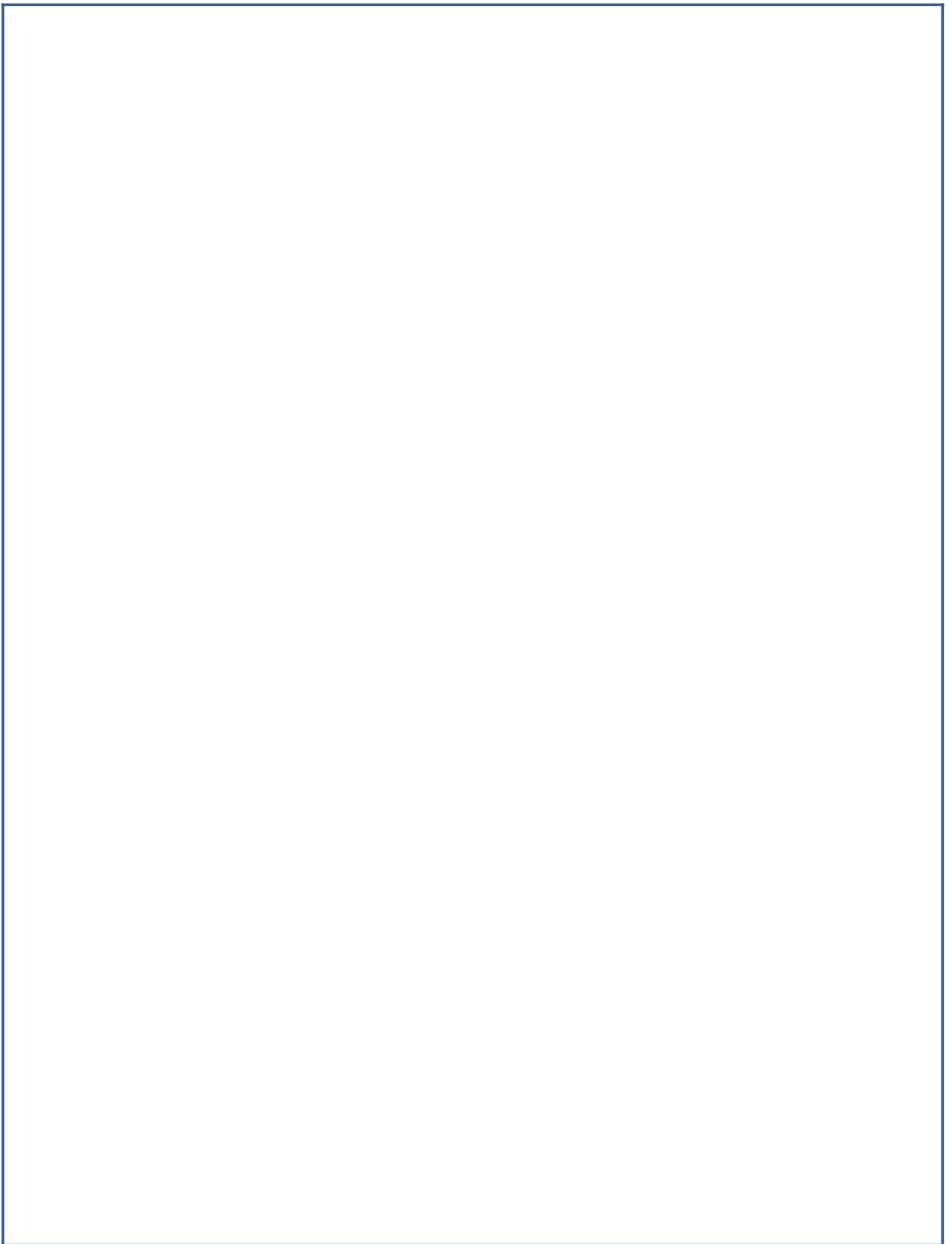


Foreword



History of Clusters

Concentration of units in a given geographical location producing same or similar types of products and facing common opportunities and threats is called a cluster. Clustering has been the age old phenomenon in India. Clusters have been in existence in India for centuries and are known for their products at the national and international level. India has more than 6400 clusters. These have been typified as industrial, handloom, and handicraft clusters. Clusters represent the socio-economic heritage of the country where some of the towns or contiguous group of villages known for a specific product or a range of complementary products that have been in existence for decades and centuries. In a typical cluster, producers often belong to a traditional community, producing the long-established products for generations. Indeed, many artisan clusters are centuries old. Given below are examples of such clusters.



CHANDERI SAREE



Handloom Cluster of Chanderi: Chanderi is a town of historical importance in Ashok Nagar District of Madhya Pradesh. It is situated at a distance of 127 km from Shivpuri, 37 km from Lalitpur, 55 km from Ashok Nagar, is on southwest of the Betwa River. Chanderi is surrounded by hills, lakes and forests and there are several monuments of the Bundela Rajputs and Malwa Sultans. Chanderi finds mention in Mahabharata. Shishupal was the king of Mahabharata period.

Chanderi weaving has created some of India's most elegant summer-light cotton fabrics that are ideal as summer wear. It is traditionally handspun cotton yarn. In 1350, Koshti weavers from Jhansi migrated down here. In the beginning, weavers were mostly Muslims. During the business of Chanderi reached to its peak. Chanderi saris were patronized by royalty, since their fragile lightness, pastel hues and intricacy of motifs was unparalleled. Their motifs are inspired by nature and by the stunning temples of Chanderi town, Madhya Pradesh, where this weaving style is practiced. Chanderi weaves today are produced using three raw materials: cotton, silk thread, and zari, or gold thread. There are 3500 looms and 7000 weavers in Chanderi. It is a renowned centre for traditional weavers of saree. The Chanderi saree is a common name in middle & rich societies and is in high demand everywhere.

Handicraft Cluster of Moradabad: Moradabad is a city in Uttar Pradesh. The brassware industry in Moradabad bloomed in early 19th century and British took the art to foreign markets. Other immigrating artisans from Varanasi, Agra, Lucknow and many other places formed the current cluster of brassware. It is called 'Peetal (Brass) City' and is worldwide famous for its Brass Metal Handicrafts. Today, it is said to house around 29% of the metalwork-artisans of India.



Moradabad's brassware is exported to many countries besides USA, Britain, Canada, Germany and Middle East Asian countries. There are about 850 export units and 25,000 metal craft industrial units in the cluster. The export of different types of metal artifacts from Moradabad is Rs 3000 crores



Textiles Cluster of Jaipur (Bagru). Bagru a rural Indian village in Jaipur district is located about thirty kilometers east of Jaipur city. Its traditional process of hand printing of textiles, with rich natural colors has been known for many centuries. The colorful floral prints of Bagru are very distinctive. The village hums with activity, supplying the exquisite printed material for export trade.

The printing process has started around 450 years back in Bagru. The village had a community of CHHIPAS, or traditional crafts people who printed fabrics by hand. Bagru Chhipas came from Sawai Madhopur, Alwar, Jhunjhunu, and Sikar districts of Rajasthan to settle in Bagru and make it their home. They are known for their unique designs of luxuriant trellises in sophisticated natural colors.



The art of printing is a family tradition, with every member contributing in the process. There was a ready market created by the existing social practices and choices. As an art form it was patronized by the Royal families. In some cases the returns were much above the actual value of the labour and capital employed by the artisan.

The cluster comprises of 275 units of printers and about 20 printing units and about 50 exporters of the products in Jaipur.

Tirupur Cotton Hosiery cluster, Ludhiana Knitwear cluster and Gem and Jewellery cluster of Surat are few examples of clusters which have evolved in the recent past and have become renowned world over.

Cluster Concept

Alfred Marshall, the English economist, is supposed to have propounded the cluster concept in 1910. He examined the industrial districts found in Europe and explained that main reasons of localization of industry are physical conditions such as climate and availability of raw materials. These factors resulted in benefits of externalities for firms within them such as technology availability, access to a skilled labour, access to inputs and marketing advantages. These externalities provided competitive advantage both domestically and internationally. Firms located in industrial districts are highly competitive in the neoclassical sense, and in many cases there is little product differentiation. The major advantages of industrial clusters arise from simple propinquity of firms, which allows easier recruitment of skilled labour and rapid exchanges of commercial and technical information through informal channels. They illustrate competitive capitalism at its most efficient, with transaction costs reduced to a practical minimum but they are feasible only when economies of scale are limited.

Economic geographers have tried to explain the existence of clusters on the basis of cost minimization or maximization of profit. The preferred locations for new entrepreneurs are those where demand is large or supply of inputs is more convenient and these are places where other producers of similar goods are already located. Other economists have argued that the competition that exists between firms located in a cluster drives productivity and innovation creating new resource endowments such as skilled staff and technological know-how. Human capital has also been identified by some as the main engine of growth.

Cluster Definitions

- “Clusters are a geographically proximate group of interconnected companies and associated institutions in a particular field linked by commonalities and complementarities. Clusters encompass a array of linked industries and other entities important to competition ... including governmental and other institutions – such as universities, standard setting agencies, think tanks, vocational training providers and trade associations” **Porter (1998)**
- ...geographically bounded concentration of similar, related or complementary businesses, with active channels for business transactions, communications and dialogue, that share specialized infrastructure, labour markets and services, and that are faced with common opportunities and threats.” **Rosenfeld (1997)**
- Regional clustering has been used to describe industrial districts of small crafts firms, high

technology centers, agglomerations of financial and business service firms in cities, company towns, and large branch plants and their supply chains.” “...clusters at least must be characterized along relevant dimensions if appropriate policies are to be devised ... (these include) ...density..breadth depth...activity base...growth potential...innovative capacity.” **Enright (1998).**

(Source: OECD 2007, Cluster Policies Whitebook 2004 & Enright (1998)

UNIDO cluster definition: Cluster can be defined as concentration of micro, small and medium enterprises in a given geographical location producing same or a similar type of products or services and these enterprises face similar type of opportunities and threats. The cluster is known by the name of the product being produced by principal firms and the place they are located in.

While defining a cluster, it is to be seen that too wide a product range will make product group meaningless because the common opportunities and threats cannot be said to exist for wide range; and also too large a geographical area will not allow the firms in the cluster to take benefit of development through proactive joint action. Also, defining product too narrowly will make the cluster mapping process meaningless. It is pertinent to mention that conglomeration of firms does not necessarily imply a ‘cluster’. The table below gives what is not a cluster and why:

	Not a Cluster	Why not a cluster
1	A ‘sector’ that is present in various places all over a state or a country	Too large a geographical area deprives the units across the area to exploit advantages of proactive joint action
2	An industrial estate or an industrial park having multiple products	Too wide a product range means no common opportunities and threats. Hence, little scope of joint action
3	A net work (small group) of enterprises producing similar products	Too small a number for enabling significant and variety of joint actions. These are often part of a cluster
4	A cooperative, which promotes cooperation among a number of enterprises under some norm, rule or a public scheme of assistance	A central feature of dynamic clusters is ‘competitive cooperation’. In case of a cooperative, competition does not exist. It is often a part of a cluster
5	A group of villages, town or city consisting of enterprises producing a diverse range of products or services	These are clusters in a different sense and are not enterprises based clusters

There MSME or traditional industries clusters, Handloom clusters and Handicraft cluster.

In India clusters have been defined differently by different organisations to suit the typology of clusters which an organisation is mandated to deal with:

The definitions of cluster followed by the Ministries/Departments for their cluster related schemes are given below:

1. MINISTRY OF MSME

(i) Micro and Small Enterprises - Cluster Development Programme (MSECDP)

A cluster is a group of enterprises located within an identifiable and as far as practicable, contiguous area and producing same/similar products/services.

(ii) Scheme of Fund for Regeneration of Traditional Industries (SFURTI)

Definition of Traditional Industry Cluster”, in the context of SFURTI, refers to a geographical concentration of around 500 beneficiary families of artisans/ micro enterprises, suppliers of raw materials, traders, service providers, etc., located within one or two revenue sub-divisions in one or more contiguous District(s).

2. Department of Industrial Policy and Promotion

Industrial Infrastructure Upgradation Scheme (IIUS)

There is no specific definition of cluster in the Industrial Infrastructure Upgradation Scheme (IIUS). A number of existing industrial units operating in a particular area is taken as a cluster for the purpose of IIUS.

3. Office of the Development Commissioner (Handlooms)

Integrated Handloom Cluster Development Programme

A handloom cluster has been defined as one having a minimum of 500 looms.

4. Office of the Development Commissioner (Handicrafts)

Baba Saheb Ambedkar Hastshilp Vikash Yojana (AHVY)

Agglomerations having 100 artisans. The cluster has been defined as an area which has a minimum of 25 families practicing handicrafts as a major source of economic activity. The number of craft persons would therefore, vary from 50-250 in a cluster.

5. Cluster Development Programme of SIDBI

Under Promotional & Developmental initiatives SIDBI adopts clusters having homogenous production activities complementary with each other, spread over generally, contiguous urban/ semi- urban/ rural areas for cluster development.

6. Government of Gujarat

A minimum of 50 industrial units, indulging in the manufacture of the same or related products and located within a radius of 10 km in a particular location.

7. NABARD, Cluster Development Program

Micro enterprises and household units functioning on SHG mode and having a minimum of 50 beneficiaries' up to a maximum of 200. In intensive clusters, the number of beneficiaries may go up to 500-700 and can even extend over a block or taluka.

8. National Minority Development Finance Cooperation (NMDFC)

Handloom cluster, which has more than 75% of the population as “minorities’

Policy Framework for Cluster Development in India

Abid Hussain Committee on Small Scale Industry set up by the then Ministry of Small Scale Industry in its report in 1997 was first to recommend to adopt the cluster approach for support to small and medium enterprises. Subsequently, in several Budget speeches the emphasis was made on adoption of cluster based approach to increase the productivity and competitiveness of small and medium enterprises. The Government of India announced on 10th August 2005 a policy package where cluster development was made the plank for making Indian SMEs globally competitive. The earlier scheme of Industrial Infrastructure Development (IID) was subsumed in the new scheme of Small Industry Cluster Development Programme. In the Budget speech of 2006-07 the then Finance Minister said that *“The Cluster Development model can be usefully adopted not only to promote manufacturing but also to renew industrial towns and build new industrial townships. The model is now being implemented, in one form or other, in nine sectors falling under different Ministries. The sectors include Khadi and village industries, handlooms, handicrafts, textiles, agricultural products and medicinal plants. It would be advantageous to empower a group to oversee cluster development and monitor progress. Hence, the Prime Minister has decided to constitute an Empowered Group of Ministers who will lay down the policy for cluster development and oversee the implementation.”* Thereafter an Empowered Group of Ministers (EGoM) under the chairmanship of the External Affairs Minister was constituted to lay down the comprehensive

policy for cluster development and oversee its implementation by different ministries of the Government of India. State Governments of Gujarat, Madhya Pradesh, Andhra Pradesh, Kerala, etc. in their Industrial Policy made the cluster development approach as a means to support, develop and enhance productivity of SMEs and make them globally competitive. The cluster development is one of the thrust areas of the Ministry of Micro Small & Medium Enterprises for the 11th Five Year Plan. Thus cluster development became the buzz word.

Pursuant to implement the cluster development programme, several schemes and programme were launched by Central Ministries/Departments and its agencies as also the State Governments and its institutions.

Schemes and Programmes for Cluster Development

S.No.	Name of the Scheme	Name of the Institution	Focus of the Scheme
1	Scheme for Integrated Textile Parks (SITP)	Ministry of Textiles	Infrastructure
2	Baba Saheb Ambedkar Hastshilp Vikas Yojna	Development Commissioner (Handicrafts), Ministry of Textiles	Development of Handicrafts clusters
3	Integrated Handloom Cluster Development Scheme (IHCDS)	Development Commissioner (Handlooms), Ministry of Textiles	Development of Handloom clusters
4	National Programme for capacity building of textiles SMEs through cluster based approach	Textiles Committee, Ministry of Textiles	Capacity Building
5	Micro and Small Enterprises Cluster Development Programme (MSECDP)	Development Commissioner (MSME), Ministry of MSME	Productivity and competitiveness
6	National Small Industries Corporation (NSIC)	National Small Industries Corporation	Machinery and Equipment
7	National Programme for Rural Industrialization (NPRI)	National Bank for Agriculture and Rural Development	Skill and technology
8	Scheme of Fund for Regeneration of Traditional Industries (SFURTI)	Khadi and Village Industries Commission and Coir Board under the Ministry of MSME	Productivity and competitiveness
9	Industrial Infrastructure Up	Department of Industrial	Infrastructure

	gradation Scheme (IIUS)	Policy and Promotion, Government of India	
10	NMDFC Micro Financing Scheme	National Minorities Development & Finance Corporation (NMDFC)	Employment
11	SBI Project UPTECH	State Bank of India	Technology
12	SIDBI Technological Upgradation Fund Scheme (TUFS)	Small Industries Development Bank of India (SIDBI)	Competitiveness
13	SIDBI-Financing and Development of SMEs	Small Industries Development Bank of India (SIDBI)	Credit
14	NABARD Cluster Development Programme	National Bank for Agriculture and Rural Development	Competitiveness
15	NMCC-Project Vikas with support from Microsoft	National Manufacturing Competitive Council	Competitiveness
16	Margin Money Scheme for Cluster Development Activities	Department of Industries, Government of Kerala	Productivity and Competitiveness
17	Grant Assistant to Cluster Development Activities	Industries Department, Government of Kerala	Training/Skill
18	Scheme for Assistance to Cluster Development	Industries Commissionerate, Government of Gujarat	Competitiveness
19	Integrated Cluster Development Programme	Rural Industries Department, Government of Madhya Pradesh	Promotion of traditional products
20	Craft Village Scheme (Shilpgram Yojna)	Department of Handicrafts, Government of Orissa Director (Handicrafts)	Employment
21	Cluster Development Programme	Government of Rajasthan, Industries Department	Productivity and competitiveness
22	Boosting employment through Small Industries Development (ILO)	International Labour Organisation	Health & Hygiene
23	MSECDP of West Bengal	Government of West Bengal Directorate of Micro and Small Scale Enterprises	Productivity and competitiveness
24	Scheme for promotion of	Bureau of Energy Efficiency	Energy

Energy Efficiency in MSMEs

Details of some of the Schemes

1. Micro, Small and Enterprises-Cluster Development Scheme:

In October 2007, the erstwhile cluster development scheme ‘Small Industries Cluster Development Programme (SICDP)’ was renamed as ‘Micro and Small Enterprises – Cluster Development Programme (MSE-CDP)’. The earlier scheme named ‘Integrated Infrastructural Development (IID)’ was subsumed in the new scheme. A comprehensive MSE-CDP is being administered by the office of Development Commissioner (MSME), the Ministry of MSME.

Objectives of the Scheme

1. Support the sustainability and growth of MSEs by addressing common issues such as improvement of technology, skills and quality, market access, access to capital, etc.
2. Build capacity of MSEs for common supportive action through formation of self help groups, consortia, upgradation of associations, etc.
3. Create/upgrade infrastructural facilities in the new/existing industrial clusters.
4. Set up common facility centers,

Under the scheme both hard and soft intervention can be undertaken under the following broad heads:

- (i) Diagnostic Study Reports:** To map the business processes in the cluster and propose remedial measures, with a validated action plan.
- (ii) Soft Interventions:** Technical assistance, capacity building, exposure visits, market development, trust building, etc for the cluster units.
- (iii) Detailed Project Report:** To prepare a technical feasible and financially viable project report for setting up of a common facility center for cluster of MSE units and/or infrastructure development project for new industrial estate/ area or for upgradation of infrastructure in existing industrial estate/ area/ cluster.
- (iv) Hard Intervention/Common Facility Centers (CFCs):** Creation of tangible “assets” like Testing Facility, Design Centre, Production Centre, Effluent Treatment Plant, Training Centre, R&D Centre, Raw Material Bank/Sales Depot, Product Display Centre, Information Centre, any other need based facility.

- (v) **Infrastructure Development:** Development of land, provision of water supply, drainage, Power distribution, non- conventional sources of Energy for common captive use, construction of roads, common facilities such as First Aid Centre, Canteen, other need based infrastructural facilities in the clusters.
- (vi) **Hard Interventions (setting up of CFCs):** Hard Interventions under the programme consist of creation of tangible “assets” as Common Facility Centers (CFCs) like Common Production/Processing Centre (for balancing/correcting/improving production line that cannot be undertaken by individual units), Design Centers, Testing Facilities, Training Centre, R&D Centers, Effluent Treatment Plant, Marketing Display/Selling Centre, Common Logistics Centre, Common Raw Material Bank/Sales Depot, etc. The grant under the scheme will be restricted to 70% of the cost of the project of a maximum of Rs.15 crores. However, the grant will be up to 90% in case of North-East and Hill States. For creation of CFC a Special Purpose Vehicle (SPV) is created.
- (vii) **Infrastructure Development:** Infrastructure Development projects under the scheme consist of projects for infrastructural facilities like power distribution network, water, telecommunication, drainage and pollution control facilities, roads, banks, raw materials, storage and marketing outlets, common service facilities and technological backup services for MSEs in the clusters.

A total of 463 clusters have been taken up for intervention under the scheme out of this the soft intervention were in 223 clusters and hard interventions in 50 clusters. In case of 165 clusters only Diagnostic Study has been conducted.

2. **Industrial Infrastructure Upgradation Scheme**

Department of Industrial Policy and Promotion, Ministry of Commerce and Industry launched ‘Industrial Infrastructural Upgradation Scheme’ in the year 2003 to enhance competitiveness of industry by providing quality infrastructure through public-private partnership with financial assistance up to 75% of the project cost subject to a ceiling of Rs.60 crores for each project. For implementation of the scheme, a Special Purpose Vehicle (SPV) is to be formed which should be headed by a private sector entrepreneur.

A total of 25 projects had been sanctioned during the period of 2003-07 at a cost of Rs.1766 crores with the stipulation of central grant of Rs.952 crores. These include 5 in Auto component, 5 Textiles, 3 Chemical, 3 Foundry, 2 Leather and 2 Rubber projects. Out of these 25 projects, 10

projects have been completed with Central grants of Rs.765 crores and contribution of Rs.63.45 crores from SPV/Financial Institutions/State Government.

The following is the list of clusters assisted:

1. Tirupur Textiles, 2. Vapi Chemical, 3. Vijayawada Auto Components, 4. Chennai Auto Ancillary, 5. Ankleswar Chemical and Pharma, 6. Jajpur Steel and Metallurgy, 7. Ludhiana Textiles, 8. Madurai Cereals, 9. Pune Auto, 10. Bangalore Machine Tools, 11. Belgaum Foundry, 12. Kishangarh Marble, 13. Pitampura Auto, 14. Surat Gems and Jewellery, 15. Kerala Coir, 16. Panipat Textiles, 17. Haldia Multi Industry, 18. Howrah Foundry, 19. Howrah Rubber, 20. Ahmedabad Chemicals, 21. Ichalkaranji Textiles, 22. Kanpur Leather, 23. Ambur Leather, 24. Chhattisgarh Ispat, 25. Coimbatore Engineering, 26. Hyderabad Pharma.

During the period 2007- 2010 5 projects have been sanctioned involving a project cost of Rs.270 crores. A sum of Rs.58.5 crores has been released and a sum of Rs.22.5 crores has been put in by SPV/FI/State Government. The clusters involved are:

- (1) Jabalpur Garments, (2) Chanderi Handloom, (3) Nashik Engineering, (3) Adityapur Auto component, (4) Chhindwara Industrial

3. Babasaheb Ambedkar Hastshilp Vikas Yojana

Baba Saheb Ambedkar Hastashilp Vikas Yojana (BAHVY) was launched in the year 2001-02. The main thrust of the scheme is on need based approach for integrated development of potential handicrafts clusters. It ensures participation of the craft persons at all stages of implementation with the ultimate objective of their empowerment and hence sustainability. The scheme envisages a package of support to the cluster of handicraft artisans, which inter-alia includes basic inputs and infrastructure support in addition to capacity enhancement to cater to target markets. The Scheme has five types of interventions as mentioned below:

- Social Intervention – (i) Diagnostic Survey and formulation of Project Plan (ii) Community empowerment for mobilization of artisans into Self Help Groups (iii) Issuance of Identity cards to the artisans
- Technological Interventions – i) Development and supply of improved modern tools (ii) Design and Technical Development Technical Workshops (iii) Training of artisans (iv) Organising seminar and symposium (v) Technological status and need based study and research provision

- Marketing Interventions – (i) Organising exhibitions (ii) Publicity through printing and electronic mode and brand building campaign (iii) Setting up of Handicrafts emporia (iv) Market assessment (v) Establishment of warehousing-cum-common work shed (vi) Entrepreneurship development program
- Financial Interventions – (i) Margin money support (ii) Wage compensation to cluster manager (iii) Service charges for Implementing Agencies (iv) Engagement of experts (v) Credit Guarantee
- Infrastructure – (i) Establishment of Resource Center for major crafts (ii) Establishment of e-kiosks (iii) Creation of raw material banks (iv) Setting up common facility center (v) Technological assistance by setting up of Facility Centers by Exports/Entrepreneurs

Year	No. of Clusters assisted	Amount spent (Rs. in crores)
2002-03	50	8.80
2003-04	83	15.56
2004-05	112	21.10
2005-06	137	29.75
2006-07	83	28.13
2007-08	147	NA
2008-09	121	41.93
2009-10	58	42.76
Total	791	188

Source: Annual Report of Ministry of Textiles 2007-08

4. INTEGRATED HANDLOOMS DEVELOPMENT SCHEME (IHDS)

The Development commissioner (Handlooms), Ministry of Textiles) is implementing the ‘Integrated Handlooms Development Scheme’ since November 2007. This scheme subsumed the other 4 schemes i.e. Deen Dayal Hathkargha Protsahan Yojana (DDHPY), Integrated Handloom Training Project (IHTP), Integrated Handloom Cluster Development Scheme (IHCDS) and Work-Shed-cum-Housing Scheme. It is proposed to take up 625 clusters during the XI Five Year Plan. The objectives of the Scheme are:

- Focus on formation of handloom weavers’ groups as a visible production group in a selected handloom clusters,
- Assist the handloom Weavers Groups for becoming self –sustainable,
- Inclusive approach to cover weavers both within and outside the Co-operative fold,
- Up-grade the skills of handloom weavers/workers to produce diversified

products with improved quality to meet the market requirements,

- Provide suitable workplace to weavers to enable them to produce quality products with improved productivity,
- Market orientation by associating entrepreneurs, designers and professionals for marketing, designing and managing the production,
- Facilitate process of credit from financial institutions/banks.
- Encourage co-operativisation of weavers.
- Holistic and flexible interventions to provide need based inputs specific to each cluster/group.

The 20 pilot clusters have been selected under the scheme

Cluster-wise money sanctioned (Rs. in lakhs)

S.No.	Cluster	2007-08	2008-09	2009-10
1	Bargarh	62	51	48
2	Kullu	54	35	43
3	Barabanki	56	51	42
4	Kurunjipadi	58	33	29
5	Bhgalpur	76	64	24
6	Madhavaram	93	40	41
7	Bijoy Nagar	86	61	27
8	Mubarakpur	59	33	27
9	Bijnor	108	54	33
10	Nadia	50	51	31
11	Burdwan	66	66	38
12	Sonepur	77	44	47
13	Chirala	90	27	35
14	Thiruvannamalai	59	40	31
15	Gadag	72	45	41
16	Trichy	74	43	23
17	Chanderi	69	43	37
18	Thiruvananthapuram	59		45
19	Imphal	76	48	49
20	Varanasi	69	34	51
	Total	1413	863	742

Some of the achievement under the scheme

1	SHG Formed	2149
2	No. of Weavers in SHG	26077
3	Consortium formed	51

4	No. of weavers in Consortium	15207
5	Awareness Camps	378
6	Dyers workshops	129
7	No. of dyers participated	2635
8	Exhibitions and Buyers Seller Meets	273
9	New Designs developed	2734
10	Looms upgraded	2794
11	CFC and Dye House	20

5. Scheme of Fund for Regeneration of Traditional Industrial (SFURTI)

With a view to making the traditional industries more productive and competitive and facilitating their sustainable development, the Central Government announced the setting up of a fund for regeneration of traditional industries, with an initial allocation of Rs. 100 crore. Pursuant to this announcement, a Central Sector Scheme titled the “Scheme of Fund for Regeneration of Traditional Industries (SFURTI)” has been drawn up and approved at a total cost of Rs. 97.25 crore. The Scheme will be implemented by the Union Ministry of Agro and Rural Industries (ARI) and its organisations and institutions, in collaboration with State Governments, their organisations concerned, non-Governmental organisations, etc. The Scheme was launched by the then Ministry of Agro and Rural Industries, now Ministry of MSME in 2005. The Objectives of the scheme are:

- (i) Develop clusters of traditional industries in various parts of the country over a period of five years commencing 2005-06;
- (ii) Make traditional industries more competitive with more market-driven, productive, profitable and sustained employment for traditional industry artisans and rural entrepreneurs;
- (iii) Strengthen the local governance systems of industry clusters, with the active participation of the local stakeholders, so that they are enabled to undertake development initiatives by themselves; and
- (iv) Build up innovated and traditional skills, involved technologies, advanced processes, market intelligence and new models of pub-private partnerships, so as to gradually replicate similar models of cluster based regenerated traditional industries.

Under the Scheme the average spending per cluster is Rs.10 lakhs. The assistance is to be provided up to 75% and 25% is to be contributed by the beneficiaries. 105 clusters have been assisted. The total money released under the scheme is estimated to be Rs. 83 crores. 21933 artisans have been trained and 9450 new modal charkhas have been provided under

the scheme. 1139 SHGs have been formed and 9579 Tool kits and 1025 new looms have been provided. Exposure visit of 2401 artisans have been undertaken under the scheme. 73 CFCs have also been set up.

Thus under the above major 5 cluster development schemes an estimated 1413 clusters have been assisted and an estimated amount of Rs.1328 crores has been spent.

Sizes of Clusters

Clusters are of various sizes in terms of number of units, employment and turnover. There are big clusters like Tirupur which has more than 7200 firms and provides employment to more than 3 lakh workers and produces products worth more than 11,000 crores. In comparison there are small clusters like Kaithun Handloom cluster which has 1500 looms, 1500 workers and turnover of Rs.2 crores only. There is Hosiery knitwear cluster of Ludhiana which employees about 5 lakhs persons having 12000 units and producing products worth Rs.5000 crores. Whereas Wooden Beads cluster at Gurera in Bhiwani has 800 units employing 2500 persons and producing products worth Rs.2 crores. The Panipat cluster of Made Ups has more than 7500 units employing about 2.6 lakh persons and producing products worth Rs.1200 crores in comparison to cluster of Madhepura having 221 units of Jaggery making employing about 3000 persons and a turnover of Rs.10 crores per annum.

Big Clusters				
S.No.	Name of the cluster	No. of firms	Employment	Turnover (Rs. in crores)
1.	Tirupur Cotton Knitwear Cluster	7200	3,00,000	11,000
2.	Delhi Ready Made Cluster	2039	50,000	4000
3.	Chennai Leather Cluster	1195	40,000	2020
4.	Panipat Made ups Cluster	7435	2,60,000	1200
5.	Ludhiana Knitwear Cluster	12000	5,00,000	5000
6.	Rajkot Engineering Cluster	2190	62,800	5450
7.	Surat Diamond Cluster	6000	700,000	72000
8.	Ahmedabad Pharmaceuticals Cluster	1290	41,000	10250
Small Clusters				
1.	Kaithun Handloom Cluster	1500	1500	2
2.	Baruipur Surgical Instruments	500	7500	5

3.	Gurera Beads cluster	800	2500	2
4.	Madhepura Jaggery Cluster	221	3000	10
5.	Lonavala Chikki Cluster	100	950	20
6.	Pareo Brassware Cluster	500	4000	18
7.	Parwanoo Light Engineering Cluster	75	2000	70
8.	Roorkee Survey Instruments	250	5000	50

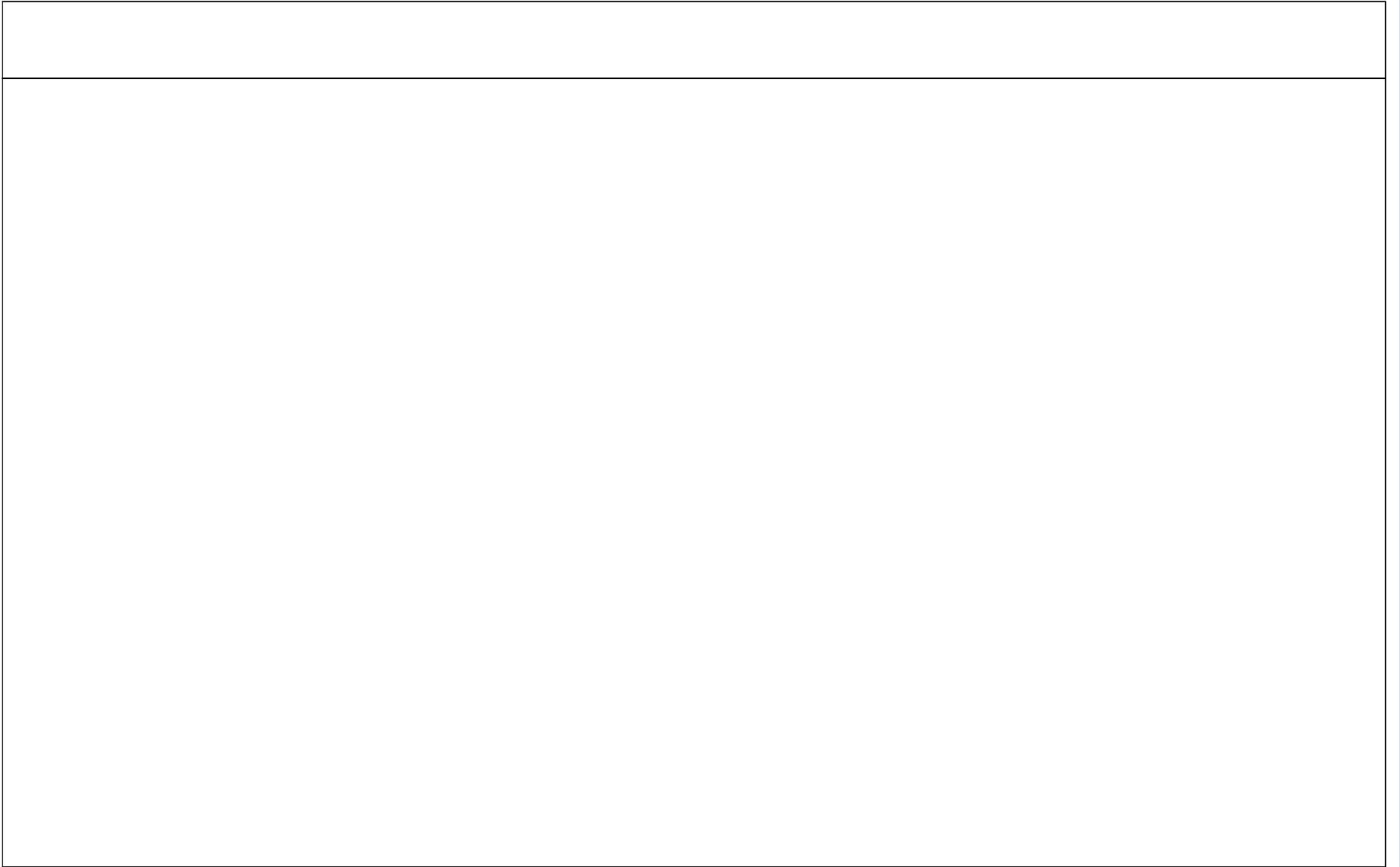
Typologies of Clusters

It is estimated that there are 6400 clusters in India. A total number of 3811 clusters have been mapped. These clusters are spread all over India. These 3811 clusters have been in the following typology:

(i) SME clusters	- 630
(ii) Handloom clusters	- 307
(iii) Handicraft clusters	- 2874
Total	- 3811

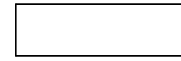
The State of Uttar Pradesh has the largest number of 419 clusters of all types followed by 299 clusters in West Bengal and 298 in Maharashtra.

A state-wise presence of all types of clusters is shown in the graph given below. It may be observed that top 7 States of Uttar Pradesh, West Bengal, Maharashtra, Orissa, Andhra Pradesh, Gujarat and Tamil Nadu accounts for 54% of all types of clusters in India. With regard to zonal spread of clusters, it will be observed that East Zone accounts for 1077 (28%), West Zone 957 (25%), South Zone 931 (25%) and North Zone 846 (22%).



Zone-wise presence of all types of clusters

Zone-wise cluster-type-wise presence of clusters

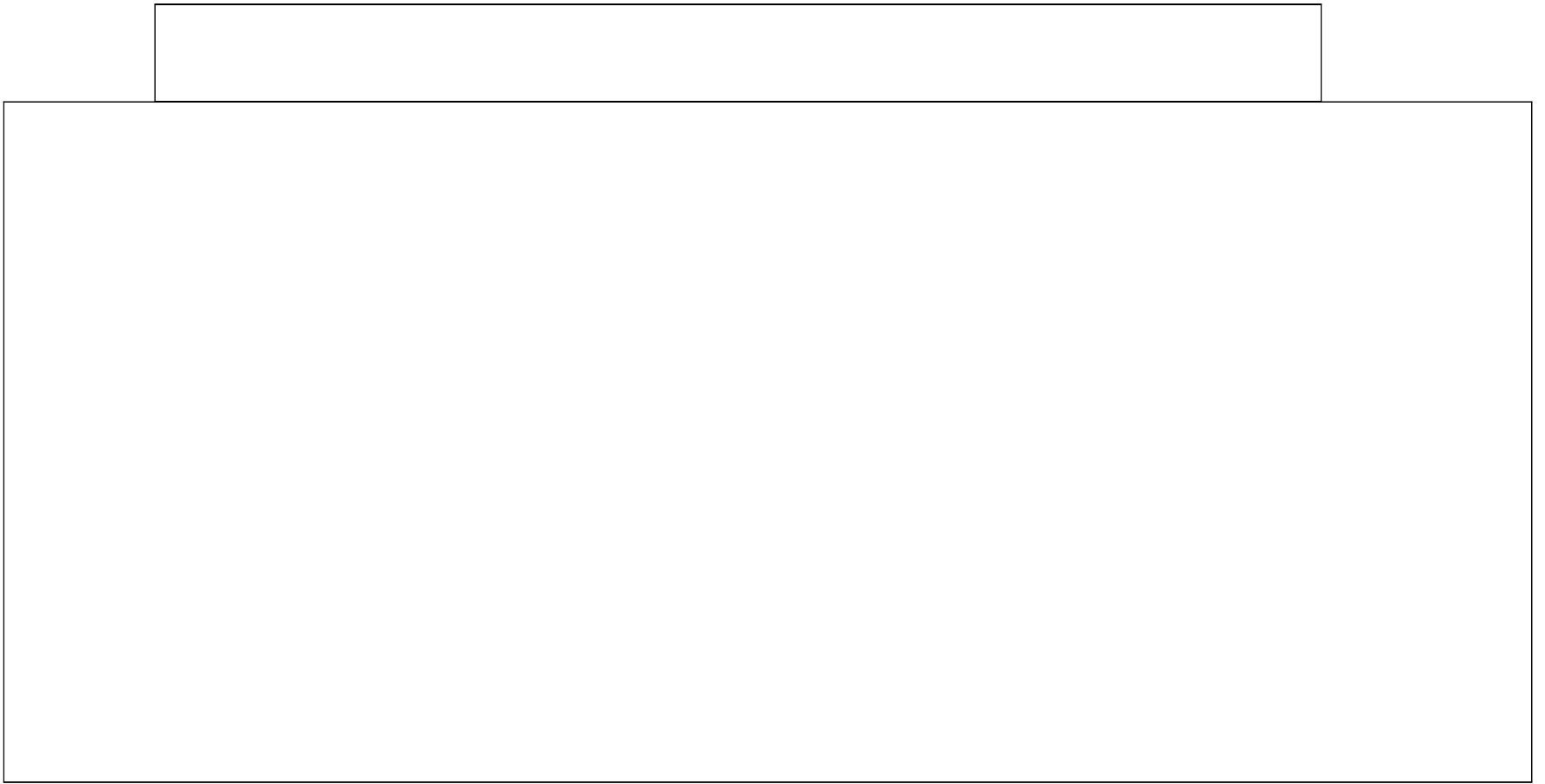


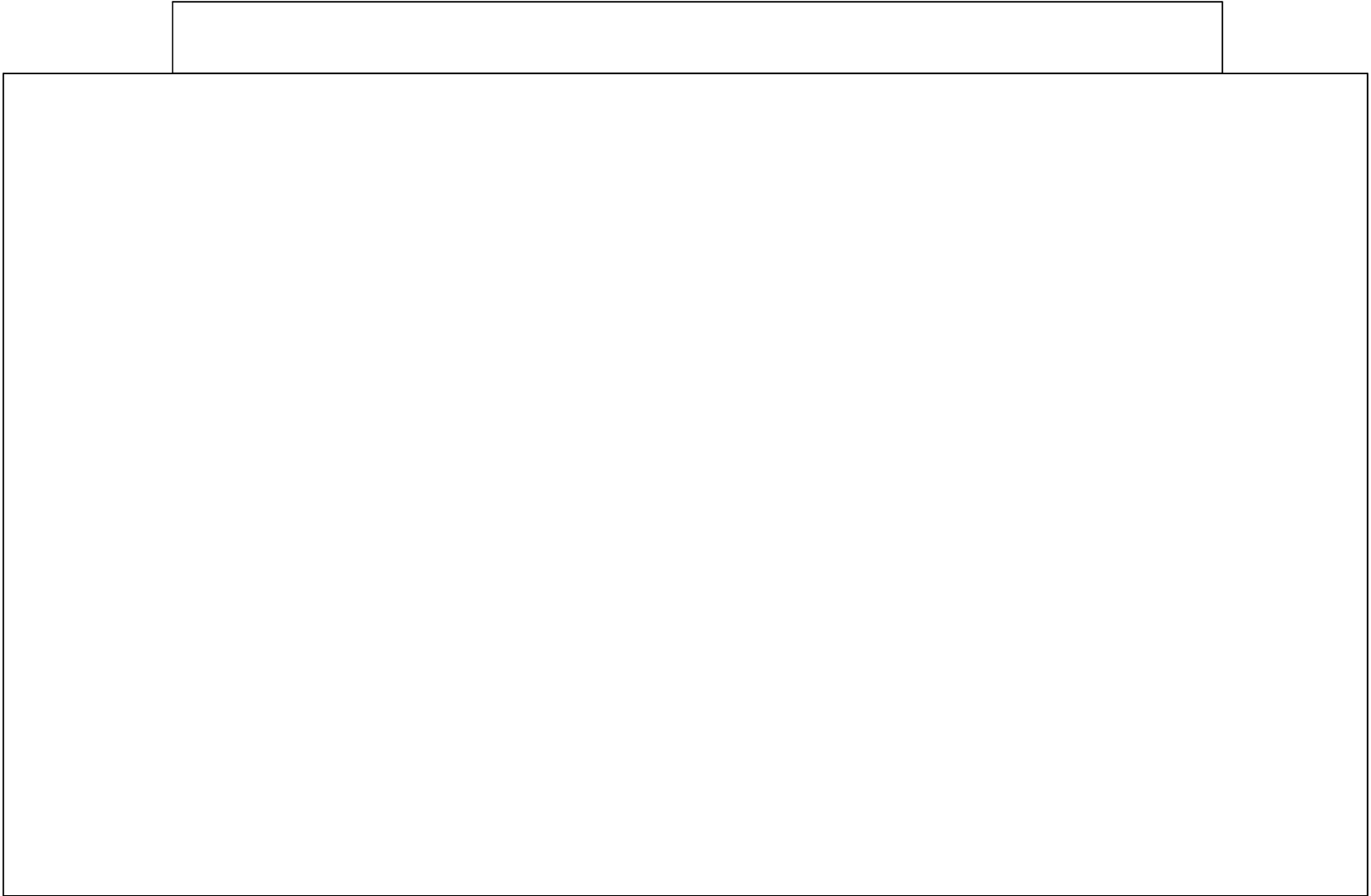
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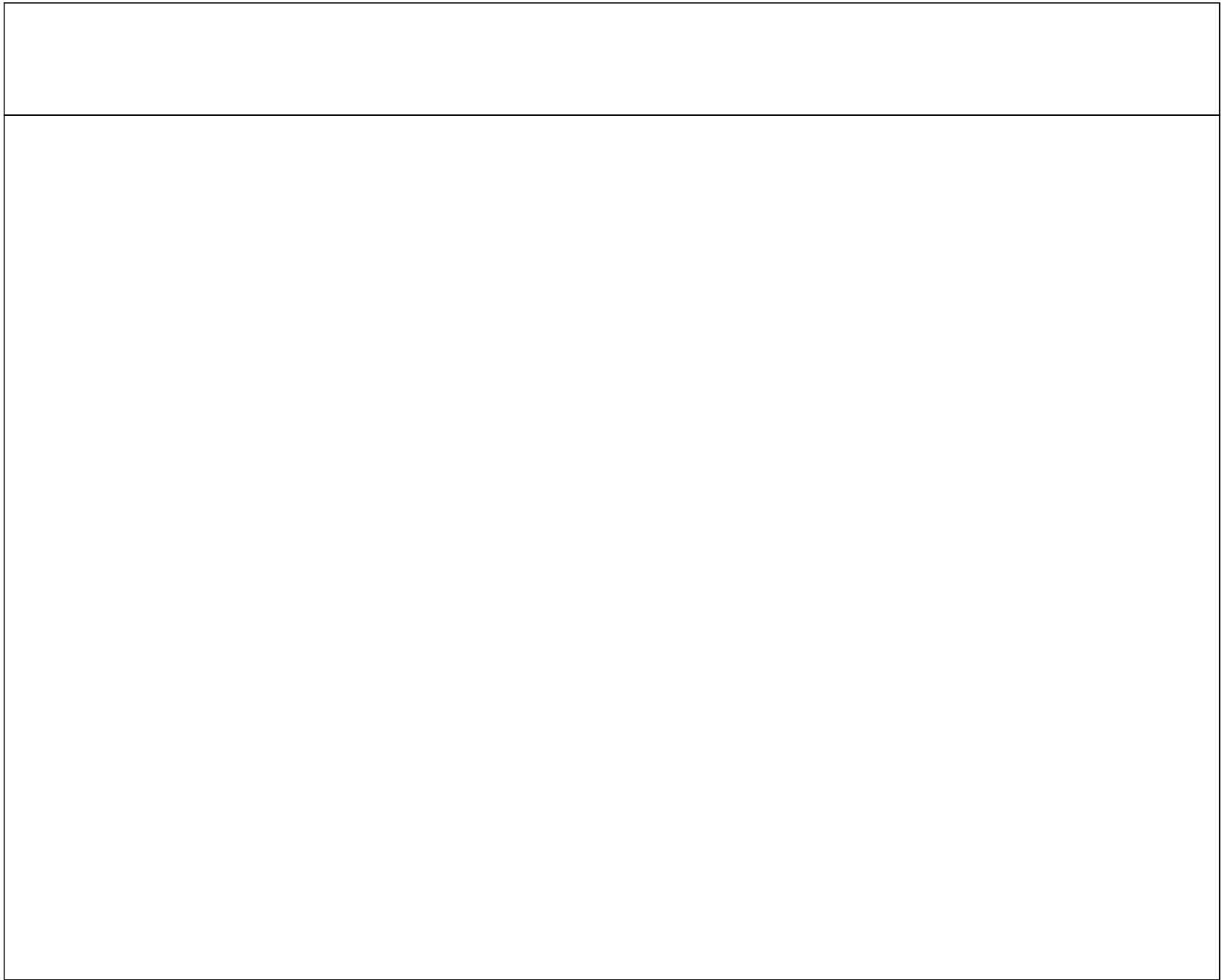
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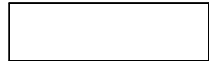
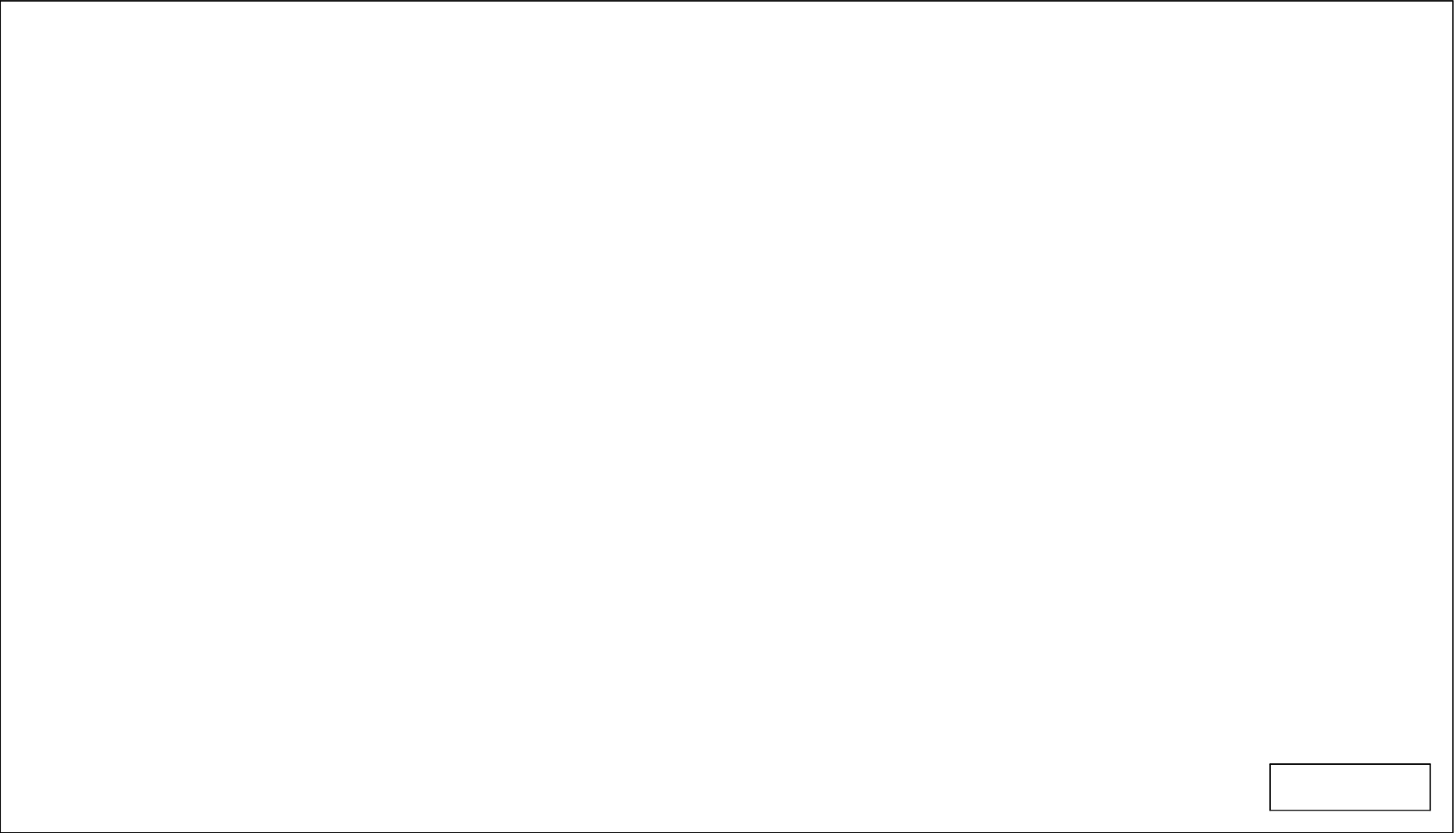
Cluster Interventions

Various developmental agencies are working for promotion of MSMEs and are adopting cluster development approach to meet this end. The main thrust of the Office of Development Commissioner (MSME) is promotion of MSMEs through cluster development. Development Commissioner (Handicrafts) is working for the development of handicraft units through cluster development approach. The following ministries/departments and agencies have undertaken cluster interventions:

- 1) Ministry of MSME, Development Commissioner (MSME)
- 2) Development Commissioner (Handicrafts)
- 3) Development Commissioner (Handlooms)
- 4) Department of Industrial Policy and Promotion
- 5) Ministry of Textiles
- 6) Department of Science and Technology
- 7) Textiles Committee
- 8) United Nations Industrial Development Organisation (UNIDO)
- 9) Government of Kerala
- 10) Government of Gujarat
- 11) Government of Madhya Pradesh
- 12) Government of Rajasthan
- 13) National Bank for Agriculture and Rural Development (NABARD)
- 14) Small Industries Development Bank of India (SIDBI)
- 15) State Bank of India (SBI)
- 16) National Manufacturing Competitiveness Council (NMCC)
- 17) National Small Industries Corporation (NSIC)
- 18) Rajasthan chamber of Commerce and Industry (RCCI)

Though there have been cluster interventions as early as 1987 by State Bank of India, but the work on cluster development started only in this millennium i.e. after 2000. All above organisations put together have made 2057 cluster interventions. The chart below gives the name of the organisation with number of cluster interventions. There has been maximum number of cluster interventions in Uttar Pradesh at 277, while there were 163 cluster interventions in Kerala, 144 in Gujarat, 131 in Andhra Pradesh, 127 in Tamil Nadu, 123 in Rajasthan and 113 in West Bengal. Chart --- shows state-wise cluster interventions undertaken by various developmental/donor agencies.

Developmental/Donor Agencies





Way Forward

So far most of the work under the framework of cluster development has been done in the area of productivity and competitiveness. Not only that there is much space to work in the areas of innovation, poverty alleviation, greening of clusters, and skill development but the future of cluster development lie in these areas.

In the area of Innovation the Foundation for MSME Clusters (FMC) is working for product and process development in Information Communication Technology cluster of National Capital Region (NCR) of Delhi, and Pharmaceutical and Bulk Drugs clusters of Ahmedabad and Hyderabad. With liberation of world economy there is pressure on small and medium enterprises to innovate in order to meet the challenges. One of the many gains of globalisation is that it has brought about increased in the number of knowledge activities such as product design,

production process management and quality control etc. Continuous improvement in product, process, technology has become the key to sustained competitiveness in globalised economy. SMEs need to innovate and change, restructure their operations and achieve efficiencies in production. Many a times they do not have resources to do so. Through clusters and networks SMEs can access skilled and educated labour and pooled business services. These opportunities allow specialisation, build technological capability and innovativeness and facilitate tacit knowledge flows and learning through interaction processes.

In the area of poverty alleviation not much work is being done keeping poverty alleviation as the main focus. Under a project of UNIDO work on poverty was done in Chanderi and Sindhudurg clusters.

It is needless to emphasize the importance of greening of clusters. The Energy and Resource Institute (TERI), SBI-Uptech, FMC, SIDBI BDS are doing work in this area but only in select type of clusters e.g. foundry. The greening of clusters can be undertaken by assisting SMEs in reducing their energy consumption through energy audits at the unit level, undertake technology assessment studies with regard to energy and environmental performance for different industrial sectors, develop and promote energy efficient and environment friendly technological solutions for SMEs, facilitate knowledge sharing and learning amongst industry stakeholders through workshops, seminars and focused training programs, facilitate development and execution of CDM projects at different levels, and provide inputs on transfer and diffusion of environmentally sound technologies in the context of climate change. The efforts in this direction will provide results not only greening of clusters but contribute in making the products of SMEs more competitive.

Corporate social responsibility is another important area where not much work has been done in clusters. Greater results could be obtained by working in the area of CSR through clusters. UNIDO had worked in Jalandhar Sports Goods cluster, Kalady Rice Mills cluster and Rourkela Sponge Iron cluster in the area of corporate social responsibility. Under a project from Indian Institute for Corporate Affairs (IICA) and GTZ, Foundation for MSME Clusters is working for promotion and adoption of CSR in SMEs in clusters. CSR is being presented as a business model for better understanding the benefits of CSR accruing to the units and thus easier adoption by SMEs.

Skill is an area where no work has been done through cluster approach. IL&FS off shoot named Education and Technology Services Limited has provided training to 50,000 rural youths and they have been placed under Ministry of Rural Development's Skill for Employment in Apparel Manufacturing (SEAM) program in textiles industry. This has been done keeping in view that the Indian textiles and clothing industry is expected to reach \$85 billion by the year 2010, the gap in the demand and the supply of skilled manpower is expected to be 2 million, especially as the present institutional structure is seen to be inadequate to bridge this gap, both in quantitative and qualitative terms. They have plans to train another 18,800 youths under Ministry of Rural Development's SESS program. Pilot level works have taken place which means few in number, in selected sectors by selected institutions. If inclusivity has to be ensured then holistic cluster development work along with special focus on skills need to be undertaken. To do this, there needs to be high level coordination among ministries, agencies, resources organisations to

become strong, with more industry-academia linkages. ITIs and other vocational training institutions need to become more proactive.