

# Study for Identifying Strategies for Quadrupling Meerut's GDP



**DRAFT REPORT**



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**Identifying Strategies for Quadrupling Meerut's GDP**

**(Draft Report for Discussions)**

Conducted by  
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Commissioned by



**Meerut Citizens Forum**  
**Meerut**

In Association with



**Federation of Indian Micro and**  
**Small & Medium Enterprises**  
**(FISME), New Delhi**

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## **Preface**

The Government of Uttar Pradesh has set a target of getting to US one Trillion Gross State Domestic Product by 2026-27, from their estimated level of a GDP of close to US \$ 250 billion in 2021-22. Reaching of milestone would require the State to accelerate its gross in excess of 30 per cent per annum in next five years. All the Districts of the State may need to equally contribute to this aspiration by quadrupling their GDP during this period.

It in this context, Meerut Citizens' Forum (MCF) and Federation of Indian Small and Medium Enterprises (FISME) decided to entrust a study to identify the current status of economy of Meerut and the way forward to achieve this milestone.

In the process of completing the study, based on a preliminary data analysis, a Meeting was held in Meerut in the august presence of Hon'ble Member of Parliament of Meerut, Hon'ble Member UP State Assembly and a group of knowledgeable persons from Administration, Industry, Trade and Professionals to identify the approach and further agenda. A virtual cum physical Meeting was later held in Delhi which outlined the broad approach of the Study.

Draft Report based on submissions made by knowledgeable persons and professionals and intensive discussions with the stakeholders has now been prepared for finalizing the strategy of getting to the milestone set.

Suggestions for further improving the Report are welcome.

M C Singhi

## Chapter I- Introduction

The Uttar Pradesh Government under the stewardship of Chief Minister Yogi Adityanath has set a target to make Uttar Pradesh a \$1 trillion economy by 2027. The target to be achieved in less than 5 years is four times than the current level. The Chief Minister himself has emphasized to breakdown the goals to the district level. Keeping in view that Meerut is among the group of top 5 industrialized districts of the state, it would have to contribute more than four times to compensate for other not so advanced districts to help the State to achieve the goal. While the target is ambitious, the fillip to the hope is given by several positives that have emerged in recent years.

2. Firstly, Meerut is part of the NCR- a mega industrial zone that has become a magnet for attracting investment. It is just 60 min from the core of NCR- Delhi and is connected by world class highways and is being connected to India's first rapid Rail network. The travel time from Delhi to Meerut is considerably reduced as compared to Greater Noida or Manesar or Sonipat, the other competing investment destinations. Meerut will also be connected to Delhi- Mumbai Industrial Corridor.

3. These developments are set to transform the economic geography of the district. Further, Meerut also encompasses the largest cantonment in India both in terms of population and geographical area. Last but not the least, it already has over a dozen industrial and services clusters pump priming economy of the district. GDP is an ideal indicator of prosperity as it measures the output in the entire economy in non-overlapping method and alternate methods of estimation through supply side, perspective of demand and factor shares, it leads to a common outcome. Assessment of GDP through these methods is summarized below to indicate that GDP is not a black hole. At the Stat level, usually data is released for GDP from supply side perspective, though in non monetized services sector, measurement may often be based on factor shares.

<b>Box 1.1 Estimating Gross Domestic Product</b>		
<b>From Supply perspective</b>	<b>From Demand Perspective</b>	<b>From Factor Shares</b>
Value Added From Agriculture & Allied Sectors	Government Final Consumption Expenditure	Labour Payments, Wages & other emoluments
Value Added from Industry	Private Final Consumption Expenditure	Interest and Rent
Value Added from Services	Investment (Gross Capital Formation)	Profit or Mixed Income
Taxes less Subsidies	Net International Trade	Depreciation
<b>Working Approach</b>		
GDP= GVA(Output- Inputs)+ Net of Taxes	Consumption + Gross Capital Formation (Domestic Savings+ Capital Transfers)	Labour Share +Interest +Rent+Profit+ Depreciation

4. This study based on desk research and discussions with the stakeholders at ground level attempts look at investment opportunities, policies to be adopted at ground level, role of ground level institutions and other factors that may impinge on growth. The study is set in the

background of the State of Uttar Pradesh and looks at the development opportunities in Meerut as one of its promising districts.

5. We look at the six parameters to examine the feasibility of converting this rhetoric to reality covering the level of GSDP and its structure including the best possible growth achieved in last decade; the level of workforce and its structure; the institutional credit relative to GSDP; the capital expenditure of the State; the policy dynamism; and the effectiveness of its administrative apparatus. The empirical findings of the study revealed a significant and positive association between States' capital outlay and GSDP - a one per cent increase in capital outlay leading to a range of 0.82-0.84 per cent increase in GSDP. Further, the findings also revealed that past values of capital outlay influence the current year's decision on public investment.

## Chapter II- Economy of Uttar Pradesh

The economy of Uttar Pradesh is the third largest of all the states in India. Nominal GDP of the state in the year 2022-23 is estimated in its Budget 2022-23 at Rs. 21.74 trillion, assuming a growth of 17 per cent over the previous year based on the GDP numbers available at that point. In the Budget for 2023-24, GDP for the State has been projected to reach Rs. 24.39 trillion. Compared to the estimates of previous Budget, it reflects a growth of 12.2 per cent. It is the most populous State of the Indian Union. According to the 2011 census report, 22.76 per cent of population of Uttar Pradesh lived in urban areas and rest in rural areas. The state has 7 cities with populations exceeding 10 lakh (1 million) each. According to erstwhile Planning Commission estimates for the year 2011–12, 29.4 per cent of the state's total population was poor. However, updated findings by NITI Aayog based on NFHS-4 (2015–16), 37.8 per cent of the population was reported to be poor.

2. Uttar Pradesh is a major contributor to the national food grain production. This is partly due to the fertile regions of the Indo-Gangetic plains and partly due to irrigation facilities such as canals and tube wells. Western Uttar Pradesh is more advanced in terms of agriculture as compared to the other regions in the state. The majority of the state's population depends upon farming activities. Wheat, rice, pulses, oilseeds, and potatoes are major agricultural products. Sugarcane is the most important cash crop throughout the state. Uttar Pradesh is one of the most important states in India as far as horticulture is concerned. State now-a-days plays an important role in development. The activist functions of the State encompass building physical infrastructure where returns are not immediate and facilitating private investment (Box 1).

<b>Box- 2.1: Role of the State</b>				
	<b>Addressing Market Failures</b>			<b>Improving Equity</b>
<b>Minimal Functions</b>	<b>Providing pure public goods</b> Internal Security, Law and order, Property rights, Public health, Macroeconomic management, Civic amenities, Building perspectives			<b>Protecting the poor</b> Anti-poverty programs, Disaster relief, Public distribution
<b>Intermediate Functions</b>	<b>Addressing Externalities</b> Basic education, Environmental Protection, Rural roads,	<b>Regulating Monopoly</b> Utility regulation	<b>Overcoming imperfect information</b> Consumer Protection, Crop insurance, Sectoral credit support	<b>Providing social insurance</b> Family pensions, Unemployment insurance, Direct subsidies
<b>Activist Functions</b>	<b>Coordinating private activity</b> Cluster initiatives, State as an entrepreneur, Investment Facilitator, Providing physical Infrastructure			<b>Redistribution</b> Assets redistribution, Land reforms

3. UP has witnessed rapid industrialisation in the recent past, particularly after the launch of policies of economic liberalisation in the country. As per the All India enterprises survey of 2015-16, Uttar Pradesh had about 90 lakh unorganised sector non agriculture establishments, including own account enterprises in manufacturing, trade and services sector employing 16 million persons. Uttar Pradesh is the fourth largest State in terms of GSDP, the top three States being Maharashtra, Tamil Nadu and Karnataka. The GDP of the Uttar Pradesh grew in double digit in 2007-2012. Growth had decelerated post 2011-12, partly because of structural changes in the economy. Post 2011-12, the GSDP growth of State was less than most of the major States and below the average of all the States. The pandemic led to a contraction in GSDP growth in 2020-21. The growth recovered in 2021-22 and has been projected to grow by 17 per cent in the budget of the State for 2022-23. The State has set a medium term ambitious target of reaching one trillion dollar mark by 2026-27. The current growth at sectoral level is indicated in Table 1.

**Table 2.1: Gross State Domestic Product of Uttar Pradesh (Rs in Crore)**

Item	2011-12	2014-15	2017-18	2018-19	2019-20	2020-21	2021-22	CAGR
Agriculture	183,252	245,230	326,174	351,814	381,197	402,445	468,346	9.8
Industry	188,316	247,615	370,860	391,141	407,052	390,519	448,102	9.1
Services	310,326	456,148	626,642	699,899	767,433	711,359	811,093	10.1
<b>Gross Value Added</b>	<b>681,895</b>	<b>948,993</b>	<b>1,323,676</b>	<b>1,442,854</b>	<b>1,555,681</b>	<b>1,504,324</b>	<b>1,727,540</b>	<b>9.7</b>
Gross Domestic Product	724,050	1,011,790	1,439,925	1,582,180	1,700,530	1,641,801	1,916,913	10.2
Population (Lakh)	2,016	2,110	2,208	2,242	2,277	2,311	2,347	1.5
Per Capita GSDP (Rs.)	35,917	47,953	65,203	70,565	74,699	71,032	81,684	8.6

Source: Ministry of Statistics & Programme Implementation (MOSPI)

4. The infrastructure in UP is improving in comparison to the other advanced states of India. Lucknow Metro and Kanpur Metro became operational in September 2017 and December 2021 respectively with Kanpur Metro being the fastest built metro network in India. The Uttar Pradesh State Road Transport Corporation bus service is one of the largest in the country with more than 10,000 buses. UPSRTC ALSO introduced Volvo, Scania, and Janrath AC buses service across the state. The length of the national highway and railway track is highest in India. A new international airport had been proposed in Gautambudh Nagar district at Jewar passed by the central government and supposed to start by 2023. The Yamuna Expressway, which is between New Delhi to Agra, is one of the best highways in the country. Delhi-Meerut expressway was opened for public use in April 2021. Purvanchal expressway has been opened for public use, while the Bundelkhand expressway has started operating in February 2022. Additionally, the state government has selected seven cities for Metro train projects.

5. Between 2011-12 and 2021-22, there has been an increase in both labour force participation rate (LFPR), or job seekers and work participation rate (WPR) or workers in Uttar Pradesh. The increase in LFPR however has been faster relative to WPR during this period resulting in an increase in the incidence of unemployment (Table 2). However, compared to the

national average, both LFPR and WPR were lower in Uttar Pradesh and so were the percentage who were unemployed.

**Table 2.2: LFPR and WPR in Uttar Pradesh (per cent of population)**

Uttar Pradesh	LFPR			WPR			Unemployment Rate
	male	female	person	male	female	person	Persons
2011-12	50.4	16.3	33.9	49.5	16.1	33.3	1.77
2020-21	54.4	16.7	36.0	51.9	16.2	34.5	4.17
2021-22	53.1	18.7	36.2	51.4	18.4	35.1	3.04
<b>All India</b>							
2011-12	55.6	22.5	39.5	54.4	21.9	38.6	2.28
2020-21	57.5	25.1	41.6	54.9	24.2	39.8	4.33
2021-22	57.3	24.8	41.3	54.8	24	39.6	4.12

Source: MOSPI

6. Overall persons employed in Uttar Pradesh increased from 6.71 crore in 2011-12 to 7.97 crore in 2020-21 recording an average annual growth of 1.9 per cent, which has been higher than the growth of population during this period averaging 1.53 per cent. There have, however, been sectoral shifts in share of employment and value added per person engaged in a specific activity (Table 3). The contact intensive sectors like trade and transport (including tourism) and agriculture has witnessed relatively slower increase in value added per person engaged. Highest growth in employment was observed for agriculture & allied sectors and communication. There was decline in workforce over the decade in industry (mining, manufacturing and construction) despite a programme of public infrastructure. Value added per person engaged recorded highest growth in mining (because of lower denominator and increased capital intensity), utilities, public administration (which usually have an element of inflation compensation and annual increases) and trade. Hotels and Restaurants had a negative growth in value added, as the most intensive contact sector suffered the most during the pandemic. Reallocation of labour, therefore, has tremendous growth potential.

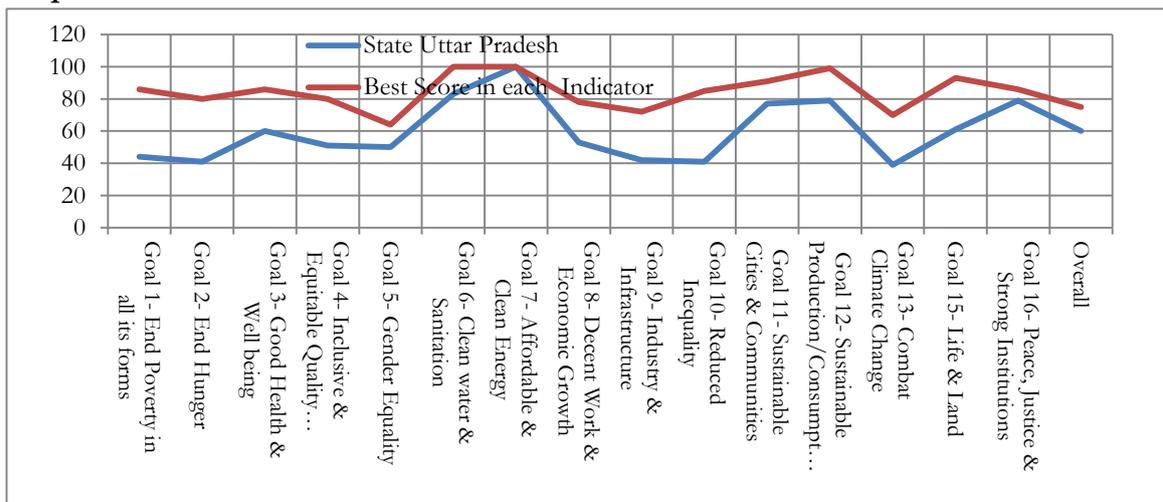
**Table 2.3: Sectoral Employment and value added per person engaged**

Item	Gross Value Added (Rs crore)		Employment (In Lakhs)		CAGR	Value Added per person engaged (Rs)		CAGR
	2011-12	2020-21	2011-12	2020-21		2011-12	2020-21	
	Agriculture & Allied	183,252	405,834	308.73		439.30	4.0	
Mining and quarrying	6,535	20,472	3.76	0.56	(19.1)	173,842	3,667,532	40.3
Manufacturing	87,636	174,961	83.98	68.18	(2.3)	104,354	256,618	10.5
Electricity & water supply	9,268	36,492	2.89	3.11	0.8	321,088	1,173,409	15.5
Construction	84,877	158,702	106.20	100.24	(0.6)	79,922	158,329	7.9
Trade & repair services	61,622	114,119	71.29	82.37	1.6	86,436	138,539	5.4
Hotels & restaurants	7,844	6,948	9.53	11.24	1.9	82,287	61,792	(3.1)
Transport	31,723	76,033	26.85	25.28	(0.7)	118,141	300,786	10.9
Communication	8,752	29,647	1.61	2.79	6.3	543,201	1,062,253	7.7
Financial services	25,182	59,543	3.29	3.59	1.0	765,559	1,659,317	9.0
Real Estate & professionals	97,454	227,335	4.50	5.10	1.4	2,166,757	4,454,507	8.3
Public administration	42,348	112,311	9.53	8.69	(1.0)	444,255	1,292,142	12.6
Other services	35,401	88,693	39.14	46.97	2.0	90,455	188,837	8.5
<b>Total GVA</b>	<b>681,895</b>	<b>1,511,090</b>	<b>671.30</b>	<b>797.42</b>	<b>1.9</b>	<b>101,579</b>	<b>189,498</b>	<b>7.2</b>

Source: MOSPI

7. The Sustainable Development Goals (SDGs) has emerged as ambitious commitments and a new paradigm for development. The SDGs are a bold universal set of 17 Goals to help organise development actions for overall human wellbeing, while leaving no one behind. The SDGs are in a way commitments and goalposts to be achieved over a time frame of 15 years by 2030, with implementation strategy and achievements staggered over a time frame of three, seven and fifteen years. The spectrum of the 17 SDGs range from poverty eradication, human health and sanitation to urban settlements and to safeguarding the ecosystems necessary for our survival. SDG Index 3, ranks States/UTs based on their performance across the 16 SDGs and is a useful instrument to judge the progress of the States/UTs in adopting and implementing the SDG agenda, the new development paradigm. The data sources for the selected indicators have been restricted to national survey reports/national data portals/MIS portals of Union ministries. Overall performance of Uttar Pradesh with an Index value of 60 is only of a performer, way behind the States which are front runners (Graph 1). While this indicates below par performance base, it also gives optimism that performance can be significantly scaled up.

**Graph 2.1: SDG Performance**



Source: Niti Aayog- SDG Dashboard

8. On November 6, 2022, the proposal to make the state a one trillion dollar economy was unfolded by the Uttar Pradesh government, which will be placed before the Cabinet. The salient features of the proposed strategy as indicated below clearly suggest the seriousness of the Government and importance attached to this announcement.

- To make the state a one trillion dollar economy, the government will spend an amount of Rs 40 lakh crore by 2027 on infrastructure, health, judicial system, education, heavy industries etc.
- According to the government, to achieve a one trillion-dollar economy, the annual growth rate will be increased to 30 to 35 percent and the investment in the state will have to be increased even faster.

- To woo the investors in the state, a blueprint investment policy has been prepared. It emphasizes infrastructure, manufacturing, services and identifying most moving sectors. The infrastructure is divided into two parts, hard and soft. Hard infrastructure includes power and energy along with logistics, while soft infrastructure includes regulatory, judicial system, education, and health.
- Under the soft infrastructure, the state government will spend about Rs 2.1 lakh crore between the years 2022 to 2027 for modern medical system 24 lakh bed hospitals will be constructed. For this, about 4.35 lakh doctors and 17 lakh nurses will be recruited.
- Under the hard infrastructure Rs 13 lakh crore will be spent on electricity, Rs 25 lakh crore on roads and Rs 200 crore on judicial system in the state.
- The Budget for Uttar Pradesh for 2023-24, on the infrastructure front, a provision of over ₹21,159 crore for the construction of roads and bridges and ₹6,209 crore for their maintenance. With religious tourism in mind, the budget proposed ₹1,000 crore for the development of 'Dharmarth Marg' (roads to religious places). It sets an investment target of ₹10 lakh crore and the creation of 20 thousand jobs in the next 5 years under the new Uttar Pradesh Tourism Policy 2022.

## Chapter III- Economy of Meerut

Meerut is one of the progressive districts of Uttar Pradesh and is located in Western Uttar Pradesh and is part of NCT Region. It is well connected by Rail and Road. With a population of around 4 million, it is about 1.7 per cent of population of the state. As per 2011 census, Meerut had a population of 34 million- 18 Million Males and 16 million Females with a decadal growth of 14.9 per cent significantly lower than that of the State. It has been an urban population dominated district, with urban population being 17.6 million. Population with age group 15+ was estimated to be 68 per cent, more than 60 per cent could be considered eligible to participate as labour force. Share of Meerut in GSDP of UP is a little over 3 per cent, so it is relatively economically well placed. Though Agriculture is main stay of economy in terms of persons engaged, industry and services are equally important. Share of Industry at 30 per cent is better than National Average. More than half of nearly 7 lakh households are in income range of Rs. 60-120 thousand, 13 per cent household are below income level of Rs. 60,000. Table 1 broadly summarizes Meerut in context of Uttar Pradesh and India. Table 3.1 broadly summarizes Meerut in relation to Uttar Pradesh and India. Per Capita GDP of Meerut has continued to be higher relative to average of the State. However, relative to India, it has a lower per capita GDP in the current decade. GDP in 2020-21 recorded a decline across, in Meerut, in Uttar Pradesh and for India also. There was however a sharp upsurge in GDP in 2021-22, the post pandemic and rate of growth of GDP in Uttar Pradesh was 16.8 per cent.

**Table 3.1: Meerut in Context of Uttar Pradesh and India**

	2011-12	2017-18	2018-19	2019-20	2020-21	CAGR
<b>Gross Domestic Product (Rs Crore)</b>						
Meerut	22,847	45,887	50,432	53,973	51,212	9.4
Uttar Pradesh	724,050	1,439,925	1,582,180	1,700,530	1,641,801	9.5
India	8,736,329	17,090,042	18,886,957	20,351,013	19,800,914	9.5
<b>Per Capita Gross Domestic Product (Rupees)</b>						
Meerut	66,783	125,545	135,954	143,365	134,036	8.0
Uttar Pradesh	35,917	65,203	70,565	74,699	71,032	7.9
India	71,609	130,061	142,328	151,760	146,132	8.2
<b>Ratio of Meerut in Per Capita GDP</b>						
Uttar Pradesh	1.86	1.93	1.93	1.92	1.88	
India	0.93	0.97	0.96	0.94	0.92	

Source: MosPI and Directorate of Economics & Statistics, Uttar Pradesh

### SWOT Analysis of Meerut

2. Meerut has both the strengths and weaknesses in accelerating economic growth which are broadly summarized below. The most significant factor which could contribute to Meerut emerging as driver of growth is its manufacturing and services base, its proximity to market and better connectivity.

<b>Box 3.1 SWOT Analysis of Meerut</b>	
<b>Strength &amp; Opportunities</b>	<b>Weakness and Threats</b>
Meerut is close to NCT and has potential to exploit this huge market	It lacks a well planned strategy for exploiting the potential
Internal Market size of Meerut is big and expanding at an accelerated rate	Biggest weakness the lack of awareness of the potential
It has an industrial base which can be scaled up	Meerut lacks coordinated efforts for the required scale up
Services Sector and logistics are fairly developed and can be expanded	Sluggish Public Perception is major hindrance

### **Gross District Domestic Product (GDDP)**

3. Economy Meerut in last 9 years (2012-21) has grown 9.4 per cent in current prices. However, at constant prices growth it moderates to just 4.6 per cent on an annual basis. Agriculture and allied sectors account for about 19 per cent of Gross Value Added and has recorded a growth of 6.2 per cent annual basis during this period. Services have been the most buoyant sector with a growth of 11.7 per cent. Growth had turned negative in 2020-21 due to the impact of pandemic and this deceleration was across all the three sectors. Growth in industries and agriculture has already become minimal in last four years. It is, however, expected that there may be a significant recovery in post pandemic period of 2021-22 and 2022-23, in line with the growth assumed for the State.

**Table 3.2: Gross Domestic Product- Broad Sectors (Rs crore)**

	2011-12	2017-18	2018-19	2019-20	2020-21	CAGR
Agriculture & Allied	5,070	9,047	9,227	10,152	8,749	6.2
Industry	8,876	16,269	17,017	17,271	16,852	7.4
Services	7,571	17,127	19,594	21,590	20,467	11.7
Gross Value Added	21,517	42,442	45,839	49,013	46,069	8.8
Gross Domestic Product	22,847	45,887	50,432	53,973	51,212	9.4
Share of Industry & Services	76.4	78.7	79.9	79.3	81.0	

Source: Directorate of Economics & Statistics, Uttar Pradesh

4. A new vision should aim at raising the growth rate to more than double the present level to accomplish the objective of the State for a trillion dollar economy. Meerut is however better placed in terms of two parameters; first it is a more urban centric relative to rest of Uttar Pradesh. Secondly, it has a significant non agriculture sector which accounts for nearly 80 per cent of the gross value added. Manufacturing and services, the two vibrant sectors significantly contribute of the value added of the economy.

5. Urbanisation has significantly contributed to higher per capita GSDP of Meerut relative to the State average. The well-known agglomeration economies operate through scale economies (more people, more choices, more demand and the spiral goes on); lower infrastructure cost per capita, less information asymmetry (physical proximity of people, firm and modern civic centers to exchange ideas); hub of producers, suppliers, artisans (everyone has enough to contribute, collaborate and grow) and ease of networking. There are better schools, colleges, universities and training facilities in the city as agglomeration economies push for innovation and help in knowledge spill over which sets in dynamic efficiency effect. Cities are no longer the hub of only production and exchange activities; they are also the place of germination of ideas on governance and policy making. Urbanisation has also contributed to emergence of secondary and tertiary sector as dominant sectors relative to agriculture. The share of various sectors of economy in GSDP of Meerut, average of state of Uttar Pradesh and national average indicated in graph below fully substantiates this fact.

### Labour Force & Work Force

6. According to estimates made on the basis of periodic labour force survey in 2017-18, Labour force participation rate (LFPR) for Males and Females was 66.5 % and 7.53% respectively giving a figure of 39.7 per cent for all persons. The workforce participation rate for Male and Female was 55.8% and 6.4% respectively giving a figure of 33.34 per cent for all persons. Our estimate for workforce comes to 12.2 lakhs in 2017-18. Unemployment rate for Male and Female was 16.1% and 14.8% respectively (Table 3.3). In 2021-22, there may have been some changes in these rates. Unemployment rate in Uttar Pradesh in 2021-22 has nearly halved of the levels that prevailed in 2017-18. There was also an increase in LFPR and WPR during this period. Assuming that Meerut may have witnessed a similar growth trend during post 2017-18 period, the number of unemployed persons may have declined to an extent. Given the growth that was witnessed in the post pandemic year of 2021-22, this is more likely scenario.

**Table 3.3: Labour Force and Workforce Participation Rate (per cent) and Workers**

2017-18	Rural	Urban	Male	Female	Persons	Workers (Lakhs)	
	Percent of population					2017-18	2021-22
LFPR Meerut	39.63	39.77	66.48	7.53	39.69	14.51	15.25
WPR Meerut	35.1	30.91	55.77	6.42	33.34	12.19	13.40
Unemployment	11.44	22.22	16.09	14.75	15.98	2.32	1.85
Unemployment Uttar Pradesh	5.28	10.0	7.06	3.19	6.51		

Source: Uttar Pradesh- District Fact Book: India state Publications 2022, page 99& PLFS

7. Meerut is not that well placed in terms of labour force participation rate. We have two independent estimates of labour force in Meerut, the population census and the periodic labour force assessment estimates. Population census data for 2011 indicate a work force of 10.9 lakh persons, comprising main workers of around 9 lakhs and the balance marginal workers. Workforce is almost equally divided as rural and urban, though the number of female workers is

very small. Even in urban areas, the female workers are just under one third of total workers. The rural areas the ratio is even worse where females account for just 12 per cent of the workforce. The total workforce is estimated to be close to 13.40 lakhs in 2021-22 (Table 3.4). More than half of the labour force in other sectors, comprising mainly trade, transport and wage earners. Agricultural labourers and cultivators together account for over 30 per cent of work force. While the occupational distribution of workers is generally consistent with the one that prevails in Uttar Pradesh, there is greater penetration of MSME in Meerut, which has historically been a centre for some important industries. Number of workers in Meerut is about 1.6 per cent of total workforce of Uttar Pradesh while the share of population was slightly higher at 1.65 per cent, indicating on work front Meerut did not have any edge.

**Table 3.4: Workforce in Meerut in 2011 and 2021-22**

	Main Workers		Marginal Workers		Rural	Urban	Total	2021-22
	male	female	male	female	Persons	Persons	Persons	Estimated
Cultivators	158,291	17,653	9,253	10,871	178,834	17,234	196,068	228,000
Agriculture Labourers	95,206	17,041	26,420	15,328	124,120	29,875	153,995	201,000
Household Industries	37,424	10,808	7,024	7,840	28,331	34,765	63,096	80,500
Others	484,132	70,255	81,060	41,933	212,081	465,299	677,380	830,500
Total Meerut	775,053	115,757	123,757	75,972	543,366	547,173	1,090,539	1,340,000
Uttar Pradesh 000	37420	7215	12426	8753	51951	13864	65814	82686
Per cent	2.07	1.60	1.00	0.87	1.05	3.95	1.66	1.60

Source: Uttar Pradesh- District Fact Book:India state Publications 2022

### **Institutional Infrastructure**

8. Financial institutions have become critical for sustaining growth and employment in recent years. Entrepreneurs and even individuals have to rely on these institutions for their capital expenditure needs as also needs for day to day operations and their cash flow related mismatches. Financial institutions are intermediaries who receive deposits and on lend it to individuals and entrepreneurs generally for productive purposes for a defined period and purpose. Commercial banks are the principal intermediaries. Overall number of accounts in commercial banks in Meerut increased from 2.75 lakhs in 2012 to over 5 lakhs in 2022 with an annual growth of 7.2 per cent. Total credit disbursed also more than doubled from nearly eight thousand crores to twenty thousand crores. While credit growth kept pace with GSDP growth, accounts grew faster than population growth indicating a greater penetration of banking services. Overall credit to GDP ratio nearly remained at the same level. Sectoral number of accounts, credit disbursed and growth over this period is in Table 3.5. The share of personal loans during the decade has considerably increased and account for more than one third of total loans. As against this, the share of loans to agriculture and manufacturing has declined. There was a decline in the share of financial disbursement to professional services. GSDP data also

show a relatively moderate growth for manufacturing. Loans for education and other purposes which are clubbed in other finances have also witnessed a slower growth.

**Table 3.5: Number of Accounts and Credit Disbursed for each category of borrowers**

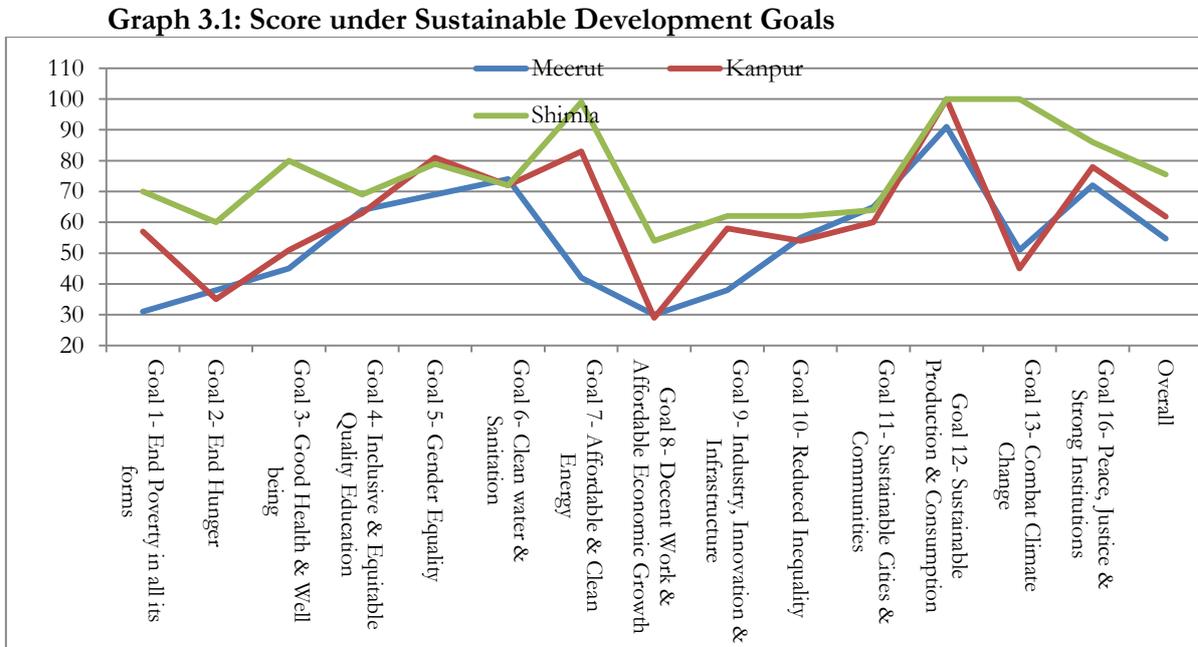
	March 2022		March 2012		CAGR	
	Accounts (00)	Credit (Rs Lakhs)	Accounts (00)	Credit (Rs Lakhs)	Accounts	Credit
<b>I. Agriculture</b>	1,791	358,323	1,509	152,465	1.7	8.9
1. Direct Finance	1,740	346,925	1,436	142,424	1.9	9.3
2. Indirect Finance	51	11,398	73	10,041	-3.5	1.3
<b>II. Industry</b>	379	383,966	58	219,588	20.6	5.7
1. Mining & Quarrying	1	925	0.1	563	31.8	5.1
2. Manufacturing	371	358,826	55	197,013	21.0	6.2
3. Electricity, Gas & Water	0.3	949	0.1	10,136	13.7	-21.1
4. Construction	6	23,267	3	11,876	8.5	7.0
<b>III. Transport operators</b>	96	38,031	11	4,873	23.9	22.8
<b>IV. Professional services</b>	346	114,985	51	89,387	21.0	2.6
<b>V. Personal loans</b>	2,240	740,472	647	181,261	13.2	15.1
1. Housing	263	379,809	174	97,696	4.2	14.5
2. Purchase of Consumer Durables	11	2,614	11	863	-0.1	11.7
3. Rest of the Personal Loans	1,967	358,049	462	82,702	15.6	15.8
<b>VI. Trade</b>	482	280,697	249	84,955	6.8	12.7
1. Wholesale Trade	68	97,069	14	11,456	16.9	23.8
2. Retail Trade	414	183,628	235	73,499	5.8	9.6
<b>VII. Finance</b>	17	7,024	2	4,777	22.0	3.9
<b>VIII. All Others</b>	165	82,392	228	38,623	-3.2	7.9
<b>Total Bank Credit</b>	5,516	2,005,891	2,756	775,929	7.2	10.0

Source: Reserve Bank of India- Basic Statistical Returns of Banks

### Sustainable Development Goals Outcome

9. Sustainable growth and development indicators have emerged as the barometers of performance and public perception. Niti Aayog recently came out with the ranking of the municipal corporations based on defined parameters aggregated into 16 goals. Meerut with an overall score of less than 60 was a performer and not a front runner. In two crucial parameters of End Poverty and Decent Work and Affordable growth, the score of Meerut was just close to 30, which is subpar from any consideration. In terms of Multi Poverty Index developed by Niti Aayog also, the head count ratio of poverty was 21.1 per cent, though lower than the national average of 25 per cent was much above the ratio observed for Punjab, Himachal Pradesh, Tamil Nadu, which was under 10 per cent. Performance of the Municipal Corporation in terms of parameters relating to health and education was also poor. While it performed better in sustainable production and consumption and civic amenities relating to water supply and sanitation, overall performance had significant incremental improvement scope. Better SDG

score, which in a way is a surrogate measure of effectiveness of implementation and better outcome, could provide the benefits of agglomeration and higher scale of urbanisation. It could also help the district to benefit from urban Meerut. Overall Goal based score and the score of Best Corporation is in graph below.



Source: Niti Aayog: SDG Dashboard of Urban local bodies

### Market Size

10. One of the important parameters of growth and its sustainability is the market size because that determines local support that the producer's can expect and the minimum threshold. The overall market size of Meerut for a variety of products was Rs. 8758 crore in 2011-12 for major products. However, assuming private final consumption expenditure at 55 per cent of GSDP, the total market size in 2021-22 could be estimated to be nearly of rupees thirty thousand crore.

**Table 3.6: Market Size (Rs million) and per capita expenditure (Rupees) in 2011-12**

Items	Per Capita	Market Size	Item	Per Capita	Market Size
Cereals & pulses	203.12	8389	Fuel & Power	164.5	6798
Milk & Milk Products	289.98	11983	Cloth & Foot wear	119.37	4933
Sugar & Salt	56.03	2315	Education	105.92	4377
Edible Oils	63.39	2620	Health	327.39	13942
Egg, Meat & Fish	39.61	1637	Rent	48.22	1993
Vegetables & Fruits	160.04	6613	Consumer Durables	33.48	1384
Other Food	106.21	4388	Others	337.12	13524

Processed Food	64.94	2683	Total	2119.32	87579
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Source: Uttar Pradesh- District Fact Book:India state Publications 2022

11. Size of the market is indicative of the local demand in Meerut. However, given its location and economic structure of production and services, particularly the manufacturing and professional services, there are opportunities for trade outside the District and even exports.

## Chapter IV: Current Sectoral Status of Economy of Meerut

In the current Chapter, we briefly summarize the sub sectors in each broad category of GDP of the district to look at the current spread and possible strategy for an accelerated growth.

### Agriculture & Allied Activities

2. Uttar Pradesh is essentially an agro centric State with a share of Of nearly 26 per cent of agriculture and allied activities as against the national average of under 20 per cent. Meerut, however, is one of the exceptions with the share of agriculture sector being 19 per cent in 2020-21, lower than the average of Uttar Pradesh as also the national average. Notwithstanding a lower share of agriculture, it supports a workforce of 32 per cent of Meerut as cultivators or agricultural labourers. Some broad characteristics of agriculture and land use are as under:

Area in Hectares	Meerut	Uttar Pradesh	Share
Reported Area	273,005	24,170,454	1.13
Forests	21,314	1,714,612	1.24
Area under non agricultural uses	47,787	3,610,677	1.32
Other Uncultivable Land	1,980	726,601	0.27
Net Area Sown	196,399	16,537,678	1.19
Gross Cropped area	303,308	26,858,658	1.13
Area sown more than once	106,909	10,320,980	1.04
Irrigated area	196,391	14,391,915	1.36
Fertilizer Use (Tonnes)	562,940	32,535,610	1.73

Source: Uttar Pradesh- District Fact Book: India state Publications 2022

### Gross Domestic Product from Agriculture

3. Overall gross value added from agriculture and allied activities in Meerut has declined from 2.8 per cent of Uttar Pradesh in 2017-18 to 2.2 per cent in 2020-21 because of a lower growth. With in agriculture crop segment dominates in Meerut accounting for 61 per cent of total value added. Livestock sector has been another important sector accounting for nearly 30 per cent of total value added (Table 4.1).

**Table 4.1: Value added from agriculture and allied sectors (Rs crore)**

	2011-12	2017-18	2018-19	2019-20	2020-21	CAGR
Crops	2,580	4,989	5,055	5,847	5,394	8.5
Livestock	2,108	3,530	3,447	3,493	2,590	2.3
Forestry and logging	378	523	683	759	689	6.9
Fishing and aquaculture	4	5	42	53	76	39.0
Agriculture & Allied	5,070	9,047	9,227	10,152	8,749	6.2
Uttar Pradesh	183,252	326,174	351,814	380,939	405,834	9.2
Share	2.7	2.8	2.6	2.7	2.2	

Source: Directorate of Economics & Statistics, Uttar Pradesh

## Production of major crops

4. Within crop sector food crops dominate and 2019-20, area under food crops, including sugarcane accounted for over 85 per cent of the gross sown area. Another 10 per cent of the gross sown area was allocated to fruits and vegetables and rest to the fodder crops as livestock was an important segment. Most of cropped area was irrigated with tube wells accounting for more than 85 per cent of the total irrigated areas. Principal crops grown in Meerut are summarized in Table 4.2 below.

**Table 4.2: Major Crops grown (Area, production and yield)**

	Area (ha)	Production (Tonnes)	Yield (Tonnes)	Area (ha)	Production (Tonnes)	Yield (Tonnes)
	2008-09			2019-20		
Wheat	81,622	299,308	3.7	75,086	367,752	4.9
Rapeseed & Mustard	4,118	5,392	1.3	5,341	8,983	1.7
Coarse Rabi Cereals	202	703	3.5	84	338	4.0
Rabi Pulses	396	342	0.9	754	1,083	1.4
Rice	17,629	22,565	1.3	17,162	22,565	1.3
Cereals	465	887	1.9	1,327	1,973	1.5
Pulses	2,142	1,155	0.5	638	495	0.8
Sugarcane	132,000	10,956	83.0	138,815	12,632	91.0

Source: Directorate of Agriculture, Meerut

## Employment & Workforce

5. According to population census of 2011, 32 per cent of the working population of Meerut were either cultivators or agriculture labourers. 87 per cent of these were, however, concentrated in rural areas. However, there have establishments and enterprises other than in the crop segment engaged agriculture and allied sectors, particularly in the livestock segment. Total numbers of such persons in 2013 were reported to be 1.70 lakhs with number of enterprises/establishments being nearing one lakh (table 4.3). The numbers in these activities were 6.27 per cent of such persons in Uttar Pradesh. With pandemic getting the agriculture as the fall back sector and with industry and contact intensive services not being able to offer many jobs, the share of agriculture and allied sector in total employment may still be around 30-35 per cent. While latest data for Meerut are not available, number of persons engaged in agriculture & allied sectors in Uttar Pradesh did show a relative increase during the 2012-2022 decade.

**Table 4.3: Establishments in agriculture & Allied sectors (Numbers)**

Sector	Rural	Urban	Total	Rural	Urban	Total
	Number of Units			Number of Persons Engaged		
Total	89,932	7,018	96,950	157,602	12,913	170,515
Uttar Pradesh	1,367,202	78,135	1,445,337	2,563,458	157,629	2,721,087
Share	6.58	8.98	6.71	6.15	8.19	6.27

Source: Uttar Pradesh- District Fact Book: India state Publications 2022

## Sector specific initiatives- Agriculture

6. On April 13, 2016, the government set up a committee to prepare a report on doubling income of the farmers by 2022-23. On a pro-rata basis, doubling the income in seven years implicitly assumes a growth of over 10 per cent per annum, nearly twice the historically observed rate of growth in agriculture. Various studies on agriculture sector have identified crop productivity, intertwining livestock with crops, improved resource use efficiency, crop diversification, better prices and shift to non-farm occupations as the instruments for a sustained growth of agriculture.

Box 5.3 Increasing Income of farmers and GDP from Agriculture			
Objective	Policy Options	Instruments	Schemes/Programmes
Enhancing Farm Income	Enhancing Gross Income	Production Growth	Increase cropping intensity
			Bridge productivity gaps
			Extended irrigation
			Higher nutrient use
		Better Prices	Increased MSP
			Institutional Procurement
	Diversification	Aggregation for volume & better prices	
		Processing Linkage	
		Allied Activities/Animal Husbandry	
	Reducing Costs	Reduce Purchase Inputs	Better crop mix
			Better nutrient management
		Exploit Complementarities	Use of farm residue
Income Stabilization	Coping Mechanisms	Technology use	
		Crop Insurance	
		Assets Insurance	
Enhancing non farm income		Institutional coping mechanism	
		Employment Generation	
		Reducing dependency	MGNREGA and other employment
			Skill Development

7. There has been a consensus that agriculture needs a new direction. The traditional approach as in Meerut depending on sugarcane, wheat and rice hardly answer the sustainability issues. The crop production is somewhat ensured because of inherent soil quality, though it is deteriorating and needs additional use of chemicals and remunerative prices are guaranteed as these are exogenously determined. It has also to be realised that crop diversification is another significant instrument to sustain the agricultural growth. As the second-generation agriculture reforms, farmers needs to be motivated to undertake crop diversification towards newer varieties of high-value crops, orchards, fruits, pulses, vegetables and flowers. There are studies to show that these newer varieties could fetch three times more revenue compared to traditional staple crops. All these are doable and actionable. The Department may need to enable farmers with quality inputs, technical guidance, market information, and capital for on-farm investments. This will also address issues of small holdings. Technology, diversification and transfer of labour from agriculture to non-agriculture is critical. Sustained labour force in agriculture in Meerut is roughly of the size as its share in GDP.

## Industry

8. Meerut is relatively more urban centric in Uttar Pradesh and industry has been important sector of economy. Overall share of industry comprising mining, manufacturing, electricity & utilities and construction together have a share of 36.5 per cent compared to a share of 23.8 per cent for Uttar Pradesh and 25.1 per cent at national level. Within industry, manufacturing and construction are the dominant sectors. Overall gross value added from industry and its share in total value added from this sector in Uttar Pradesh is summarized in Table 1 below. Medium term growth of the secondary sector of Meerut has been lower than that of Uttar Pradesh resulting in a decline in its share from 4.5 per cent in 2011-12 to 4.31 per cent in 2020-21.

**Table 4.4: Gross Value added from Industry and its sub sectors (Rs crore)**

	2011-12	2017-18	2018-19	2019-20	2020-21	CAGR
Mining and quarrying	53	123	34	27	25	(8.0)
Manufacturing	2,582	5,647	5,230	4,511	4,299	5.8
Electricity & utility services	284	1,048	1,080	1,364	1,493	20.2
Construction	5,957	9,450	10,674	11,369	11,035	7.1
Industry	8,876	16,269	17,017	17,271	16,852	7.4
Uttar Pradesh	188,316	370,860	391,141	407,052	390,627	8.4
Share of Meerut (per cent)	4.50	4.39	4.35	4.24	4.31	

Source: Directorate of Economics & Statistics, Uttar Pradesh

9. Within industry, manufacturing is the most vibrant sector. Manufacturing comprises organised manufacturing, the units covered under Annual Survey of Industries employing 10 or more workers and unorganized employing less than 10 persons.

**Table 4.5: Annual Survey of Industries- A snapshot (Invested Capital & Output in Crores and Persons in numbers)**

	2018-19			2011-12			CAGR	
	Invested capital	Output	Persons employed	Invested capital	Output	Persons employed	Invested capital	Output
Food Products	3,900	8,022	7,081	2,084	2,924	8,619	9.4	15.5
Beverages	177	395	540	97	175	755	9.0	12.3
Textile & Apparels	583	1,116	5,412	472	682	3,123	3.1	7.3
Paper & products	1,230	3,650	4,870	882	792	1,450	4.9	24.4
Chemical & Pharmaceuticals	616	2,007	4,954	305	929	3,658	10.6	11.6
Rubber & Plastic Products	793	1,381	3,687	216	651	3,030	20.4	11.3
Basic & Fabricated Metals	178	461	1,639	68	280	681	14.9	7.4
Machinery & Equipments	164	559	1,631	142	335	1,868	2.1	7.6
Transport Related	149	156	1015	164	60	549	-1.4	14.6
Sports Goods	344	875	6,554	123	292	2,746	15.9	17.0
Others	496	479	3,975	152	107	19,302	18.3	23.9
<b>Total factory sector</b>	<b>8,631</b>	<b>19,102</b>	<b>41,358</b>	<b>4,705</b>	<b>7,227</b>	<b>45,781</b>	<b>9.1</b>	<b>14.9</b>

10. The latest ASI data for Meerut are available for 2018-19. Between 2011-12 and 2018-19, there has been a small increase of 30 units in number of factories from 625 to 658. Invested capital and output during this period, however has doubled (Table 4.5). Surprisingly, there has been a decline in number of persons engaged in factory sector. The industries which have witnessed an increase in number of persons engaged are sports goods, textiles & apparels, paper, chemicals, rubber and metals. The other industries, which include leather, furniture, gems & jewellery seems to have witnessed an employment reduction in 2018-19. Gross value added from organised manufacturing in 2018-19 at Rs. 2658 crore was just around 50 per cent of total value added from manufacturing. In 2011-12 also the share of organised sector in value added from manufacturing was close to 50 per cent. The ratio of value added to output was sticky at 14-15 per cent during this period.

11. The small scale industry has indicated existence of over 47,000 establishments in micro, medium and small scale sector in manufacturing, trade and services sector in Meerut in 2017-18. The sector wise numbers are as in Table 4.6.

**Table 4.6: Number of Micro, Small and Medium Enterprises in Meerut**

Sectors	Numbers	Sectors	Numbers
Manufacturing Food products	3172	Trade (Wholesale & Retail)	7085
Sports Goods	3946	Education & Culture	1199
Textiles & Apparels	3804	Health	573
Computer, electronic and optical products	259	Transport and Services Related	4278
Rubber and plastics products	596	Personal Services	1882
Leather and related products	329	Food & Catering Services	1747
Paper and paper products	484	Construction	2442
Electrical equipment	815	Civic Amenities	523
Chemicals and chemical products	679	Others	9513
Machinery, Metals & equipment	1308		
Other Manufacturing	2412	Total	47046

Source: District Industries Centre, Meerut

12. Government of Uttar Pradesh had conducted a survey of unorganized units in manufacturing sector in 2017. Number of units. MSME units in Meerut were relatively bigger.

**Table 4.7: MSME- A Snapshot**

	Meerut	Uttar Pradesh	Share
No of Enterprises	7881	163,319	4.83
Workers	59,710	1,310,194	4.56
Fixed Assets (Rs Crore)	2,220	62,513	3.55
Loans (Rs crore)	259	17,284	1.50
Output (Rs crore)	1,188	15,511	7.66
GVA (Rs crore)	684	9,462	7.23
GVA per unit (Rs)	868,212	579,383	

Source: Directorate of Economics & Statistics- Unorganized Sector Survey

13. Data on employment in manufacturing is significantly different when compared across the source agencies. The populating census data gives a number of around 77,000 for household industries. Unorganised manufacturing survey gives a number of 59,000. The establishment and number of persons based on other survey gives a number of a little over one lakh for manufacturing. However, based on these and given the manufacturing base in the District, one can take that manufacturing in Meerut may be employing around one lakh persons and total employment in industrial sector could be somewhere between 2 to 2.5 lakhs. Construction is the single largest sector in Meerut accounting for 25 per cent of gross value added. It has been a buoyant sector with preliminary skill needs and as such would perhaps be employing more than one lakh persons.

**Table 4.8: Establishments and Employment in Industry in 2013**

Sector	Rural	Urban	Total	Rural	Urban	Total
	Number of Establishments/Own Account Units			Number of Persons Engaged		
Total Industry	12993	28310	41303	35761	79198	114959
Uttar Pradesh	653,335	581,004	1,234,339	1,557,558	1,950,129	3,507,687
Share	2.0	4.9	3.3	2.3	4.1	3.3

Source: Uttar Pradesh- District Fact Book:India state Publications 2022

## Industry

14. The Uttar Pradesh government launched its Industrial Investment and Employment Promotion Policy 2022 in November 2022 to enable the state's aim of becoming a one trillion-dollar economy. With the UP Global Investors Summit 2023 at sight, the state passed the new umbrella policy of the State.

- The policy aims at creating a progressive, innovative, and competitive industrial ecosystem generating employment in the state while mobilising investments from across the world.
- Ensuring a continuity of the successes of Industrial Investment and Employment Promotion Policy 2017, the new umbrella industrial policy of the State reflects the voice of industries of the State & the country.
- Offering a unique flexibility to the investors by extending a one-time choice of choosing an option amongst three 'mutually-exclusive' options of Investment Promotion Subsidy, Capital Subsidy and Net SGST reimbursement, the policy categorizes investments into four major categories Large, Mega, Super Mega and Ultra Mega.
- With India at a bright spot in the global economy today, the policy is an excellent offering for foreign as well domestic investors. It complements as well as supplements various schemes and policies of the Centre to offer one of the most attractive and optimal incentive packages for investments in the country (Box 5.4)

#### **Box 5.4: Industrial Incentives**

- Stamp Duty: 75 per cent in Madhyanchal & Paschimanchal
- EPF Reimbursement : to the extent of 50% of employer's contribution to the units providing direct employment to 100 or more unskilled workers
- SGST Reimbursement: Net SGST reimbursement ranging from 60 per cent to 90 per cent based on scale of industries.
- Capital Interest Subsidy : 5 per cent per annum for 5 years
- Infrastructure Interest Subsidy : 5 per cent per annum for 5 years
- Industrial Quality Development : 5 per cent per annum for 5 years
- Electricity Duty: 100 per cent exemption to all new industrial units for 10 years.
- Mandi Fee: 100 per cent exemption to all new food processing units on purchase of raw material for 5 years.
- Incentivising employment generation: Units generating minimum employment of 200 direct workers will be provided 10 per cent additional EPF reimbursement .

15. During pandemic in 2020-21, a stimulus package announced for MSME sector has the following components:

- Collateral free loan of Rs 3 lakh crores to restart work and save jobs
- Subordinate debt provision of Rs 20,000 crore for 2 lakh stressed MSMEs. Besides, there will be Rs 50,000 crore equity infusion and a fund of funds with corpus of Rs 10,000 crore to help these units expand capacity and help them list.
- The Central Government and PSUs will clear all MSME receivables in next 45 days
- An interest subvention of 2 per cent for Mudra/Shishu loans up to Rs 50,000
- Special scheme for street vendors to provide Rs. 10,000 of working capital

#### **Industrial Infrastructure in Meerut: challenges**

Uttar Pradesh has a mechanism of Udyog Bandhu. It is an organization of the State dedicated to facilitate Investment in Industrial and Service Sectors, besides solving various problems of existing & up-coming industries as well, related to different Government departments. It is a systemic process of by which the state administration engages with local industry associations. Problems are raised, recorded and endeavoured to be resolved by the District administration and at the Division level. Just a cursory glance of problems/ issues raised gives a vivid picture. The last three meetings organized in 2023 have the common issues:

- Problems related to poor condition of internal roads in approved industrial areas
- Non-functional street lights and poor maintenance
- Poor alignment of NHAI roads/ projects with PWD/ Municipal/ MDA roads leading disjointed patches and clogged connectivity
- Lack of regular cleaning of street/ roads leading to dust accumulation & severe air pollution
- Water drainage issues inside and outside industrial areas leading to water logging
- House Tax accounting/ fixation issues
- Connection of smaller industries in many industrial areas with rural feeder instead of industrial feeder
- Permanent and temporary encroachment (through weekly markets) of main roads leading to disruption in vehicular movement and in some cases drainage

16. With two thirds of the enterprises being unregistered and more than half of the registered enterprises not seeking institutional credit support, these bailout packages were of limited significance. There are usually three biases in any bailout package, first it covers the units which are easily reachable (road side bias), second, the units with which the institutions or authorities are familiar (nearness bias) and thirdly the units which are relatively more resilient (have greater immunity) or (bias of the comfort) and these do not even bring the most vulnerable ones into any reckoning of bailout packages.

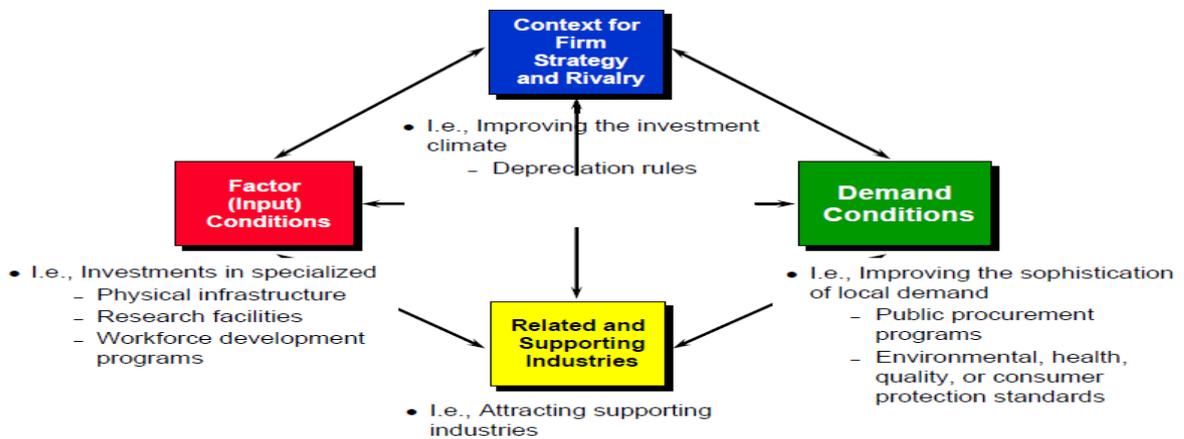
17. Niti Aayog had earlier commissioned IDFC to have a survey of industries to look at the Ease of Doing from the perspective of investors. IDFC, which released its Report in 2017 discussed the business facilitating initiatives and business environment with a sample of 3326 industrial units across the country (including Sikkim) together with 75 experts (subject matter specialists) and 25 Industry Associations at different levels. Based on the Study and other Reports, Industry could consider a twelve point charter as indicated in Box 5.5

**Box 5.5 Twelve Point Charter for Industries**

1. **Based on the performance of the States** divided into those that have experienced faster growth and those that have experienced slower growth; it was observed that fast-growing states systematically exhibited fewer delays in the grant of permits and clearances.
2. Survey findings point to vast gap between what the enterprises know and what the government officials say. Lack of communication has been an important deterrent to investors.
3. Findings greatly reinforce the existing body of research pointing to the need for a more flexible labour market. The enterprises in labour-intensive sectors experienced greater difficulty in labour related matters.
4. Enterprises in high-growth states on average report monthly power shortages that are ten hours less than those reported by low-growth states.
5. Other things being equal, an increased pace of “creative destruction” which allows more rapid entry and exit should lead to an increase in productivity.
6. The regulations should not place disproportionately large compliance burden on large firms and inhibit their growth.
7. **There are** large variations in the experiences of enterprises regarding the access to finance. Enhancing access to low-cost capital is important to improve business environment.
8. Need to incentivise registration of establishments; both the owner operated ones and ones which have hired labour for access to incentives and institutional credit.
9. Many establishments are providing services/products to State/Union Government, Local Bodies, PSUs of the State and the Union and large public limited companies and a significant amount is receivable from these units. Besides the Samadhan scheme, it is important to create a separate window to purchase such receivables and others from MSME sector, at an appropriate discount.
10. Vocational trade specific training and training of soft skills are necessary.
11. Encourage Industrial clusters
12. Success of toy industries also indicate need for setting standards for reducing cheap substandard imports and also consider appropriate import/safegaurds duties

18. Clustersemerge spontaneously and can be facilitated by the State. Proximity to natural resources, ethnic concentrations, spin-outs from a key institution, leveraging the existing

infrastructure and strategy of the Government could develop clusters. The pro-active approach of the Government in inviting the large industries as anchor companies, better infrastructure, land availability and availability of industry friendly environment with labour availability may be a key in the development of a cluster. Since clusters involve powerful externalities across firms in a location, and associated public goods, there is a strong rationale for public policy. The Government can play the *catalytic role* by investing in common facilities and encouraging the entry of common facility providers as one of the many options. There are three critical factors of cluster success: collaboration (networks and partnerships), skills and abilities (human resources), and organizational capacities to generate and take advantage of innovation - any public policy for clusters, then, needs to aim at spurring these success factors that go beyond just strengthening common infrastructure of brick and mortar. Porter, using his Diamond framework, represents the possible Government interventions using the following framework.



19. Though the provisioning for basic facilities such as land, labor and capital is listed as the last in the list, they become the necessary and a very important role played by Government. However, that is not the sufficient condition. The type of institutions required to increase the competitiveness of the cluster are:



20. An entrepreneur is a catalyst for economic development, a change agent with vision and creativity. Potential entrepreneurship development requires to be supported by a business ecosystem that is conducive to its emergence, easy finance, expertise, infrastructure, skills and a high level of motivation for change. Government of Uttar Pradesh has conceived an Integrated Business Development, which integrates various government schemes, provides integrated business development services, handholding of MSMEs starting from registration to promotion of their product/service in a competitive landscape and networking of entrepreneurs. The export promotion policy conceives of providing necessary export-related assistance and services in key focus areas of handicrafts, agriculture and processed food products, engineering goods, handloom and textile, leather products, carpets and rugs, glass and ceramic products, wood products, sports goods, defence products, services sectors covering education, tourism, IT and ITES, medical value travels and logistics. The scheme offers funding for participation in international fairs, study tours abroad, trade delegations, publicity, etc. Knowledge is now the key driver of growth.

<b>Box 5.6 Sources of Knowledge Using and changing capacities</b>		
	<b>Sources of increasing knowledge using capabilities</b>	<b>Sources of increasing knowledge changing capabilities</b>
<b>Intra Firm Sources</b>	Learning by doing	Learning by changing
	Improved process & practices derived from trial and error	Absorption and adoption of changing technologies
<b>Intra cluster sources</b>	Cluster mobility of skilled labour	Creative collaboration between firms
	Knowledge spillovers and diffusion between producers	Training and skill development through cluster based initiatives
	Knowledge spill over between suppliers, production related activities	Collaboration between entrepreneurs in clusters Association between stakeholders
<b>Sources outside cluster</b>	Externally linked technical advantages	Understanding testing needs and use of facilities
	Customers' and traders knowledge	Availability and use of factoring services
	Machinery and input suppliers	

21. Meerut has widespread industrial spectrum and each sector has their unique concerns, strategy and development targets. Each sector has different expectations. While generalisation does help in policy formulation, it is appropriate that industry specific concerns are taken note of. The involvement of stakeholders and understanding their concerns is equally important as what is being delivered. After all, it is these industries and entrepreneurs who would not only push the growth and facilitate getting to the target. They are both the contributors and beneficiaries of the growth process.

For the study, discussions were held with representatives of major industry and services segments. In the Table 5.2 below, we look at the concerns and expectations of each important industry in Meerut.

<b>Sectors</b>	<b>Current Status &amp; Target</b>	<b>Constraints &amp; Support Required</b>
Sports Goods	There are more than 3500 units, employing nearly 50-70 thousand workers and producing goods worth Rs. 200 crore annually. The major products are items related to cricket, boxing gloves, football, badminton, and lawn tennis. The cluster comprises of both SMEs and household units. The SMEs are largely located in the sports goods complex, while the sub contracting units are spread all over the city and even in the nearby villages. The cluster is growing at an average annual growth rate of 8 per cent for the last few years. Some units like those producing boxing gloves have been growing at a comparatively faster rate. With new technology and a competitive stimulus could push the growth to nearly 20 per cent annually. Meerut sports goods industry contributes to roughly around 25 per cent of India's sports goods export.	The cluster draws technical support from the Process and Product Development Centre (PPDC) for sports goods, which is a central government organization. The cluster firms mostly use manual manufacturing processes. The cluster produces items only for few sports, leaving a large chunk of the segment out of its domain. Sector is MSME dominated and that constraint in getting large orders. The cluster is facing immense competition from mechanized units manufacturing similar products. The technology is changing rapidly and the cluster firms are too small to make the required investments. The cluster has immense scope for technical up gradation within the existing set of manufactured items. Even greater scope lies in diversifying to other sports good segments. Facilitation in acquiring technology, inter firm collaboration in getting orders of large scale, product standardization and easy finance together with an improved infrastructure is critical.
Scissors Industry	175 units exist in this sector with direct and indirect employment nearly 25,000 persons. Scissors are being manufactured in Meerut households since long. There are many families involved in this industry; conventionally family tradition: However pathetic health conditions of old streets of Meerut, health-hazardous production process and lack of any research, any directional change or product diversification it remains restricted to scissors used by tailors.	To address the tool room and other problems a Cluster facility centre was initiated. Industry took up with MDA and got 300 industrial plots. Though all plots stands allotted but shifting process is very slow.  The main problem of industry is its inability to match CHINA imports. New techniques of production process have not been adopted. Setting standards, higher import duty and facilitation in technology acquisition together with Skill development is critical.
Textile Weaving Industry	Reportedly number of units 1200 with direct and indirect employment of nearly 50,000. Units are households since long and are in residential areas and conventionally family tradition:	Industry remains restricted to conventional methods. Problems are like costly input thread, power cost, not able to match import pricing, out of jobs due to new technology machines coming up etc.

	Reportedly Meerut has around 1000 household specialized in intricate designing and needle work. Mostly female workers and are exploited because of lack of market, aggregator and design upgradation.	There is a demand for industry-park, increase in import duty, developing centralized designing, testing facility, yarn shining, finishing and latest packing facilities. Marketing and technology are the concerns. Cluster and SHG are the possible options.
Brass Band Industry	Reportedly number of units 600 with direct and indirect employment of around 10,000. Units are households or in mahollas since long in residential areas. There are many families involved in this industry; conventionally a family tradition.	DJ a substitute, though with sound pollution, puts restrictions on demand. Sector needs a 200 units' industrial area. Here too competition from China is causing problems. High cost of brass, the basic raw material is another problem. Being a highly labour intensive industry, it is very difficult to find skilled workforce for the Brass Band manufacturers.  The Manufacturers desire that MDA should provide them land at subsidized rates for setting up their units. The State Governments should support these units in the procurement of metals and other raw materials and with provision for subsidy on electricity. Cheap quality imports could be restricted through an appropriate duty and product standards.
Leather Industry	Meerut had around 1000 house hold units hand making shoes.	Labour cost per pair here is about Rs 50-60 in Agra the same is Rs 30, Besides marketing and other problems and customer shift to branded products has spoilt the show.
Textile Printing & Processing Industry	Reportedly numbers of units 15 big and around 100 small household type with direct and indirect workers around 500. Small units are households or in mahollas.	Technology Up-gradation Fund 2018 did help partially but it is a continuous process. Reliance has monopoly on polyester which has input cost 40-60 per cent and is 20 per cent costlier than China putting industry out of global rates. On participation in foreign exhibitions there should be government aid like China does it.
Handicrafts:	It is very interesting sector to take effective steps as growth potential exists. Mudali has around 2000 household units working on items developed from artificial pearls such as curtains etc. Of these items substantial part is finally exported but the advantage of high pricing of exports is generally not available to households or is passed on to them.	There is need for an aggregator for exports. Product design could considerably increase export base
Print & Publishing	Reportedly numbers of units 8 big and around 80 small, employing around 3000	The availability and cost of paper are the issues. Digital technology is both helpful but

Industry	workers. Turnover is estimated at around Rs. 500 crore. Meerut is also hub of education book publication with an equal turnover.	increases competition. A cluster kind of arrangement with scattered location could be useful.
Electronic Switch gear	Around 15 units and small house hold repair units are in this sector with a turnover of around Rs 70 crore of which exports constitute around 30 per cent. Number of workers may be close to 500 but mostly on contract. There is big scope because of higher application of electronics.	The sector has high import content and duty structure of inputs and outputs needs a review. It is a capital intensive segment and also technology driven which changes rather fast. Technology facilitation and incentives on investment with assured power availability are the main issues.
Gems & Jewellery	Meerut is the largest producer of both precious metals and artificial jewellery. Units are scattered and no brand name has been acquired. Basically units cater to other sellers. Price realization is therefore low. Local designing are not of high quality so job workers and even producers copy the design or produce for a given design.	There is need for an organisation/association which could facilitate their technology acquisition. Adequate and affordable credit is another major concern.
Food Processing Industry	Food processing is a sunrise sector. The growth potential for this sector is enormous as the demand for processed food products is increasing in the domestic as well as in the overseas markets.	The State Government could promote this sector through public investment and by facilitating private investment in development of processing industry and supportive infrastructure. Private/public/Joint Sector initiative for development of cold chains, grading, and transportation and post harvest storage facilities will be give strong impetus. Meerut being a leading District in agriculture and horticulture should have a Mega Food Park.
Meerut Power loom Cluster	Cluster has 3,000 power loom units employing over 30,000-35,000 workers. Most units (almost 95 %) are micro-scale units. Main products are grey fabric and fabric for home furnishing, which are then supplied to traders located at Delhi, Ghaziabad and Panipat. The cluster annually produces goods worth Rs. 40 crore.	Like most other power loom clusters, the traders or master weavers control the market. Female members of the family mostly indulge in embroidery work on job work basis. The power loom sector has generally seen a decline in the last few years. Meerut has very few units that have modern looms and are relatively inefficient when compared to the power loom cluster of Panipat. This cluster faces a number of challenges, including limited market linkages. The turnover is very low, and the cluster needs sustained support to make it more productive.

Auto parts industry of Meerut	Units produce both electrical and mechanical parts. This cluster has about 5000 units, of which almost 95% are related to mechanical parts. Apart from manufacturing, significant number of units is also into repairing. Approximately 26,000 workers are employed in this cluster. The cluster has an annual turnover of Rs 100 crore. The major products are auto rubber parts, auto brakes, auto engine spare parts, nuts and bolts, spring pills, etc. All the units are either small or micro in nature, and are spread throughout Meerut city.	The cluster is highly fragmented and hence cannot produce any single item in large volumes, affecting both manufacturing costs and quality. The workforce is unskilled and quality culture is by and large absent. There is a strong requirement for technological up-gradation. In most of the units, simple cutting and drilling machines are being used. There is a need for introducing advanced equipment, to improve shop floor practices, induce quality systems and to promote standardization.
Khadi and Textiles Weavers	The Khadi production is expected to rise by 40% in coming years. The Government of India through the Khadi and Village Industries Commission (KVIC) is establishing a Centre of Excellence for Khadi (CoEK) to promote Khadi industry.	On the aspect on the impact of Technology, the weavers stated that the new technologies are driving traditional handloom weavers out of work. Therefore they expect that the Government should focus more on skill development in the areas of Designing, Testing, Cloth shining, Finishing, Packaging, Dying etc.. Setting up of a cluster, easy access to credit would be helpful.

22. For many of the issues raised by Industry, industrial park or an industrial could be an answer. A typical cluster could be turning point for excellence in production, inter firm learning, technology upgradation, labour mobility beside being articulating common concerns more effectively (Box 5.7). Type of a cluster based on industry is given in Annex 1.

<b>Box: 5.7 A Typical Cluster</b>				
	Benefits from Central Government schemes		Can avail State subsidies through awareness and association	
<b>Conglomerate of Producers, Input Suppliers and Traders</b>				
<i>Suppliers/ Dealers</i>	<i>Direct Production</i>	<i>Supporting Trade</i>		
Machinery	Producing Units	Export Producers	International Agents	
Raw Materials		Export Traders		
Intermediate Inputs	Supporting Units	Domestic Suppliers	Surplus/Defective Pieces	
Packing Material	Ancillary Units	Whole sellers		
<b>Supporting Infrastructure</b>				
<i>Industry Associations</i>		<i>Skill/ Education</i>	<i>Banking/Logistics</i>	
MDA	Industrial Institution	Labour Employability	Banks	Transport/Freight

23. The industry specific analysis, however, leads to three interesting observations. First, the employment in manufacturing sector is significantly higher than what the other data sources tell. Most of these workers operate from home and may have not surfaced in official data. Second, the industry is scattered and unorganised to a significant extent and an innovative approach could only improve their conditions. Finance, technology, marketing and recognition are their common problems. A fixed location cluster may not be an answer to their concerns. Third, while these industries are to an extent vocal, they have not been able to articulate their concerns effectively. These industries have significant potential and also non-farm employment source with possibility of a significant increase in female labour force participation. Further since they are outside the LFPR and workers, their GDP contribution may perhaps be underestimated.

24. While skill development and training (including the craftsmen training) has been recognised as a necessary input, their accessibility is still an issue. Further, training and placement are two sides of the coin and without placement, only the unutilized potential will be created. In PM Kaushal Vikas Yojana and the Craftsman Training, placement record is not satisfactory. Industry Associations' involvement, regular updation of course design and continuous research on skill sets that are in demand are essential ingredients.

**Box 5.8 :Quality of Skilling: skilling for competitive advantage**

The greatest challenge of job creation and placement is the proper skilling eco-system and of most paramount importance is the accreditation and certification. The system of certification, be it through Institutionalized training or recognition of prior learning, should be tailored made so as to facilitate maximum placement of the unemployed skilled work force.

**In the Current Situation** NCVET is assessing and certifying the courses/trades only which are affiliated to it and Centrally Sponsored Schemes and courses. SCVT is allowed to assess and certify only state related/sponsored courses. SCVT certified candidates are not allowed to be mapped under Apprenticeship and hence cannot undergo Apprentice training.

**Current challenges** include cumbersome certification process, delay in assessment and certification, hindrances in promotion and upgradation avenues and inadequacy of current process of certification in skilled/semi skilled trades for trades requiring highly skilled knowledge and acumen. If SCVT of respective states is empanelled as assessment and certification body to assess and certify the courses/trades both in Technical and Non-Technical trades in respect of Centrally Sponsored Schemes courses/trades adopting a diligent system in coordination with NCVET, the current situation could be improved.

Craftsmen training is another area which needs to be given greater emphasis, particularly in a District like Meerut where some kind of craftsmanship is inbuilt historically. It is time that their full potential is identified, acknowledged and harnessed.

25. While traditional industries are needed to be nurtured, there is tremendous scope for new set of industries in the District. The digital technology has changed the environment and eco system of manufacturing. It is kind of destructive construction and it needs to be recognised upfront. There are four areas where there is additional scope of green field investment. In case of Meerut, with somewhat innovative workforce such transition and adoption of new emerging industries/sectors is less difficult.

Box 5.9 There are five avenues—green industries, special economic zones, industry 4.0, tourism and urbanisation
<b>Green Industries</b> and green jobs are the future and the sooner an economy adopts them, the better it is for sustainable growth and development. Meerut could aggressively attempt for Electric vehicles (EV) and solar panels.
<b>SEZ Strategy-</b> SEZs can play a major role for manufacturing exports, especially in labour-intensive manufacturing. Meerut could look for one large size multi product SEZ which should provide for liberal labour laws and exit policies with proper safeguards. Since labour laws fall under the concurrent list of the constitution, both the federal and state governments can legislate.
The <b>Fourth Industrial Revolution (4IR)</b> , which covers the emergence of technologies—ranging from machine learning, artificial intelligence, autonomous transportation and cloud computing—has yielded a sea change by permanently altering the relationship between man and machine. The education hub that Meerut is could be seen as a reservoir of skill and talent. One District One Product and Export potential from district could be starting points.
Tourism potential of Meerut has hardly been exploited. Religious and historical places could be major attractions.
Meerut has seen relatively greater urbanization in Uttar Pradesh. The availability architects, construction advisers and relatively higher income with MSME potential generate new avenues for urbanization in Meerut. Meerut and some other urban agglomerations around it need to be smart, safe, efficient and pleasant to live in, supported by infrastructure (water, sewerage, electricity, transport, etc.) and be able to create competitive jobs.

26. Government of India, along with Make in India has also introduced a scheme of product linked incentives. State Government has also identified Sports Goods and Textiles as the two industries as part of One District One Product. These are innovative schemes and entrepreneurs need to inform of the opportunities that these schemes offer.

<b>Box- 5.10: The Production Linked Incentive Scheme- March 2020</b>
This scheme was introduced to reduce India's dependence foreign countries. It supports the labour-intensive sectors and aims to increase the employment ratio in India. This scheme works to reduce down the import bills and boost up domestic production. It invites foreign companies to set up their units in India & encourages enterprises to scale up.
The incentives, calculated on the basis of incremental sales, range from as low as 1% for the electronics and technology products to as high as 20% for the manufacturing of critical key starting drugs and certain drug intermediaries.
So far, the government has announced PLI schemes for 14 sectors including automobile and auto components, electronics and IT hardware, telecom, pharmaceuticals, solar modules, metals and mining, textiles and apparel, white goods, drones, medical devices and advanced chemistry cell batteries.

## Services Sector

27. Services have been an important segment of GSDP of Meerut accounting for 44 per cent of district GDP. The share of tertiary sector gross value added in Meerut has been around 2.9 per cent of the aggregate GSVa from this sector in Uttar Pradesh. Sector wise GSVa of tertiary sector in Meerut is in Table 4.9. Services are further categorized as market driven and non-market driven. The other services which comprise mainly education, health and other miscellaneous household services are usually not market driven. Particularly, for education and health are considered merit goods and often considered obligatory for the public sector, directly or through outsourced mechanism. Basic education and preventive healthcare have externalities and are not fully left in market domain. While public administration and professional services (including real estate) are the fastest growing services, contact intensive sector of trade and hotels grew much slower. Further, Meerut is yet to fully exploit the tourism potential of the District.

28. Overall persons engaged in tertiary sector in 2013 in Meerut were estimated a little over lakhs in 2013. Nearly half of these were in the trade sector followed by other services, education and transport sector (Table 4.10). Given the growth of services during this period and Meerut being an education and publishing hub, total number of persons engaged in mix of services could be anywhere between 5-6 lakh.

**Table 4.9: Gross Value Added from Tertiary Sector (Rs crore)**

	2011-12	2017-18	2018-19	2019-20	2020-21	CAGR
Trade, hotels and restaurants	1,802	3,441	3,691	4,082	3,025	5.9
Transport & communication	937	2,230	2,812	3,029	2,371	10.9
Financial services	634	1,153	1,272	1,531	1,615	11.0
Real estate & professional services	2,384	5,397	6,053	6,418	7,013	12.7
Public administration	831	3,226	3,793	4,265	4,155	19.6
Other services	984	1,679	1,973	2,265	2,288	9.8
<b>Tertiary Sector</b>	<b>7,571</b>	<b>17,127</b>	<b>19,594</b>	<b>21,590</b>	<b>20,467</b>	<b>11.7</b>
Uttar Pradesh	310,326	626,642	699,899	767,433	714,629	9.7
Share of Meerut	2.7	2.7	2.8	2.8	2.9	

Source: Directorate of Economics & Statistics, Uttar Pradesh

**Table 4.10: Number of Establishments and persons engaged**

Sector	Rural	Urban	Total	Rural	Urban	Total
	Number of Establishments/Units			Number of Persons Engaged		
Total	33,660	79,158	112,818	54,966	151,400	205,706
Uttar Pradesh	2,138,418	1,865,811	4,004,229	3,832,363	4,056,915	7,889,278
Share	1.6	4.2	2.8	1.4	3.7	2.6

Source: Uttar Pradesh- District Fact Book: India state Publications 2022

29. Given the structure of economy of Meerut, it would need to pursue a unique strategy of development. It has a vibrant agriculture, but its long term sustainability is seriously constrained, it has a diversified manufacturing base, but that is relatively shrinking, due to both to its internal constraints and also as competition from neighbouring districts is intensifying, it has a diversified and well entrenched service sector, but trade and tourism potential is hardly exploited and

education and health sector not getting into the competitive mode. Public administration and defence, though has been a fast growing sector, has limitations and digital revolution and delivery of services moving to that mode, further expansion possibilities are not that significant.

30. Services sector is more heterogeneous by its very nature. It has purely monetised sector comprising trade and transport. It covers mixed sector such as health and education and purely non monetized sector as public administration. Further, while trade and transport by and large private sector dominated, health and education have both public and private sector presence and public administration by definition, a government driven. Further, dependency of this sector on infrastructure as roads is as significant as manufacturing. In services sector, we have also included construction because its problems are more similar to services sector and it is partly driven by professionals. Like manufacturing, we look at different sectors (excluding the financial sector) of services to identify the constraints and what the stakeholders' expectations are in Table below:

<b>Table 5.5 Services sub sectors, their issues and way forward</b>		
<b>Sectors</b>	<b>Current Status &amp; Target</b>	<b>Constraints &amp; Support Required</b>
<b>Construction Advisers &amp; Contractors</b>	Meerut derives significant GDP from construction sector. New residential and commercial complexes indicate a significant scope for this sector. The District has significant number of Construction Engineers, Architects, Designers and workers.	Major constraint is the haphazard development of District and frequent regulatory changes. There is hardly a collective voice of the group. Municipal Corporation and MDA need to be considerate of their concerns. A cluster kind of approach would suit this sector. Fiscal support and institutional finance are equally important.  Another problem in construction sector is the actual cost/valuation and the declared valuation which acts as collateral.
<b>Doctors &amp; Health Clinics</b>	Meerut has sizable number of clinics and specialized hospitals with care cost just under half of which prevails in Delhi, the nearest centre. But sector has not grown to its potential of frequent regulatory changes and statutory requirements.  Hospitals have significant forward and backward linkages with technicians, nurses, paramedics, pharmacists, civic amenities, particularly sewage disposal. By	A similar approach as that of Constructions needs to be adopted. Old clinics built on the then prevailing regulation cannot be expected to move to new regulations, particularly with regard to location and size.

	ignoring one, we are blocking the prospects of an entire chain.	
Education	Meerut is an Education hub with 5 universities in the District. It is one of the biggest centre in North India of printing and publishing of textbooks and other literature. But, quality of education has remained subpar compared to Delhi and other places leading to exodus. Further, at school level, most of these have not adjusted themselves to medium of instruction which has moved to English as preferred one.	Municipal Corporation and District Education Officer have significant responsibility of improving the quality of education. There is need for more active collaboration between administration and institutions. Further, the syllabus of the higher education needs to be relevant to current requirements. The New Education Policy has hardly found to have been assimilated even by teachers.
Professionals	Meerut has significant number of other professions, particularly lawyers, chartered accountants and business professionals.	The problem of these professionals is also apathy of administrative set up and articulation of their views collectively at a decision making platform. A strong aggregation/association and a cluster will mutually be beneficial. Exchange of knowledge and networking is most important in this sector
Tourist Aggregators	Meerut has tourist hotpots, mythological, historical and religious. But there is hardly any understanding and publication of this potential. Meerut is yet to emerge on the tourist destination network. While its proximity to Delhi and Agra, which are touristscentres put to it in a disadvantageous position, but it could turned into its strength.	Meerut Corporation need to improve the image of the city as peaceful and tourist friendly. Besides, a tourist aggregator could considerably improve its position. Meerut could also be showcased as health care destination, an education hub besides the other tourist hot spots. The connectivity network further opens up the avenues in this sector and it is right time to ride on.
Street Hawkers/Eating Joints	This is the largest and most vulnerable group, always at the mercy of police and municipal corporation. The usefulness of this segment is hardly recognised.	Municipalities should consider providing them fixed locations for their activities, legal and transferable.

31. Besides the hard infrastructure, there is need for soft interventions. Some of the common problems and a possible menu of solutions have been outlined in table below. This is not an exhaustive list, but a tentative one and more can be added as identified. But soft interventions are equally important as hard interventions and infrastructure. In the entire analysis so far, we have not touched the infrastructure of power, roads and civic amenities. Adequate power at affordable rates is a pre requisite for economic activities. Meerut is relatively better placed with power with overall technical losses under 20 per cent. Road network is expanding and State has an extensive programme of connectivity. Digital connectivity is a dynamic concept and is rapidly changing.

**Table 5.6: Soft intervention - Menu of solution of problems**

Problem	Solution
Lack of Marketing linkages	<ul style="list-style-type: none"> <li>• Joint participation in dealing with local traders/ markets players</li> <li>• Joint participation in exploring international business opportunities</li> <li>• Training in marketing</li> <li>• Exposure to marketing outlets/markets</li> <li>• Diversification in products/selection of product mix through common expert (service provider)</li> <li>• Creation of a common brand</li> <li>• Buyer Seller meet</li> <li>• Common web site</li> <li>• Common advertisement</li> <li>• Joint exploration of new international markets</li> </ul>
Poor Quality of product	<ul style="list-style-type: none"> <li>• Joint hiring of consultant for quality improvement</li> <li>• Common testing laboratory</li> <li>• Common training for workers on quality issues</li> <li>• Common access to Quality Certifications</li> </ul>
Credit availability is a problem	<ul style="list-style-type: none"> <li>• Mutual credit Guarantee</li> <li>• Sensitization of bankers</li> <li>• Suggesting new financial products through experts/experiences from other countries</li> <li>• Customers give order security to Banks</li> </ul>
Poor Technology	<ul style="list-style-type: none"> <li>• Exposure to right technology</li> <li>• Joint negotiation for buying machinery</li> <li>• Arranging technology exhibition for technology sellers</li> </ul>
High cost of production	<ul style="list-style-type: none"> <li>• Common procurement of raw/input material</li> <li>• Common consultant for redesigning / improving process of production</li> <li>• Common consultant on feed production/layers rearing/providing veterinary services</li> <li>• Common consultant on cost auditing</li> </ul>
Lack of diversification in product	<ul style="list-style-type: none"> <li>• Hiring a common consultant for introduction of right product mix for agro based products (Maize, Mushroom, egg layers, cattle rearing and vegetable cultivation / product development</li> <li>• Exposure to other benchmark enterprises/networks/clusters</li> <li>• Networking with potential new customers (Pick &amp; Pay)</li> </ul>
Poor skills	<ul style="list-style-type: none"> <li>• Common training</li> <li>• Starting a new training programme with a training institute and institutionalizing the programme</li> </ul>

	<ul style="list-style-type: none"> <li>• Introducing a common service provider for hands on training for production of a particular product (Mushroom, poultry, feed production etc.)</li> </ul>
Poor infrastructure in the cluster	<ul style="list-style-type: none"> <li>• Common infrastructure</li> <li>• Common facility center for use of capital intensive tools (Tractors, tillers), providing feed, transportation, packaging, processing plants etc.</li> <li>• Executing projects through Public private Partnership mode</li> <li>•</li> </ul>
Lack of innovation in the cluster	<ul style="list-style-type: none"> <li>• Promotion of direct intervention between producer and consumer / customer</li> <li>• Networking with a local technical institute for inputs in innovation</li> <li>• Removing isolation of the cluster as a whole ( People travelling outside ; outside customers approaching cluster ; Sharpening competition amongst groups : large number of BDS etc)</li> </ul>
Poor social capital	<ul style="list-style-type: none"> <li>• Strengthening existing association</li> <li>• Forming new associations</li> <li>• Forming apex associations</li> <li>• Forming small groups – consortia</li> </ul>

### Grinding wheel of justice: Justice system in Meerut

The Meerut District Judiciary faces significant economic challenges due to a high number of non-working days and absences of judges. Of the 58 to 65 courts in Meerut, only a few are permanent. The tenure for judges is typically three years, except for the District Judge. The main reasons for the loss of working days are abstinence from work by lawyers, non-working days declared by the Bar Association, and absence of judges.

Lawyers in Meerut abstain from work on the first and third Saturdays of every month, resulting in the loss of 26 days annually. Additionally, strikes are called for various reasons, including demands for a High Court bench in West UP, cultural events, and extreme weather conditions, leading to approximately 20 non-working days. Lawyers also observe condolence days to mourn the death of a fellow lawyer or judge, which are frequently misused and sometimes extended to observe the death of family members. Bar association-declared "no adverse order" days further contribute to non-working days. Non-working days also include the second and fourth Saturdays, declared off by the High Court, resulting in the loss of 26 days annually. Moreover, the absence of judges due to leaves, transfers, or not hearing cases adds to the problem. Judges have scheduled leaves, including casual leave, earned leave, and medical leave, and transfers can result in the loss of approximately one month. This absence of judges leads to delays in hearings and case adjudication.

The economic impact of these non-working days is substantial. The entire judicial establishment remains present but non-operational, incurring costs for court staff, facilities, police personnel, and utility bills. Litigants face wasted time and resources due to travel for hearings. The delay in adjudication of matters leads to a significant lock-up of capital, amounting to thousands of crores, in prolonged disputes.

#### Status of civil case disposal rate of Meerut & Delhi

MEERUT					DELHI				
	No. of cases	%	Pending %	Disposal %		No. of cases	%	Pending %	Disposal %
< 1	9047	28.42	100.00	28.00	< 1	10481	51.01	100.00	51
>1	7769	24.40	72.00	24.00	>1	4715	22.95	48.99	23
>3	6215	19.52	48.00	20.00	>3	3118	15.17	26.04	15
>5	5307	16.67	28.00	17.00	>5	2104	10.24	10.87	10
>10	2685	8.43	11.00	8.00	>10	129	0.63	0.63	1
>20	623	1.96	3.00	2.40	>20	0	0.00	0.00	0
>30	190	0.60	0.60	0.60	>30	0	0.00	0.00	0
TOTAL	31836				TOTAL	20547			

*In 2 years, disposal by Meerut = 52%, by Delhi = 74%. Above 10 years cases : Only 1% in Delhi. In Meerut 8% and 2.5% even above 20 years*

To address these issues, several solutions are proposed. The last day of the month can be designated for condolence references after lunch to streamline and reduce the impact of condolence days. E-courts can be utilized to track judge vacancies and absenteeism, and non-working days should be marked in the e-court calendar with specified reasons. Management Information Systems (MIS) should be generated to track non-working days for each reason. Finally, there is a need to sensitize and create awareness among the bar association members regarding the negative economic consequences of non-working days.

## Chapter V- Strategy for Development- going beyond the basics

While the most recent data in respect of Meerut is hardly available, other than for the GDP numbers, an assessment has been made of future growth based on assumptions relating to the sources of growth in an economy. Quantity and quality of inputs and factor productivity are the sources of growth. A Study by Reserve Bank of India has revealed that of the overall inflation adjusted growth of 6.1 per cent during 1981-2017, labour and capital inputs had contributed to 4.7 per cent growth (3.4 per cent by capital), another 0.46 per cent was contributed by capital and labour quality and only 0.96 per cent came from total factor productivity.

<b>Box 5.1: Sources of Growth</b>				
<i>Capital Inputs</i>	<i>Labour Inputs</i>	<i>Quality of Capital</i>	<i>Quality of Labour</i>	<i>Total Factor Productivity</i>
New Investment	Increase in Workers	Technology	Skill Development	Systemic Improvement
Expansion/Modernisation	Higher Female Participation	Scale of operation	On the Job Training	Agglomeration Effect
Reallocation of Labour& Capital		Digital Technology	Improved Employability	Institutional Factors

2. But growth in itself a dynamic concept and there are leakages and slacks which, if covered properly, an accelerated growth could be achieved. There has been both direct and disguised unemployment. Labour Force participation is low and has so far been sticky. However, a reasonable part of this low participation of labour force as job seekers may have to do with poor quality jobs, these being less remunerative compared to the transaction costs involved in relocating, social structure or lack of proper facilities of child care and other amenities for female labour force. There is considerable scope for new capital being injected and the Investment Summit of Uttar Pradesh is indicative of investor interests. There is possibility of relocating already employed persons occupationally through proper skilling. The data of Uttar Pradesh as in Chapter II clearly indicate that value added per person engaged in different sectors vary considerably. While a person engaged in agriculture gets about 50 per cent of the average of all sectors, it goes up to 23 times in professional services. Even in construction and communications which are low skills, the value added per person engaged is more than 10 times the value added in agriculture. While the quality of labour could be improved through skills, quality or productivity of capital could also be improved through better technology. There could be institutional settings which could reduce transaction cost of business and industry, through Single Window, Ease of Doing Business, appropriate factoring services, inter firm learning and others.

3. Our assessment indicates that it is possible to raise labour force participation by 5-10 percentage points. In 2021-22, labour force participation rate across the States had varied from 27 per cent for Bihar (LFPR of Uttar Pradesh was 36 per cent) to 58 per cent for Sikkim and Himachal Pradesh. The female participation in labour force in Uttar Pradesh at 18.7 per cent was

just about a third of Himachal Pradesh. Even among the educated persons, the LFPR for Diploma holders, graduates and above in Uttar Pradesh was around 60 per cent compared to 84 per cent in Himachal Pradesh. The Investment Summit of Uttar Pradesh and the discussions and presentation made in Meerut indicate additional investment commitment of Rs. 26,554 crore over next five years (Table 5.1). In addition, there has been a proposal for logistic park and additional infrastructure on Delhi-Mumbai Industrial Corridor in Meerut. Besides, the Government of Uttar Pradesh has unveiled a infrastructure development package and additional capital expenditure in Uttar Pradesh. Assuming that Meerut will get a proportionate share, an additional public investment of Rs. 10,000 crore could flow to Meerut in next five years.

**Table 5.1: Investment Intentions Indicated (Rs Crore)**

Sector	Number	Investment	Sector	Number	Investment
Agriculture	5	71	Residential & Industrial Estate	20	2304
Livestock	12	21	Industrial Development	1	325
Dairy	39	2303	IT	2	150
Renewable Energy	9	3430	Health	3	23
MSME	390	10407	Technical Education	7	1126
Skill Development	1	3	Tourism	9	570
Food Security	2	554	Transport	2	760
Forestry	3	295	Urban Development	3	620
Handlooms & Handicrafts	14	1675	Industrial Estate	5	173
Higher Education	2	190	UPIDA	1	1600
Horticulture	7	232		537	26554

#### **Finding a way out of City riddled with encroachments and unauthorized construction**

Unauthorised constructions in various cities of Uttar Pradesh have a profound impact on the local economy, particularly the GDP. These constructions are prevalent in each development authority, with compounding fees under current rules being impractical for individuals to pay. Consequently, unauthorised constructions neither get demolished nor compounded, especially those situated along main roads. This results in a reduction in road width as per the master plan, hindering efforts to increase road width in most areas. Additionally, the negligence and corruption surrounding unauthorised constructions lead to revenue loss for the authority, adversely affecting development works in the district and impacting the local GDP.

Unauthorised colonies further exacerbate the problem, with a significant number of constructions not conforming to existing rules regarding road width, frontage, setbacks, and parks. Unauthorised construction in these colonies can reach up to 100 percent, primarily driven by commercial activities along main roads. The master plan lacks provisions to address these issues effectively, allowing unauthorised construction to persist without consequences. Consequently, the authority fails to collect map fees and other charges, which further compounds the negative impact on revenue and, subsequently, the GDP.

Unorganised sector workers play a crucial role in the unauthorised colonies mentioned above and significantly contribute to the local GDP. However, their livelihoods are constantly under threat due to the unauthorised nature of these colonies. This uncertainty affects their work and has a direct impact on the GDP. Additionally, the lack of comprehensive assessment of unauthorised construction and the absence of clear responsibility in this matter further exacerbate the challenges. To address these issues, a committee comprising experts should be established, empowered with flexible rules to prioritize and resolve unauthorised constructions. This approach would generate revenue, boost the GDP, and foster development within the city.

## Chapter VI: Arithmetic of GDDP growth of Meerut

There are two ways to look at the future growth possibilities. First is to assess the growth in each sector and sub sector and aggregate that to arrive at the Gross District Domestic Product (GDDP) or District level GDP. Second approach is to take the current GDP of the District as surrogate and extrapolate based on certain assumptions. We have preferred the second approach; though in earlier Chapters have outlined sector specific concerns and options because it is always possible for some of these sectors to emerge as lead sectors. Further, a surrogate measure allows policy shifts more easily.

2. With a little over 3 per cent share in overall GSDP of the State, the GSDP of Meerut need to reach US\$ 30 billion by 2026-27, in line with the State perspective of a trillion dollar GSDP. Overall growth that has observed for Meerut during 2011-12 to 2020-21 at 9.4 per cent is somewhat lower than the growth recorded by the State. Yet, Meerut has obvious advantages for scaling it up better than the State as a whole. At a normal base line growth scenario of 13 per cent, the GSDP reaches barely US \$ 20 billion. The required rate of growth for Meerut to reach US \$ 30 billion is in excess of 30 per cent, assuming a moderately depreciating rupee (Table 1).

**Table 1: Arithmetic of GDP (Rs crore)**

	Base GDP	GDP at 13% Base Growth	Additional Growth				Base GDP for Next Year
			Institutional Improvement	Labour Participation	Relocation of Labour	New Investment	
2023-24	67,765	76,574	678	678	1,355	2,963	82,248
2024-25	82,248	92,940	822	822	1,645	2,963	99,193
2025-26	99,193	112,088	992	992	1,984	2,963	119,019
2026-27	119,019	134,491	1,190	1,190	2,380	2,963	142,215
2027-28	142,215	160,703	1,422	1,422	2,844	2,963	169,355
2028-29	169,355	191,371	1,694	1,694	3,387	2,963	201,108
2029-30	201,108	227,252	2,011	2,011	4,022	2,963	236,156

2. Some key assumption in the forecast include, additional growth at 1 per cent for institutional improvement and labour participation, 2 per cent on account of labor relocation for one sector to another, an Incremental Capital Output Ratio (ICOR) of 2.7 in nominal terms for new public and private investment that has been targeted. If the base growth increases there would be an early realization of target.

### Additional growth drivers

	Proposed Intervention	Increase estimated in GDP	Caveat
1	ICOR	2.7 %	Committed investment Rs. 10,000 cr for districts materializes; Political leadership & district administration
2	Labour participation & Institutional investment	1 %	Greater participation of women with improved law & order & skills training
3	Labour relocation	2 %	Migration from Agriculture through expansion of industry/ services & skills training
4	Institutional Improvement	1%	Improving ease of doing business, reducing delays and multiple visits, interface with State and Central agencies

4. Institutions have a significant role in accelerating growth. The role of District institutions basic functions are summarized in box 5.2.

Box- 5.2: Role of District Level Institutions			
	Minimal Functions	Intermediate Functions	Activist Functions
District Administration	Maintaining law and order, ease of living	Infrastructure development, contingency planning	Supporting business, reducing legal burden and reduce transaction cost through timely delivery
Municipal Corporation	Basic civic facilities, property tax and ensure accessibility & affordability of civic amenities	Medium term perspective of civic amenities demand and availability	Supporting business through proper land development, long term view of accessibility & affordability of civic amenities
Industry Associations	Act as representative of business to understand and speak for their concerns	Have a working relation with each business, set up business specific groups and understand their concerns	Built effective communication channel with Administration and Corporation at highest level for redressal of business grievances
Development Authority	Industrial Corridors, Development of new residential & commercial areas	Be conscious of regulatory changes over time. To provide a rational land use pattern	Ensure that development under previous regime is recognised and not have a long drawn process of ratification, re-approval

## Chapter- VII: The Way Forward: Actionable Agenda

There is a dominant trend to think of GDP growth as a factor of investment. This is evident from the emphasis on inviting mega projects and announcing big-ticket investments by all governments. The approach presupposes that investment at top creates trickle down impact on economy leading to higher GDP growth. The result of such a strategy has been patchy. Secondly, mega projects tend to concentrate in a certain geography whereas the population and habitats are scattered all over. Such a growth fails to create growth which is equitable and sustainable.

The current study posits a contrarian view and proposes to imagine GDP growth from bottom-up. If districts are the units of the States, higher GDP growth at District level can create higher aggregate GDP at the State (and National level). Like in rest of India, the GDP in the States is largely contributed by self-employed, unorganized and household enterprises.

Impact of local administration on these economic actors is overwhelming. A higher GDP growth can be unleashed in Districts with Institutional improvement, Labour Participation, Relocation of Labour and New Investment. The proposed strategy therefore rests upon these four pillars.

1. Institutional improvements and reforms:
  - i. 'Ease of Doing Business': for self-employed household enterprises should be a priority for the local administration. Almost 85% of people are employed and sustained by them. That could be achieved through a series of measures:
    - a. Regularizing / allowing working from home and residential areas with suitable caveats of size. Establishing a committee comprising of experts with suitable flexibility in rules to prioritize and resolve unauthorised constructions through compounding.
    - b. Below a threshold, people working from home should not be levied House Tax at par with Commercial enterprises (Shops/ industries)
    - c. Similarly, they should not be charged Electricity & Water tariff at par with Commercial entities
    - d. The administration also have to come out with a policy for Street Vendors and earmarking spaces for them.
  - ii. Municipal Corporation: Water logging after rains and clogged drainage systems are a perpetual issue in the city and industrial areas. It results into spread of communicable diseases and waste due to traffic snarls. A detailed study is needed to set the drainage and sewage system right.
  - iii. Meerut Development Authority: Needs of business and industry in terms of industrial/ commercial space are not static and they change with time. The current regulatory dispensation is frozen in time. A transparent time mechanism needs to be evolved to dispose of pending cases in time. Secondly, the task should not be treated as a revenue generating activity by MDA but as the role of facilitator for creation and sustenance of employment. The Master plan should not be seen as frozen but much like the new Foreign Trade Policy, is made dynamic allowing flexibility to accommodate emerging needs.

- iv. **Industrial Infrastructure:** It requires urgent attention of the administration. A run-down infrastructure does not only create a poor impression on existing and potential investors, it is a cause of serious pollution and accidents. Firstly, trade & industry associations of the respective areas should be vested the responsibility of upkeep and maintenance of their industrial area. The Partapur Industrial Area model could be immediately replicated in all other industrial areas. Secondly, an interface needs to be developed for joining the national projects with existing infrastructure of the Districts.
- v. **Education:** The role of education in the economic growth is highly understated. As the study notes, the human resources and labour (participation and relocation) can add more than 2% to GDP of the District. The National Education Policy (NEP) 2020 provides a blue print how human resources could be equipped with technical and life-skills to be self-employed or employed elsewhere. Schools and Colleges need to be sensitized towards the expectations of NEP 2020 and capacitated with participation of civil society institutions and associations.
- vi. **District Industry Center:** It needs to be the fulcrum for coordinating the development agenda of the different industrial and service sectors along with associations. The DIC may be provided adequate resources for holding regular meetings to develop detailed sector wise plans.
- vii. **Law and Order:** There are two aspects here- Policing and Judiciary.
  - a. Participation of women in UP and more so in Meerut is among the lowest in the country. This straightway drags down GDP. One of the chief reasons is lack of trust on safety of women in the street. With civil society institutions and associations of trade and industry campaigns need to be run to create needed trust. A higher women participation in labour force is the lowest hanging fruit to push GDP upward.
  - b. As if the continental distance between Meerut and Allahabad High Court was not a deterrent enough in access to speedy justice (almost 800 Km), the Meerut courts have self-imposed brakes on themselves. The study suggests how number of working could be increased and process improved.
- viii. **Agriculture:** Agriculture being disorganized and dependent upon the states for inputs and markets, requires administrative support in a few areas. Firstly, the functioning of FPOs needs to be evaluated in the district and their growth drivers identified. Secondly, civil society institutions need to be engaged for promoting 'natural farming' to dissuade farmers from highly fertilizer and water intensive to a self-sustainable model of agriculture. Thirdly, experts need to be engaged in unearthing the potential of district in eth area of dairy and animal husbandry. (The districts of Haryana have benefited immensely from integrating with Delhi NCR).

2. Industry: The study identifies more than 14 major industrial agglomerations or clusters in the District. Most of them have their representative associations. The associations with the DIC could develop detailed plans for their specific sectors and leverage local Administration for tapping resources available under central and state government schemes.
  - a. Sports Goods Industry: Internally, they need technological upgrade and better inter-firm collaboration to meet large-scale orders. They need to work on product standardization. Externally they need support for easy finance and infrastructure to support industry growth.
  - b. Scissors Industry: Need to adopt new techniques of production processes, meet standards. The segments needs support through higher import duties to compete with imports and help for technology acquisition and skill development.
  - c. Textile Weaving Industry: Besides bearing pressure of input cost, they need support for collective facilities for centralized designing & testing, and yarn shining. Need for Technological upgrade.
  - d. Brass Band Industry: Urgently need a dedicated industrial area. Help sought in imposing higher import duties and product standards. Skilled workforce needed.
  - e. Leather Industry: Support sought for product design and marketing for exports
  - f. Textile Printing & Processing Industry: Need support for continuous technology upgradation and in managing input cost differentials particularly in polyester.
  - g. Handicrafts: Highly fragmented segment and needs an export aggregator for access to designs and markets.
  - h. Print & Publishing Industry: In need of support to ensure paper availability and cost issues. Challenges in embracing digital technologies.
  - i. Electronic Switchgear Industry: Inverted duty structure of inputs a challenge, needs facilitation for technology acquisition.
  - j. Gems & Jewellery Industry: Asked for facilitation for technology acquisition and help for access to better designs
  - k. Food Processing Industry: Investment needed in establishing cold chains, grading, transportation, and storage facilities and in developing processing industry and supportive infrastructure. Demand for a Mega Food Park for Meerut.
  - l. Power Loom Cluster: Tech-upgrade to enhance quality & productivity. Require skilled workforce.

- m. Auto Parts Industry of Meerut: Technological upgradation and advanced equipment required by units. Also need help to improve shop floor practices to meet quality standards.
  - n. Khadi and Textile Weavers: Overarching need for human resource development in areas such as designing, testing, finishing, etc. Support the setting up of the Centre of Excellence for Khadi.
3. Services: The Services sector is rapidly growing. Its growth could be further accelerated if the constraints identified by the segments are addressed.
- a. Construction Advisers & Contractors: Municipal Corporation and MDA needs to work closely with the stakeholders of the sector to reduce cost of compliance of regulations.
  - b. Doctors & Health Clinics: Medical professionals also need a transparent and facilitative regulatory environment to help them scaleup and become a hub for medical care in NCR. Need support to develop an entire healthcare chain, including technicians, nurses, paramedics, pharmacists, and sewage disposal facilities.
  - c. Education: Need support in implementation of NEP 2020 to make students employable.
  - d. Professionals: Professionals such as lawyers, chartered accountants, and business professionals seek administrative engagement to get their issues addressed and also to contribute towards making Meerut grow
  - e. Tourist Aggregators: Administration and civil society need to work to improve the image of Meerut as a peaceful and tourist-friendly city and to promote Meerut as a tourist destination, highlighting its historical, mythological, religious, and cultural attractions.
  - f. Street Hawkers/Eating Joints: Municipalities should provide fixed and legal locations for street hawkers and eating joints. Need to recognize the importance and usefulness of this segment and provide necessary support and recognition.
4. District Administration could set-up a Committee to monitor the progress and continuously engage with stakeholders with regards to initiatives for quadrupling GDP of Meerut. It may help set-up Chair for GDP of Meerut in Management and Technical Institutes.

## Annex 1: Types of Clusters for Variety of Participants

	<b>Participants</b>	<b>Likely industries</b>	<b>Objectives of Cluster initiatives</b>	<b>Government role</b>
MSME Clusters	Primarily Micro Small and Medium scale players; they may be from one or several industries.	Leather, Gem & Jewellery, Brassware, small diesel engines, apparel manufacturers, etc.,	Maximizing employment, improving technological skills, increasing labor productivity, improving competitiveness, developing market linkages and strengthening local governance institutions	Common facilities, improvement in technology, investment in infrastructure, skill and quality enhancement, ensuring market access financing, value chain linking, etc.
Hub & Spoke clusters	One or several large scale players and many smaller players supporting the larger player	Automobile, Engineering goods, Gem & Jewellery, Software, pharmaceuticals, etc., Handlooms and Handicraft products	Enabling competitiveness through investment in skill building and innovation, improving the value addition, technology upgradation	Investment in common facilities, identifying missing links and incentivizing such industries, skill development to industries, facilitating industry-academia interaction
New emerging high tech industries	Similar to hub & spoke, but the industry is nascent stage and require government push	Semi-conductor industry, aerospace industry, Engineering goods, Capital Equipment, etc.,	Kick-starting the growth of high-tech industries by investment through public-private partnerships, creating the eco-system for the industry development through support to start ups, linking with R&D institutions, promoting innovations	Providing fiscal benefits, investing in fundamental and applied research with private sector players, improving the reputation of the location, providing preferential treatment to cluster players in public procurement, etc.,
Industrial Clusters	Industrial conglomerate with all different industry verticals (like state industrial estates)	Industries which are adjacent to nearby clusters	Providing common facilities to take facilitate carrying out business	Investment in infrastructure - such as roads, power, water, etc., setting up of other common facilities

### **About author: M.C. Singhi**

Shri Manak C. Singhi is a reputed economist and is from Indian Economic Services. He has been Sr. Economic Advisor, Ministry of Commerce and Industries. He brings with him vast experience of several economic Ministries besides Commerce & Industries, Finance, Corporate Affairs etc. He writes regularly in the Hindu Businessline.

### **About Meerut Citizens Forum**

The Meerut Citizens Forum (MCF) is a not-for-profit foundation set up by a group of concerned citizens comprising of Architects, Businessman, Engineers, Professionals, Academicians, Doctors, Chartered Accountants, Lawyers, Educationists, Industrialists, Media persons, Social Workers, retired Govt. officials among others. The MCF strives for Meerut to be a city with good quality of life. The MCF realizes that it is only the citizens who are the permanent "owners" of the city and who enjoy or suffer the consequences of the quality of governance. And, it is they who need to come out and assume the responsibility and team up with both administrators and political leaders. MCF has carried out pioneering studies in the air, water and civic amenities of the city especially the waste management. It has forged linkages with national and international development agencies. It has commissioned the study to quadruple GDP of Meerut with the objective of orienting all stake holders towards the common goal of economic development and collective prosperity.

More at: <https://www.meerutcitizens.in>

### **About Federation of Indian Micro and Small & Medium Enterprises (FISME)**

Federation of Indian Micro and Small & Medium Enterprises (FISME) evolved into a large national Federation of geographical and sectoral associations of MSMEs in 1995 following India's embarking upon liberalization in 1991 and India's accession to WTO in 1995. Till then it used to be known as National Alliance of Young Entrepreneurs which was established in 1967. FISME works in three thematic areas: Market access (including domestic public procurement and bilateral/ multilateral trade issues such FTAs and WTO), Advocacy for reforms for ease of doing business for MSMEs and execution of MSME development projects assisted by Gol and multilateral agencies.

More at <http://www.fisme.org.in>



