assorted single-flute bits	1	490.00
97AR620Y	V-notch Toolkit for PowerHead/HDU, 15mm, 45 degrees	1	1,180.00
97AR5449	Conveyor option for C60, factory installed	1	15,540.00
97AR5451	Wide Format Roll Feeder w. universal 76 mm dia shaft C60/C64	1	4,700.00
	<b>On-site Services</b>		
9641832	On-site Installation - Hardware - per day	3	1,230.00
9641833	On-site Training - Hardware - per day	3	1,230.00
9641833	On-site Training - Hardware - per day	3	1,230.00
9641829	Accommodations fee - per day	9	918.00
9641828	Travel - Within Country (incl. Malaysia)	4	620.00
9641831	Daily Expenses - Within Country	9	189.00
	<b>Freight &amp; Insurance</b>		
960050	Air Freight & Insurance (till New Delhi airport)	1	8,500.00
<b>TOTAL in EUROS (CIP, New Delhi airport)</b>			<b>C 275,507.00</b>
<b>Contract Split-up &amp; Payment terms:</b>			
	<b>Hardware</b> : 100% through LC at sight		EUR 270,090.00
	<b>Services</b> : 100% advance alongwith Purchase Order		INR 403,675.00
a) Custom Duties extra @ approx. 30% on Hardware value b) Service Tax extra @ approx. 15% on Services value c) Order confirmation on receipt of INR advance and LC d) Inspection at factory site can be done without extra charge. Customer to take care of travel, boarding & lodging e) Delivery time is 5 - 6 weeks from the date of LC receipt f) Validity of the offer is 90 days g) Service of installation & training included h) Warranty is 12 months from the date of installation i) Networking & Computer Hardware are customer's responsibility j) Industrial Vacuum cleaner & Compressed Air supply to be arranged by customer as per specs k) Service only AMC chargeable @ INR 2.5 lakh/annum beyond warranty period			



## V. Genset



**INDUSTRIAL EQUIPMENTS COMPANY**  
 AN ISO 9001, 14001, 50001 & OHSAS 18001 Certified Company  
**Karnal Branch:** 2nd Floor, Durga Mandir Complex,  
 Near Bus Stand, Opp. Central Bank, Karnal  
 Tel: 0184-4040509 . 9812050509  
 E – mail: iec.karnal@iecgensets.com . www.iecgensets.com



**REF/IEC-KAR/2017-18/DG/RKC/5033755958 Dated: - 28-08-2017**

M/S KARNAL SIGNAGE CFT PVT LTD  
 AGRO PARK , MUGAL MAZRA BLOCK-C  
 KUNJPURA ROAD, KARNAL

Kind Attn: - MR NARESH (98963-47333)

**SUB: QUOTATION FOR 100 KVA KOEL GREEN SILENT DG SET (CPCB II) WITH STD AMF PANEL (As Per BOM & Deviation Attached)**

**Note: - (Material will be supplied strictly as per manufacturer specification & B.O.M attached)**

Dear Sir,

We acknowledge with thanks the receipt of your valued enquiry referred to above. We are accordingly submitting our most competitive offer for your favorable consideration.

S. No.	DESCRIPTION	UNIT PRICE EACH
1	Supply of <b>100 KVA KOEL GREEN SILENT DG SET</b> comprising of Kirloskar make WATER cooled Diesel Engine model <b>4K1080TA- G2 (CPCB NORMS II COMPLIANT)</b> developing <b>156 BHP @ 1500 RPM &amp; 100 KVA Kirloskar Green</b> make Alternator rated at <b>3 Phase, 415 Volts, 50 Hz; 0.8 p. f. @ 1500 RPM</b> both mounted, and aligned on a common MS base frame complete with MS Fuel Tank, <b>AMF Control Panel (AS PER BOM ATTACH)</b> , Residential Exhaust Silencer, AVM Pads fitted on base frame, 1 Nos. 12 Volts DC Battery (KOEL/TATA GREEN) with Battery Leads, 1 <sup>st</sup> fill of Lube Oil and Coolant, <b>all housed in Sound Proof Acoustic Enclosure.</b>	<b>6,86,440-00</b>
	<b>GST@18%</b>	<b>1,23,560-00</b>
	<b>GRAND TOTAL</b>	<b>8,10,000-00</b>

**TERMS & CONDITIONS**

**PRICE** : - : Ex-Works, Freight EXTRA & transit insurance to customer a/c.

**G.S.T** : **Inclusive @18%. However G.S.T will be charged as applicable at the time of dispatch.**

**DILIVERY**: - 3-4 Weeks from the receipt of your Tecno-comercial clear order with advance

**STATUTORY VARIATIONS**: All state taxes, duties, levies like Octroi, entry tax, WCT, GST etc. and statutory variations or imposition of new taxes/duties shall be to purchaser's account.

**PAYMENT:**    **25% advance along with your confirmed order and balance by D.D.**  
**Fav: INDUSTRIAL EQUIPMENTS CO.,** payable at CHANDIGARH. Against  
Performa Invoice before dispatch Of D.G Set.

**ERECTION:**    As the order is for supply of material, the Erection of the same (As per drawing)  
including material Like Earthling, Cabling & connection with proper thimbling, Civil  
Work, Exhaust Pipe & Unloading of D.G Set etc is not in our Scope, However, we  
will undertake Commissioning of the set free of cost after you complete  
Installation work.

**CANCELLATION:** **All disputes are subject to Chandigarh jurisdiction only. In Case of  
Cancellation of order, 50% advance or 10 % value of Order (whichever  
is higher) shall be deducted as cancellation charges.**

**WARRANTY :** **2 years from the date of installation or 5000 operating hours or 30  
calendar months from dispatch date whichever is earlier, subject to  
sourcing of spares, consumables & services from Kirloskar Authorized  
Service Dealer (KOEL CARE) and DG set installed with proper Installation  
Guidelines.**

**VALIDITY:**    **10 DAYS.**

Please note that the order should be placed on

**M/s INDUSTRIAL EQUIPMENTS COMPANY, BARWALA, DISTT- PANCHKULA (HARYANA).**  
However all the correspondences should be addressed to our booking office at **KARNAL.**

Detailed Technical Specifications attached.

Should you need any further clarification(s). Please feel free to contact the undersigned.

Thanking you,

Yours faithfully,

**FOR INDUSTRIAL EQUIPMENTS CO,**

**(RAJESH CHADHA)**  
BRANCH MANAGER  
M -9812050509, 74045-10509

**RTGS DETAIL: - INDUSTRIAL EQUIPMENTS COMPANY**  
**HDFC BANK A/C NO.01070330000592**  
**IFSC CODE.HDFC 0000107**  
**BANK ADDRESS. SCO 78-79, 18-C, CHANDIGARH**



- VI. Screw Air Compressor (SXC 8 SCB – 8 bar) With Integrated Ref. Air Dryer & Air Receiver of 215 ltr capacity and Carbon Combination Filters



Dated. July 17, 2017

**KARNAL SIGNAGE**  
**c/o Roop Sign Vista**  
**Mayapuri**

**Kind Attn: Mr. Sunil Arora**

**Sub : Offer for COMPRESSD AIR SYSTEM**

Dear Sir,

This is in reference to the telecon the undersigned had with you, we are pleased to submit our offer for Screw Air compressor along with integrated Air dryer with mounted Air receiver, and Micro filter .We are pleased to submit our offer as under:

- 1) Annexure "I" - Offer for "**KAESER**" make Air Compressor with integrated Air dryer & Air Receiver and Micro filters Totally Imported from "**GERMANY**".
- 2) Annexure "II" - Commercial details

We feel that you will find our offer very competitive & attractive. Request you not to hesitate in getting in touch with us if any clarifications are required on commercial & technical matters. We look forward to you for your valued order & would be pleased to meet you all at the time convenient to you to discuss how superiority of our products can be put to service to contribute / to meet your requirement of compressed air system.

Thanking you & assuring you of best of our services at all the times, we remain

**Yours truly,**  
**For – COMPETENT PNEUMATIC PVT. LTD.**

**(RAJESH PRUTHI)**  
**M-09871395567**

**ANNEXURE – “1”**

Sr. No.	DESCRIPTION	PRICE OFFERED
01.	<p><b>SCREW AIR COMPRESSOR (SXC 8 SCB – 8 bar)</b>  <b>With Integrated Ref. Air Dryer &amp; Air Receiver of 215 Itr capacity</b>  <b>(HSN Code – 8414)</b></p> <p>One no of <b>KAESER</b> make single stage fluid cooled air end with world renowned sigma profile heavy duty stationary screw air compressor delivering FAD of <b>0.80 m<sup>3</sup>/min. (28.25 cfm)</b> with a delivery pressure of <b>7.5 bar (g)</b> at the outlet, driven by Electric motor of <b>5.5 kW</b> rated output and have Refrigeration dryer power consumption is <b>0.26 kW only</b>. The FAD Performance data as per ISO 1217 : 2009, Annex C. Sound pressure level as per ISO 2151 and standard ISO 9614-2, Tolerance: <math>\pm 3</math> dB(A) &amp; will be <b>69 dB (A)</b>. The canopy of the compressor is provided with suitable coating of foam to avoid undue noise outside the compressor.  <b>The Compressor employs Vee- Belt Drive.</b></p>	<p><b>Rs. 3,63,000</b></p>
02.	<p><b>CARBON COMBINATION FILTERS: ( Model F 9 KA &amp; F 9 KE)</b>  <b>(HSN CODE :-8421)</b></p> <ul style="list-style-type: none"> <li>▪ Initial differential pressure at saturation &lt; <b>240 mbar</b></li> <li>▪ Aerosol content at Inlet: <b>10 mg/m<sup>3</sup></b></li> <li>▪ Remaining Aerosol content at Outlet as per <b>ISO 12500-1:06-2007 &lt; 0.003 mg/m<sup>3</sup></b></li> <li>▪ Application: <b>for filtration of Solid, Liquids, aerosols and particulate matter for higher compressed air quality and exclusively used for removal of oil vapor's.</b></li> <li>▪ Application: <b>Filtration of solids, liquids, aerosols and particulate matter.</b></li> <li>▪ Capacity: <b>31.78 cfm @ 7bar</b></li> </ul>	<p><b>Rs. 17,000(each)</b></p> <p><b>Total= 34,000</b></p>
	<b>TOTAL AMOUNT</b>	<b>Rs. 3,97,000</b>

## VII. Computer/desktop, HP Laserjet MFP 1005 Printer and HP Scanjet Enterprise 7000 S3



**HORIZON SYSTEMS & COMM. PVT. LTD.**  
 SCO 157, Sector-13, Main Market, Urban Estate,  
 KARNAL- 132 001 (INDIA)  
 Ph : 9896457800,9996656808, 9896302666  
 E-mail : [info@horizonsystems.co.in](mailto:info@horizonsystems.co.in)

**Karnal Signage CSC Pvt. Ltd.**  
**Mugal Majra,**  
**Karnal.**

**Date:- 28-08-17**

**Sub : - Quotation for Desktop, Printer & Scanner.**

Dear Sir,

We are pleased to introduce Horizon provide all kind of IT Products (Desktop, Laptop, Printers, Servers, branded with reasonable price. Our main focus is how we can help our clients to get more traffic and leads for their business. We provide a different set of IT Solutions. Internet Lease Lines & AMC Support that enables customer to focus on driving competitive advantages in their operations.

Horizon deals in **World's no 1 Ricoh Photocopier with UNBELIEVABLE PRICE (Buy Back Offer)**

**Horizon Products Line:-** CCTV Cameras/Computers/ Laptops/ Server/ A3 Size Photocopier/ Copy Printer/Laser & Mfp Printer/ LCD Projectors / Online & Off line Ups/Smart-School Contents / Interactive Board/ Visualizer/Reliance Data cards, Internet Lease Lines, MPLS VPN, PRI LINES, TOLL FREE NOS./Networking products/ Bio Metric Time attendance Machine.


Sr.No	Item	Qty.	Unit Price	Total	GST
01	<b>Lenovo Desktop</b> <ul style="list-style-type: none"> <li>Processor - Intel Core i7</li> <li>Hard Drive-1TB</li> <li>Ram-8GB DDR4</li> <li>Display-19.5"</li> <li>Graphics Card- 2 GB</li> <li>Keyboard</li> <li>Mouse- Optical</li> <li>O.S - Dos</li> <li>Warranty-3 Year</li> </ul>	15	72000/-	10,80,000/-	Inclusive
02	<b>HP Laserjet MFP 1005 Printer</b> <ul style="list-style-type: none"> <li>Warranty 1year</li> </ul>	02	17500/-	35,000/-	Inclusive
03	<b>HP Scanjet Enterprise 7000 S3</b> Warranty 1year	01	88500/-	88,500/-	Inclusive
<b>Grand Total</b>				<b>1203500/-</b>	

**Terms & Condition:**

- Payment : 100% against delivery.
- GST No. : 06AAACH4028G1ZZ
- Mobile No. : 9896457800,9896302666

Kindly contact the undersigned for any further clarification and information you may require regarding the product,. We look forward for your valuable response and assuring for best of our services at all times to come. Looking forward for your valuable order. We remains.

- VIII. UPS with Battery Circuit Breaker and Inbuilt Isolation Transformer (1) Battery 12V, 150AH (34) Battery Rack, Battery Interconnecting Cable, UPS to Battery Cable 4m along with Installation (1)

 <b>Swift Sales</b> 121-D,Pocket-B,Mayur Vihar Phase-2, Delhi-110091 Mob: +91 9810927854 Email:swiftsales1@gmail.com GSTIN:07AFXPJ3526L1ZV													
<b>QUOTATION</b>													
To, M/S. Graphics Pvt. Ltd. Kirti Nagar.										Date: 13th July 2017 Quotation No.: Q-1516/02-388			
S. No.	Product Description	HSN code	UOM	Qty	Rate	Amount	Discount	Taxable Value	CGST		SGST		Total
1	Supply of 120KVA Emerson Liebert Hipulse Online UPS with Battery Circuit Breaker and Inbuilt Isolation Transformer			1	828000	828000	0	828000	9	74520	9	74520	977040
2	Supply of Emerson Approved SMF Battery 12V, 150AH			34	10500	357000	0	357000	14	49980	14	49980	456960
3	Supply of Battery Rack, Battery Interconnecting Cable, UPS to Battery Cable 4m along with Installation.			1	69000	69000	0	69000	9	6210	9	6210	81420
<b>Total</b>				36		1E+06	0	1254000		130710		1E+05	1515420
Total amount in words									Total Amount before Tax		1254000		
Fifteen Lakh Fifteen Thousand Four Hundred Twenty Only.									Add: CGST		130710		
									Add: SGST		130710		
									Total Tax Amount		261420		
									Total Amount after Tax:		1515420		
									GST on Reverse Charge				
									I hereby certify that the particulars given above are true and correct. <b>For Swift Sales</b>  Authorised signatory				
<b>Sr. TERMS AND CONDITIONS</b> <b>1 PRICE BASIS</b> a. The prices quoted in our offer are inclusive of GST @ 18% on UPS and 28% on Batteries. b. Government levies such as entry tax along with service charge payable on the same, will be to your account. c. Road Permit for the transfer of goods in the scope of customer. <b>2 PAYMENT TERMS</b> 50% Advance along with the order & 50% prior to Dispatch of material. <b>3 VALIDITY</b> Our offer is valid for the period of 10 days. <b>4 DELIVERY</b> Within 2-3 weeks from the date of receipt of PO along with advance. <b>5 EXCLUSIONS</b> a. Any type of civil/ labour/cable work is not included in our scope of supply and will be arranged by you. Anything, which is not covered in our offer, terms and conditions of supply. <b>6 WARRANTY</b> 12 months from the date of commissioning or 13 months from the date of supply whichever is earlier on UPS and Batteries.													

IX. Air Conditioners

## SHRIRAM TRADERS

#139 Dyal Singh Colony, Kunjipura Road, Karnal- 132001

### QUOTATION

To,

KARNAL SIGNAGE CEC. PVT. LTD.

VPO. MUGAL MAJRA,

KARNAL:- 9896347333

Subjects:- Quotation of VRF Scrolling Ductable Air Conditioners.

Particulars	Unit Price
(1) <u>CARRIER VRF INVERTER SCROLL 22HP(17.6 Ton) OUTDOOR</u>	5,50000.00
* Add CGST 14% + SGST 14% = 28%	<u>1,54000.00</u>
* Total Value	<u>= 7,04000.00</u>

Terms and Conditions :-

- Above model of Air Conditioner on Advance Payment.
- Duct and Installation expenses will be extra.
- Delivery for above model after receiving the Purchase Order.

Within 15 days

- Servo stabilizer will be extra.

Date:- 24/10/2017

Shriram Traders, Karnal

Manoj Sardana 9812792000



Annexure 8: Minutes of Meeting - Validation meeting of Detailed Project Report (DPR) of Karnal Signage & advertising cluster under MSE-CDP scheme of DCMSME

# Our offices

Ahmedabad  
2nd Floor, Shivalik Ishaan  
Near CN Vidhyalaya,  
Ambawadi,  
Ahmedabad - 380 015  
Tel: + 91 79 6608 3800  
Fax: + 91 79 6608 3900

Bengaluru  
"UB City", Canberra Block  
12th & 13th floor  
No.24, Vittal Mallya Road  
Bengaluru - 560 001  
Tel: + 91 80 4027 5000,  
+ 91 80 6727 5000  
Fax: + 91 80 2210 6000  
Fax: + 91 80 2224 0695

Chandigarh  
1st Floor, SCO: 166-167  
Ernst & Young Pvt. Ltd.  
Sector 9-C, Madhya Marg,  
Chandigarh, Punjab 160009  
Tel: +91 172 6717800  
Fax: +91 172 6717888

Chennai  
TPL House, 2nd floor  
No 3, Cenotaph Road  
Teynampet  
Chennai - 600 018  
Tel: + 91 44 4219 4400  
+ 91 44 6632 8400  
Fax: + 91 44 2431 1450

Hyderabad  
205, 2nd floor  
Ashoka Bhoopal Chambers  
Sardar Patel Road  
Secunderabad - 500 003  
Tel: + 91 40 6627 4000  
Fax: + 91 40 2789 8851

Oval Office, 18, iLabs Centre,  
Hitech City, Madhapur,  
Hyderabad - 500081  
Tel: +91 40 6736 2000  
Fax: +91 40 6736 2200

Kochi  
9th Floor, Abad Nucleus  
NH-49, Maradu PO  
Kochi, Kerala 682304, India  
Tel: + 91 484-3044000  
Fax: + 91 484 2705393

Kolkata  
22, Camac Street  
Block 'C', 3rd floor  
Kolkata - 700 016  
Tel: + 91 33 6615 3400  
Fax: + 91 33 2281 7750

Mumbai  
6th floor & 18th floor  
Express Towers  
Nariman Point  
Mumbai - 400 021  
Tel: + 91 22 6657 9200 (6th floor)  
+ 91 22 6665 5000 (18th floor)  
Fax: + 91 22 22876401 (6th floor)  
+ 91 22 2282 6000 (18th floor)

Block B-2, 5<sup>th</sup> Floor,  
Nirlon Knowledge Park,  
Off Western Express Highway,  
Goregaon (E), Mumbai - 400 063  
Tel: +91 22 6749 8000  
Fax: +91 22 6749 8200

15th Floor, The Ruby, 29,  
Senapati Bapat Marg, Dadar (W), Mumbai  
- 400 028, India  
Tel: +91 22 6192 000

NCR  
Golf View Corporate Tower - B  
Near DLF Golf Course  
Sector 42  
Gurgaon - 122002  
Tel: + 91 124 464 4000  
Fax: + 91 124 464 4050

6th floor, HT House  
18-20 Kasturba Gandhi Marg  
New Delhi - 110 001  
Tel: + 91 11 4363 3000  
Fax: + 91 11 4363 3200

4th and 5th Floor, Plot No. 2B, Tower 2,  
Sector 126, NOIDA - 201 304  
Gautam Budh Nagar, UP, India  
Tel: +91 120 671 7000  
Fax: +91 120 671 7171

Pune  
C-401, 4th floor  
Panchshil Tech Park  
Yerwada (Near Don Bosco School)  
Pune - 411 006  
Tel: + 91 20 6603 6000  
Fax: + 91 20 6601 5900  
Fax: + 91 33 2281 7750

## Ernst & Young LLP

Assurance | Tax | Transactions | Advisory

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