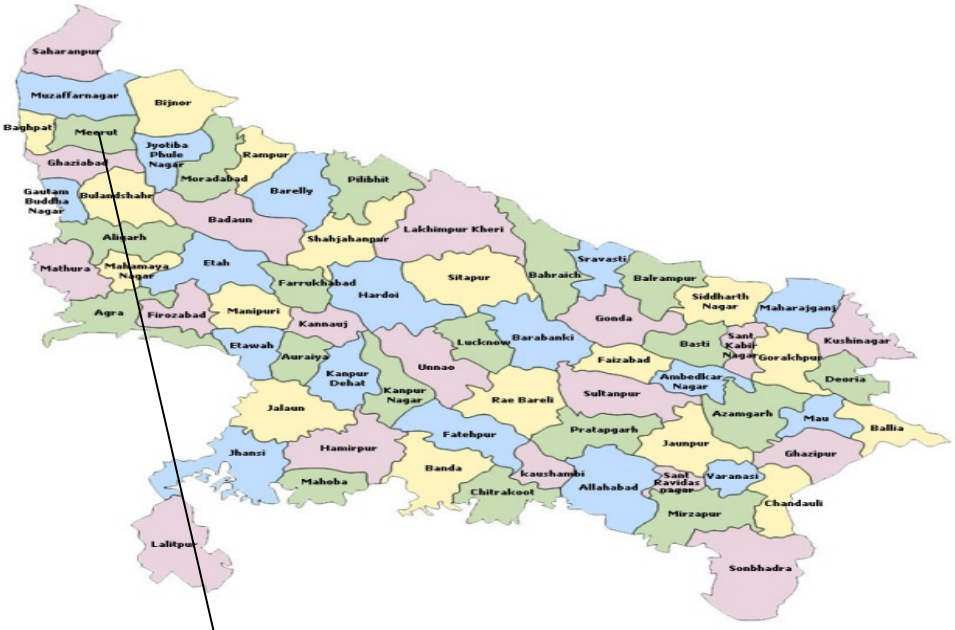
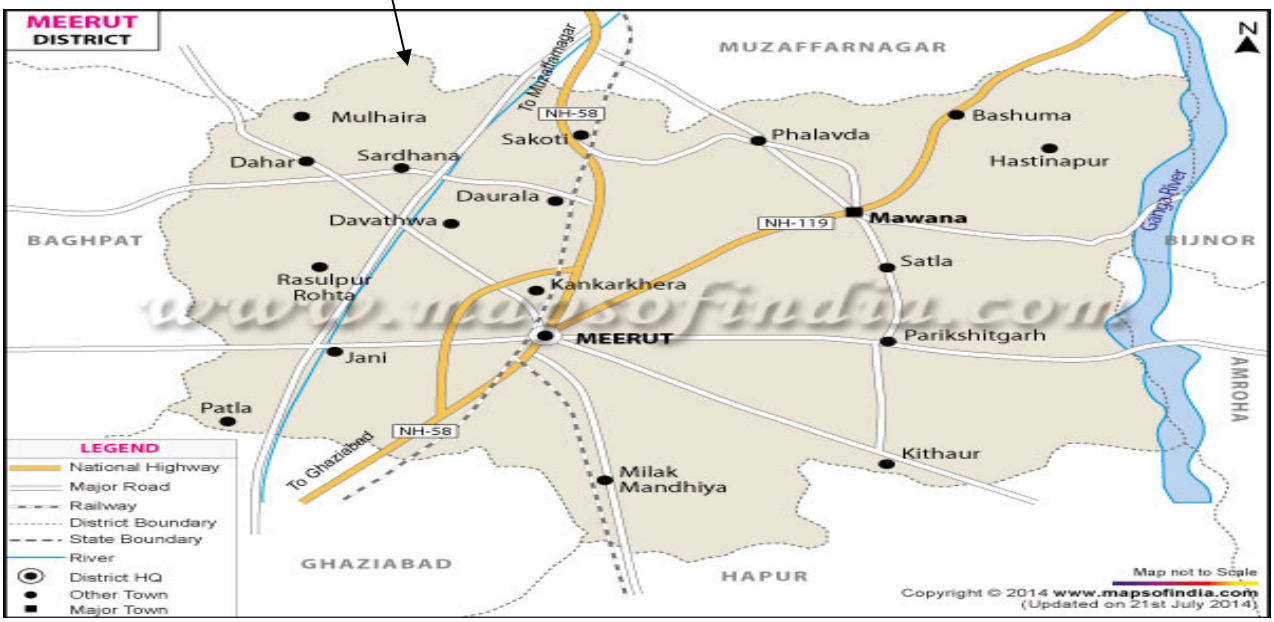
DISTRICT SURVEY REPORT, MEERUT





Chairman,

DISTRICT ENVIRONMENTAL IMPACT ASSESSMENT AUTHORITY,

Meerut U.P

DIRECTORATE OF GEOLOGY & MINING,U.P

PREFACE

In Compliance to the Notification Issued by the Ministry of Environment, Forest and Climate change Dated 15.01.2016, the preparation of District survey report of River bed mining and other minor minerals is in accordance appendix 10 of the notification. It is also mentioned here that the procedure of preparation of District Survey Report is as per notification guidelines. Every efforts have been made to cover soil mining locations, areas & overview of Mining activity in the district with all it's relevant features pertaining to geology & mineral wealth in replenish able and non-replenish able areas of rivers, stream and other soil sources. This report will be a model and guiding document which is a compendium of available mineral resources , geographical set up, environmental and ecological set up of the District and is based on data of various departments , published reports , and websites. The data may vary due to flood, heavy rains and other natural calamities. Therefore, it is recommended that Sub Divisional Level Committee may take into consideration all its relevant aspects / data while scrutinizing and recommending the application for EC to the concerned Authority.

Overview of Mining Activity

SURVEY REPORT

OF

DISTRICT MEERUT

As per Gazette notification of 15th January 2016 of Ministry of Environment, Forest and Climate Change a Survey shall be carried out by the District Environment Impact Assessment Authority (DEIAA) with assistance of irrigation department, Drainage department, Forest department, Mining department and Revenue department in the district for preparation of District Survey Report as per the sustainable Soil mining guidelines to ensure identification of areas of aggradations or deposition where mining can be allowed; and identification of areas of erosion and proximity to infrastructural structures and installations where mining should be prohibited and calculation of annual rate of replenishment and allowing time for replenishment after mining in that area.

Every efforts have been made to cover soil mining locations, areas & overview of Mining activity in the district with all it's relevant features pertaining to geology & mineral wealth in replenish-able and non-replenish-able areas of rivers, stream and other soil sources. The mineral potential is calculated based on field investigation & geology of the catchment area of the river or streams. Also as per the site conditions and locations, depth of minable mineral is defined. The area for removal of the mineral in a river or stream is decided depending on geo- morphology & other factors, it can be 50% to 60% of the area of a particular river or stream. Other constituents like clay and silt are excluded as waste while calculating the mineral potential of particular river or stream. This District Survey Report shall form the basis for application for environment clearance, preparation of reports and appraisal of projects. The report shall be updated once every five years.

Introduction

HISTORICAL BACKGROUND

Situated between Ganga and Yamuna, close to the imperial capital, Meerut district has been a center of varied activities throughout the course of history. Coming under the control of the "Company Government", the Meerut district assumed its present geographical features in 1836. Prior to 1836, it formed a part of Moradabad and then Saharanpur. In 1818 it was separated from Saharanpur in 1824, Bulandshahr was separated from Meerut and finally in 1836 after the death of Begum Samru, Sardhana was added to its territory. The district Meerut is said to be associated with earliest traditions of the Hindus according to which Maya, the father-in-law of Ravan, founded this place which has, therefore, been called Maya, a distinguished architect, got from king Yudhister, the land on which the city of Meerut stands and he called this place with the name "Mayrashtra", which in course of time became shortened to Meerut.

Meerut leapt into international prominence during the revolt of 1857. However, the events of 1857 established the British authority firmly and they began to create elaborate system of transportation and communication; and a chain of English schools to turn out an army of intermediaries between rulers and the ruled. Since Meerut was the most important town in the western part of the united provinces, and a better center of commerce, education and politics, it contained a higher proportion of men engaged in the liberal professions, in the judiciary and in business.

The Arya Samaj movement gained popularity in Meerut and started publications of magazines and newspapers, opened schools and emphasizes on anti-untouchability campaigns, Swadeshi and Swaraj. A number of prominent middle class people of Meerut were attracted towards the teachings of Arya Samaj.

The public life in Meerut began with the founding of a branch of Indian association in 1877 by S.N. Banerjee. In 1914, Meerut became the venue of three important conferences i.e. Meerut Political Conference, the U.P. Industrial Conferences and the U.P. Political Conferences. Meerut had been an important center of religious, cultural, intellectual and political activities and was also a cotton producing district and a big center of cotton trade and weaving. Archeological excavation carried out at villages Alamgirpur

near Meerut had discovered the ruins of the Harappa culture. This put Meerut on the international map of ancient cultures.

Meerut has since time immemorial been, on the national as well as international scene. Its progress and development has, therefore, been rapid and on the latest modern technological lines. Its proximity to Delhi was a boon to this district. The enterprising populace armed with modern education and latest technology developed Meerut into one of the most important business centers of Western U.P. A huge pharmaceutical market, innumerable factories, schools, colleges and management institutes as well as medical colleges have been developed in this district.

Meerut district is one of the districts of Uttar Pradesh state of India, and Meerut is the district headquarters. Meerut district is also a part of the Meerut division. The administrative head of district of Meerut is a District Magisrtate while the administrative head of Meerut Division is Divisional Commissioner, an IAS officer The district was established under British rule in 1818 and, on establishment, constituted the then tehsils of Meerut, Ghaziabad, Mawana, Baghpat, Sardhana and Hapur. These now constitute the districts of Meerut, Ghaziabad, Hapur, Bagpat, Muzaffarnagar, Bulandshahr and a part of Gautam Buddh Nagar district Meerut is a city in the Indian state of Uttar Pradesh. It is an ancient city with settlements dating back to the Indus Valley civilisation having been found in and around the area. The city lies 70 km (43 mi) northeast of the national capital New Delhi, and 453 km (281 mi) northwest of the state capital Lucknow.

Meerut is the second largest city in the National Capital region, and as of 2011 the 33rd most populous urban agglomeration and the 26th most populous city in India. It ranked 292 in 2006 and is projected to rank 242 in 2020 in the list of largest cities and urban areas in the world. The municipal area (as of 2001) is 141.89 km2 (54.78 sq mi) with the cantonment covering 35.68 km2 (3,568.06 ha). The city is one of the largest producers of sports goods, and the largest producer of musical instruments in India. The city is also an education hub in western Uttar Pradesh. Meerut is also known as the "Sports City Of India". The city is famous for being the starting point of the 1857 rebellion against British colonial rule

The city may have derived its name from 'Mayarashtra', the capital of the kingdom of Mayasura, Mandodari's father and Ravana's father-in-law. This name may have mutated to Mairashtra, Mai-dant-ka-khera, Mairaath and eventually Meerut.

According to another version, Maya (sura), being a distinguished architect, received

from King Yudhishthira the land on which the city of Meerut now stands and he called this place Mayarashtra, a name which in the course of time became shortened to Meerut. Tradition also has it that the city formed a part of the dominions of Mahipala, the king of Indraprastha, and the word Meerut is associated with his name.

Revenue of last three year

Mines and Mineral Name	2016-17		2015-16		2014-15	
	Income	Quantity	Income	Quantity	Income	Quantity
Ordinary Soil	516.16		535.74		470.29	

Permit description

Sub-Mineral Name	Teshil	Village	Gata No.	Area Ha.	Approval (From-To)	Quantity (If Available)	Remarks
Ordinary Soil	Meerut	Kuddi & Gadhadi	4 165	0.7680, 1.3040	15.09.2017 to 14.12.2017	20,000	
Ordinary Soil	Meerut	Khaspur	114 118	0.2980 2.1890	15.09.2017 to 14.12.2017	24350	

MINING

This Simplified Mining plan is prepared for minor mineral and it is based on consideration of following aspects.

Mining Method

Semi mechanized / Manual open cast operations(Digging, and Transportation)

Safety

Environment The River Ganges Forms The Eastern Boundry Of Distt. Meerut And Separates The distt. From Muradabad And Bijnor , 10 km Area Of Hastinapur in Mawana Tehsil has been Dilclared as ECO Sensitive Zone by Forest Depart. Hence no Sand Mining Area's are being Dimarected in this Zone

Total 122 Brick Klins Owner's have been Granted Enviornmental Clearence by DEAA , Broadning of Meerut, Bulandsahar Highway N0-235 is Under Progress ,

A) EXISTING/PROPOSED MINING METHOD

The proposed method of mining will be semi mechanized/manual open cast. The height of bench will not be kept more than 1.5 m at a time and the width of the benches will be always kept safe according to provisions.

Loading and Transportation: Loading of mineral will be done by excavator and will be sold out. Trucks / Tractors of 5 T will be used for transportation of mineral from mine site.

PHYSICAL FEATURES & GEOGRAPHICAL AREA

GEOLOGY

GEOGRAPHICAL STRUCTURE

Meerut is the largest city in NCR after Delhi Meerut lies between the plains of the Ganges and those of the Yamuna. In area Meerut district covers 2,522 km2 (974 sq mi), which is larger than Delhi (Delhi covers an area of 1,484 km2 [573 sq mi]). However, Meerut's population is three times less than that of Delhi (Current population of Meerut is 3,443,689)

Meerut district lies between 28°57' to 29°02' North latitude and 77°40' to 77°45' East longitude in the Indo-Gangetic plains of India. It is bound on the north by Muzaffarnagar district, in the south by Bulandshahar district while Ghaziabad and Baghpatdistricts form the southern and western limits. The river Ganges forms the eastern boundary and separates the district from Moradabad district and Bijnor district. The Hindonforms the western boundary and separates the district from Baghpat. The ground is not rocky and there are no mountains. The soil is composed of pleistocene and sub-recent alluvial sediments transported and deposited by river action from the Himalayan region. These alluvial deposits are unconsolidated. Lithologically, sediments consist of clay, silt and fine to coarse soil. Land is very fertile for growing crops, especially wheat, sugarcane and vegetables.

TOPOGRAPHY

The topography of the lease area and surrounding area of the lease area is plain. The highest elevation of the lease area is 225 m. MSL and lowest is 215 m. MSL.

As the district Meerut lays in the middle of holy river Ganga and Yamuna, the land of the district is very fertile which is known as alluvial soil or the loam soil. The whole district shows the impression of wellmaintained and properly leveled field. The district is used in the upper Ganga-Yamuna duab at 28 degree 44` and 29 degree 18` north latitude and 77 degree

08` and 78 degree 47` longitude. The drainage system of the district is from North-West to South-East. The construction of roads, canals and the lying railway tracks etc. have hampered the natural 58 drainage system and some area of the district faces the acute problem of drainage in the rainy season. Having all the above said obstacles the District Meerut generally remains blessed with good fertility. Following types of soils are found in the district Meerut: 1. Alluvial soil or loam soil. 2. Fine soily loam. 3. Soily loam. 4. Clay loam. 5. Silty clay loam. 6. Loamy soil. The following table shows the soil-wise areas and the percentage of the soil area in the district Meerut:

reveals that the area of loam soil is higher than the remaining type of the soil. It covers 60.33 percent of the total soil in the district and is very fertile for intensive cultivation.

SOIL TYPE

Soil and Land Related Constraints Deficiency of macro and micro nutrientsλ Lack of Organic Carbon and absence of practices forλ incorporation of crops residues SOIL MANAGEMENT AND LAND USE PROJET Deteriorating soil health is a serious problem in Meerut, i.e. not only the organic matter is low but there is also imbalance of major nutrients (NPK). The deficiencies of micronutrients have also started appearing which has telling effect on crop yield. The soils of entire region are poor in organic carbon. The large part of cow dung is being used for energy through burning and not as farm yard manure. Under this programme following components are being proposed.

Crop production, Animal Husbandry and Horticulture are among the major enterprises of the farming system prevailing in the district. Poultry and piggery has also emerged as new enterprises. Increased pressure on cultivated land and daily need of various items of human and Cattle diet warrants that the farmers should go for more than one enterprises keeping in view the resources and technical knowhow for harvesting full advantage from the system designed on integrated approach. The analysis of impact of mechanization of cropping system also leads to emphasis on timeliness, precision and general improvement in quality of work, with proper mechanization will always enhance the yield and total production of district. By adopting mechanization will also reduce the drudgery and solve the labour scarcity problem

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2. Fine soily loam.
3. Soily loam.
4. Clay loam.
5. Silty clay loam.
6. Loamy soil.

The following table shows the soil-wise areas and the percentage of the soil area in the district Meerut

DIFFERENT TYPES OF SOIL IN DISTRICT MEERUT

S.No.	Types of Soil	Area(In Hectare)	Percentages of District Area
1	Loam Soil	236344.80	60.33
2	Fine Soily Loam	6317.70	1.61
3	Soily Loam	49728.24	12.61
4	Silty Loam	51669.86	13.20
5	Clay Loam	1109.38	0.28
6	Silty Clay Loam	1130.16	0.28
7	Loamy Soil	45413.08	11.69
	Total	391714.00	100.00

Block wise soil type

Situation	Soil Type	Block
AES I	Loam	Mawana, JaniPariksheetgarh, Machhra, Kharkoda, Rajpura, Meerut, Duaralla, Sardhana, Saroorpur, Rohta
AES II	Loam Soil	Hastinapur, Pariksheetgarh, Machhra, Kharkhoda, Jani, Rohta, Saroorpur, Sardhana
AES III	Soily loam, Silty loam, Clay laom	Hastinapur, Pariksheetgarh

General Profile of Meerut

BRIEF DETAIL OF Meerut DISTRICT

NAME OF DISTRICT	AREA (PER SQ. KM)	POPULATION 2011	DENSITY(PER SQ. KM)
Meerut	2590	1,309,023	9,200/km^2

Tehsils

SR. NO.	NAME OF TEHSIL
1.	MEERUT
2.	MAWANA
3.	SARDHANA

Block

SR. NO.	NAME OF SUB – TEHSIL
1.	MEERUT
2.	RAJPURA
3.	KHARKHAUDA
4.	JANI
5.	ROHATA
6.	MAWANA
7.	PARIKSHITGARH
8.	MACHHARA
9.	HASTINAPUR
10.	SARDHANA
11.	DAURALA
12.	SAROORPUR

POPULATION

Meerut city is governed by Municipal Corporation which comes under Meerut Metropolitan Region. The Meerut city is located in Uttar Pradesh state of India. As per provisional reports of Census India, population of Meerut in 2011 is 1,305,429; of which male and female are 688,118 and 617,311 respectively. Although Meerut city has population of 1,305,429; its urban / metropolitan population is 1,420,902 of which 752,893 are males and 668,009 are females.

RELIGION POPULATION

Hinduism is majority religion in Meerut city with 61.15 % followers. Islam is second most popular religion in city of Meerut with approximately 36.05 % following it. In Meerut city, Christinity is followed by 0.41 %, Jainism by 0.92 %, Sikhism by 0.60 % and Buddhism by 0.60 %. Around 0.01 % stated 'Other Religion', approximately 0.77 % stated 'No Particular Religion'.

Hindu	798,269	61.15 %
Muslims	470,595	36.05 %
Jain	11,978	0.92 %
Not Stated	10,064	0.77 %
Sikh	7,833	0.60 %
Christian	5,367	0.41 %
Buddhist	1,192	0.09 %
Others	131	0.01 %

RIVER SYSTEM

Meerut is located on the bank of river ganga and the yamuna, for which reason, agriculture has played a pivotal role in shaping up of the economy in meerut and its surrounding places. Fertile land coupled with good climate has made it conducive for the growth of agriculture and farming activates here. However, Insufficient and untimely rains has also caused shortage of cereals and destruction of crops in the past, Dam Irrigations and cultivation of crops through canals has, thus, proved to be promising for the farmers here. Similarly, since Meerut has abundant water resources through River Gangas and Yamuna, canal irrigation has been developed sufficiently well to supply water to other drought- ridden districts of uttar Pradesh.

The establishment of dams and canals can be traced back to the age of Mughals, when 12-mile-long kali Nadi link with Meerut Opened up to Supply water to the groves and gardens in Meerut, rather than for pure Irrigation. Later on, during the British rule the 129-,mile-long

Doab Canal was opened up that served the district of Meerut, Muzaffarnagar, etc. The Need for better engineering capabilities were felt, as a result of which the British Ingenuously developed work on the Ganges Canal. A Number of canals and dams have been established in the later year to harness the available water resources in the region.

CLIMATE

The climate of Meerut district may be divided into three seasons i.e. rainy season, winter season and summer season. The rainy season starts in the month of July and remains very moist. It is also unhealthy for human habitation. The average rainfall in Meerut districts is 768 mm. 1 The winter season in the district starts from October and continues till February. In this season there is severe cold and the temperature declined near to freezing point. After mid December the dense fog can be seen in the morning in this district. The temperature of this district ranges below 20 degree Celsius in winter. According to the survey of U.P. Information and Public Relation Department, Meerut, the minimum temperature of the district was 1.5 degree Celsius in the year 2006-07. 2 The summer season falls in the month of March and ends in the month of June. The last month of this season is the hottest month of the year. In this month the hot winds blow throughout the day and night. The maximum temperature of the district reaches up to 45 degree Celsius. 3

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Celsius Meerut has a monsoon influenced humid subtropical climate characterised by hot summers and cooler winters. Summers last from early April to late June during and are extremely hot, with temperatures reaching 49 °C (120 °F). The monsoon arrives in late June and continues till the middle of September. Temperatures drop slightly, with plenty of cloud cover but with higher humidity. Temperatures rise again in October and the city then has a mild, dry winter season from late October to the middle of March The lowest temperature ever recorded is −0.4 °C (31.3 °F), recorded on Sunday, 6 January 2013. Rainfall is about 845 millimetres (33 in) per annum, which is suitable for growing crops. Most of the rainfall is received during the monsoon. Humidity varies from 30 to 100%. The city receives no snow.

Climate data for Meerut (1971–2000)

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
Record high °C (°F)	29.3 (84.7)	32.2 (90)	39.5 (103.1)	43.5 (110.3)	45.8 (114.4)	46.1 (115)	46.0 (114.8)	40.0 (104)	39.0 (102.2)	38.0 (100.4)	34.5 (94.1)	30.0 (86)	46.1 (115)
Average high °C (°F)	21.9 (71.4)	23.1 (73.6)	28.7 (83.7)	36.3 (97.3)	39.1 (102.4)	37.6 (99.7)	33.6 (92.5)	32.6 (90.7)	33.7 (92.7)	32.8 (91)	28.6 (83.5)	23.5 (74.3)	31.1 (88)
Average low °C (°F)	7.2 (45)	9.1 (48.4)	13.8 (56.8)	19.9 (67.8)	24.3 (75.7)	26.0 (78.8)	25.9 (78.6)	25.5 (77.9)	23.6 (74.5)	18.2 (64.8)	12.4 (54.3)	8.0 (46.4)	17.7 (63.9)
Record low °C (°F)	0.2 (32.4)	0.1 (32.2)	5.4 (41.7)	8.3 (46.9)	15.4 (59.7)	17.7 (63.9)	16.5 (61.7)	19.0 (66.2)	15.7 (60.3)	7.2 (45)	1.8 (35.2)	0.2 (32.4)	0.1 (32.2)
Average precipitation mm (inches)	19.7 (0.776)	24.9 (0.98)	24.4 (0.961)	12.8 (0.504)	19.1 (0.752)	71.2 (2.803)	269.0 (10.591)	264.7 (10.421)	95.4 (3.756)	25.9 (1.02)	4.3 (0.169)	13.4 (0.528)	845.0 (33.268)
Average rainy days	1.5	1.7	1.7	0.9	1.6	3.9	10.2	9.4	4.2	1.6	0.4	0.9	38.0

Source: India Meteorological Department (record high and low up to 2010)[45][46]

RAINFALL

Mainly rainy season starts from the month of June which increases in the month of July and August and it ends in the month of September. The annual rainfall of the district was 738 mm. In 2006-074. In the month of January drizzling starts again and continues till the month of February. In the remaining months of the year the rainfall is totally uncertain and insignificant.

Availability of Ground Water: As per available data Zone-wise ground water recharge, exploitation and stage of development in different regions of the state is given in Table 2.17. Although overall water Comprehensive District Agriculture Plan: Meerut 27 balance situation appears to be positive yet, 37 blocks at present are over-exploited, 13 blocks are critical and 88 blocks are semi-critical and 675 blocks are in safe categories as per stage of ground water

development. The available ground water balance in the State is 2.13 million hectare-meter (M ha-m) and out of this 1.95 M ha-m is available for irrigation purposes.

LAND UTILIZATION PATTERN IN THE DISTRICT

Land Use Pattern The land use pattern (2005-06) in the State has been indicated in the Table 2.6. The total cultivated area of the state is 166.83 lakh ha. And the gross cropped area is 255.24 lakh ha. The cropping intensity in the state is 153 %. The area sown during rabi is more as compared to area sown in kharif. The area under sugarcane which is an annual crop is 0.38 lakh ha.

Availability of Minerals.

No other mineral is available in the district.

FOREST

The Head Quarter of Social Forestry, Meerut division is at Meerut, which is under Divisional Director Social Forestry. According to forest administration district is divided in range, sections and beats.

The total forest area in the district is 21,314 hectare.

Administrative set up.

Meerut city is the Divisional headquarter of Uttar Pradesh. For administrative convenience, the district of Meerut has been divided into three tehsils namely,

Sardhana
Mawana
Meerut

These tehsils are further divided into 12 blocks.

IRRIGATION

Irrigation is the prime prerequisite for better cultivation. The area of Meerut district is well irrigated. In 2005-2006 the total irrigated area in the district was 1,88,042 hectares. Table no.3.3 shows the different sources of irrigation in the district and its percentage of the total

irrigated area.

DISTRIBUTION OF IRRIGATED AREA UNDER DIFFERENT SOURCES IN MEERUT DISTRICT[5]

S.No.	Means of Irrigation	Area(In Hectares)	Percentage of Total Irrigated Area
1	Canals	37954	20.19
2	Tub wells: Govt. Private	7431 142444 149875	3.95 75.75 79.70
3	Other wells	25	0.01
4	Tanks, Lakes & Ponds	-	-
5	Other Sources	188	0.10
	Total Irrigated Area	**188042**	**100.00**

The above table reveals that the main sources of irrigation are canals and tub-well in this district, which covered 99.89 percent of the total irrigated area.

Agriculture

Concerned by the slow growth in the Agriculture and allied sectors, the National Development Council (NDC) in its meeting held on 29th May, 2007 resolved that agriculture development strategies must be reoriented to meet the needs of the farmers. The NDC in its resolution advised the State Governments to prepare Comprehensive District Agriculture Plan (C-DAP) that will fully utilize available resources and will include allied agriculture sectors. C-DAP, Meerut is an innovative way to draw up plans for agriculture sector more comprehensively, taking agro-climatic conditions, natural resource issues and technology into account, and integrating livestock, poultry and fisheries more fully. Accordingly, the C-DAP for district Meerut has been prepared. Meerut district is located in western Uttar Pradesh, 72 km north-east of New Delhi. The total area of the district is 2590 sq km supporting a population of 29.73 lakh with a density of 1,148 persons per sq km. It has 12 blocks, namely Sarurpur Khurd, Sardhana, Daraula, Mawana Kala, Hastinapur, Parikshitgarh, Machhra, Rohta, Janikhurd, Meerut, Rajpura and Kharkhoda. The rural population constitutes 51.1% of the total population. The district has 72.9 % of the area under cultivation, 50% of the farmers

having less than 2 ha of land. The net sown area accounts for 1.98 lakh ha out of which 1.98 lakh ha is under irrigation. Horticulture occupies an important place in the district; mango, guava and peach being the important fruit crops. The agro-climatic conditions of the district are also suitable for floriculture, apiculture and mushroom cultivation. Commercial crops like aonla and papaya are also being cultivated in the district. Paddy (rice), wheat, maize, sugarcane, potato, oilseeds and pulses are the main crops. Due to considerable hike in procurement price of sugarcane in the last 3-4 years, there has been increase in the area under sugarcane. The district with 6 sugar mills ensures adequate market linkages for the sugarcane growers. The productivity of various crops in the district, although well above the state average, but is lower than the national average. The productivity of the crops is also lower ii than the adjacent states of Haryana and Punjab. There is scarcity of adequate quantity of quality seeds and planting material. The seed replacement rate of wheat and other crops is very low. Soils are deficient in both micro and macro nutrients and low level of organic carbon. The strategy to achieve higher growth rate include higher seed replacement rate through quality seed production programme, balanced use of plant nutrients both from organic and inorganic sources, use of irrigation facility to facilitate second crop, diversification through vegetable production and increased extension intensity with Customized Farmers' Training, and location specific weather-crop advisory services. The interventions proposed include Improvement in soil management and land use, management of water resources, Organic Farming, increased availability of quality seeds and planting material, entrepreneurship development, improving plant protection and Farm Mechanization services, improved market facilities, strengthening dairy, poultry, piggery and fishery, Income generating activities like bee keeping and mushroom cultivation and Improved Technology Dissemination mechanism including use of Information and Communication Technology. The total cost of the projects proposed in C-DAP of district Meerut is Rs 14751.99 lakh. The details of the project plan are given in.

INDUSTRIAL DEVELOPMENT IN DISTRICT MEERUT

Meerut is famous as an industrial city. It is also famous for Handloom work and Scissors Industry from olden age. Being in the proximity of Delhi, it is ideal for industries like textile, transformers, sugar, distillery, chemicals, engineering, paper, sports goods and

jewellery. Meerut is the largest suppliers of Sports Goods being the largest Indian Cricket Goods manufacturer and exporter.

Uttar Pradesh State Industrial Development Corporation (UPSIDC) has already two industrial estates in Meerut namely Partapur and Uddyogpuram. Mohakampur Industrial Area is a private initiative. Bhurbaral Industrial Area is under development. Another Industrial Area has been identified by UPSIDC at Gagol Road adjacent to Delhi Road for which 1200 hectares of land is available for industrial development. Identified industrial areas are at Shatabdinagar, Delhi Road, Bagpat Road, Roorki Road, Mawana Road, Parikshitgarh Road, Garh Road and Hapur Road. Further 2000 hectares land is being proposed for Industrial development near Delhi-Meerut Express way. NIPRO GLASS from Japan has set up a large glass plant for medical use.

According to new industrial policy of government of India, District Industries Centre (DIC) was established in 1979 in Meerut district to speedup industrial development. The main objective of DIC is to provide all the services under a single roof. A general manager, who is assisted by seven managers-in-charge and other employees of various functions, heads each DIC.

There are 55 units in the district those come under large and medium scale industries, with the investment of Rs. 330.22 crore and provide employment to 28922 people. These are located in the areas like Delhi Road, Kankarkhera, Sadar Bazar, Modipuram, Daurala, Mawana, Partapur and Baghpat Road etc. These industries produce Alcohol, Straw Boards, Transformers, Tyre-tubes, Cotton Yarn, Sugar, Chemicals, Milk Products, Paper etc.

Besides the above there are 21702 Small Scale Units working at Meerut with the investment of Rs. 435.15 crore providing employment to 108285 people. These industries are producing Electrical Equipments, Flour, Suji, Eatable Items, Sports Goods, Electronic Items, Engineering Items etc.

Further, in these industries of Meerut district, some expert hands are also engaged in the work of Scissors, Hasthkargha, Range and Chaplain, Musical Instruments etc.

Existing Status of Industrial Areas in the District Meerut

S. No.	Name of Ind. Area	Land acquired (In Acre)	Land developed (In Acre)	Prevailing Rate Per Sqm (In Rs.)	No of Plots / Shade	No of allotted Plots/ Shade	No of Vacant Plots	No. of Units in Production
1	Govt Industrial Estate, Partapur	16.18	16.18	3350	97/32	97/32	Nil	92
2.	Sports Goods Complex	12.72	8.536	8000	51	51	Nil	39
3.	Partapur Industrial Area	12.34	6.54	4000	40	40	Nil	30
4.	Udhyogpuram	96.436	72.83	4000	312	312	Nil	216
	Total	137.676	104.086		403	403	Nil	377

Source:- DIC, Meerut / UPSIDC, Meerut

DISTRICT AT A GLANCE

S.No	Particular	Year	Unit	Statistics
1	**Geographical features**			
(A)	Geographical Data			
	i) Latitude			29.01^0 N
	ii) Longitude			77.45^0 E
	iii) Geographical Area	2011	Sq KM	2590
(B)	Administrative Units			
	i) Sub divisions	2011	Nos.	3
	ii) Tehsils	2011	Nos.	3
	iii) Sub-Tehsil/ Blocks	2011	Nos.	12
	iv) Patwar Circle	2011	Nos.	NA
	v) Nyay Panchayat	2011	Nos.	92
	vi)Nagar nigam	2011	Nos.	1
	vii) Nagar Palika	2011	Nos.	2
	viii) Gram Panchayats	2011	Nos.	459
	xi) Revenue villages	2011	Nos.	615
	x) Assembly Area	2011	Nos.	7
2.	**Population**			
(A)	Sex-wise			
	i) Male	2011	Nos.	1829192
	ii) Female	2011	Nos.	1618213
(B)	Total Population	2011	Nos.	3447405
3.	**Agriculture**			

A.	Land utilization			
	i) Total Area	2009-10	Hectare	273005
	ii) Forest cover	2009-10	"	21314
	iii) Non Agriculture Land	2009-10	"	40109
	v) cultivable Barren land	2009-10	"	2395
4.	**Forest**			
	(i) Forest	2009-10	Ha.	21314
5.	**Livestock & Poultry**			
A.	**Cattle**			
	i) Cows	2007	Nos.	155338
	ii) Buffaloes	2007	Nos.	666872
B.	**Other livestock**			
	i) Goats	2007	Nos.	45145
	ii) Pigs	2007	Nos.	19052
	iii) Poultry	2007	Nos.	146982
	iv) Railways			
	i) Length of rail line	2010-11	Kms	56
	V) Roads			
	(a) National Highway	2010-11	Kms	128
	(b) State Highway	2010-11	Kms	120
	(c) Main District Highway	2010-11	Kms	118
	(d) Other district & Rural Roads	2010-11	Kms	1505
	(e) Rural road/ Agriculture Marketing Board Roads	2010-11	Kms	1334
	(f) Kachacha Road	2010-11	Kms	NA
	(VI) Communication			
	(a) Telephone connection	2010-11		63158
	(b) Post offices	2010-11	Nos.	261
	(c) Telephone center	2010-11	Nos.	7
	(d)Density of Telephone	2010-11	Nos./lakh person	1778
	(e) Density of Telephone	2010-11	No. per Sq. KM.	24.39
	(f) PCO Rural	2010-11	No.	967
	(g) PCO STD	2010-11	No.	2824
	(h) Mobile	2010-11	No.	NA
	(VII) Public Health			

	(a) Allopathic Hospital **(b) Beds in Allopathic hospitals** **(c) Ayurvedic Hospital** **(d) Beds in Ayurvedic hospitals** **(e) Unani hospitals** **(f) Community health centers** **(g) Primary health centers** **(h) Dispensaries** **(i) Sub Health Centers** **(j) Private hospitals**	2010-11	No. No. No. No. No. No. No. No. No. No.	122 2825 19 81 5 3 60 52 299 124
	(VIII) Banking commercial			
	(a) Commercial Bank		Nos.	297
	(b) rural Bank Products		Nos.	2
	(c) Co-Operative bank products		Nos.	34
	(d) PLDB Branches		Nos.	4
	(IX) Education			
	(a) Primary school		Nos.	2271
	(b) Middle schools		Nos.	1069
	(c) Secondary & senior secondary schools		Nos.	310
	(d) Colleges		Nos.	13
	(e) Technical Institute		Nos.	5

Source:- District Stat. & Eco. Office, Meerut

GENERAL RECOMMENDATIONS/CONCLUSIONS

1. Mining below subterranean water level should be avoided as a safeguard against environmental contamination and over exploitation of resources.
2. Mining area should be demarcated on the ground with Pucca pillars so as to avoid illegal unscientific mining.

3. This environmental clearance does not create or verify any claim of applicant on the This environmental clearance does not create or verify any claim of applicant on the proposed site/activity.

4. Any mining activity shall be undertaken only after valid permission from Mining Department/District Administration and written agreement with land owner from where earth excavation is proposed.

5. No change is mining technology and scope of working shall be made without approval of Authority.

6. Personnel working in dusty areas shall be provided with protective respiratory devices and they shall also be imparted adequate training and information on safety and health aspects.

7. The Authority reserves the right to revoke the clearance if conditions stipulated are not implemented. The Authority will also be entitled to impose additional environmental conditions or modify the existing ones, if necessary.

8. In case of any deviation or alteration in the project proposed from those submitted to this Authority for clearance, a fresh reference should be made to the Authority to assess the adequacy of the condition(s) imposed and to add additional environmental protection Measures required, if any.

9. Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.

A. <u>Specific Conditions:</u>

1. This environmental clearance does not create or verify any claim of applicant on the proposed site/activity.
2. The Environmental clearance will be co-terminus with the mining lease period
3. This environmental clearance shall be subject to valid lease in favour of project proponent for the proposed mining proposals. In case, the project proponent does not have a valid lease, this environmental clearance shall automatically become null and void.
4. The brick earth mining work will be open-cast and no machine shall be used for excavation work. The mining will be opencast type and carried out manually
5. Top soil should be adequately preserved and should be used for landscaping.
6. Excavated soil should be properly stored in a manner not to increase surrounding SPM level.
7. Water sprinkling should be exercised during excavation and storage of soil for suppression of fugitive dust.
8. Excavated area should be properly reclaimed and ensured that no open bore hole is left.
9. Safety measures for the people working at the site shall be duly taken care of as per law.
10. The excavation work shall be done in day time only.
11. The project boundary shall be properly covered to restrict dust dispersion.
12. Precautionary measures during soil excavation for conservation and protection of rare and endangered flora and fauna found in the study area.
13. Equivalent Level of Noise level shall be maintained as per standards for both day and night.
14. The route map for soil transportation from excavation plots to work site should be firmed up and necessary permissions shall be sought from

District Administration.

15. Vehicles hired for the transportation should be in good condition and should have Pollution Check Certificate and should conform to applicable air and noise emission standards.
16. Approach road will be maintained periodically.
17. Personnel exposure monitoring for respirable mineral dust shall be carried out for the workers and records maintained including health records of the workers. Awareness program for workers on impact of mining on their health and precautionary measures like use of personal protective equipments etc. shall be carried out periodically. First aid facilities and adequate sanitary facility in the form of temporary toilets/septic tanks.
18. Solid waste material viz gutkha rappers, plastic bags, glasses etc. to be generated during project activity will be separately stored in bins and managed as per Solid Waste Management Rules.
19. Project proponent should maintain daily register for information of (a) collection of soil/clay, (b) manpower & (c) transportation purpose.
20. Six monthly compliance reports of condition stipulated in the Environment Clearance should be submitted to the DEIAA Baghpat, Regional Office, MoEF&CC, GoI, and UPPCB as per provision of Gazette Notification No. S.O. 1533(E) dated 14.9.2006, as amended
21. Adequate drinking water and sanitary facilities should be provided for construction workers at the site. Provision should be made for mobile toilets. Open defecation by the laborers is strictly prohibited. The safe disposal of waste water and solid waste generated during the construction phase should be ensured.
22. 2% of project cost should be earmarked for CSR activities. Firm up plan should be submitted to District Administration and to DEIAA with proposed activities and time schedule. A copy of resolution as above shall be submitted to the authority along with list of beneficiaries with their mobile nos./address.
23. CSR plans as per need also including mosquito net and blanket distribution. CSR audit report will be maintained and shall be submitted.
24. Project proponent shall ensure compliance to provision of all Acts, Rules, Regulations and Guidelines, for the time being in force, as applicable to the project.

कार्यालय जिलाधिकारी मेरठ।
(खनिज अनुभाग)

पत्रांक 3031 /खनिज लिपिक दिनांकः– 25–11–2017

जिला सूचना विज्ञान अधिकारी,
मेरठ।

पर्यावरण वन एवं जलवायु परिवर्तन मंत्रालय भारत सरकार द्वारा निर्गत अधिसूचना संख्या–125 दिनांक 15–01–2016 में जारी नोटिफिकेशन के परिशिष्ट–10 में जिला सर्वेक्षण रिपोर्ट तैयार करने के लिए दिये गये बिन्दूओं एवं निर्देशों के अनुक्रम में जिला सर्वेक्षण रिपोर्ट प्रारम्भिक ड्राफट रिपोर्ट तैयार की गयी है। जिसको जनपद की बेवसाईट (http://meerut.nic.in) पर अपलोड कराना है।

उक्त जिला सर्वेक्षण रिपोर्ट जिलाधिकारी महोदय द्वारा दिनांक 25–11–2017 को अनुमोदन उपरान्त अपलोड करने हेतु स्वीकृति प्रदान की गयी है। अतः आपसे अपेक्षा की जाती है कि संलग्न जिला सर्वेक्षण रिपोर्ट को उक्त बेवसाईट पर अपलोड करने का कष्ट करे।

संलग्नः–सर्वेक्षण रिपोर्ट।

25/11/17
अपर जिलाधिकारी (वित्त/राजस्व)
मेरठ।