"A STUDY ON THE POSITIVE IMPACT OF CLUSTER DEVELOPMENT PROGRAM OF GOVERNMENT OF INDIA ON THE MICRO AND SMALL ENTERPRISES WITH SPECIFIC REFERENCE TO TEXTILE CLUSTERS IN MAHARASHTRA STATE"

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ABSTRACT

Indian policy towards Micro and Small enterprises (MSE's) uses a simple definition of a cluster. Micro and Small Enterprises - Cluster Development Programme (MSE-CDP) defines a cluster as a group of enterprises located in nearby locations where they produce same or complementary products or services. In Indian context, this simple approach is very useful as the cluster policy is strongly connected with development policy for rural areas and small cities. The Indian Ministry of Micro, Small and Medium Enterprises (MSME) has adopted the cluster development approach as a key strategy for enhancing the productivity and competitiveness of MSEs and binding it with creation of industrial infrastructure. The main concept behind this scheme is to build small local cooperation networks of MSEs, which will change their surroundings in a positive way. Cluster Development Programme (CDP) is a sequential mix of soft and hard intervention which improves capacity building, productivity and competitiveness of MSMEs. Clustering is the way forward which helps the country to have socio-economic development at each corner leading to regional balance. This phenomenon helps the country to face and solve the primary problem of migration issues, regional gap of development (societal turbulence), rich-poor divide (poverty elevation), employment, reducing dependency on service sector. This concept is towards the 'Atmanirbhar' which provides opportunities for growth.

Researcher has done this study as explorative and empirical way where the former was done with help of existing literature and later was done on basis of primary and secondary data. The primary data was collected via structured questionnaire from four textiles clusters which were approved under MSE-CDP scheme in Maharashtra state.

I. INTRODUCTION

The word 'Atmanirbhar' itself means 'self reliant' and 'independent'. The word 'Manufacturing' not only means the development of a tangible product, but it also means the development of IDEA i.e. 'Culture of Creativity' – which is new, competitive, marketable acceptance and can be easily adopted resulting in new product development, improvement in existing product i.e. product development and enhancement of quality of production. This would result in increased margins and overall development of all actors in this entire process.

MSME is also recognised world-wide for its dominant role played towards job creation and income generation resulting in poverty alleviation. In developing world, MSME helps to accommodate workforce characterised by low education and low skills. Sub-contracting is also the opportunity which MSME grabs from Large enterprises. The key to success of production of high quality products lies in industrial organisation i.e. the manner in which industrial activities are organised plays a very dominant role in economic development and poverty alleviation.

Micro, small and medium enterprises as per MSMED Act, 2006 (Government of India) were defined based on their investment in plant and machinery (for manufacturing enterprise) and on equipment for enterprises providing or rendering services. The ceilings on investment for enterprises to be classified as micro, small and medium enterprises are as shown in table below[3]:

Definition of Micro, Small and Medium enterprises (MSME)

Table 1. Old version of Definition of MSME

Manufacturing Sector	Investment in Plant & Machinery
Micro	Less than Rs. 25 lakhs
Small	Rs. 25 lakhs to Rs. 5.00 crores
Medium	Rs.5.00 crores to Rs.10.00 crores
Service Sector	Investment in Plant & Machinery
Micro	Less than Rs. 10 lakhs
Small	Rs. 10 lakhs to Rs. 2.00 crores
Medium	Rs. 2.00 crores to Rs. 5.00 crores

Source: Ministry of Micro, Small & Medium Enterprises.

The above definition of MSME was based in terms of investment in Plant and Machinery and was different for Manufacturing and Service Sector.

Since the economy has undergone massive change and also due to its low financial criteria, a revision of MSME definition was announced in Aatmnirbhar Bharat Package on 13th May, 2020 and come into effect

from 1st July, 2020. This revision was done to be realistic with time, provide objective system of classification and ease of doing business.

Major highlights of New Definition –

- No difference between Manufacturing and Service sector
- New criteria of turnover added with earlier criteria based on investment on Plant and Machinery
- New definition aims to bring more benefit and help to MSME to grow in size
- Exports of goods or services will not be counted under Turnover in any category of Micro, Small or Medium enterprise. It is sought to have more investments and creating jobs

Responsibility of promotion and development of MSMEs is termed to be primary responsibility of State Governments. Government of India supplements efforts of State government by providing various initiatives.

Below is New definition of MSME –

Table 2 – New definition of MSME

Revised Classification applicable w.e.f 1st July 2020			
Composite Criteria: Investment in Plant & Machinery/equipment and Annual Turnover			
Classification	Micro	Small	Medium
Manufacturing Enterprises and Enterprises rendering Services	Investment in Plant and Machinery or Equipment: Not more than Rs.1 crore and Annual Turnover; not more than Rs. 5 crore	Investment in Plant and Machinery or Equipment: Not more than Rs.10 crore and Annual Turnover; not more than Rs. 50 crore	Investment in Plant and Machinery or Equipment: Not more than Rs.50 crore and Annual Turnover; not more than Rs. 250 crore

(Source - The Gazette of India: Extraordinary [PART II—Section 3—Sub-section (ii)])

This Research has considered previous (OLD) definition of MSME. Further the questionnaire was also prepared considering old definition as the new definition was approved during the course of study.

Concept of Cluster

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. 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.

2. MICRO & SMALL ENTERPRISES - CLUSTER DEVELOPMENT PROGRAMME (MSE-CDP)

The Ministry of Micro, Small & Medium Enterprises (MSME), Government of India (GoI) has adopted the cluster development approach for Micro and Small Enterprises (MSEs) as a key strategy for enhancing the productivity and competitiveness along with capacity building and their collectives in the country. Clustering of the units also enables providers of various services, including banks and credit agencies, to provide their services more economically, thus reducing costs and improving the availability of services for these enterprises.

Introduction to Cluster Development Scheme of Government of India and Government of Maharashtra:-

There are two cluster schemes being implemented in Maharashtra state namely – Central Government's Micro, Small and Medium Enterprise Cluster Development scheme (MSE – CDP) and Maharashtra State Industrial Cluster Development Programme (MSI - CDP). Both these schemes are towards development of Micro, Small and Medium Industries.

Researcher, here has done his research towards clusters which are registered under Micro & Small Enterprises - Cluster Development Programme (MSE – CDP). Now, let's have introduction to both of programmes -

(A) *Micro & Small Enterprises - Cluster Development Programme (MSE – CDP):-*

In India, Cluster development programme is one of the oldest scheme which is run by Office of Development Commissioner under MSME Ministry. This scheme was revised in year 2007 and then in 2019 and currently we have revised guidelines (supersession of the previous guidelines) of this scheme as per Office Memorandum No. 1 (1247)/CDD/EFC/MSE-CDP/2021E dated 24.05.2022. In October 2007, 'Small Industries Cluster Development Programme (SICDP)' was renamed as 'Micro and Small Enterprises Cluster Development Programme (MSE-CDP)'. It was also decided to subsume the 'Integrated Infrastructural Development (IID)' Scheme in MSE-CDP for providing developed sites for new enterprises and upgradation of existing industrial infrastructure. Office of Development Commissioner (MSME), Ministry of MSME administers MSE-CDP. Under this scheme, Govt. of India gives financial support by grant-in-aid to establish Common Facilities Centre (CFC) & Infrastructure development to enhance the productivity and competitiveness of the clusters. CFC includes R & D facilities, Packaging Centre, Testing Centre, Training Centre, CETP, Common Processing Centre etc. The scheme is implemented by the Special Purpose Vehicle (SPV) under Public Private Partnership (PPP) mode.

(B) *Maharashtra State Industrial Cluster Development Programme (MSI - CDP):-*

Government of Maharashtra have announced Maharashtra State Industrial Cluster Development Programme (MSI - CDP) vide Government Resolution reference number SME-2013/P.K.207/Udyog-7, dated 25.02.2014 to boost the growth of MSEs and promote entrepreneurship activities specially in industrial backward areas

of Maharashtra state. This scheme is implemented in D, D+, Non Industrial Districts and in area which are affected by Naxalites. With this scheme, MSEs will benefit by having easy access to advance technology and other common infrastructure / programmes under this scheme, which will help them to improve competitiveness and productivity of each cluster members. This scheme provides financial support for having sustainable development of MSEs by encouraging of having collaborated efforts. The Ministry which looks after this scheme is Government of Maharashtra, Industry, Energy & Labour Department The District Industries Centre (DICs) under the guidance of the Directorate of Industries, Mumbai, implements the scheme all over the state

In this study an attempt is made to understand the Micro, Small Enterprise Cluster Development scheme (MSE-CDP) in India were the researcher have visited 4 textile clusters in Maharashtra state which is approved under MSE-CDP scheme, Government of India.

Financial assistance under Cluster scheme[1]

GoI funding pattern for projects –

As per New guidelines issued for MSE-CDP vide Office Memorandum No. 1(1247)/CDD/EFC/MSE-CDP/2021E dated 24.05.2022 the GoI funding pattern for projects would be -

- For preparation of Diagnostic Study Report (DSR) GoI grant is limited to Rs. 2.50 lakhs and for field organisation of Ministry of MSME its upto Rs. 1.00 lakh

- For Soft Intervention, GoI will grant 75% of sanctioned amount, with maximum project cost of Rs. 25 lakh per cluster and for NE / Hill states / 50% of micro, village, women owned, SC, ST units, the GOI grants will be 90%

- There is no **contribution towards preparation of DPR by GOI, however, 4% of total Project cost, not exceeding Rs. 50 lakhs may be considered as contribution by State Government or Special Purpose Vehicle** (SPV) on case to case basis. This includes consultancy charges to Technical institutions, etc from conceptualization stage to the operational handholding support, based on approval of State Level Steering Committee (SLSC).

- Contribution by GoI towards Hard intervention i.e. for setting up of CFC for eligible project cost

Table 3(i): Funding pattern

Total Project cost	Funding Pattern		
	Government of India	State Government	SPV
Rs 5 crore to Rs 10 crore	70%	20%	10%
Rs 10 crore to Rs 30 crore	60%	20%	20%

Source : Office Memorandum No. 1(1247)/CDD/EFC/MSE-CDP/2021E dated 24.05.2022

For projects located in the Aspirational Districts, North Eastern Region (NER), Hill States and Islands, LWE (Left Wing Extremism) affected districts and clusters where there are more than 50% micro / village ; women

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[1] https://msme.gov.in/know-about-scheme-1

owned ; Schedule Case / Schedule Tribes (SC / ST) owned units, the funding pattern towards Common Facility center would be as follows –

Table 3(ii): Funding pattern

Total Project cost	Funding Pattern		
	Government of India	State Government	SPV
Rs 5 crore to Rs 10 crore	80%	15%	5%
Rs 10 crore to Rs 30 crore	70%	15%	15%

Source : Office Memorandum No. 1(1247)/CDD/EFC/MSE-CDP/2021E dated 24.05.2022

The project cost of CFC which cost more than Rs. 30 crores, is considered eligible, but the GoI assistant would be calculated considering the maximum ceiling of Rs. 30 crores. The project cost which is less than Rs. 5 crores would be considered in SFURTI scheme (Scheme of Fund for Regeneration of Traditional Industries) guidelines and would not be eligible for MSE-CDP. SPV / beneficiaries contribution should be upfront. Funds are released to implementing agency in three instalments of ratio 50:40:10 – depending on various parameters of this programme. The Office of DC (Office of Development Commissioner), MSME would evaluate the project after three years of completion by third party.

Cluster Member contribution –

Minimum contribution should be sought from each member to SPV via equity capital to feel the sense of ownership and this has direct impact on the success of CFCs. If a member wishes to contribute more than the minimum contribution than it should be treated by way of unsecured interest free loans. Minimum contribution by member for the project would be -

- With project costing less than Rs. 10 crores (could be 5% for NER) – the contribution would be 10% of project cost for CFCs
- With project costing more than Rs. 10 crores (15% for NER) – the contribution would be 20% of project cost for CFCs
- Restriction of holding more than 10% by single unit in equity capital (or any equivalent capital contribution) of SPV – as per O.M. dated 26th July, 2022

3. LITERATURE REVIEW

Literature review helps to get clear idea and better understanding of cluster theme and its usefulness in business development in developing countries like India. It also becomes a part of our National Theme 'Made in India' & 'Atmanirbhar Bharat'. Further it also highlights how the 'cluster theme' became beneficial for those who have become part of this scheme. It's seen that co-operation, mutual understanding and trust, will help businesses grow as with the help of clustering process the ideas of expanding business, growth, productivity and increased margins seems to be a Primary focus. Previous research studies help in

understanding the ideology of cluster and its importance in MSME space. With Government more attention to MSME growth, which will help India to be a Hub of Manufacturing processes, this scheme holds importance to Micro and Small entrepreneurs to have value addition in their existing produce and became a part of India's successful stories of Growth and success.

The motivation to take the 'Cluster concept' was not to just have analysis of empirical phenomenon, but to develop a new approach for economic policy which would help the regional and national economies. Clusters based economic policy has lot of potential, but it's not a remedy for all difficulties. The high hopes to avail this benefits can bear fruits, were the research and practice needs to step up towards this rigorous demand in new era[2].

Szymon Mazurek (2014)[3] studied Diversity of cluster policies in Asian countries, which highlighted that there are different cluster policies in Asian countries which depend highly on multi-level and multi-actor reality of each country which leads to the formation of different policy-mixes which are associated with local capabilities and limitations. Below is brief about cluster definition and their understanding about Cluster concept –

i) Knowledge cluster initiative in Japan

The cluster policy at Japan is described as challenge driven or vision led approach, where they define it as a network among industry, academia and government – which are regarded as tool for triggering innovation and realization of broad idea. Linkage of cluster initiatives with knowledge based economy is the core issue of Japanese cluster policy. More space is given to research compared to production – which is most novel aspects of Japan's strategy

ii) Specialised Town Program in China

China marked a beginning of Open-Door Policy to modernize industry and boost economy. It was from year 1980 that China created its first Special Economic Zones (SEZ) followed by opening numerous types of development zones which offered different kind of incentives and benefits, which are agglomeration of specialised enterprises. Thus cluster policy concentrates of having same type of business activities in the prescribed area resulting in development of lagging areas and better arrangement of development process. Researcher gave the example of Specialised towns program - Guangdong Province, which was labelled under "one city-one product". Here number of preferential policies was granted in order for having agglomeration of specialised enterprise, which encouraged agglomeration of enterprises focused on production of one specific item.

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[2] Ketels, C. (2003), The development of the cluster concept – present experiences and further developments
[3] Szymon Mazurek(2014), "Diversity of cluster policies in Asian countries". Prace Naukowe Uniwersytetu Ekonomicznego we Wrocławiu 370:57-70

iii) Provincial cluster development policy in Thailand

In 9th plan, provincial cluster development policy was launched having strategy on sustainable rural and urban development through empowering communities, reducing rural & urban poverty and developing urban- - rural linkages. This policy aimed to reduce economic and social disparities between the capital i.e. Bangkok; and other cities thereby restraining expansion and migration from rural areas. The goal of provincial cluster development policy is to develop each province and provincial cluster as a self-contained settlement which is able to compete with Bangkok.

iv) Craft villages in Vietnam

In Vietnam, in rural areas there are clusters local industries called as "craft villages" where majority households are engaged together in the economic activities. With further policy developments, some of these craft villages have increased their size and level of industrialization, where some have started to export their produce others have become big suppliers of industrial goods. Labourers are attracted not only from their village and surroundings but also from other provinces. Craft villages not only contributed essentially to the production but also have become indispensable part of Vietnam culture (craft village-based tourism)

v) Micro and Small Enterprises – Cluster Development Programme in India

India has adopted the cluster development approach for Micro and Small Enterprises (MSEs) as a key strategy for enhancing the productivity and competitiveness along with capacity building and their collectives in the country. Here clusters are defined as a group of enterprises located nearby and producing the same and similar products or services.

Japanese Knowledge Clusters are strictly connected with the policy promoting innovations but at the same time they are a part of the strategy of boosting regional economies and replace older approach of industrial policy. Chinese concept of Specialised Towns can be placed between industrial and regional policy. Vietnamese craft villages, provincial clusters in Thailand and Indian MSEs clusters are an important part of development policy for rural areas. Speaking about the best cluster policy mix, the policy which is cohesion and adequate should be established in economy.

Dun & Bradstreet India (D&B India)[4] in association with British Airways had launched cluster based report series "D&B - British Airways SME Cluster Series 2014: Mumbai", which focuses on status and scenarios of SMEs operating in Mumbai cluster having various parameters. This report highlights the benefits of firms operating within this cluster and factors that enhance their competitiveness. The key primary findings are elucidated below –

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[4] Cluster based report series, "D&B - British Airways SME Cluster Series 2014: Mumbai"

Mumbai SME Cluster - SME Perspective

With different factors towards benefits of operating in a Cluster - Tax benefits and import/export turned out to be the key benefits of operating in a cluster

Under Exports Scenario –

- Major SMEs were earning export revenues below 20% of their total income
- Access to newer markets emerged as the top barrier while operating in exports markets

Marketing Strategies

- Topmost marketing strategies of majority of the SMEs were B2B (Business to Business) and online marketing. However, exhibitions, media, and journals emerged as least popular marketing choices
- Lack of market awareness and branding awareness in products and services acted as a major roadblock on their offering which hampers their production and business activities. The second major challenge was cost incurred on marketing and branding, and shortage of skilled workforce

Technology Scenario

The key benefit of technology is improved efficiency, but its high implementation cost is a deterrent followed by lack of consultancy support services towards technology being used by them. To overcome this hurdle, there is scheme from government 'Capital subsidy for adopting new Technology (CLCSS)'. The survey highlighted that major SMEs were unaware of the various government schemes for upgrading/modernizing technology.

SME financing preferences

- For business expansion and meeting up their regular working capital requirements, SMEs are dependent on banks. Private equity (PE) and venture capital (VC) are emerging as the most preferred source of funding for SMEs for starting business and also for business expansion requirements followed by Regional rural banks
- SMEs expect information update on the industry and target markets from financier so that they are not jeopardized by incorrect or obsolete information

Business Travel Trends

- Majority of the SMEs did not make any single international and domestic business trip
- Asian regions emerged as the most frequent business travel destination by SMEs
- Budget expenditure for business travel was discussed; and travelling cost, safety, value added services, discounts/reward point was on top criteria in choosing an Airline

Key challenges and rebuilding business strategies during economic slowdown

- Decline in client orders emerged as the most significant effect of the economic slowdown
- Top-most priority to sustain business growth appeared to Client retention strategy

The research concluded that to be more competitive the access to modern technology is key factor supporting businesses in the cluster followed by government assistance in enhancing competitiveness. Further, in boosting cluster competitiveness, assistance in obtaining patents and IRPs (Corporate Insolvency resolution process) were considered as the top factor followed by regular updates on market.

Christopher Ziemnowicz (2013)[5] studied factors that cause change in economy. He mentioned the special factors which were analyzed by economist Joseph Schumpeter in 1934. Cluster helps the members to take innovative steps for their business prosperity, defines innovation as "carrying out of new probabilities", which he briefed into five different types –

- The introduction of a new goods / products
- The introduction of new process / production
- Opening of new market
- Opening of new source of supply
- Carrying new organization like creation or breach of monopoly position

Anna Soloveva, Larisa Chizho, Andrey Makarov and Anna Beznebeeva (2021)[6] in their paper Cluster approach as the innovative model for the development of the regional economy (on the example of the Volgograd region) mentioned that to maintain the competitiveness and to adapt the changing conditions of external and internal environment for sustainable development of a region, there exist a requirement of formation of new achievements in science in technology. Hence, innovation activity and innovation policy should be made to work together. With rapid development in all factors of business i.e. technology, transport, manufacturing, logistics, communication, movement of funds, and so on; the most important factor to become superior over competitors, is not only the innovation and scientific knowledge, but also the relationship between enterprises (the creation of clusters). The Volgograd Region of Russia has predominance of manufacturing industries. The cluster policy is one of the directional program which helps to strengthen interconnection networks between cluster members to facilitate the access to new technologies, risk distribution in form of joint economic activities including joint access to foreign markets, joint research and

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[5] Ziemnowicz, C. (2013). Joseph A. Schumpeter and Innovation. In: Carayannis, E.G. (eds) Encyclopedia of Creativity, Invention, Innovation and Entrepreneurship. Springer, New York, NY. https://doi.org/10.1007/978-1-4614-3858-8_476

[6] Soloveva, A., Chizho, L., Makarov, A., & Beznebeeva, A. (2021).Cluster approach as the innovative model for the development of the regional economy (on the example of the volgograd region) E3S Web of Conferences 274, 10010 (2021), STCCE – 2021. Published by: EDP Sciences. doi:https://doi.org/10.1051/e3sconf/202127410010

development works, joint use of knowledge and fixed assets, joint learning from world class specialist, reduction in transportation cost.

FEW ADVANTAGES FOR ENTERPRISES WHICH ARE PART OF CLUSTER –

- REDUCTION IN ENTRY BARRIERS INTO NEW INDUSTRY, LESS COST IN ADAPTION TO EXTERNAL ENVIRONMENT

- Common problems being solved with support from Authorities

- Upgradation in production and technology

- Access to new technologies

- Intensification in innovation and close relation with business partners

- Cheaper access of factors of production – personnel's, machineries, technologies

- Specialised information flow

- More information of specialised suppliers, resulting in exploring local market opportunities

- Similar mindset of all enterprises towards improvement and coordination on efforts - leading to improvement in quality and efficiency of all participants

- Joint marketing, exploring the reputation of region in the industry

- Quick response to customer needs

Few indicators which show economic benefits of Cluster to regional economy -
- Increase in employment

- Wage increase

- Contribution in Budget at various levels

- Increase in sustainable development of region

- Increase in competitiveness of regional industries

There exist a number of factors which hinder the cluster development in region –
- Low infrastructure development

- Educational and research programmes are inconsistent and do not match as per needs to economy

- Lack of interconnection between productions, education, scientific organisation – which act as main factors of development

- Low efficiency and professionals

- Concentration in short term gains, where the cluster program reps benefits in 5 – 7 years

THERE IS NEED TO DEVELOP POSITIVE ENVIRONMENT BY FEDERAL EXECUTIVE AUTHORITIES IN REGION TO MAINTAIN AND STIMULATE THE CLUSTER POLICY AND TO OVERCOME OBSTACLES -

- PROVIDING BUSINESS INFORMATION AND SUPPORT TO ENTERPRISES INSIDE CLUSTER

- Developing general strategy which includes goals, objectives, direction of development of cluster policy and support on complex initiatives for cluster development in region

- Support in development of international cooperation in cluster policy
- Support to enterprises of clusters in carrying out marketing and advertising campaign, increase in competitiveness and helps in sale of product in interregional and foreign markets
- Promote the interaction of cluster members with scientific institutes, laboratories
- Their main efforts should be directed to industrial and innovative policies, strategies and programmes towards socio-economic development of region

Nibedita Saha, Drahomíra Pavelková and Petr Sáha, (2014)[7] in their study mentioned that number of countries and individual businesses are under stress of how to be sustainable in modern competitive world and to keep pace with increasing complex network of social, political and economic entities. The study helps to understand how the industrial clusters influences development of human resources. The demand of professional individual increases to have business growth in new-form resulting in establishment of research institutions to meet the global challenges which requires knowledgeable people and within the cluster there are chances of knowledge spillovers where there are chances of getting highly qualified individuals resulting in increase of technology level. The technological progress results in cost reduction which having its repealing effect, both, in competitiveness and profitability. The potential utilization of knowledge benefits the company. The scale of production increases with increased cooperation among member firms thereby strengthening the competitive ability of enterprises.

United Nations Industrial Development Organization's (UNIDO)[8] in its working paper titled 'Development of Clusters and Networking of SMEs' (2001) mentioned three main aspects of assistance provided by UNIDO for clusters with various cluster case studies with problems facing the cluster and how with UNIDO support, the cluster got revamped. Below is the brief on case studies supported by UNIDO for this aspect –

Boaco and Chontales cluster (Nicaragua): institutional networking

The Cattle state, famously known, produces millions of tonnes of milk and milk products. UNIDO established a close cooperation with institutions that were committed to support and develop milk and cheese sector. An important step of formation of an Institutional coordinator found to be crucial which helped in cooperation among institutions from medium to long term and shared task to capitalise the available capacity, skills and resources. Direct participation approach by local entrepreneurs and institutions led to identify the bottlenecks at different stages of production and possible solution were designed as an action plan. This focused on improving the quality of cheese and diversifying the types of markets the cluster cater to. Below were outcomes of these arrangements –

- Establishment of Technical norms by local government

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[7] Nibedita Saha, Drahomíra Pavelková and Petr Sáha, (2014) Impact of Cluster Activities Accelerate Human Capital and Firms Competitiveness: An Empirical Study of the Clusters in India (Kerala). Strategic Management Quarterly June 2014, Vol. 2, No. 2, pp. 109-126 ISSN: 2372-4951 (Print) 2372-496X (Online)

[8] Private Sector Development Branch Investment Promotion and Institutional Capacity Building Division, The UNIDO (United Nations Industrial Development Organization) Programme, Vienna, 2001

- New products were launched

- Improvement in Quality, leading average increase of yield by 25 percent

- Reduced water pollution by around 70 percent

- Creation of 'Cooperative' to improve constant milk supply to cheese producers and establishing a joint purchasing system

- Relocation of cheese producers outside the urban areas to reduce environmental impact

- Subcontracting to cluster from large multinational companies where such companies to provide the required training and machineries to undertake the task

- Establishment of testing laboratory for milk quality

- Establishment of common technical service centre for milk and cheese cluster and promotion of alliance to represent the local sector

Woodworking network in Masaya (Nicaragua)' – which mentions how the business units benefited from Clustering

Masaya city, southwestern Nicaragua (country of Central America) serves as a commercial and manufacturing centre for the rich agricultural hinterland. There are high concentrations of woodworkers. From this 15 of these business units decided to participate in UNIDO networking project to become more competitive in their business.

This initiation proved to be successfully where they started producing higher quality product of local market, started exporting 3 models of chairs to United Kingdom and participating in trade fairs with a common catalogue and quality standards

The possibility of exports to United Kingdom constituted powerful incentive to restructure their existing production line and processes. These enterprises jointly agreed on designs, prepared common product specification catalogue. Further, they also started purchasing wood in bulk allowing them to obtain cheaper prices. After 3 years of their successful business operation, the said group opened a shop selling production inputs, which were scarce and expensive in local markets. This led the existing retailers to lower the input prices cost leading to benefit to entire local woodworkers

NABARD has published a handbook named 'NABARD's Cluster development Programme'[37] where they have documentated their initiatives, which they have undertaken.

These initiatives was considered after through examining the concept and its outcome which stated that – **Cluster approach is best suited for the development of small and micro enterprise**; where NABARD evolved its own Cluster Development Policy in the year 2005-06. Below is one of cases which is documented and explained in brief –

Cluster Name Tasar Silk Cluster, Andhalgaon and Mohadi - District Bhandara, Maharashtra

Cluster details Considering the pre-project scenario, it was accentuated the need for intervention via Cluster development programme. Problems faced was of defunct of Weavers cooperative societies, weavers don't had access to employment facility, activities performed was in traditional way, migration was problem where

weavers migrated to Surat and Bhiwandi, Wages which were around Rs. 25 per day for male weaver and Rs 10 per day for women artisans

Cluster importance –

Age old skills in weaving sarees and dress materials

Raw Material in Tasar cocoons, which is available locally

Compared to other silk variety, Tasar silk is having a typical stiffness.

Outcome of Cluster Cluster was formed on 18th February, 2005. Communication gap between development agencies, banks and weavers were narrowed. This had lead to more trust and faith between them. Training and Research center was made operational and Common Facility centre was established. Weavers upgraded their skills from production of plain cloth to sarees, dress materials, booty work and new patterns and designs. Sales increased along with annual income. Now their kids have started to go to schools regularly and the quality of life has improved significantly.

Cluster Name - Papier Mache Cluster, Kancheepuram, Tamil Nadu

Cluster details - Cluster is famous for dancing dolls – 60% of the country's production of dancing dolls is made in this village. They used to make the dolls from clay but now they are using Papier mache.

Pre-forming of cluster –

Artisans used to carry business individually with less support, this led to less income

Outcome of Cluster

Cluster was formed on 30th October, 2003.

Intervention in form of creation of infrastructure, facilitating marketing support, skill training was provided;

Construction of Common facility centre (CFC);

Financial assistance by banks,

Participation in exhibition,

Income of artisans increased

Misu Kim, (2019)[9], in his article analysed the potential of India's textiles and clothing (T&C) sector. The study shows that the T&C sector share its significant part towards exports, industrial production and employment generation. It highlights that low cost producing countries like Bangladesh, Vietnam and Honduras can become treat to India's export. Also China has high labor cost compared to these countries – but there quality of T&C compensate the additional increase in cost. As the world is moving forward and seen a significant demand in Man-made fibre, than that of natural fibre, India has competitive advantage which can fully be explored. India needs to work more on Technology, logistics so as to create export infrastructure to

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[9] Misu Kim, (2019), Export Competitiveness of India's Textiles and Clothing (T&C) Sector in the United States

sustain export competitiveness. Further rise in demand of Indian Textiles, due to various government schemes like ;Make in India' and less purchase from China' policy – will definitely help Indian to maintain its stand in Global market. This requires India to determine components where it sees the comparative advantage with aid in Policy.

4. SIGNIFICANCE OF THE STUDY:

The significance of present study lies in economic development, regional balance, employment generation, migration issues and entrepreneurship development, exploring the regional opportunities of products available, increased incomes, increased in GDP and exports, innovation. The importance of cluster is that even non-cluster member can use the facilities there at CFC. This means that the producer of raw material can also become the manufacturer and can sell its output directly to end-user leading to increased margins and it also benefits the end user as they gets the produce in low price compared to shop price or middleman price. This scheme has huge capacity of removing poverty from India, if policymakers try to promote this scheme aggressively at local levels. This will lead to preservation of our tradition and locals will have more income at their disposal.

Developed countries has shown a wide interest in development of clusters, which India have not attracted enough attention to policy makers, so even businessmen. The task of our government is to create a favourable economic space in which the clusters emerge and develop the economic environment. Here, we also have presented the literature review from countries that have explored the concept of clusters to improve competitiveness to national economy. Seeing the nature of study for clusters – which researcher think, this concept is useful as a business policy which will contribute more to local businesses; more related to economic development of country and one of a tool to solve the frontline problems of country i.e. migration issues, urban-rural gap, profit margins and unemployment – where researcher have mentioned detailed review of some literature, so that the readers understands the impact of clusters to their socio – economic life more effectively and efficiently. Researcher, with help of concerned government and non-government departments, wants to create 'cluster' as a brand which bring regional prosperity in country where every corner of region is benefited making India strong and contributes in drawing the roadmap towards achieving the three trillion economy. Creation of brand at local level will be with help of regional DIC and educational institutes where the former can be done more aggressively by local elected members which helps to find the local commercial product which can be explored more using the technology and other required support; and latter can be achieved with help of having additional informative and guest lectures at regional level to make understand the product grown at their region and how it can be explored more with help of government support. The benefit which the state can get by spreading the cluster concept at educational stream is that – to get support of new millennial who can re-innovate the process and product, make much more use of available technology leading to road towards entrepreneurship and new-startups in region.

5. SOURCE OF DATA COLLECTION

PRIMARY DATA:

Researcher has collected primary data with help of questionnaire and interviews, where each responded where contacted personally. The main objective of this research is to study the positive impact of Cluster scheme in Textile sector of Maharashtra state. The study covers a diverse range of enterprises in Maharashtra state of the said sector. Since it's an exploratory study, it is based on primary data collected from the entrepreneur of the textile cluster. The size of the sample was fixed at 80% of the enterprises registered in cluster scheme. Researcher has considered the previous definition of MSME as research was started earlier before introduction of new definition. It's to be noted that considering the new definition, all the enterprises comes on the Micro units. The survey gathered information from small and medium-sized firms in four textile clusters which have availed the benefits of MSE-CDP scheme of Government of India. Survey has been conducted in these clusters via framed questionnaire. Data was collected at place of work of entrepreneur. The questionnaire was designed to capture impact of MSE-CDP scheme to cluster members, firms were asked to rate as per impact they felt after being a part of cluster scheme 80% of units were interviewed with help of structured questionnaire. Data collection was further supplemented by structural interviews with the entrepreneurs. The output / answers which were received during these interviews were later analysed using SPSS software to test the Hypothesis and Objective of study

The study covers **175** units from **202** registered units of Four clusters. Various discussions in terms of economy and business perspective was discussed, where researcher tried to club majority points as – 80% of registered members i.e. 175 units were interviewed and response collected was analysed as a part of this thesis.

Table 4: Cluster members details

SN	Name of Cluster	Location	Number of Cluster members	Number of cluster respondents
1	Textile Cluster	Hatkanagle, Kolhapur	72	58
2	Textile Cluster	Shirpur, Dhule	29	25
3	Textile Cluster	Malegaon, Nashik	49	47
4	Textile Cluster	Navapur, Nandurbar	52	42
	TOTAL		202	175

SECONDARY DATA:

Secondary source have created addition pillar towards understanding the concept and the work done by scholars. It act as a guiding tool to understand the basic's and flow of Domain Concept, where the researcher was more attracted to explore this area which would be benefitted to the society. The said sources were Journals, books, articles, websites, magazines, conference papers and so on.

PERIOD OF DATA COLLECTION:

The primary data collection for the present study was collected during the years 2020 and 2021.

SAMPLE SIZE

Sample takes into account a representative number of respondents from entire population. Studying the entire population becomes difficult and hence researcher needs to select the population which can represent the entire universe. Hence, for this study, researcher has taken utmost care to reach out to maximum respondents in each cluster from whom the data and information can be obtained.

RESEARCH AREA:

Researcher had visited following 'Textile clusters' and covered 80% of respondents under each cluster. List of said clusters are:-

Table 5 : Cluster members details

SN	Name of Cluster	Location
1	Textile Cluster	Hatkanagle, Kolhapur
2	Textile Cluster	Shirpur, Dhule
3	Textile Cluster	Malegaon, Nashik
4	Textile Cluster	Navapur, Nandurbar

Table: List of Textile cluster visited

7. OBJECTIVE OF THE STUDY

To evaluate impact of Cluster development policies on production performance of enterprise in Textile clusters in Maharashtra

HYPOTHESIS OF THE STUDY

Null Hypothesis H_0: There is no impact of cluster development policies on production performance of Textile clusters in Maharashtra.

Alternate Hypothesis H_1: There is an impact of cluster development policies on production performance of Textile clusters in Maharashtra.

8. DATA ANALYSIS AND INTERPRETATION

Information required for the research study is collected through a structured Questionnaire. Total cluster members in four clusters were 202, out of this 80% of cluster members were interviewed. Responses from 175 respondents from these clusters were collected; Demographics data and responses on various statements from the respondents are classified, rated and presented in the tables as follows:
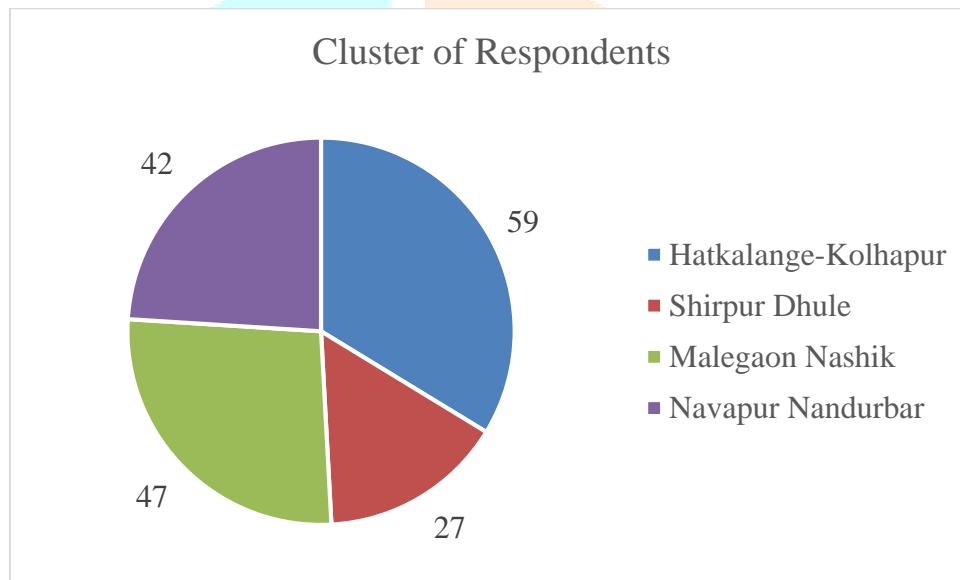
Classification of Cluster :

Table 6: Number of cluster members

Number of Cluster members in each cluster under study	
Hatkalange – Kolhapur	72
Shirpur – Dhule	29
Malegaon – Nashik	49
Navapur – Nandurbar	52
TOTAL	202

The above table indicates that there are total 175 respondents from which 59 respondents are from Hatkalange-Kolhapur, 27 respondents are from Shirpur-Dhule, 47 respondents are from Malegoan-Nashik and the remaining 42 respondents are from Navapur-Nandurbar. This information is shown below in the form of pie diagram.

Graph 1 : Cluster of Respondents

Impact of cluster on Production facilities:

Information related to impact on production **facilities** due to cluster formation is obtained and after classification presented in the following table:

Table 7: Impact on Production facilities

Sr. No.	Production facilities	No	Yes
1	Modernization status of cluster machinery has increased	18	157
2	Sufficiency of cluster machinery to carry out your orders	34	141
3	Ease in procurement of raw materials from local producer has increased	27	148
4	Easiness in accessing sources of Raw Materials has increased	155	20
5	Use of Joint transportation services is now possible	26	149
6	Raw material jointly purchasing in bulk is now possible	34	141
7	Management of usage timing for use of members during the Peak season is not possible	26	149

Above responses are rated as follows:

No   =   0

Yes   =   1

Using above responses mean score of Impact on Production facilities is obtained using formula given below:

Mean Impact on Production facilities = $\dfrac{Total\,score\,of\,rating\,of\,respondent\,(for\ 7\ statements)\ \times 100}{Maximum\ rating\,(7)}$

Using the above formula mean scores obtained for each respondent and also for all 175 respondents. Descriptive Statistics is as follows:

Table 8: Descriptive Statistics on Impact on Production facilities

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Impact on Production facilities	175	1.0	87.5	63.869	13.3784
Valid N (listwise)	175				

Above table indicates that the mean score for Impact on Production facilities is 63.86 per cent with standard Deviation of 13.37, suggesting moderate variation in the responses.

Impact of cluster on Increase in production of Textile clusters members

The following table shows the percentage of increase of production level:

Table 9 : Percentage Increase in Production level

Increase in Production level				
Increase in Production level	Frequency	Percent	Valid Percent	Cumulative Percent
No change	0	0	0	0
Up to 10%	8	4.6	4.6	4.6
10% to 25%	26	14.9	14.9	19.4
25 to 50%	45	25.7	25.7	45.1
More than 50%	96	54.9	54.9	100.0
Total	175	100.0	100.0	

Above table indicates that there are total 175 respondents from which 8 respondents have up to 10% of increase in production level, 26 respondents have 10% to 25% of increase, 45 respondents have 25 to 50% and remaining 96 respondents have more than 50% of increase in production level. This information is shown below in form of pie chart.

Graph 2: Percentage Increase in Production level

Increase in Production level

- Up to 10%
- 10% to 25%
- 25 to 50%
- More than 50%

8
26
45
96
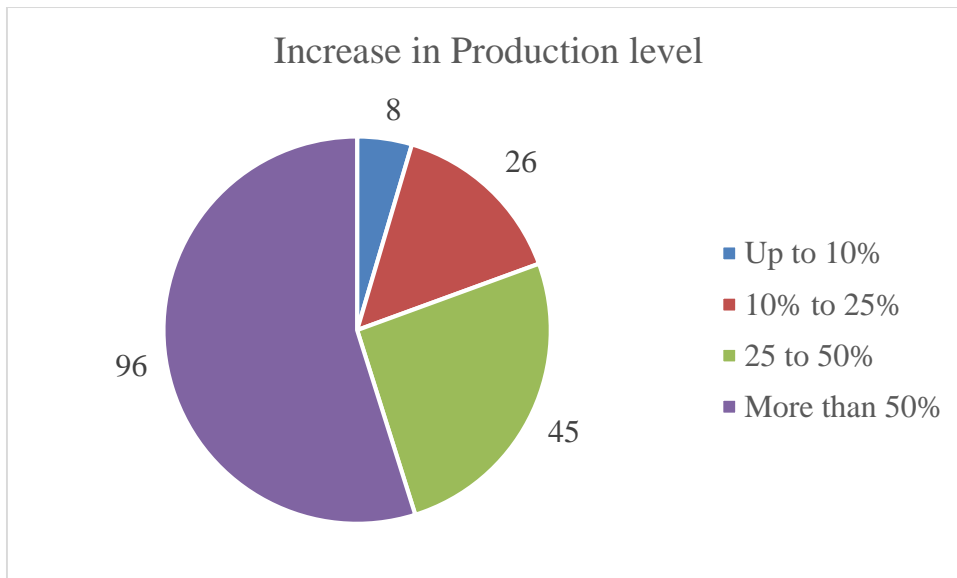
9. HYPOTHESIS TESTING:

Objective: To Evaluate impact of Cluster development policies on production **performance of enterprise in Textile clusters in Maharashtra.**

To investigate the above hypothesis, following hypothesis are constructed and tested for statistical significance.

Null Hypothesis H_{01A} : There is no positive impact of cluster development policies on production **performance** of Textile clusters in Maharashtra.

Alternate Hypothesis H_{01A} :

There is an positive impact of cluster development policies on production **performance** of Textile clusters in Maharashtra.

To test the above Null Hypothesis Independent sample t test is applied. The p-value is calculated and is shown in the below table:

Table 10: One-Sample Test on Impact on Production performance

One-Sample Test						
	Test Value = 50					
					95% Confidence Interval of the Difference	
	T	Df	p-value	Mean Difference	Lower	Upper
Impact on Production **performance**	13.713	174	.000	13.8686	11.873	15.865

Interpretation: The above results indicate that calculated p-value is 0.000. It is less than 0.05.. Hence Null hypothesis is rejected and Alternate hypothesis is accepted.

Conclusion: There is an positive impact of cluster development policies on production **performance** of Textile clusters in Maharashtra..

Finding is that the mean score of cluster development policies on Production is highly significant. It is higher than 50 percent for the respondents from different clusters. This can be observed in the following table:

Table 11: Mean score of Impact of cluster development policies on Production performance

	N	Mean Score	Std dev
Impact on Production	175	63.86	13.37
Comparative percent		50.00	

The above table indicates that the mean score of cluster development policies on significant Impact on Production is highest at 63.86 percent, which is higher is than 50 percent, suggesting that there is a significant impact of cluster development policies on production. This verifies our findings. The above information can be represented in the following Bar chart as follows:

Graph 3: Mean score of Impact of cluster development policies on Production performance
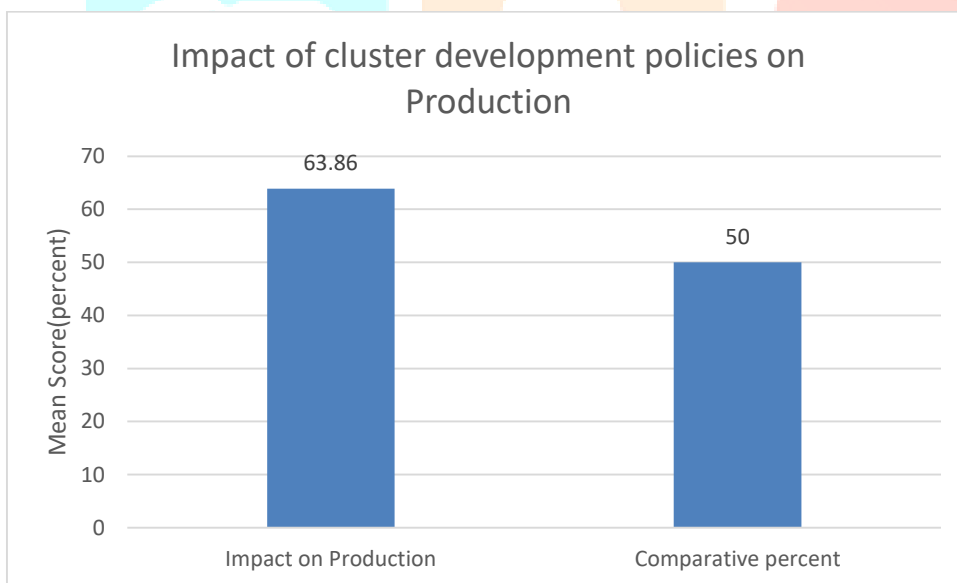
Null Hypothesis H_{01B} : There is no significant difference in the production performance of textile across clusters in Maharashtra.

Alternate Hypothesis H_{01B} : There is a significant difference in the production performance of textile across clusters in Maharashtra.

To test the above Null Hypothesis ANOVA is obtained and F test is applied. The p-value is calculated and is shown in the below table:

Table 12: p-value of Impact of cluster development policies on Production performance

ANOVA					
Impact on Production activities					
	Sum of Squares	Df	Mean Square	F	p-value
Between Groups	658.669	3	219.556	1.232	.300
Within Groups	30484.308	171	178.271		
Total	31142.977	174			

Interpretation: The above results indicate that calculated p-value is 0.300. It is more than 0.05. Therefore F-test is accepted. Hence Null hypothesis is accepted and Alternate hypothesis is rejected.

Conclusion: There is no significant difference in the production performance of textile across clusters in Maharashtra.

Finding is that the difference in the mean score of production performance of textile is highly insignificant across clusters. It is similar for all clusters under consideration for this study. This can be observed in the following table:

Table 13: Productivity of textile clusters on Production facilities

Report			
Impact on Production performance			
Cluster	Mean	N	Std. Deviation
Hatkalange-Kolhapur	64.619	59	11.8705
Shirpur Dhule	59.333	27	19.8673
Malegaon Nashik	64.628	47	10.8470
Navapur Nandurbar	64.881	42	12.7230
Total	63.869	175	13.3784

The above table indicates that the mean score of Impact on Production facilites is highest at 64.88 percent for the cluster of Navapur-Nandurbar, while it is lowest at 59.33 percent for the cluster Shirpur-Dhule, suggesting that the productivity is similar for all clusters under consideration. This verifies our findings. The above information can be represented in the following Bar chart as follows:

Graph 4: Production Performance of textile clusters on Production facilities
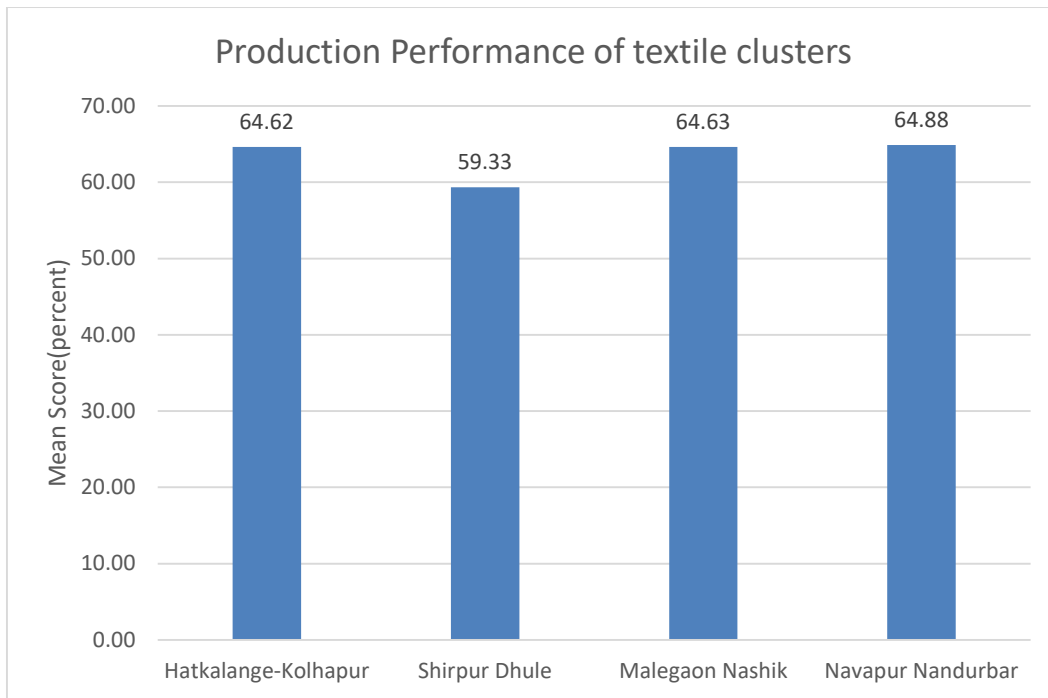
Null Hypothesis H_{01C} : There is no significant difference in the factors of impact on production **performance** of textile.

Alternate Hypothesis H_{01C} : There is a significant difference in the factors of impact on production facilities of textile.

To test the above Null Hypothesis Friedman test is applied. The p-value is calculated and is shown in the below table:

Table 14: Friedman Test of Impact on Production activities

Test Statistics[a]	
N	175
Chi-Square	394.650
Df	6
p-value	.000
a. Friedman Test	

Interpretation: The above results indicate that calculated p-value is 0.000. It is less than 0.05.. Hence, Null hypothesis is rejected and Alternate hypothesis is accepted.

Conclusion: There is a significant difference in the factors of Impact on production **performance** of textile **Finding** is that the ranking of Impact on production facilities of textile is significantly different. It is observed there is a significant difference in the most important and least important factor of Impact on productivity of textiles. This can be observed in the following table:

Table 15: Ranking of Impact on production performance of textile

Ranks		
	Statements	Mean Rank
Q1	**Modernization status of cluster machinery**	**4.55**
Q 2	Sufficiency of cluster machinery to carry out your orders	4.23
Q 3	Ease in procurement of raw materials from local producer	4.37
Q 4	Easiness in accessing sources of Raw Materials	1.81
Q 5	Use of joint warehousing	4.39
Q 6	Use of Joint transportation services	4.23
Q 7	Raw material jointly purchasing in bulk	4.39

The above table indicates that the most important factors for Impact on production **performance** of textiles is "**Modernization status of cluster machinery**" as it has the highest rank of 4.55. The least important factors for Impact on production **performance** of textiles is "Easiness in accessing sources of Raw Materials" as it has the lowest rank of 1.81.

This can also be graphically represented in the following Bar chart:

Graph 5: Ranking of Factors of Impact on production performance of textile
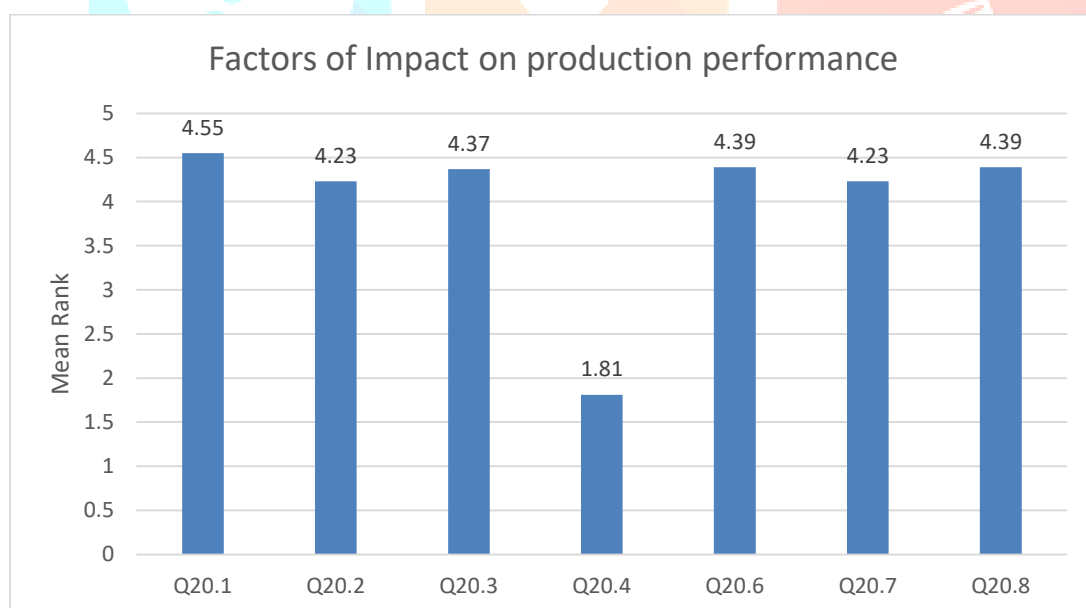
10. FINDING FROM THE STUDY –

Below are the findings -

1. The Cluster development policies have significant impact on Production in Maharashtra State and the collective efficiency as the concept of 'togetherness' is propounded among entrepreneurs has improved.

2. Findings suggest that there is no significant difference in the productivity of textile across clusters in Maharashtra. Difference in the mean score of productivity of textile is highly insignificant across clusters. It is similar for all clusters under consideration for this study.

3. The most important factor for Impact on productivity of textiles is "Modernization status of cluster machinery"

4. The least important factors for Impact on productivity of textiles is "Easiness in accessing sources of Raw Materials"

11. CONCLUSION

With India having its aim of having $5 trillion economy by 2025, the first and foremost requirement would be to eliminate poverty and improve the quality of life of each region, where each corner, even if is situated at the very remote place, should have the basic infrastructure and basic rights of living. This can only be possible when the rural areas are given the source of employment or tools for income generation. To make this dream come true, government should mandatory implement these schemes and educate the benefits and ways to make rural economy stable thereby having mirror effect on the face of country's policies