

25th November 2017

Director

Department of Industries & Commerce, Government of Haryana 1st 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 a Centre of Knitting in the Faridabad Women Knitwear 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
- DIC Faridabad
- Garment units located in and around Faridabad
- 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 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 Center for Fabric Knitting for Faridabad women knitwear 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-HR)' (hereinafter referred to as 'the Client').

The inferences and analyses made by EY in this report are based on information collated through primary research, secondary research, discussions with the client personnel and key stakeholders and our knowledge about the state mini cluster development scheme and its objectives. EY has taken due care to validate the authenticity and correctness of the information from various sources, however, no representations or warranty, expressed or implied, is given by EY or any of its respective partners, officers, employees or agents as to the accuracy or completeness of the information, data or opinions provided to EY by third parties or secondary sources.

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Acknowledgement

This Draft Detailed Project Report for development of **Center for Fabric Knitting** as common facility centre for Faridabad women knitwear 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-HR)' (hereinafter referred to as 'the Client').

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Abbreviations

AEMA	Apparel Exporters & Manufacturers Association	
AEPC	Apparel Export Promotion Council	
ATDC	Apparel Training & Design Centre	
BDS	Business Development Services	
CAGR	Compound Annual Growth Rate	
CFC	Common Facility Centre	
DIC	District Industries Centre	
DSR	Diagnostic Study Report	
EU	European Union	
GDP	Gross Domestic Product	
GSDP	Gross State Domestic Product	
HFC	Haryana Financial Corporation	
HSIIDC	Haryana State Infrastructure & Industrial Development Corporation	
HUDA	Haryana Urban Development Authority	
IAM	Institute of Apparel Management	
IAMSME	Integrated Association of Micro, Small & Medium Enterprises	
IDBI	Industrial Development Bank of India	
MSME	Micro, Small and Medium Enterprises	
MSME-DI	MSME - Development Institute	
NCR	National Capital Region	
NIFT	National Institute of Fashion Technology	
NITRA	North India Textile Research Association	
NSIC	National Small Industries Corporation	
SBI	State Bank of India	
SIDBI	Small Industries Development Bank of India	
SWOT	Strength, Weaknesses, Opportunities and Threats	
TIT&S	The Technological Institute of Textile & Science	
UAM	Udyog Aadhar Memorandum	
USA	United States of America	

Table of contents

Executiv	e summary	9
1. Intr	oduction	16
1.1	Overview of the Cluster	16
1.2	About the State	16
1.3	Industrial Scenario ofFaridabad District	17
1.4	Geographical Traits	17
1.5	Demographic Trends and Economic Structure	18
2. Sec	tor Overview	20
2.1	Brief Global Scenario	20
2.2	India Scenario	21
2.3	Textile and Garment Sector in Haryana	22
2.4	Cluster Scenario	23
3. Diag	gnostic Study Findings	27
3.1	Cluster Actors and their role	27
3.2	Cluster Market,Employment and Turnover	31
3.3	Production Process	32
3.4	Value Chain Analysis	37
3.5	Strengths, Weaknesses, Opportunities and Threats (SWOT) Analysis	39
3.6	Major Issues / Problem Areas of the Cluster	43
3.7	Key technologies missing	44
3.8	Cluster growth potential	46
4. Diag	gnostic Study Recommendations	48
4.1	Soft Interventions for Setting up a CFC	48
4.2	Hard Interventions for Setting up a CFC	50
4.2.1	Fabric Knitting Facility	50
4.3	Expected Outcome after Intervention	52
5. SPV	for Project Implementation	55
5.1	Shareholder profile and Shareholding mix	55
5.2	Initiatives undertaken by the SPV	59
5.3	SPV Roles and Responsibilities	59
6. Proj	iect Economics	62
6.1	Project Cost	62
6.1.1	Building	62
6.1.2	Plant and Machinery	62
6.1.3	Miscellaneous Fixed Assets	65
614	Preliminary and Pre-operative Expenses	65

6.1.5	Provision for Contingencies	66
6.1.6	Margin Money for Working Capital	66
6.1.7	Summary Project Cost	66
6.2	Means of Finance	67
6.2.1	Share Capital	67
6.2.2	Grant-in-Aid	67
6.3	Expenditure Estimates	68
6.3.1	Consumables	68
6.3.2	Manpower Requirement	72
6.3.3	Utilities	72
6.3.4	Annual Repairs and Maintenance Expenses	74
6.4	Working Capital Requirements	75
6.5	Depreciation Estimates	77
6.6	Income/Revenue estimates	80
6.7	Estimation of profitability: Income and Expenditure statement	84
6.8	Cash flow statement	87
6.9	Projected Balance Sheets	88
6.10	Break-even analysis	90
6.11	Feasibility analysis summary and sustainability indicators	92
6.12	Additional revenue sources	93
6.13	Risk Analysis & Sensitivities	93
6.14	Assumptions for financial calculations:	94
7. Pro	ject Implementation and Monitoring	97
7.1	Envisaged Implementation Framework	97
7.2	Monitoring Mechanism	98
8. Cor	nclusion	101
8.1		102
9. Anı	nexures	103
Anne	kure 1: DSR approval & DPR preparation Letter	103
Anne	cure 2: MoM of DPR Validation	104
Anne	cure 3(a): SPV Certificate of Incorporation	111
Anne	cure 3 (b) Copy of Memorandum of Association and Article of Association	112
Anne	cure 4: Verification of units by DIC, Faridabad	113
Anne	kure 5: Building Availability Proof	114
Anne	kure 6: Shareholding Pattern	115
Annex	xure 7: Machinery Quotations	116

List of Figures

Figure 1: GSDP Composition 2015-16	. 16
Figure 2: District Map of Faridabad	. 17
Figure 3: Global Apparel Market Segmentation (based on global export data)	. 21
Figure 4: Textile and Garment Exports from India (US\$ billion)	. 21
Figure 5: Indian Textile & Garment Industry Snapshot	. 22
Figure 6: Textiles and Garment Industry Trends in Haryana	. 23
Figure 7: Size and Nature of Cluster Units	. 24
Figure 8: Key Cluster Actors	. 31
Figure 9: Flow Chart of Production Process	. 33
Figure 10: Steps in the Production Process	. 34
Figure 11: Organisational Structure	. 60
List of Tables	
Table 1: Value Chain Analysis of Embroidered Blouse	. 37
Table 2: SWOT analysis of the cluster	. 39
Table 3: Technology Gaps Identified and Interventions	. 44
Table 4: Expected Outcome of CFC	. 53
Table 5: List of Directors	. 56
Table 6: Details of SPV Members of Faridabad Garment Cluster	. 57
Table 7: Miscellaneous Fixed Assets	. 65
Table 8: Preliminary and Pre-Operative Expenses	. 65
Table 9: Total Project Cost	. 66
Table 10: Means of Finance	. 67
Table 11: Consumables	. 68
Table 12: Expenditure Related to Salary (direct manpower - machine operators and helpers)	. 72
Table 13: Expenditure Related to Salary (indirect manpower - administrative and support staff).	. 72
Table 14: Machine & Equipment (facility) wise power requirement	. 73
Table 15: Annual Expenditure Statement vis-à-vis Power Charges	. 74
Table 16: Annual Repairs and Maintenance Expenditure	. 74
Table 17: Insurance and Miscellaneous Administrative Expenses	. 74
Table 18 Working Capital Requirements	. 75
Table 19: Depreciation based on WDV	. 77
Table 20: User Charges for Machinery	. 80
Table 21: Income and Expenditure Statement	. 84
Table 22: Cash Flow Statement	. 87
Table 23: Balance Sheet	. 88

Table 24: Break Even Estimates	90
Table 25: Financial Analysis	92
Table 26: Calculation of Return on Capital Employed	92
Table 27: Sensitivity Analysis	93
Table 28: Project Implementation Schedule	97

Executive Summary



Executive summary

The Government of Haryana through the Department of Industries and Commerce intends to transform the MSME sector of the state and put it on a growth path. Several incentives have been offered under the state's ambitious 'Enterprise Promotion Policy (EPP) 2015' to provide an impetus to growth of the MSME sector. Towards this, the state aims to strengthen the technology infrastructure as well as enhance productivity and competitiveness of various MSME clusters across the state by leveraging funding under the State Mini Cluster Development Scheme providing grant under its EPP 2015.

In this context, this draft Detailed Project Report (DPR) has been prepared to seek grant-inaid assistance under the State Mini Cluster Development Scheme to set up a **Centre for Fabric Knitting** for Faridabad women knitwear cluster.

About the Faridabad Women's Knitwear

Despite the global economic downturn, the global apparel industry continues to grow at a healthy rate and this, coupled with the absence of switching costs for consumers and product differentiation, means that rivalry within the industry is no more than moderate.

The global apparel market is worth approximately US\$ 1.7 trillion, and constitutes around 2% of the world's GDP. EU, USA and China are the world's largest apparel markets with a combined share of approximately 54%. The top 8 apparel consuming nations form a dominating share of 70% of the global apparel market size. The global market size is expected to reach US\$ 2.6 trillion in 2025, growing at a projected rate of 4%. The major growth drivers of the global apparel market will be the developing economies, mainly China and India, both growing in double digits. China will become the largest apparel market, while India will be the second most attractive apparel market adding more than US\$ 121 billion by 2025.

India's textile and garment sector is one of the oldest industries in Indian economy dating back several decades. Even today, textile and garment sector is one of the largest contributors to India's exports with approximately 11 per cent of total exports. As per IBEF data, the domestic textile and garment industry in India is estimated to reach US\$ 141 billion by 2021 from US\$ 67 billion in 2014. Increased penetration of organised retail, favourable demographics, and rising income levels are likely to drive demand for textiles. Textile and apparel exports from India were US\$ 40 billion in 2016, and expected to increase to US\$ 82 billion by 2021. Readymade garments remain the largest contributor to total textile and apparel exports from India, contributing 40 per cent to total textile and apparel exports.

There are about 500 garment manufacturing units in Faridabad district, Haryana, with 11 units willing to join hands to form a Special Purpose Vehicle (SPV) to set up a Common Facility Centre (CFC) to address common problems of the cluster. The cluster comprises of 500 micro and small units, of which a significant number are run by female entrepreneurs. This is a unique cluster, as it will be the first women's cluster under the program, run by women and for women. Several micro and small level women entrepreneurs face challenges in getting fabric knitted due to high costs or lack of local availability. The annual turnover of the cluster (micro and small units) is about INR 700 Crore. The cluster units are engaged

in garment manufacturing, including knitting, cutting, stitching, washing, finishing, packing, etc. Most units manufacture for other brands, while some also manufacture under their own brands in addition to manufacturing garments for other brands. They manufacture garments with either woven or knitted fabric, with knitted fabric having a greater demand.

Diagnostic Study and Interventions

A diagnostic study was undertaken by the cluster members inSeptember 2017 to map the existing business processes in the cluster, identify the gaps, and understand the requirements of the cluster. It was observed that most units required fabric knitting facilities, as they were currently availing these services from external service providers at high prices or with production delays. This resulted in a negative impact on their cost competitiveness as well as production delays. In this context, the units decided to establish a CFC.

A DSR validation meeting was conducted with SPV and cluster members on 04^{th} September 2017. The DSR was approved by the Director of Industries & Commerce on 21^{st} November 2017 and the SPV was granted permission to go ahead with preparation of Detailed Project Report (DRP) for the cluster.

Proposed Common Facility Centre

The proposed CFC will facilitate:

▶ Fabric knitting facility for various types of fabric knitting machines

Such a common facility will both supplement and complement the activities of firms in the cluster, and there is no similar facility available in the district for use by cluster MSEs. The proposed common facilities will be utilized by the SPV members and will also be available to non-members units within and outside the cluster. The facility will provide a much needed technological push to the cluster units and will enable them to become more competitive.

Special Purpose Vehicle for Project Implementation

After the diagnostic study, the cluster units came together to form a Special Purpose Vehicle (SPV) by the name and style of 'Faridabad Knitwear Pvt Ltd.' The SPV has been set up as a private limited company under section 8 of the Companies Act, 1956 and rule 8 of the Companies (Incorporation) Rules, 2014. DIC, Faridabad and MSME-DI have played an important role in SPV formation by cluster stakeholders. The SPV was incorporated in 2017, and includes about 11 members who are subscribing to the necessary equity base of the company. The proposed CFC will be implemented on public-private partnership basis through the SPV 'Faridabad Knitwear Pvt Ltd.' by availing support from Government of Haryana.

The SPV members have a track record of cooperative initiatives. SPV members are also members of prominent cluster associations. Cluster members have been autonomously undertaking several soft interventions to enhance knowledge and exposure of the cluster units on new trends in the garment industry and enhancing productivity of their units. This includes exposure visits to fairs and sharing of best practices, registration under UAM,

awareness programs on new trends in garment manufacturing, entrepreneurship development, IPR, energy efficiency, GST, barcoding, equity schemes, SME IPO process, sustainability, etc. These programs were conducted in collaboration with DIC, State Government, IAMSME of India, etc.

Project Parameters, Viability and Sustainability

The SPV with support from State Government is planning to set up a common facility centre having state-of-the-art fabric knitting facilities to undertake job work of cluster units with a total project cost of about Rs.246.82 lakhs (2.47 crores). The SPV members have proposed to contribute 27% of the project cost. The total contribution of SPV members will amount to Rs. 0.67 crores. Support from State Government is envisaged for Rs. 1.8 crores (73%).

The cost of the project and proposed means of finances is tabulated below:

	PROJECT COST			
S. No.	Particulars	Total Project Cost	Amount as per Guideline s	Remarks
1	Land & Building			
	a. Land Value	0.00		Eligible
	b. Land Development	0.00	0.00	(Max 25% of total of
	c. Building & Other Civil Works	0.00	0.00	L&B, P&M,
	d. Building Value	0.00		and Misc.
	Sub Total (A)	0.00	0.00	F.A.)
2	Plant & Machinery			
	a. Indigenous	0.00		
	b. Imports	213.40	200.00	Eligible
	c. Secondary Machines	5.97		
	Sub Total (B)	219.37	200.00	
3	Miscellaneous fixed assets (C)	1.80	0.00	
4	Preliminary & Preoperative Expenses (D)	9.63	0.00	
5	Contingency			
	a. Building @ 2%	0.00	0.00	Not eligible
	b. Plant & Machinery @ 5%	10.97	0.00	for grant
	Sub Total (E)	10.97	0.00	
6	Margin money for working capital @ 75% C.U. (F)	5.06	0.00	
	Grand Total (A+B+C+D+E+F)	246.82	200.00	

The total project cost is estimated to be Rs. 247 lakh. As indicated above, assistance to the project from the Govt. of India is envisaged to the tune of 73% of the project cost, SPV contribution is to the tune of 27% of the project cost.

S. No. Source of finance		Project cost upt	o INR 200.00 lacs
		Percentage Contribution	Amount (INR in lacs)
1	Grant-in-aid under MSE-CDP (Govt. of India)	90	180.00
2	Contribution of SPV	10	66.82
Total		100	246.82

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

Project's financial indicators

FEASIBILITY				
S. No.	Particulars	Estimates		
1	BEP (cash BEP at initial operating capacity of 75%)	58.62%		
2	Av. ROCE (PAT/CE)	29.66%		
3	Internal Rate of Return (IRR)	24.97%		
	Net Present Value (at a discount rate of 10 per	NPV is positive and high (Rs.		
4	cent) - incorporating viability gap funding (grant)	187.57lacs) at a conservative		
	by GoH	project life of 10 years		
5	Payback period	4.81 years with Grant-in-aid		
		assistance from GOH		
6	IDSCR	Not Applicable (non-availment of		
Ö		term loan in this project)		

As evident from the financials above, with viability gap funding under State Mini Cluster Development Scheme of GoH, the project is highly viable and sustainable. 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 7 months upon receipt of final approval of grant-in-aid assistance from the Government of Haryana under State Mini Cluster Development Scheme. The project will be implemented by the SPV in close association with DIC, Faridabad and the State government. It is proposed to constitute a Cluster Development Coordination Committee (CDCC), constituted under the Chairmanship of Director of Industries, Government of Haryana to oversee all cluster development projects in Haryana under State Mini Cluster Development Scheme. The committee may operate under the overall monitoring of the State Level Steering Committee (SLSC).

In addition, for implementing this CFC project, a Project Management Committee (PMC) comprising of the GM, DIC Faridabad, representatives of the SPV, IAMSME of India, and EY experts shall be constituted to directly oversee effective monitoring and implementation. The project will be implemented through the SPV, and the PMC will report progress of implementation to the CDCC as well as State Level Steering Committee and DIC, Faridabad.

The potential for the Faridabad garment cluster to grow is enormous, owing to the growing market demand for garments in India and globally. The strengths of the Faridabad garment cluster lie in its location (both geographically & industrially), with alarge textile industry which provides the key raw material for garments, and its proximity to Delhi which is a key supply hub. Cluster units are unable to effectively cater to the domestic and international markets as they are lacking in price competitiveness and efficiency due to lack of fabric kintting facilities.

This cluster has the ability to increase its output and market share by manufacturingprice competitive products. The proposed facility will be open to all cluster firms to enable them to get job work done in order to cater to the fabric knittingrequirements of the market. The facility will also provide an opportunity to MSE units to increase their capacity utilization and profitability. The facility will provide a major technological push to the units reeling under high competition. The CFC will also enhance the co-operation and joint action among cluster stakeholders to improve their competitiveness to meet the demands of the domestic as well as international markets.

Introduction



1. Introduction

1.1 Overview of the Cluster

There are about 500 garment manufacturing units in Faridabad district, Haryana, with 10 units willing to join hands to form a Special Purpose Vehicle (SPV) to set up a Common Facility Centre (CFC) to address common problems of the cluster. The cluster comprises of 500 micro and small units, of which a significant number are run by female entrepreneurs. This is a unique cluster, as it will be the first women's cluster under the program, run by women and for women. Several micro and small level women entrepreneurs face challenges in getting fabric knitted due to high costs or lack of local availability. The annual turnover of the cluster (micro and small units) is about INR 700 crores. The cluster units are engaged in garment manufacturing, including knitting, cutting, stitching, washing, finishing, packing, etc. Most units manufacture for other brands, while some also manufacture under their own brands in addition to manufacturing garments for other brands. They manufacture garments with either woven or knitted fabric, with knitted fabric having a greater demand.

1.2 About the State

Haryana is 11th state in the country in terms of GSDP, with growth rate of around 6.5%. With just 1.3% of the total area of the country, Haryana contributes to nearly 3.4% of India's GDP. Haryana, with just 1.37% of the country's geographical area and 1.97% of country's total population, is counted among the first few states with the highest per capita income. The state economy is predominantly agricultural.

The industry sector contributes about 18% of the total GSDP of the

GSDP Composition 2015-16

0
18.20%

51.20%
30.60%

Primary Sector Secondary Sector Tertiary Sector

Figure 1: GSDP Composition 2015-16

state. Haryana is fast emerging as one of the most favoured investment destinations in India. The globalization of markets and a resilient economy have given an incredible drive to the industrial sector in Haryana, which already has a competitive advantage in terms of strategic location, basic infrastructure as well as large skilled, educated and young workforce. Besides, the State has investor-friendly policies and regulatory environment as outlined in its recent EPP 2015. It is one of the leading states in terms of industrial production, especially passenger cars, mobile cranes, two-wheelers & tractors. It is the 2nd largest contributor of food grains to India's central pool, accounts for more than 60% of the export of basmati rice in the country and is 3rd largest exporter of software.

The state is in transition from agrarian to manufacturing sector. The state is gradually transforming from an agrarian economy to an industrial economy. To boost the growth rate further and make Haryana a favourable investment destination, the State has developed the

Enterprise Promotion Policy in 2015. With the Enterprise Promotion Policy-2015, the state has envisaged a sustainable industrial spectrum in the state with a special focus on MSMEs in its endeavour for effecting a balanced regional and sustainable development. In order to accelerate the industrial growth in the state, the focus of the government is on holistic development, i.e., by encompassing initiatives for resource efficiency improvement, smarter technology, and environment friendly methods which reduce resource consumption.

1.3 Industrial Scenario of Faridabad District

Faridabad is the largest city in the district, and one of the major industrial hubs of the state as well as North India. Large and renowned brands have their manufacturing facilities in the district. The proximity to the national capital also makes it a lucrative investment destination industrially and commercially, with a portion of the district falling in the National Capital Region. The district is well connected by road and railway. National Highway No. 2 and the prominent Mathura Road pass through the district. It is in close proximity to Delhi and thus has domestic and international airport access.

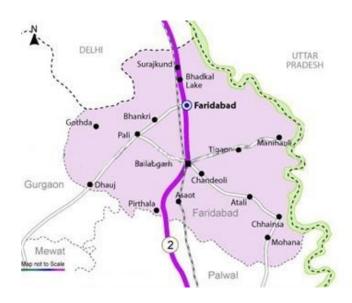
Haryana Urban Development Authority (HUDA) and Haryana State Industrial and Infrastructure Development Corporation (HSIIDC) have multiple industrial estates and areas in the district which house facilities belonging to a plethora of sectors. Also, Mathura Road has large and prominent industrial presence as well. Auto ancillary industries also form a major chunk of the industrial units present in the region.

1.4 Geographical Traits

Faridabad district has an area of approximately 742.9 sq. km. It is about 25 kilometres from Delhi. It is bounded by Union Territory of Delhi (National Capital) on its north, Palwal District in the south, Gurgaon District on the west. The river Yamuna separates the district boundary on the eastern side with UP state. Delhi-Agra National Highway No.2 passes through the centre of the district.

The city of Faridabad is also seeing rapid development and positive incentive commercially with the entry of the Delhi Metro Corridor. The extension of the Delhi metro beyond Faridabad would benefit the area through improved connectivity with other parts of Haryana.

Figure 2: District Map of Faridabad



1.5 Demographic Trends and Economic Structure

The total population of Faridabad district as per 2011 census is 1,809,733, with nearly 80% of the population being urban. The district has a population density of 2,442 per square kilometre. Faridabad district comprises approximately 7% of the State's total population. Faridabad has a sex ratio of 873 females per 1000 males, and a literacy rate of about 82%.

Faridabad is the industrial heart of Haryana. It is a home to hundreds of large scale companies like Auto Ignition Limited (AUTO-LEK), Star Wire India Limited, JCB, Escorts, Yamaha, Knorr Bremse, ACE, ABB, GoodYear, ACC, IndianOil(R&D), Whirlpool, Easy Infotech, Jham Plastic Industries, Havell's, L&T, Sangeeta Industries, WEBTECH Engineering etc. Faridabad is also emerging as an IT hub for the small and medium level enterprises, providing the resources such as skilled and qualified professionals with a lot of scope of doing business due to proximity to the national capital New Delhi.

Sector Overview



2. Sector Overview

Industries in the apparel manufacturing subsector group include establishments with two distinct manufacturing processes:

- (1) Cut and sew (i.e., purchasing fabric and cutting and sewing to make a garment), and
- (2) Manufacture of garments in establishments that first knit fabric and then cut and sew the fabric into a garment.

The apparel manufacturing subsector includes a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel manufacture; and tailors, manufacturing custom garments for individual clients are all included. Knitting, when done alone, is classified in the textile mills subsector, but when knitting is combined with the production of complete garments, the activity is classified in apparel manufacturing.

2.1 Brief Global Scenario

Despite the global economic downturn, the global apparel industry continues to grow at a healthy rate and this, coupled with the absence of switching costs for consumers and great product differentiation, means that rivalry within the industry is no more than moderate. The apparel industry is of great importance to several economies in terms of trade, employment, investment and revenue. This particular industry has short product life cycles, vast product differentiation and is characterized by great pace of demand change coupled with rather long and inflexible supply processes.

The global apparel market is worth approximately US\$ 1.7 trillion, and constitutes around 2% of the world's GDP. EU, USA and China are the world's largest apparel markets with a combined share of approximately 54%. The top 8 apparel consuming nations form a dominating share of 70% of the global apparel market size. The global market size is expected to reach US\$ 2.6 trillion in 2025, growing at a projected rate of 4%. The major growth drivers of the global apparel market will be the developing economies, mainly China and India, both growing in double digits. China will become the largest apparel market adding more than US\$ 378 billion in market size by 2025, while India will be the second most attractive apparel market adding more than US\$ 121 billion by 2025. The global textile and apparel trade stood at US\$ 820 billion in 2014, growing at a CAGR of 5.6% over the last decade. Apparel categories had a larger share of 56%, while textile categories had the remaining share of 44% in the overall trade. EU & USA are the largest markets for textile and apparel with a share of 36% and 15% respectively¹

The largest segments of the garment industry are women's suits, dresses, skirts & shorts with a 28% share; followed by men's suits, jackets & trousers with a 17% share; Jersey pullovers & cardigans with a 14% share; T-shirts, singlets, vests with 11% share; men's shirts with a 7% share; women's blouses & shirts with a 5% share, etc. The market segmentation of the global apparel industry is provided in figure 3²:

¹FICCI White Paper - Global Shifts in Textile Industry & India's Position - 2016

² International Apparel Federation

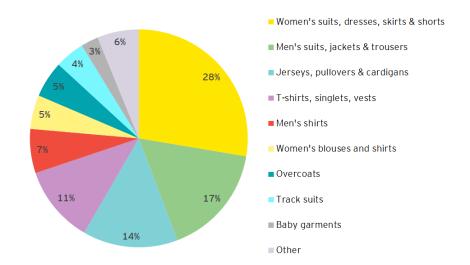


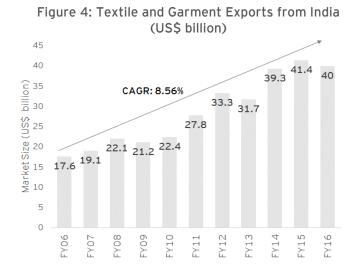
Figure 3: Global Apparel Market Segmentation (based on global export data)

2.2 India Scenario

India's textile and garment sector is one of the oldest industries in Indian economy dating back several decades. Even today, textile and garment sector is one of the largest contributors to India's exports with approximately 11 per cent of total exports. The textile and garment industry is also labour intensive and is one of the largest employers. The textile and garment industry can be broadly divided into two segments - yarn and fibre, and processed fabrics and apparel. India accounts for ~14 per cent of the world's production of textile fibres and yarns (largest producer of jute, second largest producer of silk and cotton, and third largest in cellulosic fibre). India has the highest loom capacity (including hand looms) with 63 per cent of the world's market share.

As per IBEF data, the domestic textile and garment industry in India is estimated to reach US\$ 141 billion by 2021 from US\$ 67 billion in 2014. Increased penetration of organised retail, favourable demographics, and rising income levels are likely to drive demand for textiles.³ The trend of exports of textiles and garments from India is illustrated in figure 4.

India was the third largest exporter of textiles in 2015, and the 8th



largest exporter of clothing (behind China, European Union, Bangladesh Vietnam, and Hong Kong)⁴. Textile and apparel exports from India were US\$ 40 billion in 2016, and expected to increase to US\$ 82 billion by 2021. Readymade garments remain the largest contributor to total textile and apparel exports from India, contributing 40 per cent to total textile and

³ IBEF - Textile and Apparel Industry in India

⁴ WTO - World Trade Statistical Review 2016

apparel exports. Cotton and man-made textiles were the other major contributors with shares of 31 per cent and 16 per cent, respectively. A snapshot of the Indian textile and garment industry is provided in figure 5:

Textile & Apparel Industry CAGR: The domestic textile and apparel Rising per capita income, 223 12.84% industry in India is projected to reach favourable demographics USD223 billion by 2021. The and a shift in preference to 137 domestic textile industry stood at 108 branded products to boost USD137 billion in 2016, witnessing demand growth from USD108 billion in 2015. FY 15 FY 16 2021E US\$ billion Textile & Apparel Exports CAGR: 12.06% Textile & apparel exports from India 82 Favourable trade policies is expected to increase to US\$ 82 and superior quality to billion by 2021 from US\$ 39.66 in 39.6 drive textile exports 2016 18.7 FY 15 FY 16 2021E

Figure 5: Indian Textile & Garment Industry Snapshot⁵

2.3 Textile and Garment Sector in Haryana

The textile and garment industry in Haryana exhibits strength across the entire value chain from fibre to fashion. The state is one of the leading cotton producers in the country with Sirsa, Fatehabad, Bhiwani, Hisar and Jind being the main cotton producing districts. This bounteous availability of raw materials gives Haryana a competitive advantage in the textile sector. The cluster based approach to industrial development has produced robust textile centres such as Panipat, Gurugram, Faridabad, Hisar and Sonipat. The sector today provides employment to approximately 1 million people with readymade garments worth USD 2 billion being exported from the state annually⁶.

US\$ billion

Blessed with a resource advantage with Haryana as one of the largest producers of cotton in Northern India. Haryana is one of the leading producer of textiles and readymade garments.

Panipat is famous for handloom products, furnishing fabrics, terry-towels and blankets. Also, Gurgugram has emerged as hub for manufacturing of readymade garments. Some ofthe largest manufacturers of readymade garments in Asia have their manufacturing facilities in Gurgaon.

⁵ IBEF - Textile Industry in India

⁶ Haryana Textile Policy 2017

The numbers of industries under this sector stand at more than 4624 units. The sector employs more than 98,518 people which is a share of more than 12% of the total mapped manpower in the state. The total textiles and apparels exports (handloom and readymade goods) stood at Rs. 88,704 million as in 2015-16. The overall exports composition of textiles and readymade garments (including handlooms) as a percent of total exports from the state has averaged close to 10% from 2013-14 to 2015-16. Clearly, textiles and readymade garments is a leading export oriented sector of the state⁷.

Figure 6 provides details of the net value added, gross fixed capital formation, and employment by the textiles and apparel sector in Haryana as well as the state contribution of the sector to national levels from 2011-12 to $2013-14^8$:

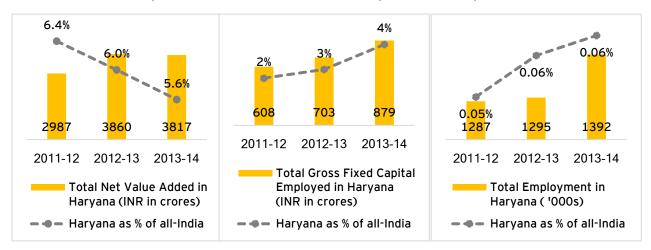


Figure 6: Textiles and Garment Industry Trends in Haryana

The Draft Textile Policy 2017 for the state is targeting an investment of Rs. 5000 crore in the sector, creation of 50,000 new jobs and CAGR of 20% during the policy period.

2.4 Cluster Scenario

Faridabad emerged as a garment hub primarily due to the economic feasibility as compared to Okhla - which at the time was a hub for manufacturing of readymade garments. In the 1980s, real estate prices and labour costs began soaring in Okhla, and by the 1990s production started moving to surrounding areas, including Faridabad. Faridabad's proximity to Delhi, easy availability of raw materials, and lower land costs made it an attractive location for garment units to migrate. In addition, there was an influx of labour into Faridabad due to lower cost of living. The formation of the cluster was marked by the establishment of a vertical unit of knit fabric in Faridabad by S.P.L Industries, a renowned name in the apparel space. In 1995, the company set up a vertical integrated plant for apparel manufacturing, which had the facilities for knitting, dyeing, processing, cutting and stitching. Other large players also began establishing units in Faridabad, including Shahi Exports, Dhruv Global, etc.

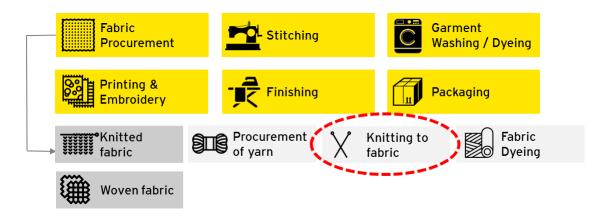
As the retail market boomed, there was an increase in orders to large units. Large units became unable to meet this demand alone, particularly smaller and more niche orders which

⁷ Department of Industry and Commerce, Haryana

⁸ Annual Survey of Industries

were not viable for them to produce. Additionally, larger units which were not vertically integrated required units for undertaking activities such as knitting, dyeing, etc. These factors gave rise to smaller units in the area. This led to the emergence of a number of micro and small garment units in Faridabad.

The Faridabad knitwear cluster houses about 500 micro and small units across the value chain, out of which a large number are run by women entrepreneurs. The cluster is located in Faridabad, and manufactures woven and knitwear garments for the domestic and international market. Units undertake some or all of the following activities:



Approximately 80% of the units, i.e. 400 units in the cluster are micro enterprises, and the remaining 20%, i.e. 100 units are small enterprises. Of the total units, approximately 15-20% are engaged in end-to-end apparel manufacture (from stitching to packaging); 25-30% are engaged in stitching; 10% in garment washing and dyeing; 20% in embroidery; and 25% in printing. These units either directly procure fabric from fabric manufacturers in NCR or Ludhiana, or undertake services for other cluster units which have already procured the fabric. The size of units and nature of operation of cluster units are provided in figure 7:

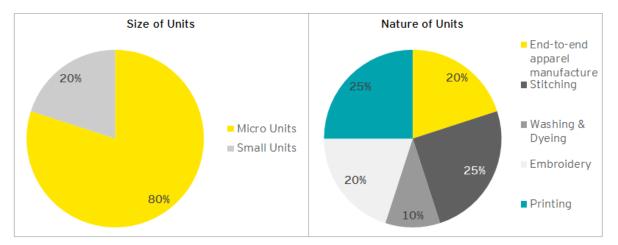


Figure 7: Size and Nature of Cluster Units

Apparel manufacturing units in the cluster face challenges in obtaining knitted fabric efficiently and at low costs. They currently procure the knitted fabric either from NCR at a high price, or from Ludhiana, leading to inefficiencies and delays. This significantly affects

the MSEs, as it reduces their competitiveness and increases the production time which delays their supplies. This is a challenge particularly for micro level female entrepreneurs who do not have the required capital to source the fabric and are unable to travel to Ludhiana to obtain lower cost job-work. Units are facing loss of orders due to their inability to price their products competitively vis-à-vis other domestic and international players.

The cluster produces garments for the domestic and international market, including large retailers as well as the open market. The apparel is made from either woven or knitted fabric, with knitted fabric comprising the majority of orders. Products include a range of garments for men and women, including T shirts, tops, dresses, scarves, salwar kameez, etc.

Units undertake a range of activities; processing or producing garments at various stages including - knitting / weaving of fabric, garment dyeing / washing, cutting, stitching, printing, embroidery, and finishing.

Diagnostic Study Findings



3. Diagnostic Study Findings

A diagnostic study was undertaken by the cluster members inAugust 2017 to map the existing business processes in the cluster, identify the gaps, and understand the requirements of the cluster. It was observed that many units required fabric knittingfacilities, as they were currently availing these services from external service providers at high prices, and often with production delays. Additionally, external service providers sometimes do not accept the low volume orders from MSMEs.

The DSR was approved on 21st November 2017 by the Director of Industries & Commerce and permission was granted to undertake Detailed Project Report (DPR) preparation. XXXX

3.1 Cluster Actors and their role

The primary stakeholders in the cluster are the garment units based in various parts of Haryana. The other stakeholders include the major industry associations, government agencies (mainly DIC, regulatory bodies, raw material suppliers, and academic/training institutes. These cluster actors provide various services to the cluster units. Some of the major cluster actors located in and outside the cluster and catering to the units of the region are mentioned below:

A. Industry Associations

Apparel Export Promotion Council (AEPC)

Incorporated in 1978, AEPC is the official body of apparel exporters in India that provides assistance to Indian exporters as well as importers/international buyers who choose India as their preferred sourcing destination for garments. AEPC works towards integrating the entire industry - starting at the grass root level of training the workforce and supplying a steady stream of man power to the industry; identifying the best countries to source machinery and other infrastructure and brokering deals for its members and finally helping exporters to showcase their best at home fairs as well as be highly visible at international fairs the world over. Twice a year, AEPC showcases the best of India's garment export capabilities through the prestigious India International Garment Fair, playing host to over 350 exhibitors. Several cluster units are members of AEPC, which provide a platform for interaction between members and for showcasing their products to expand their market.

Apparel Exporters & Manufacturers Association (AEMA)

AEMA was set up in 1981, and has since functioned as an important think tank for the Central Government and for the AEPC in advocating policy and encouraging smooth growth of the export oriented apparel manufacturing sector. AEMA undertakes activities for its members, including holding exhibitions for domestic and international buyers and facilitating members to participate in international garment fairs like India International Garment Fair and Vastra. AEMA is located in Gurgaon, and many garment units in Faridabad are members of AEMA.

Integrated Association of Micro, Small & Medium Enterprises (IAMSME) of India

IAMSME of India, based in Faridabad is created and run by entrepreneurs to facilitate and promote the growth and development of small businesses across India through various services like Credit facilitation, technology transfer, IT Solutions (ERP, e-Commerce, CRM, Mobile Apps, and more) Skill development, Energy Efficiency, Mentoring & Advisory Services, Lean Manufacturing, International Exhibitions & Trainings, Best Practices sharing, Strategic Sourcing, Export-Import Facilitation, Cluster Development, Solar Power, Sustainability, Risk Management, Electronic Surveillance, International Trade Facilitation, etc.The focus of this Institution is not to just raise or highlight problems and issues, but to identify common problems and find collective solutions. Most of the units in the cluster are active members of IAMSME of India.

Faridabad Small Industries Association (FSIA)

FSIA is the largest association of MSMEs in Haryana, and has been representing problems of small industries and working towards their overall development. The association has MoUs with Small Industries Development Bank of India (SIDBI) and National Small Industries Corporation (NSIC) to provide various services to MSMEs. FSIA is also actively associate with various national bodies like CII, FICCI, etc.. FSIA provides free services such as filing of income tax returns, preparation of balance sheet, sales tax consultation, allotment of PAN, TAN & TDS procedures, etc. to new entrepreneurs for the first 2 years. It also regularly organizes seminars for business development for its members such as vendor buyer meets, interaction with foreign business delegations, active participation in organizing exhibitions & trade fairs at a national and state level, etc.

B. Government Bodies

District Industries Centre (DIC)

DIC is the most important government stakeholder for the cluster. The office of DIC comes under the Dept. Of Industries and is headed by General Manager who is assisted functional managers and technical field officers. DIC promotes and routes subsidy to micro and small enterprises in the region. The Mini Custer Scheme under which the garment units want to set up a CFC will also be implemented through the DIC office. The Faridabad DIC is actively promoting cluster development in the district and also helps the local units register under Unique Aadhar Memorandum (UAM). It would play a key role in formulation of the garment units SPV.

MSME-Development Institute, Delhi

MSME - Development Institute, Delhi is a field office of the Development Commissioner (MSME), Ministry of MSME, New Delhi, which is an apex body for formulating, coordinating and monitoring the policies and programmes for promotion and development of MSMEs in the country. MSME -DI provides a wide range of extension / support services to MSMEs.

Haryana State Infrastructure & Industrial Development Corporation (HSIIDC)

HSIIDC is a major agency in the State to promote the setting up and promotion of small, medium and large scale industrial units. The Corporation also acts as a State-level financial institution and provides long term loans for industrial projects. The important activities of the Corporation are:

- Development of industrial areas/ estates
- Helps entrepreneurs on matters such as securing registrations/ licences/ clearances from the statutory/other authorities.
- Provision of term-loans

Haryana Urban Development Authority (HUDA)

HUDA is the urban planning agency of the state of Haryana in India. It was established in 1937. It plays a key role in land development and execution of development works like roads, water supply, sewage, and drainage etc.

National Small Industries Corporation (NSIC)

National Small Industries Corporation (NSIC) was established in the year 1955 with a view to promote, aid and foster growth of small industries in the country. Faridabad industry is served by the NSIC branch office in Faridabad. It provides diverse services to MSMEs in Faridabad such as:

- Helps entrepreneurs in purchasing machinery and equipment
- Equipment leasing and working capital finance
- Information on technological up gradation
- Composite loan scheme and export assistance

C. Educational Institutes

Apparel Training & Design Centre (ATDC), Faridabad

The Apparel Training & Design Centre (ATDC) is India's largest Quality Vocational Training Provider dedicated to the Apparel Sector. The ATDC was set-up as a society for training of shopfloor and supervisory workforce for the apparel export sector in 1991 under the aegis of AEPC, the largest Export Promotion Council in the country. The Institute through its 200 Pan-India centres renders service to the downstream Apparel export and domestic industries having trained over 200,000 candidates in short-term courses under Integrated Skill Development Scheme (ISDS) of Ministry of Textiles (MOT), and also about 80,000 candidates in longer duration Vocational courses, over the years⁹.

Institute of Apparel Management (IAM), Gurugram

Institute of Apparel Management (IAM) provides short term courses, undergraduate, postgraduate and MBA courses in various areas related to apparels, apparel manufacturing, fashion & lifestyle design, fashion communication, fashion production management, fashion retail merchandising, apparel market merchandising, apparel manufacturing & entrepreneurship, etc.

⁹ http://www.aepcindia.com/aepc-initiative

The institute also conducts workshops and value added programmes for people in the apparel industry.

▶ The Technological Institute of Textile & Science (TIT&S), Bhiwani

The Technological Institute of Textile & Science (TIT&S) provides training in textile technology, textile chemistry, fashion & apparel engineering, etc. Courses cover areas including fibre specialization, yarn specialization, fabric specialization, textile manufacturing, fashion & designing, garment & accessories, computerized designing, textile & garment surface designing, textile & garment quality assistance, etc. The institute also has a research & development wing which undertakes research on textiles and other streams.

National Institute of Fashion Technology (NIFT), Delhi

National Institute of Fashion Technology (NIFT), set up in 1986 under the aegis of Ministry of Textiles, Government of India, is a Statutory Institute Governed by the NIFT Act 2006. The institute provides a firm foundation in fashion education in the domains of Design, Management and Technology. NIFT also has a network of NIFT Resource Centres, which serve as a Fashion Information System (FIS), catering to the needs of fashion professionals, entrepreneurs and fashion educators. The integrated collections of print, digital, audio and visual creative resources are the only systematically documented learning resources available in India for the study of international and contemporary Indian fashion. FIS is a decentralized network, computerized and coordinated by the National Resource Centre at NIFT.

North India Textile Research Association (NITRA), Ghaziabad

Northern India Textile Research Association (NITRA) is one of the prime textile research institutes in the country. The textile industry and Ministry of Textiles, Govt. of India jointly established NITRA in 1974 for conducting applied scientific research and providing support services to Indian textile industry. NITRA's prime activities include R&D technical consultancy, quality evaluation of materials, manpower training and publishing technical books and papers. To meet industrial HRD needs, NITRA regularly conducts various industry-recognized job-oriented techno-management training programs across the complete textile & apparel supply chain on full-time and DLP modes. In addition to this, NITRA regularly organizes seminars, workshops and also conducts on and off-shop customized training programs.

D. Banks / Fls

Haryana Financial Corporation (HFC)

Haryana Financial Corporation, based in Chandigarh was promoted jointly by the Government of Haryana and the Industrial Development Bank of India (IDBI). HFC has been approved by SEBI as a category-I merchant banker. The corporation's activities include merchant banking, trade finance, lease finance and term lending. The corporation has diversified its range of financial services to include no-fund-based assistance in the form of guarantees, letter of credit and forex services. The DPR for the project shall be appraised by HFC.

Small Industries Development Bank of India (SIDBI)

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. The business strategy of SIDBI is to address the financial and non-financial gaps in MSME eco-system. Financial support to MSMEs is provided by way of (a) Indirect / refinance to banks / Financial Institutions for onward lending to MSMEs and (b) direct finance in the niche areas like risk capital, sustainable finance, receivable financing, service sector financing, etc.

Syndicate Bank Faridabad

Syndicate Bank of India is the lead bank of the Faridabad district and many local garment units have a banking relationship with Syndicate Bank.

E. Leading Manufacturers

Some of the leading garment manufacturers in Faridabad include Shivalik, Dhruv Global, Shahi Exports, and so on.

Key stakeholders of Faridabad cluster are presented in figure 8:

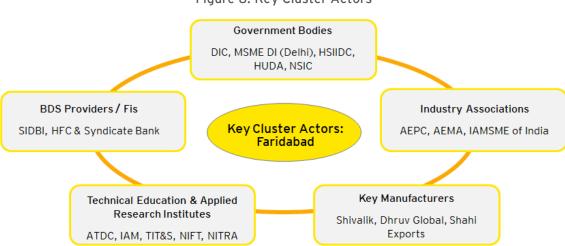


Figure 8: Key Cluster Actors

3.2 Cluster Market, Employment and Turnover

The units in the cluster cater to the domestic and international markets. Units operate across the spectrum - from completely domestic manufacturing to entirely export oriented. Manufacturing is predominantly done to order, and is usually based on the buyer's specifications. The MSMEs cater to smaller / niche orders, while larger players in the market cater to high volume orders. MSME units produce for large retailers as well as the open market. Sale to large retailers takes place either directly or through garment suppliers such as 'Impulse'. Some of the large retailers which the cluster caters to include Zara, Pantaloons, Allen Solly, Spunk, Cover Story, Mango, Forever 21, Lefties, Future Group (Lee Cooper and Umbro), etc. Units in the cluster also export to countries including Spain, South Africa, Germany, Dubai, etc.

The Faridabad garment industry is quite labor intensive. The cluster provides employment to about 40,000 persons for activities including designing, knitting / weaving, sewing, dying, washing, finishing, printing, embroidery, etc. On average, micro units employ approximately 50 people, and small units in the cluster employ approximately 200 people. The garment industry is an appealing industry for women, and about half of the manpower comprises of women. The garment industry workforce in the garment industry is well paid, with average salaries of Rs. 600 per day for workers operating on a 10 hour shift. Wages of skilled labour for activities such as cutting, sewing, etc. can be as high as Rs. 30,000 per month.

The cumulative annual turnover of the garment cluster is estimated to be around INR 700 crores. The average annual turnover of micro units is approximately Rs. 80 lakh, of small units is approximately Rs. 5 crore, and of medium units varies from Rs. 10 - 25 crore. However, there is an enormous potential of increasing the production from cluster units by reducing the outsourcing of activities by units to private players. This would also result in enhanced turnover. Currently, units are charged high prices or face inefficiencies in fabric knitting services, which affects their competitiveness. Fabric knitting is an essential requirement my most buyers for garments, which require either knitted or woven fabrics with knitted fabrics comprising the larger demand share.

3.3 Production Process

The units in the cluster are engaged in various activities across the value chain of garment manufacturing. This includes garment washing and dyeing (10% of units in the cluster), stitching (25 - 30% of units in the cluster), embroidery (20% of units in the cluster), and printing (25% of units in the cluster). Approximately 15-20% of the units are engaged in end-to-end garment manufacturing.

The flow chart of the production process followed by garment units is shown in figure 9. Figure 10 shows images of production process in a garment unit of Faridabad.

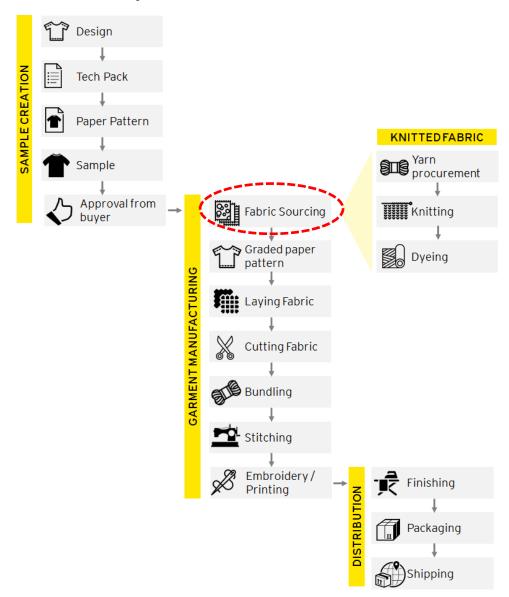


Figure 9: Flow Chart of Production Process

As detailed infigure 9, garment manufacturing involves the following steps:

1. Sample Creation:

- i. **Garment Design:** Garments are designed and specifications are decided upon (for units which design their own products).
- ii. **Receipt of Tech Pack:** Units receive a 'tech pack' detailing out the specifications of the garments from the buyers
- iii. Paper Pattern: Paper patterns are cut based on the tech pack. Trained labour is required for this process.
- iv. **Sample:** Based on the paper pattern, one sample garment is made and send to the buyer for approval.

2. Fabric Sourcing for Garment Manufacturers

v. **Procurement of Yarn:** For knitted fabric, yarn is procured as per the specifications

- vi. **Knitting:** The yarn is knitted into fabric using circular knitting machines (for basic fabric) or flat knitting machines (for collars)
- vii. Fabric dyeing: Fabric is dyed as per the requirement

3. Garment Manufacturing

- viii. **Order:** Units order the required fabric and accessories as per the buyer's specifications.
 - ix. **Graded paper patterns:** Paper patterns are cut based on size of garments and other specifications.
 - x. **Laying of Fabric:** Fabric is laid on a table and the top layer is marked. This step is in preparation for the cutting stage.
 - xi. **Cutting:** As per the graded patters, the fabric is cut into pieces of the garment to be sewn together.
- xii. **Bundling:** The cut fabric is bundled based on size and *thaan* in order to ensure that there is no variation in the same type and colour of garment (as even during dying there may be slight colour variations).
- xiii. **Stitching:** Stitching is done in an assembly line fashion, with groups of people sewing different parts of the garment and then passing it on to the next (eg. One group may stitch the collar, another may stitch sleeves, and another may stitch all the parts together). On average a unit in the cluster has 50-60 sewing machines.

4. Distribution

- xiv. **Finishing:** This involves cutting of extra threads, inspection of each unit for defects, washing and ironing of the garments.
- xv. **Packaging:** Garments are packaged in preparation for shipping.
- xvi. **Shipping:** Garments are shipped to the buyers or distributors.

Figure 10: Steps in the Production Process







Raw Material - Thaans (rolls) of cloth



Accessories - drawstrings



Cutting (after laying of fabric)



Bundled Fabric



Stitching



Finishing



Washing







Packaging

3.4 Value Chain Analysis

Value chain analysis of the most commonly produced cluster products (knitwear top) has been conducted to ascertain the major cost areas and identify suitable interventions. The value chain analysis of a knitted garment is provided in table 1:

Table 1: Value Chain Analysis of Women Blouse¹⁰

Particulars	Value Added	Total Value (INR)	% of cost of production
Yarn cost / kg @ Rs. 200/kg Used in garment 330 gms		66	36%
Knitting cost / kg @ Rs. 50/kg Used in garment 330 gms	16.5	82.5	9%
Dyeing cost / kg @ Rs. 90/kg Used in garment 330 gms	29.7	112.2	16%
Embroidery Cost @ Rs. 1.25 per 1000 stitches - for total 4000 stitches	5	117.2	3%
Trims & Accessories	13	130.2	7%
Cutting and Stitching	19	149.2	10%
Finishing & Packaging	10	159.2	5%
Overheads (~20%)	31.8	191	17%
Total Production Cost			191
Profit Margin (13.5%)			29
Selling price			220

¹⁰ Source: Stakeholder Consultation inputs

The value chain analysis has been prepared based on the stakeholder consultation. It can be observed that the yarn amounts to **36**% of total cost of production. Knitting of fabric is outsourced, and currently accounts for approximately **9**% of the total cost of production. The competitiveness of the cluster units can be increased by targeting the major cost area of knitting, and providing common facilities to the units in order to undertake knitting at a lower cost.

3.5 Strengths, Weaknesses, Opportunities and Threats (SWOT) Analysis

A SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis of the MSME garment units in the cluster is carried out keeping in mind the technology, marketing, product quality, skills, inputs, innovation, business environment and energy/environment compliance of the units. The SWOT analysis provided in table 2:

Table 2: SWOT analysis of the cluster

	Current	situation	Future			
Area	Strengths	Weaknesses	Opportunities	Threats		
Market	 Steady local and international demand for cluster products Cluster located within Faridabad Industrial area, which is well connected Cluster located in the proximity of Delhi which is a major supply hub Presence of a large number of buying houses in the region 	 Presence of other large players to whom bulk orders are made Units are unable to price their garments competitively due to high cost of knitted fabric Orders for job-work are often not accepted by service providers due to the lower volume of micro and small industries 	 Rising income levels and increasing urbanisation are driving growth of the domestic market Potential to price products competitively with acquisition of technology, in order to compete effectively with countries such as Sri Lanka, Bangladesh & China Potential for assistance under upcoming State Textile Policy Growing demand for knitwear fabric 	 Intense competition from global markets Competition from other major players like Shivalik, Dhruv Global, Shahi Exports 		
Technology /Product Quality	 Raw Material can be inspected upon delivery Each unit undertakes inspection of pieces at 	Lack of technology for knitted fabric manufacturing results in units having to obtain these from private	Setting up of CFC with equipment fabric knitting, resulting in units being able to obtain these services at lower costs	 Increase in cost of production Increase in awareness of people on quality certifications shall lead to 		

	Current	situation	Future			
Area	Strengths	Weaknesses	Opportunities	Threats		
	each stage in their manufacturing process Some buyers specify testing labs from which products need to be certified Products are made as per 'tech packs' specified by buyers, and are thus made-to-order (No challenge of inventory build-up)	service providers at higher costs or from distant locations Since products are manufactured in batches, errors in steps such as cutting result in that entire batch being rejected For exports, there is growing importance on various ecological parameters, which makes for more stringent requirements for the units	 and price their products competitively Increased use of CAD to develop designing capabilities 	losing out to business / requirement for more stringent testing procedures Competition from vendors manufacturing products at lower costs with fabric knitting technology machines Faster technology obsolescence		
Skill/Manpo wer	 Skills acquired on-the-job Presence of technical institutes such as Apparel Training & Design Centre at Gurgaon 	 High labour costs Lack of interaction between SMEs and technical institutes for providing technical training No mechanism to mobilize regional youth for training in the sector 	 Customized training programs on required skills (operations, soft skills etc.) Engage technical institutes for skill development programs Increased cost of labour in China provides opportunity for Indian industry 	 Youth interested to work in other lucrative sectors Big companies such as Shivalik, Dhruv Global, Shahi Exports attract the labour 		
Inputs	 Availability of raw materials from local dealers 	Challenge in getting low priced knitted fabric due	 Potential for common facility for local knitting of fabric by local units 	 Cost of power in India is, on average, higher than key competing countries 		

	Current	situation	Future			
Area	Strengths	Weaknesses	Opportunities	Threats		
	 Buyers sometimes specify dealers from whom they want materials Challenge in getting quality dyed fabric, etc. as a result of which many units do dyeing in-house. 		 Potential to develop a portal displaying information (price, suppliers) of raw materials 	like China, Bangladesh, Vietnam		
Innovation	 Ability to manufacture garments as per the manufacturers specifications Some units create their own designs and sell these 	 Lack of a standardised ERP solution for garment industry Low investment in development of designs Lack of process automation 	 Development of a standard IT based ERP solution Structured processes for information sharing among SMEs in the cluster 	Could lose business to other more price competitive manufacturers from countries such as Sri Lanka, Bangladesh, China if units do not innovate		
Business Environme nt	 Steady growth in domestic demand Cluster well known as a garment hub across North India Conducive policy and regulatory initiatives Active State Govt. and schemes for development of the sector Proactive industries associations in Faridabad 	 Lack of knowledge of regulatory frameworks and government schemes among micro level garment units High cost of industrial land in the cluster Lack of common infrastructure/CFC facilities No long term vision of industrialists 	 Establish CFC with latest technologies for knitting yarn into fabric Create better awareness of government schemes and regulations 	 Change in policies and regulatory environment Increase in land rates Environmental policies result in shutting down of dying houses impacting garment industry 		

	Current	situation	Future			
Area	Strengths	Weaknesses	Opportunities	Threats		
Energy/Env ironment	y/Env ► Increased focus on ► Lack of knowledge of ►	 Regular checks on maintaining quality and safety standards Potential to reduce energy costs by energy auditing 	 Increase in power tariff Increased focus on environment standards Dyeing and washing require environment compliances, and if units diversify into these services then these compliances and certifications would have to be met 			

3.6 Major Issues / Problem Areas of the Cluster

The key problems cluster related problems identified are:

- Lack of locally made low cost knitted fabric: Fabric is required for the manufacture of all garments, and there is a large demand for knitted apparel, which is consistently growing. Specific fabrics are required by buyers. Currently units obtain knitted fabric from private players, resulting in increased costs. Alternatively it is obtained from Ludhiana, resulting in inefficiencies and transportation costs. This is a challenge particularly for micro level female entrepreneurs who do not have the required capital to source the fabric and face challenges in travelling to Ludhiana.
- Absence of facility for units to make their own fabric: Units need to approach private players for the procurement of fabric. Private players knit the fabric as per the specifications, but charge high prices. Currently the price of knitting services varies from Rs. 12 per kilogram to Rs. 250 per kilogram for special fabrics. This reduces the competitiveness of units and often leads to production delays. The establishment of a common facility centre which enables units to knit their own fabric could reduce the cost of fabric by approximately 30%.
- Challenge in obtaining jobwork service: External service providers often do not accept low volume orders from MSMEs, as it is not financially viable for them. Thus units are often unable to get job work done, or have to pay high prices for it. Since MSMEs are not priority customers of the service providers due to the low volume of their orders, they often delay the orders if they receive bulk orders from large scale players.
- Limited Access to Finance: High rates of interest restrict the ability of small firms to obtain loans, as they operate on low margins. Additionally, machinery suppliers are also not willing to offer a line of credit to small scale entrepreneurs.
- ▶ Limited of access to Markets: Units are facing challenges in competing with international players due to high manufacturing costs. Further, job work is costly due to lower volume of small scale enterprises.
- Production delays: As units are obtaining knitting services from external service providers, they often have to travel to Ludhiana for obtaining this service at low costs. As a result, it leads to delays in production.

Due to lack of these facilities, the units face higher costs and production delays, thereby reducing their competitiveness, especially compared to other countries domestically as well as for export. This results in loss of market share. These facilities, if provided through a CFC in the cluster with government support will help the units become more competitive.

3.7 Key technologies missing

The technological gaps on various fronts that the CFC proposes to target, along with scope and illustration of the interventions is provided in table 3.

Table 3: Technology Gaps Identified and Interventions

S.no.	Facility/ Equipment	Technology Gaps Identified	Technology Interventions
1.	Fabric Knitting Facility	At present, there is an absence of facility for fabric knitting, which is a key requirement for knitwear fabrics. Currently, fabric knitting is being outsourced from outside Faridabad since low volume orders are not accepted within the city. The private service providers often do not accept orders or charge extremely high prices due to lower volume orders of MSMEs. This results in substantial cost of outsourcing knitting services to private service providers, ranging from Rs. 12 per kilogram to Rs. 250 per kilogram for special fabrics, thus reducing the competitiveness of units and often leading to production delays.	 ▶ The establishment of a common facility centre will enable units to knit their own fabric could reduce the cost of fabric by approximately 30%. ▶ Since, knitted fabrics are complex and dimensionally sensitive structures with even the slightest variations in material, structural, process significantly influencing performances and comfort properties of knitted fabrics, as well as their qualities. The proposed circular knitting facility will have 6 circular knitting machines, differentiated by diameter, gauge, and feeders so as handle vast majority of fabrics and knitting specifications.
1.1	Single jersey open width circular knitting machines with lycra attachments	Since there is a sizeable demand for lycra based knitted garments with open width circular knittingbut this requirement is being outsourced to private vendors outside Faridabad, mainly Ludhiana.	Coming with lycra attachment, the two open width circular knitting machines can exclusively be used for knitting lycra fabric with different gauge size. The open width facility is used for open width/thaan based crack and wrinkle controlled lycra knitting which is of high demand forlycra garments such as T-shirts.

Gauge: The smaller gauge- 24 gg is used for producing lycrafabricswith less loft generally producing larger stitches for garments such as sweat shirts. iackets jerseys. This machine can also be used for rib structure/knitting on thicker fabric garments such as sweat shirts, jackets.

machine

with

The machine with larger gauge-28 gg will be used for rib structure/ knitting with finer stitches on natural and synthetic fibres such as T-shirts, underwear, etc.

1.2 Rib cum interlock circular knitting machines

There is high demand for lycra and spandex garments and rib-cum interlock is a persistent feature on these garments. Rib-cum interlock knitting is specialized mechanical operation and most of the units are outsourcing their requirements to private vendors outside Faridabad. The larger players within Faridabad do not accept smaller volume orders. This is resulting in significant cost escalation.

A set of two rib cum interlock circular knitting machineswith different technical specificationsdiameter and feeders will form a part of the CFC. The usage/application of these two machineries will be differentiated by these technical specifications.

Diameter:The machine with wider diameter- 34" will have widerwidth and feeder add-in to make stretch and better quality interlock /rib based garments for men such as men T-shirts, sweat shirts, jackets. machine is equipped with a lycra feeding unit to produce high spandex fabric and quality material for sports gears, swim suit etc. The machine with lesser diameter- 30" will be used for women clothing.

knitting Besides the plain interlock fabric, this machine can different fabric manufacture textures by having extra cams such as p-knit, reversible, different types of mesh etc.

1.3 Single jersey three thread fleece circular knitting machines		For producing high quality fleece fabric, 2 single jersey fleece circular knitting machines will form a part of the CFC to handle the high volume job work demand for fleece knitting. The machinery will come with a separate fleece conversion kit to be able to use the machinery for fabrics other than fleece, when the demand for fleece is not substantial.
1.4 Single Jerse Four Track Circular Knitting Machine	The cluster units have substantial knitting requirement for different types of yarn/fabrics both thick and finer. Since the machine is expensive, this service is being outsourced at present, mainly to private vendors outside Faridabad, mainly Ludhiana at high costs.	The single jersey four track circular knitting machine is used to produce textured knitted fabrics. It is equipped to handle multiple knitting specifications such as single pique, double pique, popcorn & hearing bone etc.by selection of needles & cams. As in the case of above machinery, the single jersey four track circular knitting machines with different technical specifications will form a part of the CFC which will also impact the usage/application of the machineries.

3.8 Cluster growth potential

The potential for the Faridabad knitwear cluster to grow is enormous, owing to the growing market for garments in India and internationally. Faridabad is located in the proximity of Delhi, providing it with a strategic advantage in terms of its proximity to a key supply hub. Additionally, there is a large raw material base readily available as Haryana is a large cotton producing hub, and several textile units are present in the area.

Currently units are facing challenges in cost competitiveness and efficiency due to the absence of fabric knitting facilities. They are obtaining these services from external providers, which is increasing their costs as a result of which the units often get priced out and face loss of orders

Against this backdrop, if fabric knitting facilities are provided to the units under the CFC mode, their production costs and inefficiencies will reduce and they will be able to compete with other international players from low-cost production destinations such as China, Sri Lanka, Bangladesh, etc.

Diagnostic Study Recommendations



4. Diagnostic Study Recommendations

Based upon the diagnostic study and intense discussions with various cluster stakeholders regarding gap identification in the cluster, hard interventions (setting up of CFC) are being proposed to enhance the competitiveness of the garment cluster units.

The cluster has presence of a couple of proactive industries associations which frequently keep organizing awareness and training programs for the garment industry. The awareness level of the units is found to be satisfactory. Most units are members of IAMSME of India, which actively conducts trainings and workshops related to entrepreneurship development, IPR, energy efficiency, GST, barcoding, equity schemes, SME IPO process, sustainability, etc. and also sponsors members for national and international trainings. Several units currently attend domestic and international garment exhibitions. Hence, the cluster does not intend to obtain government funding for soft interventions. Details of the initiatives undertaken by the cluster mentioned in the section below.

The recommendations for hard interventions have been elaborated in subsequent sections. The recommendations were finalized in a stakeholder consultation conducted with key members of the garment cluster in Faridabad in August 2017.

4.1 Soft Interventions for Setting up a CFC

Member Meetings: Cooperation and trust building among members is foremost condition for smooth functioning of the cluster and SPV. A meeting was organized by cluster members during the month of August 2017 in Faridabad to enhance cooperation among member units and to obtain inputs for the DPR. Members of the cluster were informed about the



registration of company for the cluster and identification of land for the CFC. Members of the cluster raised their concerns during the meeting which were resolved by other members of the cluster. Additionally, several subsequent meetings have been conducted by members in order to discuss machinery requirements, share leading practices, etc.

- Awareness programmes organized by IAMSME of India: IAMSME of India actively conducts trainings and workshops related to entrepreneurship development, IPR, energy efficiency, GST, barcoding, equity schemes, SME IPO process, sustainability, etc. and also sponsors members for national and international trainings. Several units are members of IAMSME of India, and regularly attend these trainings and workshops. They actively share this information with other cluster members.
- Awareness Program on quality enhancement: An awareness program was conducted by Mr. Sanjeev Jha on 4th September 2017 for the SPV members on

garment manufacturing and lean techniques. An interactive session was held on understanding various parameters of quality and efficient manufacturing.

National Trade Fairs: Several member units attend trade fairs including the Textile Fair at Gandhinagar, Garment Fair in Okhla, etc. Units which have attended these fairs have shared their learnings and leading practices with other units of the cluster.

MSME Sammelan: Members of the cluster attended the MSME Sammelan held in Chandigarh on 30th May. This involved discussion on innovation amongst MSMEs, as well as schemes and incentives available to MSMEs. The attendees shared the information and outcomes of the MSME Sammelan with other SPV and Cluster

members.

Interaction with the Honb. Industry Minister Shri. Vipul Goyal: The SPV members also had a meeting with Shri. Vipul Goel (Honb. Industry& Commerce Minister of Haryana). The meeting was marked by discussions on the formation of the first all-women cluster as well the major activities undertaken by the SPV.



10 from Faridabad set up India's first businesswomen cluster

Manvir Sainil TNN | Oct 19, 2017, 11:11 IST



The cluster is headed by Mona Malhotra, an entrepreneur of apparei

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CHANDIGARH: More than 10 women entrepreneurs of Faridabad involved in the small-scale industries of and micro enterprises joined hands to form India's first women entrepreneur cluster of. The cluster created by the industries department of the Haryana government is headed by Mona Malhotra, an entrepreneur of apparel cluster of Faridabad.

4.2 Hard Interventions for Setting up a CFC

The cluster would require the following common infrastructure facilities to improve the competitiveness of the micro and small garment units, particularly micro and small level women entrepreneurs and to enable them to move up the value chain:

Fabric Knitting Facility

The potential members of the proposed SPV with support from the state government are willing to set up a dedicated common facility centre which shall have state-of-the-art fabric knitting facility. This facility shall provide a much needed technical impetus to the cluster units and will enable them to become more competitive.

The proposed facility along with its description, usage and tentative costs are detailed below:

4.2.1 Fabric Knitting Facility

Currently, the units approach private fabric manufacturing service providers for undertaking knitting of yarn into fabric as per buyer specifications and requirements. They often do not accept small quantity orders for job work, which results in production delays for micro and small units. Moreover, the amount charged by these centers is high, and therefore a fabric knitting facility has been proposed in the CFC for providing this service.

There is a large and continuously growing market for knitwear apparel, and this nearly all garment manufacturers have a demand for knitted fabric sourced locally at a low cost.

The factors that necessitate fabric knitting facility include:

- Necessary process for all knitwear apparel, for which there is a large and growing market.
- ▶ High cost of availing this service from external service providers, with current costs of knitting ranging from Rs. 12 per kg to Rs. 150 per kg for special fabrics, with potential to reduce this by approximately 30%.
- Orders for job-work are often not accepted by service providers due to the lower volume of micro and small industries.

A brief description of the fabric knitting equipment required is provided below:

Circular Knitting Machines:The circular knitting machines (6 in all) will be used to knot yarn into fabric. The 6 circular knitting machine will come with different technical specifications (diameter, gauge and feeders) depending on the type of apparel to be produced. Units would bring their own yarn and utilize the equipment to knit fabric. They can subsequently utilize the fabric either for apparel manufacturing or for units to sell directly.

A total of 6 circular knitting machines would be obtained, for varied kinds for different types of knits. This would include:

- a. 2 single jersey open width circular knitting machines with lycra attachments,
- b. 2 rib cum interlock circular knitting machines with lycra provision,
- c. 2 single jersey three threadfleece circular knitting machines with lycra attachmentsand single jersey 4 track conversion set

A description of the machinery required for the CFC has been detailed below:

Open width circular knitting machines with lycra attachments:

> This machine will be used by the CFC for knitting various single jersey fabric from natural and synthetic fibres such as T-shirts, underwear, sports-wear, pants, etc.

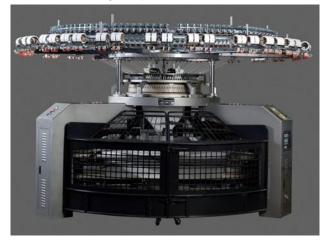


When matched with special yarn design, it will knit special fabric (from wool, rabbit hair, acrylic yarn, silk etc.) and also knit printed fabric and industrial cloth. With a separate lycra attachment, this machine can be exclusively used for lycra knitting during peak/high demand phase. It will be used for making fabrics with spandex yarn with winders toeffectively avoid folding mark. As the machine comes with roller-shifting device, it will ensure density of whole fabric to be even and stable along with a motorized cuter to ensure high efficiency and precision of folds.

Two open width ribbed circular knitting machines cum interlock machines, differentiated by technical specifications-diameter, gauge and feeder will form a part of the circular knitting facility.

Rib cum interlock circular knitting machines with lycra provision:

This machine will be used to produce rib structures (rib structures are the structures in which the face and back loop occurs along to the coarse successively but all the loops of a wale are same). In rib circular knitting machine group there is one set of needles on the circumference of a vertical cylinder and a second set of needles, arranged perpendicular to the first



set and mounted on a horizontal dial. On most of the circular knitting machines the cylinder and dial rotate, whereas the cams with yarn feeder guides are stationary. During the rotation of the cylinder, cylinder needles moves vertically and dial needles moves horizontally. Cylinder needles also get its motion from it. There is a cloth tale up roller which also rotates with unison to dial and cylinder and fabric is wound on it.

This machine will be used for rib cum interlocking for fleece, Lycra and many kinds of general fabrics, both thick and finer by arranging the cams (soft and comfortable

underwear fabric). With a 2+4 track, the machine has wider width and the feeder add in to make stretch and better quality interlock /rib based garments for fabrics that are made of thicker yarn. In addition to thicker fabrics such as fleece, the machine is equipped with Lycra feeding unit to produce high quaky spandex fabric and material for sports gears, swim -suit etc.

Two rib cum interlock machines, differentiated by technical specifications-diameter and feeder will form a part of the circular knitting facility.

Single Jersey Four Track Three Thread Fleece Circular Knitting Machine with Lycra Attachments:

The single jersey 3 thread fleece knitting machine will be used to produce all sorts of high-quality single knit fabrics for fleece, supporting diversified fabrics by means of sinkers with different specifications. The needles and cams can be arranged to manufacture plain, french terry, twill french terry, post-processing plush fabric and other fabrics with good heat retention. The machine is equipped with a fabric rolling system by which the machine is able to pull cloth evenly. Its processable materials comprise cotton yarn, blended yarn of various specifications, high-elastic polyester silk, chemical fibre, etc.



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 the CFC is expected to generate the following benefits for the cluster units:

- Enhanced value addition for cluster products
- Significant reduction in cost of production and higher capacity utilization by each unit
- Increased productivity and reduced inefficiencies
- ► Higher degree of competitiveness of cluster enterprises
- ► All cluster firms shall be encouraged to use the facility. Many micro unit entrepreneurs who could not afford to significantly contribute by way of necessary investment to the equity base of the project have also been accommodated
- The CFC will generate more job opportunities both at the cluster and individual unit level due to enhanced capacity utilization
- ► The CFC is also expected to enhance the levels of cooperation and joint-action amongst cluster stakeholders and SPV members to cooperate in other areas such as joint marketing initiatives, common raw material procurement and so on.
- It will also complement the efforts of state government in promoting clusters in the state and serve as a model for upgrading MSME clusters.

The expected outcome across areas has been detailed in Table 4:

Table 4: Expected Outcome of CFC

Area	Current Scenario	Expected Out Comes
Production Units	About 500 MSEs	About 550 MSEs
Competitiveness	Most of the units are unable to price their products competitively, and are priced out by other countries	 Units will be able to competitively price their products and compete with international players in the market. Export competitiveness.
Employment	About 40,000	About 45,000
Technology	No fabric knitting facilities with prices that allow for competitiveness	 Fabric knitting centre for units to use at a nominal fee. Units would use this to manufacture fabric for making apparel as well as for direct sale to other units / exporters.
Production	DelaysHigh costs	 Quick Production Lowered production costs Competitive prices
Turn Over	About 700 crores	Will increase to about 750 crores in the first year, expected to subsequently increase by 10% each year
Social Development	Currently several micro and small level women entrepreneurs are unable to acquire / knit low cost knitted fabric	Micro and small women entrepreneurs will be able to knit low cost fabric using the CFC for use in garment manufacturing and for units to sell directly.

Special Purpose Vehicle (SPV) for Project Implementation



5. SPV for Project Implementation

The micro and small units at Faridabad knitwear 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 'Faridabad Knitwear Pvt. Ltd' with CIN XXXXX. The SPV was registered on XXXX. The certificate of registration along with Memorandum of Association (MoA) and Articles of Association (AoA) are provided in the annexure. The company has an authorized paid up capital of Rs. 1 crorewhich shall be enhanced in the near future. The members are micro and small sized firms (registered units) in Faridabad involved in garment manufacturing activities.

DIC, Faridabad and state government both played an important role in SPV formation by cluster stakeholders. The SPV was incorporated in 2017 and already includes about 11 members 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 10 at all times. The proposed CFC will be implemented on public-private partnership basis through SPV 'Faridabad Knitwear Pvt. Ltd' by availing support from Government of Haryana under state mini cluster development scheme.

The SPV members have a track record of cooperative initiatives. SPV members are also members of prominent cluster associations. Cluster members have been autonomously undertaking several soft interventions to enhance knowledge and exposure of the cluster units on new trends in the garment industry and enhancing productivity of their units. This includes exposure visits to fairs and sharing of best practices, registration under UAM, awareness programs on new trends in garment manufacturing, entrepreneurship development, IPR, energy efficiency, GST, barcoding, equity schemes, SME IPO process, sustainability, etc.These programs were conducted in collaboration with DIC, State Government, IAMSME of India, etc.

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

5.1 Shareholder profile and Shareholding mix

List of Directors: The SPV has two directors. The details of the directors are furnished in the table below. Other than these directors, the SPV will have provision of having one director each from the state (DIC) and state Government. The SPV comprises members from micro and small garment manufacturing units. It is homogeneous in nature due to similar products and activities performed by the cluster units.

Table 5: List of Directors

S. No.	Director Name	Name of the unit	Unit address
1	Mona Malhotra	Monrish International	1st Floor 12/7 Main Mathura Road , Faridabad 121003
2	Deepali Jain	Trendier	1stFloor, # 1815, Sector 9, Faridabad-121006

The shareholders have several years of successful experience in garment manufacturing and are also well versed with the benefits of cluster development initiatives. These units are financially viable in nature. Post the DSR validation, the DIC Faridabad also acknowledged the genuineness and enthusiasm of the SPV members to undertake project initiatives under state mini cluster scheme and has recorded that the CFC demand is authentic.

Members of the SPV have been engaged in manufacturing of garments in Faridabad for several years. SPV directors &members have considerable experience in marketing and manufacturing of garments and have been in close interactions with technical experts, government institutions and machinery suppliers.

The SPV was formed with the objective of taking up cluster level activity in a joint and coordinated manner, wherein all units have equal say. The shareholding pattern of members of the 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. The two directors from the SPV will make an equity contribution of 10% and the remaining members will contribute 8.75%. The details of SPV members along with their contact persons, unit details, UAM numbers and products manufactured are provided in table below:

Table 6: Details of SPV Members of Faridabad Garment Cluster

S.N.	Contact Person	Company Name	Contact No.	Registered office address	Factory address	UAM No	Products
1	Mona Malhotra	Monrish International	9899697677	2290, sector 9 Faridabad-121006	1 st Floor 12/7 Main Mathura Road , Faridabad 121003	HR03B0006470	Manufacturing of Garments
2	Nishi Chowdhary	Nishi Enterprises	9838942345	I-1702,na,GPL Eden Heights, Sector 70, Gurgaon, Haryana- 122001	I-1702,na,GPL Eden Heights, Sector 70, Gurgaon, Haryana- 122001		Manufacturing of Garments
3	Gunjan Singal	Aaryan International	9717381005	Dhiraj nagar near Devender pehlwan office Faridabad 121002	Dhiraj nagar near Devender pehlwan office Faridabad - 121002	HR03A0005615	Manufacturing of Garments
4	Deepali Jain	Trendier	9811038499	1stFloor, # 1815, Sector 9, Faridabad-121006	1stFloor, # 1815, Sector 9, Faridabad- 121006	HR03A0007116	Manufacturing and Job work of garments
5	Sheela Devi	Dev Enterprises	9811056282	Plot no 22, E Block , Faridabad - 121005	Plot no 22, E Block , Faridabad -121005 HR03A000721		Manufacturing of garments
6	Hina Chowdhary	Aditya Exports	9999157072	No 002,Tower A, Sector 81, Bestech Park View Ananda, Gurgaon-122004	993,Harkesh Nagar,Gas Plant Gali Faridabad	HR05A0004671	Manufacturing of garments
7	Sehnaz Parveen	Shanaz Enterprises	9911446100	B-205, Jhariya Market, Palla no 02, Faridabad- 121003	B-205, Jhariya Market, Palla no 02, Faridabad-121003	HR03A0004450	Manufacturing of Garments
8	Deepa Mehra Shrivastav	Aanya Creations	8527709995	# 1682, Sector 9, Faridabad 121006	Dheeraj Nagar Gali no.3 Near Devender	HR04A0000452	Manufacturing of Garments

					Pehalwan office Faridabad		
9	Bhag Arora	Breakthrough Innovation	9810088840	3A/9 NIT Faridabad 121001, Haryana	Vill.Tilpat,Titu colony Behind Bajaj Farm house, Faridabad	HR03B0007195	Manufacturing of Garments
10	Gunjan juneja	Shri Balaji Creation	9910083872	1 st Floor, 92D DLF Phase 1, Faridabad	1 st Floor, 92D DLF Phase 1, Faridabad	HR03A0007203	Manufacturing of Garments
11	Jyoti Sharma	Fair Brother Exim Pvt.Ltd.	9811580097	Plot no 48,Sector- 58,Faridabad- 121001	Plot no48,Sector- 58,Faridabad- 121001	HR03A0006613	Manufacturing of Garments

5.2 Initiatives undertaken by the SPV

As mentioned in detail in section 4.1, 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. The major initiatives are:

- Regular member meetings for discussion on the CFC as well as technologies, marketing, discussion on incentives available to MSMEs, discussion on draft Textile Policy, etc.
- Participation in various programs for capacity building, awareness generation and technological advancement in the cluster.
- ldentification of building to be taken on lease for the SPV.
- ► The preparation of DSR was led by EY consultant and the validation & approval process for the DSR was also led by EY consultant.

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 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 for DPR approvals in the SLSC.
- Accompanying EY experts to various meetings at the state Government departments
- Execution of building lease deed agreement in SPV name.
- ▶ Garnering the SPV project contribution from the members.
- 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.

The Memorandum of Association and Article of Association 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 (BoD) will include office bearers elected/nominated from time to time, including one nominee of State Government (DIC). They will also remain present during meetings.

While various estimates on user charges/service fees 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 BoD, 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:

- 1. **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 fixing 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.
- 2. Managerial, Technical and Administrative staff: A competent and well qualified professional with a background in the garment industry will be appointed as the cluster development executive (CDE), who will look after day-to-day operations of the CFC and shall be directly reporting to the Board of Directors. The facility will have its own expert staff (supervisors, 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, store-keepers etc. to ensure effective functioning of the CFC. The proposed organizational structure of the CFC is given in figure below:

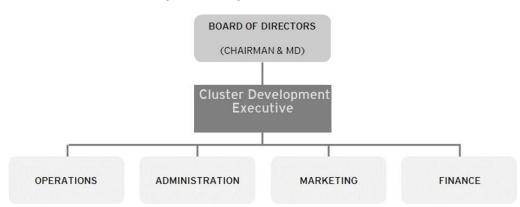


Figure 11: Organisational Structure

Project Economics



6. Project Economics

6.1 Project Cost

The total project cost is estimated at Rs. 246.82 Lakhs (INR 2.47 crores). The project cost for setting up a CFC in the Faridabad Women Knitwear Cluster includes the following:

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

The detail of each project component is provided below:

6.1.1 Building

The SPV shall take on lease one floor of a building on a 10 year irrevocable lease. The SPV has identified the building and obtained a letter establishing the availability of the building. The building is located at Plot No. 149 Sector 68, IMT Faridabad, Haryana. The available area is 3000 square feet and the monthly rent for the first year would be Rs. 70,000, with an annual increase at the market rate (estimated at 10%).

6.1.2 Plant and Machinery

As detailed in section 4.2 (hard interventions) 6 circular knitting, as well as attachments for lycra have been recommended to enable cluster units enhance their competitiveness. The machines have been categorized as primary and secondary. The machines that shall be used primarily for job work have been categorized as primary, whereas, the auxiliary/supporting machines have been categorized as secondary machines. The major facilities proposed at the CFC are for garment knitting. The total cost of plant and machineries has been estimated at INR 219.37 lakhs including taxes and installation fees, and contingency works out to INR 10.97 lakhs.

The details of the proposed machinery items are presented in the table below.

Table 7: List of Proposed Plant & Machinery

	PLANT & MACHINERY								
S. No.	Machine Name	Quantity	Basic Price	Total Basic Price	Custom Duty as Applicable*	GST as Applicable*	Total Price		
Α	Primary Machinery								
1	2 X Single Jersey Four Track Open Width Circular Knitting Machine								
1a	Single Jersey Four Track Open Width Circular Knitting Machine (including full feeder lycra provision and 23 pcs, MER 3)	1	28.70	28.70	1.72	5.48	35.90		
1b	Cylinder (without needles and sinkers)	1	1.75	1.75	0.10	0.33	2.19		
1c	Single Jersey Four Track Open Width Circular Knitting Machine (including full feeder lycra provision and 23 pcs, MER 3)	1	28.59	28.59	1.72	5.45	35.76		
1d	Cylinder (without needles and sinkers)	1	1.75	1.75	0.10	0.33	2.19		
2	2 X Single Jersey Four Track Fleece Circular Knitting Machine								
2a	Single Jersey Four Track Three Thread Fleece Circular Knitting Machine (including full feeder lycra provision and 23 pcs, MER 3)	2	23.26	46.52	2.79	8.88	58.18		
2b	Single Jersey 4 Conversion Kit	1	7.11	7.11	0.43	1.36	8.89		
3	2 X Rib-cum Interlock Circular Knitting Machine	-	1,11	7.11	0.43	1.50	0.07		
3a	Rib cum Interlock (2+4 track) circular knitting machine (including full feeder lycra provision and 8 pcs, MER 3)	1	25.28	25.28	1.52	4.82	31.62		
3b	Cylinder (without needles and sinkers)	1	1.75	1.75	0.10	0.33	2.19		

3c	Ric cum Interlock (2+4 track) circular knitting machine (including full feeder lycra provision and 9 pcs, MER 3)	1	27.35	27.35	1.64	5.22	34.21
3d	Cylinder (without needles and sinkers)	1	1.81	1.81	0.11	0.35	2.27
	Sub Total (A)	11	147.35	170.61	10.24	32.55	213.40
В	Secondary Machinery						
1	Compressor	2	0.79	1.57		0.44	2.01
2	Air Dryer	1	0.37	0.37		0.07	0.44
3	Stabilizer	1	1.00	1.00		0.28	1.28
4	Cone Rewinding Machine (8 head)	1	0.36	0.36		0.06	0.42
5	Weighing Scale	1	0.50	0.50		0.14	0.64
6	DG Set	1	1.00	1.00		0.18	1.18
	Sub Total (B)	7	4.01	4.80	-	1.17	5.97
	Grand Total	18	151.36	175.41	10.24	33.72	219.37

6.1.3 Miscellaneous Fixed Assets

The CFC would also require fixed assets such as furniture, fixtures, computer, etc. for smooth running of operations. The total estimated capital expenditure for purchase of miscellaneous fixed assets is estimated to be INR 1.80 Lakhs. Details are provided in the table below.

Table 7: Miscellaneous Fixed Assets

	MISCELLANEOUS FIXED ASSETS										
S. No.	Particulars	Amount (Rs. In lakh)									
1	Office computer - 1	0.60									
2	Furniture (2 tables, 2 chairs, planks & stools)	0.50									
3	Office items and allied items	0.50									
4	Power Back up (UPS-1)	0.20									
	Total	1.80									

6.1.4 Preliminary and Pre-operative Expenses

Another major component of the project cost is the preliminary and pre-operative expenses. The preliminary expenses are envisaged as expenses incurred for registration of SPV, legal and administrative expenses, tendering forms, tendering cost, etc.

Pre-operative expenses include expenses for electricity connection charges, refurbishment of the building, administrative establishment, travelling, bank charges, stationery, telephone, and overhead expenses during machinery testing period such as salaries, machine testing cost, bank charges, travelling, etc. The total expenditure for preliminary and pre-operative expenses is estimated at Rs. 9.63 lakh (details provided in the table below).

Table 8: Preliminary and Pre-Operative Expenses

	PRELIMINARY & PRE OPERATIVE EXPENSES											
S. No.	Particulars	Amount (Rs. In lakh)										
	Company Registration Charges (Authorised Cap- 100											
1	lakhs)	2.50										
2	Tender forms & tendering cost	1.00										
3	Project Report Preparation (DSR & DPR)	Nil										
4	Project Management Charges	Nil										
5	Travelling Cost	0.25										
6	Machine testing cost	0.20										
7	Preoperative salaries	0.50										
8	Cost of Refurbishment, electricity fittings, plumbing	2.00										
9	Lease deed registration charges	1.58										
10	Security Deposit (Rent)	1.10										
11	Bank Appraisal Charges	0.50										
	Total	9.63										

6.1.5 Provision for Contingencies

As per the guidelines of state-mini cluster scheme a provision for contingencies has to be made on plant/machinery and building (not applicable in this case as the building is being taken on a lease basis). Contingencies on plant and machinery have been estimated at 5% that amounts to Rs. 10.97 lakhs.

6.1.6 Margin Money for Working Capital

The total working capital requirement during the first year of operation at 75% capacity utilization is estimated at Rs. 19.06 lakh with margin money requirement of Rs. 5.06 Lakh (which is 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.

6.1.7 Summary Project Cost

A summary of the total estimated project cost as per actual and as per State Mini Cluster Development Scheme is presented in the table below:

Table 9: Total Project Cost

(Rs. in Lakh)

	PROJECT COST			
S. No.	Particulars	Total Project Cost	Amount as per Guidelines	Remarks
1	Land & Building			
	a. Land Value	0.00		Eligible
	b. Land Development	0.00	0.00	(Max 25% of total of
	c. Building & Other Civil Works	0.00	0.00	L&B, P&M,
	d. Building Value	0.00		and Misc.
	Sub Total (A)	0.00	0.00	F.A.)
2	Plant & Machinery			
	a. Indigenous	0.00		
	b. Imports	213.40	200.00	Eligible
	c. Secondary Machines	5.97		
	Sub Total (B)	219.37	200.00	
3	Miscellaneous fixed assets (C)	1.80	0.00	
4	Preliminary & Preoperative Expenses (D)	9.63	0.00	
5	Contingency			Not oligible
	a. Building @ 2%	0.00	0.00	Not eligible for grant
	b. Plant & Machinery @ 5%	10.97	0.00	grant
	Sub Total (E)	10.97	0.00	
6	Margin money for working capital @ 75% C.U. (F)	5.06	0.00	
	Grand Total (A+B+C+D+E+F)	246.82	200.00	

6.2 Means of Finance

The project will be financed from two sources: equity from SPV, and grant-in-aid from Govt. of Haryana (under State Mini Cluster Development Scheme, EPP-2015). The assistance to the project from Govt. of Haryana under State Mini Cluster Development Scheme is envisaged to the tune of 90% of the project cost for project up to 200.00 lakhs. SPV will be required to contribute 10% of project cost for project cost up to Rs. 200.00 lakh. Hence, the SPV members have proposed to contribute the entire amount beyond Rs. 180 lakhs, taking their overall contribution to about 27% of the total project cost. The total contribution of SPV members will amount to Rs. 66.82 lakhs. Support from State Government is envisaged for Rs. 180.00 Lakhs. Details of the means of finance are provided in the table below:

Detailed Means Of Finance Project cost up to INR Project cost over INR 200 lakh 200 lakh Source of Total **Amount Amount** Remarks finance Percentage Percentage Amount (INR in (INR in Contribution Contribution (INR in lakh) lakh) lakh) As per EPP, Grant-in-aid 2015 GoH under State contribution Mini Cluster is max 90% Development 90% 180.00 0% 0.00 180.00 (Including Scheme soft (Govt. of intervention India) expenses) Contribution 20.00 2 of SPV 10% 100% 46.82 66.82 100% 200.00 100% 46.82 246.82 Total

Table 10: Means of Finance

6.2.1 Share Capital

The contribution of the SPV members will be by 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. 66.82 lakh contributed by the cluster SPV.

The authorized share capital of the company is Rs. 100 lakhs at present which shall be increased in due course. 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.

6.2.2 Grant-in-Aid

Grant-in-aid of Rs. 180.00 lakh is expected from Government of Haryana. The amount received by the way of grant under State Mini Cluster Development Scheme will only be utilized to procure plant and machinery for the project.

6.3 Expenditure Estimates

In this section, a detailed estimate of expenditure of the CFC has been conducted on eight hour single shift (i.e. 8 hour) 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.

6.3.1 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 needles, lubrication, oil, diesel, batteries, etc.

Table 11: Consumables

				CONSU	MABLES R	EQUIRED F	OR MA	CHINE	S							
S. No	Machine Name	No. Of Machines	Partic ulars	Monthly Amt. per machine (Rs.)	Total monthly Amt. per machine (Rs. lakh)	Consum ables require d annuall y (Rs. Lakh)	Amount (in Rs. Lakh)									
							Year	Yea	Yea	Yea	Yea	Yea	Yea	Yea	Yea	Yea
							1	r 2	r 3	r 4	r 5	r 6	r 7	r 8	r 9	r 10
Α.	Secondary Machines						75%	80%	85%	90%	95%			100%		
1	Single Jersey Four Track Open Width Circular Knitting Machine with Lycra attachment (30" X28GGX90F) with 30" X24GG Cylinder	1	Needl es, Lubric ation Oil	800	800	0.10	0.07	0.0	0.0	0.0	0.0	0.1 0	0.1	0.1	0.1	0.1
2	Single Jersey Four Track Open Width Circular Knitting Machine with Lycra attachment (30" X24GGX90F) with 30" X28GG Cylinder	1	Needl es, Lubric ation Oil	800	800	0.10	0.07	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1
	Single Jersey Four Track Three Thread Fleece		Needl es,					0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
3	Circular Knitting	2	Lubric	800	1600	0.19	0.14	5	6	7	8	9	9	9	9	9

1	Machine including		ation			I	ĺ	ĺ				ĺ	ĺ			
	full feeder lycra		Oil													
	provision and															
	single jersey 4															
	conversion kit															
	Rib cum Interlock															
	(2+4 track)															
	circular knitting															
	machine including															
	full feeder lycra		Needl													
	provision		es,													
	(30"X18GGX60F)		Lubric													
	with 30" X24GG		ation					0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1
4	Cylinder	1	Oil	800	800	0.10	0.07	8	8	9	9	0	0	0	0	0
	Rib cum Interlock															
	(2+4 track)															
	circular knitting															
	machine including															
	full feeder lycra		Needl													
	provision		es,													
	(34"X18GGX68F)		Lubric													
_	with 34"X24GG	4	ation	000	000	0.10	0.07	0.0	0.0	0.0 9	0.0 9	0.1	0.1	0.1	0.1	0.1
5	Cylinder	11	Oil	800	800	0.10	0.07	8	8	9	9	0	0	0	0	0
В.	Secondary Machines															
ъ.	Macililes		Oil,													
			Cartri													
			dge,					0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1	Compressor	2	Pads	250	500	0.06	0.05	5	5	5	6	6	6	6	6	6
	Cone Rewinding	·						0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	Machine (8 head)	1	Oil	150	150	0.02	0.01	1	2	2	2	2	2	2	2	2
			Screw													
			s &													
			washe													
			rs,													
			rubber					0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	Stabilizer	1	pad,	150	150	0.02	0.01	1	2	2	2	2	2	2	2	2

			coppe r wire													
			Oil,					0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	Air Dryer	1	Filter	150	150	0.02	0.01	1	2	2	2	2	2	2	2	2
			Oil,					0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	Weighing Scale	1	Spring	100	100	0.01	0.01	1	1	1	1	1	1	1	1	1
	DG Set (62.5							0.7	0.7	0.8	0.8	0.9	0.9	0.9	0.9	0.9
6	kVA)	1	Diesel	7500	7500	0.90	0.68	2	7	1	6	0	0	0	0	0
								1.2	1.3	1.4	1.5	1.6	1.6	1.6	1.6	1.6
	Total					1.60	1.20	8	6	4	2	0	0	0	0	0
	Consumables per							0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	month					0.13	0.10	1	1	2	3	3	3	3	3	3

6.3.2 Manpower Requirement

Another major expenditure head is the manpower. Facilities installed at CFC will require manpower to function effectively. The total manpower requirement for the project would be about 15 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. 16.30 lakh and for indirect at 5.35 lakhs. The total expense on manpower is projected at Rs. 21.65 lakh per annum.

The details of monthly and yearly expenses for manpower required for running the project is provided in table below:

Category	No. of Manpower Reguired	Salary per month per person (Rs.)	Total Salary Per Month (Rs.)	Total salary & wages per Year (Rs. lakh)					
Operator	6	10,000.00	60,000.00	7.20					
Helper	1	8,500.00	8,500.00	1.02					
Master cum Fitter	1	18,000.00	18,000.00	2.16					
Checker	2	10,000.00	20,000.00	2.40					
Security Guard	1	8,500.00	8,500.00	1.02					
Office Boy	1	8,500.00	8,500.00	1.02					
Add: Perquisites/Fringe B	12 enefits @ 10%	63,500.00	1,23,500.00	14.82 1.48					
Sub Total (A)									

Table 13: Expenditure Related to Salary (indirect manpower - administrative and support staff)

Category	No. of Manpower Required	Salary per month per person (Rs.)	Total Salary Per Month (Rs.)	Total salary & wages per Year (Rs. lakh)
Cluster Development				
Executive (CDE)	1	20,000.00	20,000.00	2.40
Accountant	1	12,000.00	12,000.00	1.44
Security Guard	1	8,500.00	8,500.00	1.02
	3	40,500.00	40,500.00	4.86
Add: Perquisites/Fringe Be	nefits @ 10%			0.49
Sub-Total (B)	5.35			

6.3.3 Utilities

The most important utility required in the project is power supply. 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 29.7 kW. The table below depicts the machine and equipment wise power requirement in the CFC. The drawn power is conservatively assumed at 16.20 kW (@60% of the connected load) in the case of operating facilities and shop floor.

Table 14: Machine & Equipment (facility) wise power requirement

	Utilities		
S. No.	Machine & Equipment	Power Requirement (kW)/ Connected Load	Total power requirement (60% of drawn power) kWh
1	Single Jersey Four Track Open Width Circular Knitting Machine with Lycra attachment (30" X28GGX90F) with 30" X24GG Cylinder	4.00	2.40
2	Single Jersey Four Track Open Width Circular Knitting Machine with Lycra attachment (30" X24GGX90F) with 30" X28GG Cylinder	4.00	2.40
3	Single Jersey Four Track Three Thread Fleece Circular Knitting Machine including full feeder lycra provision and single jersey 4 conversion kit	8.00	4.80
4	Rib cum Interlock (2+4 track) circular knitting machine including full feeder lycra provision (30"X18GGX60F) with 30" X24GG Cylinder	4.00	2.40
5	Rib cum Interlock (2+4 track) circular knitting machine including full feeder lycra provision (34"X18GGX68F) with 34"X24GG Cylinder	4.00	2.40
6	Administrative Facilities	3.00	1.80
	Total Connected load for CFC	27.00	16.20
	Buffer Connected Load (10% of Total Connected Load)	2.70	
	Total	29.70	

The power requirement for operation of core machinery and equipment and administrative facilities at 60% of drawn power is 16.20 kWh. Electricity required for operation of core machinery and equipment is 4 kW per machine. The facility is heavily based on electricity for operations and will also require additional 10% connected load as a buffer to get the electricity connection. The total connected load for the CFC is estimated to be 29.70 kW.

Fixed charges for connection of 29.70 kW @ Rs. 173 per kW equals Rs. 5,138/- per month and monthly consumption charge will amounts to Rs. 29,160/- per month. This has been calculated based on the prevalent rates of the power provider.

The table below presents the envisaged annual expenditure in terms of power related charges.

Table 15: Annual Expenditure Statement vis-à-vis Power Charges

	Power charges at various C.U.														
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10					
	75%	80%	85%	90%	95%	100%	100%	100%	100%	100%					
Fixed	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62					
Variable	2.62	2.80	2.97	3.15	3.32	3.50	3.50	3.50	3.50	3.50					
Total	3.24	3.42	3.59	3.77	3.94	4.12	4.12	4.12	4.12	4.12					
Per month	0.27	0.28	0.30	0.31	0.33	0.34	0.34	0.34	0.34	0.34					

6.3.4 Annual Repairs and Maintenance Expenses

The annual repairs and maintenance expenses for building have been estimated to be Rs. 0.10 lakh and repairs and maintenance expenses for plant and machinery to be Rs. 6.58 lakh. The total annual repair & maintenance expense is estimated at Rs. 6.68 lakh. The details are presented in the table below:

Table 16: Annual Repairs and Maintenance Expenditure

Repair & Maintenance (in Rs. lakh)	
Repair & Maintenance of Building @ 2%	0.10
Repair & Maintenance of Plant and Machineries @ 3%	6.58
Total Repair & Maintenance	6.68

Insurance and miscellaneous Administrative Expenses

Insurance is a critical component of asset protection at the CFC. Insurance is computed on the basis of 0.5 percent on the fixed assets. Cost of insurance shall remain as a fixed cost and is projected at Rs. 1.15 lakh and the miscellaneous administrative expenses are estimated at Rs.1.20 lakh per year. The total expenses (insurance and miscellaneous administrative expenses will be Rs. 2.35 lakh per year.

The cost of miscellaneous expenses is also considered to be fixed irrespective of scale of operation. The details are presented in the table below:

Table 17: Insurance and Miscellaneous Administrative Expenses

Other Expenses (in Rs. lakh)	
Insurance Charges (Estimate @ 0.5% on fixed assets (such as buildings, civil works, and Plant & machinery, including related contingency expenses of approx. (in Rs. lakh)	1.15
Miscellaneous Expenses (Stationery, communication, travelling, and other misc. overheads)	1.20
Total	2.35

6.4 Working Capital Requirements

Working capital has been calculated in terms of one month's operating expenses required for the CFC. The payment period for debtors has been taken at 2 months. The operating expenses include consumables, salaries, utilities and rent.

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 local bank. While calculating the project cost, minimum 25% of working capital is shown as margin for working capital and the remaining will be borne by SPV as borrowings. The total working capital is estimated to be Rs. 19.06 lakh during the first year of operation (75% C.U.). Further, total working capital required at an operating capacity of 80% during the second year comes out to Rs. 20.31 lakh. The corresponding margin money for working capital requirement at 75% & 80% capacity utilization in the first 2 years amounts to Rs. 5.06 lakh and Rs. 6.31 lakh respectively, and the corresponding loan amounts to Rs. 14.00 lakh.

The details are presented in the table below:

Table 18 Working Capital Requirements

(Rs. In Lakh)

	WORKING CAPITAL													
S. No	Particulars	Period	As per Capacity Utilization											
			Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10		
			75%	80%	85%	90%	95%	100%	100%	100%	100%	100%		
1	Consumables	1 month	0.10	0.11	0.11	0.12	0.13	0.13	0.13	0.13	0.13	0.13		
2	Utilities (Power)	1 month	0.27	0.28	0.30	0.31	0.33	0.34	0.34	0.34	0.34	0.34		
3	Working Expenses (Manpower)	1 month	1.46	1.53	1.60	1.67	1.74	1.80	1.80	1.80	1.80	1.80		
4	Rent	1 month	0.55	0.61	0.67	0.73	0.81	0.89	0.97	1.07	1.18	1.30		
5	Sundry Debtors (Sales Value)	2 months	16.67	17.78	18.90	20.01	21.12	22.23	22.23	22.23	22.23	22.23		
6	Working capital (Total expenses)		19.06	20.31	21.57	22.84	24.12	25.40	25.48	25.58	25.69	25.81		
7	Working Capital Margin		5.06	6.31	7.57	8.84	10.12	11.40	11.48	11.58	11.69	11.81		
8	Working Capital Loan		14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00		
9	Interest on Working capital loan @11% p.a.		1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54		
10	Working Cap Margin %age		26.54 %	31.08 %	35.11 %	38.71 %	41.94 %	44.87 %	45.07 %	45.27 %	45.50 %	45.75%		

6.5 Depreciation Estimates

Estimates of depreciation are non-cash expenditure and presented in this section on the basis of Written down Value (WDV) method. Accounting for depreciation would facilitate sustainability of operations in terms of developing a fund for replacement of assets. The relevant fund that is accumulated could facilitate the replacement of such assets toward the end of the envisaged asset life of 10 years. Depreciation of plant and machinery is considered at 15% a year (envisaged project life of 10 years prior to replacement of assets), depreciation of computers is considered at 60% per year, furniture at 10% per year, and miscellaneous fixed assets at the rate of 15% a year. The computation of depreciation as per WDV method is provided in the tables below.

Table 19: Depreciation based on WDV

(Rs. In lakh)

DEPRECIATION (WRITTEN DOWN VALUE METHOD)											
		DEPRECI	ATION (WI	RITTEN DO	WN VALUI	E METHOD)					
Particulars	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	
Land											
Opening Balance	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Less : Depreciation	-	-	-	-	-	-	-	-	-	-	
Closing Balance	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Building and Civil work											
Opening Balance	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Less: Depreciation @ 10%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Closing Balance	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Plant & Machinery											
Opening Balance	230.33	195.78	166.42	141.45	120.24	102.20	86.87	73.84	62.76	53.35	
Less: Depreciation @ 15%	34.55	29.37	24.96	21.22	18.04	15.33	13.03	11.08	9.41	8.00	
Closing Balance	195.78	166.42	141.45	120.24	102.20	86.87	73.84	62.76	53.35	45.35	
Computers											
Opening Balance	0.60	0.24	0.10	0.04	0.02	0.01	0.00	0.00	0.00	0.00	
Less: Depreciation @ 60%	0.36	0.14	0.06	0.02	0.01	0.00	0.00	0.00	0.00	0.00	
Closing Balance	0.24	0.10	0.04	0.02	0.01	0.00	0.00	0.00	0.00	0.00	
Furniture											
Opening Balance	0.50	0.45	0.41	0.36	0.33	0.30	0.27	0.24	0.22	0.19	
Less: Depreciation @ 10%	0.05	0.05	0.04	0.04	0.03	0.03	0.03	0.02	0.02	0.02	
Closing Balance	0.45	0.41	0.36	0.33	0.30	0.27	0.24	0.22	0.19	0.17	
Other Misc. Fixed Assets											

Opening Balance	0.70	0.60	0.54	0.48	0.43	0.39	0.35	0.32	0.28	0.26
Less: Depreciation @ 15%	0.11	0.06	0.05	0.05	0.04	0.04	0.04	0.03	0.03	0.03
Closing Balance	0.60	0.54	0.48	0.43	0.39	0.35	0.32	0.28	0.26	0.23
Total Depreciation	35.07	29.62	25.11	21.33	18.12	15.40	13.09	11.13	9.46	8.05
Depreciated value	197.07	167.45	142.34	121.01	102.89	87.49	74.40	63.26	53.80	45.75

Note: Opening balance includes provision of contingencies on Building and Plant & Machineries.

6.6 Income/Revenue estimates

The CFC is expected to generate revenue by way of user charges that shall be levied based upon the number of garments knitted by the machine 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 SPV members. Firms based outside Faridabad shall be charged a premium for availing the CFC services. The major income sources for the CFC are envisaged by the way of providing knitting facilities across a wide variety of fabrics. .

The user charges have been estimated based upon the operational expenses of the CFC and the prevalent market rates in Faridabad. User charges for secondary 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. An average user charge has been used, taking into account the demand for basic and specialized knitting.

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 are presented in table below:

Table 20: User Charges for Machinery

	REVENUE GENERATION AT CFC															
S. N o.	Machine Name	No. Of Machin es	Reven ue per machi ne per day (Rs.)	Total Reven ue per day (Rs.)	Reven ue per month (Rs. lakh)	Annual Revenu e generati on (in Rs. lakh)	Amou nt in Rs. Lakh)									
							Year									
							75%	2 80%	3 85%	90%	5 95%	6 100%	7 100%	100%	9 100%	10 100%
1	Single Jersey Four Track Open Width Circular Knitting Machine with Lycra attachment (30" X28GGX90F) with 30" X24GG	1	8500	8500	2.12	25.50	10.12	20.40	21.60	22.05	24.22	25 50	25 50	25 50	25 50	25 50
1	Cylinder Single Jersey Four Track Open Width Circular Knitting Machine with Lycra attachment (30" X24GGX90F)	1			2.13	25.50	19.13	20.40	21.68	22.95	24.23	25.50	25.50	25.50	25.50	25.50
2	with 30"	1	8500	8500	2.13	25.50	19.13	20.40	21.68	22.95	24.23	25.50	25.50	25.50	25.50	25.50

	X28GG Cylinder															
	Single Jersey Four Track Three Thread Fleece Circular Knitting Machine including full feeder lycra provision and single jersey 4 conversion		8000	16000	4.00	49.00	26.00	29.40	40.90	42.20	45.60	49.00	49.00	48.00	48.00	48.00
3	Rib cum Interlock (2+4 track) circular knitting machine including full feeder lycra provision (30"X18GGX 60F) with 30" X24GG	1	8200	8200	2.05	48.00 24.60	18.45	19.68	20.91	22.14	<u>45.60</u>	48.00 24.60	24.60	<u>48.00</u> 24.60	24.60	24.60
5	Rib cum Interlock (2+4 track) circular knitting machine including full feeder lycra	1	8200	8200	2.05	24.60			20.91				24.60			24.60

provision (34"X18GGX 68F) with 34"X24GG Cylinder												
		440.00	111.1	118.5	125.9	133.3			148.2	_	148.2	148.2
Total		148.20	5	6	7	8	9	0	0	0	0	0

6.7 Estimation of profitability: Income and Expenditure statement

The projection 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 below:

The total gross revenue is estimated to be Rs. 111.15 lakhs per annum on an operating capacity of 75%. For projection purposes, operating capacity of 75% is considered during first year, 80% during second year 100% capacity from 6th year onwards.

The income tax rates have been considered depending upon the announcements made in the Budget 2017 and the tax applicable on a company. Income tax has been considered at 25.75% on taxable profit inclusive of all the tax components. The incidence of tax ranges from Rs. 9.44 lakhs in the first year to Rs. 22.54 lakhs in year 10.

As evident from the table below, the project is financially viable. A cumulative surplus of about Rs. 532.11 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 a lot of other development activities in the cluster that shall be funded through the surplus earned at the CFC.

Table 21: Income and Expenditure Statement

(Rs. In Lakh)

		DDCE	IT O I OCC		IT.					(Rs. In Lakh)
Partia dans			1	ACCOUN		Year 6		O	O	
Particulars	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
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 %	75%	80%	85%	90%	95%	100%	100%	100%	100%	100%
A. Income										
(User/ Service Charge)	111.15	118.56	125.97	133.38	140.79	148.20	148.20	148.20	148.20	148.20
B. Cost of Production:										
1. Utilities Power (Fixed + Variable)	3.24	3.42	3.59	3.77	3.94	4.12	4.12	4.12	4.12	4.12
2. Direct labour and wages	12.23	13.04	13.86	14.67	15.49	16.30	16.30	16.30	16.30	16.30
3. Consumable	1.20	1.28	1.36	1.44	1.52	1.60	1.60	1.60	1.60	1.60
4. Repair and Maintenance	5.01	5.34	5.68	6.01	6.35	6.68	6.68	6.68	6.68	6.68
5. Depreciation	35.07	29.62	25.11	21.33	18.12	15.40	13.09	11.13	9.46	8.05
Total Cost of production	56.74	52.70	49.60	47.22	45.42	44.10	41.79	39.83	38.17	36.75
C. Administrative expenses :										
6. Manpower (Indirect)	5.35	5.35	5.35	5.35	5.35	5.35	5.35	5.35	5.35	5.35
7. Rent	6.60	7.26	7.99	8.78	9.66	10.63	11.69	12.86	14.15	15.56
8. Insurance	1.15	0.99	0.84	0.71	0.61	0.51	0.44	0.37	0.32	0.27
9. Misc Expense	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
Total Administrative Expenses	14.30	14.79	15.37	16.04	16.81	17.69	18.68	19.78	21.01	22.38
D. Financial expenses :										
10. Interest on Working capital loan @ 11%										
per annum	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54
Total Financial Expenses	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54
E. Total Expenses B+C+D	72.58	69.03	66.51	64.80	63.77	63.33	62.01	61.15	60.72	60.67

F. Profit A - E	38.57	49.53	59.46	68.58	77.02	84.87	86.19	87.05	87.48	87.53
G. P&P Expenses written off	1.93	1.93	1.93	1.93	1.93	0.00	0.00	0.00	0.00	0.00
H. Income before Tax (F-G)	36.64	47.60	57.53	66.65	75.09	84.87	86.19	87.05	87.48	87.53
I. Adjustment of Loss	-	-	-	-	-	-	1	-	-	-
J. Income Tax (@25.75% for company)	9.44	12.26	14.81	17.16	19.34	21.85	22.19	22.41	22.53	22.54
K. Net Profit /Loss for the year	27.21	35.35	42.72	49.49	55.76	63.01	64.00	64.63	64.96	64.99
L. Cumulative Surplus	27.21	62.55	105.27	154.76	210.52	273.53	337.53	402.16	467.12	532.11

6.8 Cash flow statement

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

Table 22: Cash Flow Statement

(Rs in Lakh)

CASH FLOW STATEMENT											
Particulars	Construction Period	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
A. Source Funds:											
1. Cash Accruals (Net Profit + Interest Paid)		40.11	51.07	61.00	70.12	78.56	86.41	87.73	88.59	89.02	89.07
2. Increase in capital	66.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3. Depreciation		35.07	29.62	25.11	21.33	18.12	15.40	13.09	11.13	9.46	8.05
4. Increase in WC Loan		14.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5. Increase in Grant-in-aid from GoH	180.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Sources of Funds	246.82	89.17	80.68	86.11	91.45	96.68	101.81	100.82	99.72	98.49	97.12
B. Use of Funds:											
1. P&P Expenses	9.63	ı	-	•	ı	-	-	-	ı	-	-
2. Increase in fixed assets	232.13	-	-	-	-	-	-	-	-	-	-
3. Increase in other Assets	5.06	36.10	8.48	9.93	11.66	13.75	16.25	18.05	21.66	25.98	31.16
4. Increase in Sundry Debtors		16.67	1.11	1.11	1.11	1.11	1.11	0.00	0.00	0.00	0.00
5. Interest		1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54
6. Taxation		9.44	12.26	14.81	17.16	19.34	21.85	22.19	22.41	22.53	22.54
Total Use of Funds	246.82	63.75	23.38	27.39	31.48	35.74	40.76	41.79	45.61	50.04	55.24
C. Net Surplus (A -B)		25.42	57.30	58.72	59.97	60.94	61.05	59.04	54.11	48.44	41.88
D. Cumulative Surplus		25.42	82.72	141.45	201.41	262.35	323.41	382.44	436.55	484.99	526.87

The cash flow statement showcases the available net surplus for 10 years of the CFC operations. As most of the capital expenditure is being supported as grant under the Mini Cluster scheme, EPP 2015, therefore it does not have any negative effect on the Cash flow, in terms of interest, etc.

6.9 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 the CFC and undertaking other cluster development 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 the SPV. The projected balance sheets are provided in the table below:

Table 23: Balance Sheet

(Rs in lakh)

PROJECTED BALANCE SHEET											
Particulars	At the end of impl. period	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
1. Fixed Assets:											
Gross Block	232.13	232.13	197.07	167.45	142.34	121.01	102.89	87.49	74.40	63.26	53.80
Less : Depreciation (WDV)		35.07	29.62	25.11	21.33	18.12	15.40	13.09	11.13	9.46	8.05
Net Block	232.13	197.07	167.45	142.34	121.01	102.89	87.49	74.40	63.26	53.80	45.75
Total Fixed Assets (A)	232.13	197.07	167.45	142.34	121.01	102.89	87.49	74.40	63.26	53.80	45.75
2. Current Assets:											
Cash & bank Surplus (B.F)		25.42	82.72	141.45	201.41	262.35	323.41	382.44	436.55	484.99	526.87
Sundry Debtors		16.67	17.78	18.90	20.01	21.12	22.23	22.23	22.23	22.23	22.23
Margin Money for WC Loan	5.06	5.06	6.31	7.57	8.84	10.12	11.40	11.48	11.58	11.69	11.81
Other Current Assets		36.10	43.32	51.98	62.38	74.86	89.83	107.79	129.35	155.22	186.27
P&P Exp	9.63	7.70	5.78	3.85	1.93	0.00	0.00	0.00	0.00	0.00	0.00
Total current Assets (B)		90.96	155.92	223.75	294.57	368.44	446.86	523.95	599.71	674.14	747.18

Total Assets (A+B)	246.82	288.03	323.37	366.09	415.58	471.34	534.35	598.35	662.98	727.94	792.93
3. Current Liabilities :											
Working Capital Loan		14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00
Total Current Liabilities (C)		14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00
4. Fixed Liabilities											
Shareholders' Contribution	66.82	66.82	66.82	66.82	66.82	66.82	66.82	66.82	66.82	66.82	66.82
Grant from GoH	180.00	180.00	180.00	180.00	180.00	180.00	180.00	180.00	180.00	180.00	180.00
Reserves and Surplus		27.21	62.55	105.27	154.76	210.52	273.53	337.53	402.16	467.12	532.11
Total Fixed Liabilities (D)	246.82	274.03	309.37	352.09	401.58	457.34	520.35	584.35	648.98	713.94	778.93
Total Liabilities (C+D)	246.82	288.03	323.37	366.09	415.58	471.34	534.35	598.35	662.98	727.94	792.93

6.10 Break-even analysis

The break-even (BE) estimates of the project indicate the level of activity at which the total revenues of the project equal 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 first year itself as no major interest costs are being incurred. Hence, BE estimates at level of activity relevant to the first year and subsequent years of activity are provided in the table below:

Table 24: Break Even Estimates

(Rs. In Lakh)

BREAKEVEN POINT AT VARIOUS C.U.										
Particulars	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Capacity Utilization	75%	80%	85%	90%	95%	100%	100%	100%	100%	100%
A. Total Earning by way of user charges	111.15	118.56	125.97	133.38	140.79	148.20	148.20	148.20	148.20	148.20
B. Variable costs										
Consumables	1.20	1.28	1.36	1.44	1.52	1.60	1.60	1.60	1.60	1.60
Utilities (power- variable charge)	2.62	2.80	2.97	3.15	3.32	3.50	3.50	3.50	3.50	3.50
Interest on WC Loan	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54
Repair & Maintenance	5.01	5.34	5.68	6.01	6.35	6.68	6.68	6.68	6.68	6.68
Manpower (Direct)	12.23	13.04	13.86	14.67	15.49	16.30	16.30	16.30	16.30	16.30
Total Variable Cost (B)	22.60	24.01	25.41	26.82	28.22	29.62	29.62	29.62	29.62	29.62
C. Contribution (A-B)	88.55	94.55	100.56	106.56	112.57	118.58	118.58	118.58	118.58	118.58
D. Fixed Overheads (Cash)										
Manpower (Indirect)	5.35	5.35	5.35	5.35	5.35	5.35	5.35	5.35	5.35	5.35
Utilities (Power - fixed charges)	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62
Rent	6.60	7.26	7.99	8.78	9.66	10.63	11.69	12.86	14.15	15.56
Insurance	1.15	0.99	0.84	0.71	0.61	0.51	0.44	0.37	0.32	0.27
Misc. Expenditure	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
Sub-total (D)	14.91	15.41	15.99	16.66	17.43	18.31	19.29	20.40	21.63	22.99
E. Fixed Overheads (Non-cash)										
Depreciation	35.07	29.62	25.11	21.33	18.12	15.40	13.09	11.13	9.46	8.05

Preliminary & Pre-operative expenses written off	1.93	1.93	1.93	1.93	1.93	0.00	0.00	0.00	0.00	0.00
Sub-total (E)	36.99	31.54	27.04	23.25	20.05	15.40	13.09	11.13	9.46	8.05
F. Total Fixed Overheads (D+E)	51.91	46.95	43.03	39.91	37.48	33.71	32.39	31.53	31.09	31.04
Breakeven point (F/C)	58.62%	49.65%	42.79%	37.45%	33.29%	28.43%	27.31%	26.59%	26.22%	26.18%

Book break-even is achieved at 58.62% (of operational capacity at 75%) and at 49.65% (of operational capacity at 80 %). The operations of the CFC are expected to break-even and realize profit from 1st year of operations. Therefore, very low risk is involved in the project.

6.11 Feasibility analysis summary and sustainability indicators

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

Table 25: Financial Analysis

	FEASIBILITY	
S. No.	Particulars	Estimates
1	BEP (cash BEP at initial operating capacity of 75%)	58.62%
2	Av. ROCE (PAT/CE)	29.66%
3	Internal Rate of Return (IRR)	24.97%
4	Net Present Value (at a discount rate of 10 per cent) - incorporating viability gap funding (grant) by GoH	NPV is positive and high (Rs. 187.57 lacs) at a conservative project life of 10 years
5	Payback period	4.81 years with Grant-in-aid assistance from GOH
6	DSCR	Not Applicable (non-availing of term loan in this project)

The annual estimates in the context of ROCE (EBIT/Capital Employed) are presented in the table below:

Table 26: Calculation of Return on Capital Employed

RO CE	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Avg.
RO	15.4	19.9	24.0	27.6	31.0	35.0	35.5	35.8	36.0	36.0	29.6
CE	7%	1%	0%	3%	5%	1%	4%	9%	7%	9%	6%

The average value of ROCE is 29.66%. This indicates the high techno-economic viability of the project should the government contribute a significant portion of the project cost as grant. Capital employed considered includes the SPV contribution as well as the grant component to the project. Ignoring the possibility of grant assistance from the GoH, ROCE works out to be unviable.

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 10%, the rate at which bank offers debt capital facility and even at higher discount rates. Project IRR is high at 24.97% (at a conservative project life of 10 years). This substantiates the viability of the project.

6.12 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 the 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.

6.13 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 plastic packaging industry but also in 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 by members of the SPV themselves, thus the facility would 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 state mini cluster scheme 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 the table below:

	SENSTIV	ITY ANALYS	SIS		
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 75%)	58.62%	62.54%	67.03%	72.22%
2	Internal Rate of Return (IRR)	24.97%	22.87%	20.68%	18.42%
3	Av. ROCE (PAT/CE)	29.66%	26.97%	24.27%	21.55%
4	Net Present Value (at a discount rate of 10 per cent) - incorporating viability gap funding (grant) GoH	187.57	157.93	128.28	98.63

Table 27: Sensitivity Analysis

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.

6.14 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 @ INR 246.82 lakh on the basis of estimates and quotations.
- 2. To finance the project, a total of INR 246.82 lakhs is required. The financing will consist of grant from Government of Haryana and contribution by SPV.
- 3. In the financial projections and analysis, year 2018 is the envisaged period of project implementation also involving installation of plant, machinery and other equipment. This period will commence from the date of final approval by the State Level Steering Committee under State Mini Cluster Development Scheme. The financial projections thereafter are prepared for 10 years of operation starting 2018.
- 4. The registered SPV will manage CFC, and these services are to be used by the SPV to 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 75% in the first year; 80% for second, 85% for third year and 100% from sixth year onwards. Machines will operate for 1 shift (8 hours/shift).
- 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 @ 3% 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. Electricity connection will not be required as it is already present in the building. The existing power load available at the premises/ building proposed to be taken on lease is around 40 KW and the power load requirement for the proposed CFC is 29.70 KW. So there is no deficit and hence no load extension charges are applicable.
- **11.** Fixed charges per kW of electric connection shall be charged @ INR 173 and variable charges @ INR 9 per unit consumed.
- 12. Income estimates have been projected most conservatively. The prescribed user charges are competitive vis-à-vis charges for similar services in other regions.
- **13.** Depreciation on fixed assets is calculated on Written Down Value (WDV) method for all purposes.
- **14.** Provision for income tax has been made @ 25.75% including surcharge. This is the rate prescribed for Private Limited Companies as per the recent Budget 2017.

- **15.** Profitability estimates in terms of ROCE, NPV, IRR are computed considering operating results for first 10 years of operation.
- **16.** Debtors Payback Period has been taken at 2 months for calculation of working capital limits.
- 17. Perquisites/FBT have been taken at 10%.

Project Implementation and Monitoring



7. Project Implementation and Monitoring

7.1 Envisaged Implementation Framework

- 1. **Time frame:** Project implementation is envisaged to involve a time-frame of about 7 months upon receipt of final approval of grant-in-aid assistance from the Government of Haryana under state mini cluster development scheme.
- 2. User Base: The facilities may be used by 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 the SPV can decide on same or differential user charges for both members and non-members or based upon the volume of the output.
- 3. **Project implementation schedule:** The project implementation schedule envisaged over a period of 7 months involves several activities. They are elaborated upon in the table below:

Table 28: Project Implementation Schedule

Activity/Month	1	2	3	4	5	6	7
Collecting Contribution from SPV members							
Receipt of final sanction from GoH							
Lease deed agreement for building in the name of SPV							
Refurbishment of building							
Formation of purchase committee							
Inviting E tenders for purchase of machines							
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							

Activity/Month	1	2	3	4	5	6	7
Commencement of operations of the facility							

- 4. Contractual agreements/MoU with member units: Agreements have been indicatively finalized in terms of utilization of assets in respect of shareholders. A total of 11 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 the 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 will be submitted in due course of and as per final approval from Government of Haryana.
- 5. Memorandum of the registered company: MOA, AOA are indicative of the management and decision making structure of the SPV. All the 11 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 government of Haryana, many more members will be interested to subscribe to the shares of the SPV.
- 6. Availability of Building& Status of Acquisitions: A building will be leased by the SPV for the proposed CFC in Faridabad district. A floor of a building of area 3000 square feet has already been identified by the SPV and a letter establishing the proof of availability of the building has been acquired and attached in the annexure.
- 7. Availability of Requisite Clearances: A building with all required clearances will be leased by the SPV. Electricity is already available in the area and the building is connected to the grid. The other required clearances (environment, labor etc.) shall be obtained in due course.
- 8. **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:

- Refurbishment of building
- 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. The CDCC will look after the project under State Mini Cluster Development Scheme to be implemented under the state's Enterprise Promotion Policy 2015.

The committee may operate under the overall monitoring of the State Level Steering Committee (SLSC). 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:

- i. Director, Industries and Commerce, Government of Haryana (Chairman)
- ii. Concerned Joint Director, Department of Industries and Commerce
- iii. GM, DIC Faridabad
- iv. HSIIDC state officer
- v. HFC general Manager
- vi. President of related industry association
- vii. Directors of related SPV
- viii. EY Cluster Development Expert under MSME project

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

In addition, for implementing the Faridabad Women Knitwear Cluster- Fabric Knitting Center CFC, a Project Management Committee (PMC) comprising the GM, DIC, Faridabad, and representatives of SPV, Syndicate Bank, Kurukshetra University 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 DIC Faridabad.

Conclusion



8. Conclusion

The micro and small garment units of Faridabad are dependent on external service providers for availing fabric knitting services, as a result of which they often face increased costs and production inefficiencies. Job-work providers often do not accept low-volume orders from SMEs, or charge high prices for this. SMEs are not priority customers for the job-work providers, and thus they often delay MSMEs orders if they receive bulk orders from larger players. As a result SMEs are unable to compete with other domestic and international players.

Against this backdrop, the garment units in Faridabad require support to fabric knitting facilities for knitting various types of fabrics. This will reduce their costs, increase efficiency and enable them to be more competitive in the market.

The global apparel has been growing at a steady rate. India's textile and garment sector is one of the oldest industries in Indian economy dating back several decades. Even today, textile and garment sector is one of the largest contributors to India's exports with approximately 11 per cent of total exports. The textile and garment industry is also labour intensive and is one of the largest employers. Faridabad is a key hub for garment manufacturing in India, and the cluster comprises of over 500 units operating across the value chain, in activities such as fabric knitting, stitching, garment dyeing, printing, embroidery, finishing, and packaging. A key constraint is the challenge of obtaining fabric knitting job-work, which is currently obtained from external service providers. These service providers often do not accept low volume orders from MSMEs, or charge high prices. In addition, MSMEs are not priority customers for the service providers, and thus they often delay orders placed by MSMEs if they receive bulk orders from larger players.

Due to this, the following have been proposed in the CFC:

- Open width circular knitting machines with lycra attachments
- ▶ Rib cum interlock circular knitting machines with lycra provision
- Single Jersey Four Track Three Thread Fleece Circular Knitting Machine with Lycra Attachments

The total project cost (including plant/machinery and buildings) is estimated to be Rs. 246.82 lakhs. The project shall be implemented by the SPV 'Faridabad Knitwear Pvt. Ltd' which has been constituted by the cluster firms. The SPV has proactively undertaken a number of initiatives for capacity building and knowledge enhancement of the cluster. A number of capacity building programs and exposure visits have been organised by the SPV for the benefit for its members.

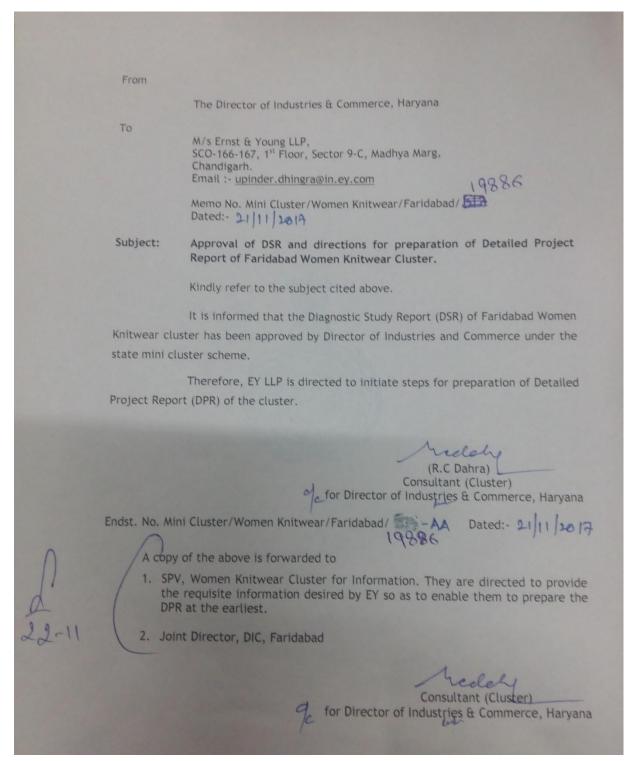
The CFC will be set up with support from DIC and the state government (Department of Industries) under a PPP mode. The building for the project has already been identified by the SPV and shall be acquired on lease basis upon in final approval by State Government. The state industry department is envisaged to provide grant for setting up of the modern machines under the Mini-Cluster scheme, EPP 2015. The SPV members have proposed to contribute Rs. 66.82 lakhs, Haryana is envisaged for Rs. 180 lakh. Working capital loans, if required, will be taken from the preferred bank. The project is financially viable and is expected to generate enough revenue to ensure its sustainability.

Annexures



9. Annexures

Annexure 1: DSR approval & DPR preparation Letter



Annexure 2: MoM of DPR Validation

Minutes of Meeting: Stakeholder Validation meeting of Draft Detailed Project Report (DPR) of Faridabad Women Knitwear Cluster - State Mini Cluster Development Scheme (EPP 2015) held under the chairmanship of Sh. Ashok Sangwan, IAS, Director Industries & Commerce, Haryana, Govt. of Haryana

Date: 25 th November 2017	Time: 3:30-4:30 PM	Venue: Monrish
		International,
		Faridabad

Agenda:

- Presentation on the Draft DPR of Faridabad Women Knitwear Cluster
- > Discussion on proposed facilities in the CFC particularly plant and machineries
- Validation of recommendations by key stakeholders
- Outlining the next steps and the way forward

Attendees

- Sh. Ashok Sangwan, IAS, Director, Industries & Commerce, Haryana (Chairperson)
- Members of Faridabad Women Knitwear Cluster SPV
- Sh. Chandan Nagasuri, EY PMU
- Ms. Jasmine Sharma, EY PMU

Members of Faridabad Women Knitwear Cluster (SPV created for project execution) welcomed Sh. Ashok Sangwan, Director, Industries & Commerce Department, Govt. of Haryana. Smt. Mona Malhotra and Smt. Deepali Jain, Directors of the SPV extended gratitude to Department of Industries, Govt. of Haryana, & EY team for putting their efforts towards a swift execution in preparing the DPR for Faridabad Women Knitwear Cluster.

EY team shared the key aspects of the draft DPR of the cluster. The participants were presented with the summary details of DPR. Sh. Ashok Sangwan highlighted state government's proactive role in ensuring growth of the state's MSMEs and various incentives available to MSMEs under EPP 2015.

EY team provided an overview of the cluster and elaborated on various aspects of the proposed project. The major project component as highlighted are mentioned below:

1. Building:

The area required for the proposed facility is estimated to be around 3000 sq. feet. The SPV has identified a suitable building (having proximity to all SPV members) having adequate space for the CFC and the building shall be taken on a 10 year irrevocable lease. The SPV has also obtained a letter from the building owner establishing the availability of the building for lease. The building is located at Plot No. 149 Sector 68, IMT Faridabad, Haryana. The

monthly rent for the first year would be Rs. 70,000, with an annual increase at the market rate (estimated at 10%).

2. Plant and Machinery:

A garment knitting facility has been proposed to be set up at the CFC. A set of 6 garment knitting machines with different technical specifications based on utility and fabric will be used. The open width knitting and fleece knitting machines will be used to knit diverse fabrics (fine and thick) ranging from lycra (spandex) to fleece. Also a set of rib-cum interlock machines will be used for creating rib and interlock stiches on the garment. The Units would bring their own yarn and utilize the equipment to knit fabric. They can subsequently utilize the fabric either for apparel manufacturing or for units to sell directly.

3. Total Cost of the Project:

The total project cost for creating garment knitting facility is estimated at Rs. 246.82 Lakhs (INR 2.47 crores). The total cost of plant and machineries has been estimated at Rs. 218.90 lakhs including taxes and installation fees, and contingency works out to Rs. 10.91 lakhs. The contribution of the State Government is Rs. 180.00 Lakhs & the remaining contribution will be made by the SPV. This SPVs contribution will amount to Rs. 66.8 Lakhs.

Further, the role of SPV in executing the project was highlighted. Participants informed that they have registered a SPV by the name and style of 'Faridabad Knitwear Pvt. Ltd.' to implement Mini cluster scheme of Govt. of Haryana. SPV has proved its ability to undertake hard intervention under the project and is geared up to take the project to its logical conclusion.

Discussion and Action Points

- ► Machinery: The participants elaborated on the need for various fabric knitting machines to knit fabrics. The following points were further discussed:
 - a. DI inquired about the usage of the proposed knitting facilities by the cluster units. The SPV members mentioned that at present fabric knitting is largely being outsourced from outside Faridabad since low volume orders are not accepted within the city. They are paying substantial cost of outsourcing knitting services to private service providers, ranging from Rs. 12 per kilogram to Rs. 250 per kilogram. Besides there is surging demand for knitting niche seasonal fabrics such as fleece.
 - b. Smt. Mona Malhotra raised some issues faced by the garment manufacturing units of Faridabad due to lack of fabric knitting facilities and explained the need of a common in-house knitting facility as a crucial requirement of garment manufacturing units in order to expand its market share and become price competitive.
 - c. Working model of CFC was also explained to the members. Participants were also informed that the cluster units will bring their yarn/thaan/thread for knitting into fabrics at the CFC. The members would be paying a user fee as decided by the

Board of Directors (BoD) of the SPV. CFC will also be open to non-members who would be required to pay a comparatively higher user fees. SPV shall fix charges for members and non-members separately.

d. The Director, Industries & Commerce was explained the financial viability of the proposed facility by the EY PMU in terms of the Net Present Value, Internal rate of Return and the Break-Even Point.

Finally, SPV members validated the recommendations as mentioned in the DPR and gave consent for submission of DPR to state government for further actions.

In concluding remark, Sh. Ashok Sangwan, appreciated the efforts of SPV members in coming together and forming the first-of-its kind all-women cluster in the state and suggested similar clusters in the garment space will help establish a one of its kind cluster of clusters (mega cluster) in the state. Further, he lauded the commitment of the SPV members towards completing the DPR and the company registration process in time.

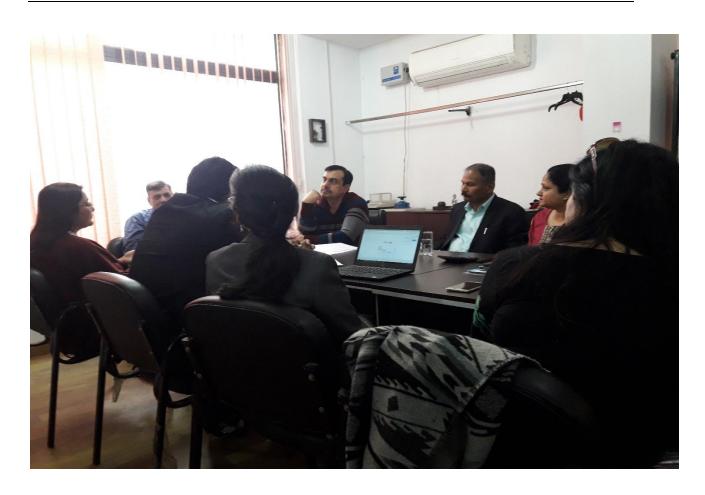
Overall, he appreciated the project and acknowledged that proposed CFC will enable the cluster units to become more competitive. He assured the support of Government of Haryana in realizing the CFC. He also informed the participants that the DPR will be taken up for approval in the forthcoming State Level Steering Committee.

The list of participants & photographs of the meeting given below:

Stakeholder Validation Meeting for Draft Detailed Project Report (DPR)- Faridabad Women Knitwear Cluster under the chairmanship of Sh. Ashok Sangwan, at Monrish International, Faridabad dated 25th November 2017

.N Contact Person . Mona Malhotra		Company Name	Contact No.	Unit Address	Signature	
		Monrish International	9899697677	1 st Floor 12/7 Main Mathura Road , Faridabad		
2	Nishi Chowdhary	Nishi Enterprises	9838942345	I-1702,na,GPL Eden Heights, Sector 70	Or .	
3	Gunjan Singal	Aaryan International	9717381005	Dhiraj nagar near Devender pehlwan office Faridabad	Margin	
4	Deepali Jain	Trendier	9811038499	1ºFloor, # 1815, Sector 9, Faridabad	Jask Dou	
5	Sheela Devi	Dev Enterprises	9811056282	Plot no 22, E Block , Faridabad	sugar	
6	Hina Chowdhary	Aditya Exports	9999157072	993,Harkesh Nagar,Gas Plant Gali Faridabad	Heren	
7	Deepa Mehra Shrivastav	Aanya Creations	8527709995	Dheeraj Nagar Gali no.3 Near Devender Pehalwan office Faridabad	Bethi	
8	Nishi Arora (Bhag Arora)	Breakthrough Innovation	9810088840	Vill, Tilpat, Titu colony Behind Bajaj Farm house, Faridabad	18 jun	
9	Gunjan Juneja	Shri Balaji Creation	9910083872	1" Floor, 92D DLF Phase 1, Faridabad	Parja.	

10. RK Panigrahi PMUEY
11. Chandon Nagasuni PMU, EY
12. Jasmine Shavma PMU, EY
13. Chetan Bajbayee PMU, EY
14. Vinod Kumar PMU, EY







Annexure 3(a): SPV Certificate of Incorporation

Annexure 3 (b) Copy of Memorandum of Association (MoA) and Article of Association (AoA)

Annexure 4: Verification of units by DIC, Faridabad

Annexure 5: Building Availability Proof

Annexure 6: Shareholding Pattern

Annexure 7: Machinery Quotations

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