CHAPTER – I

A. GEOGRAPHICAL BACKGROUND OF STUDY AREA

The Geographical background identifies an area or region from other, and describes the significance of a particular region to understand that region. A geographical study of any area is more important for its development and recognition. The geographical background of the two cities Bilaspur and Dhamtari is given below:

BILASPUR CITY

Bilaspur city is said to have been founded in about 1560 AD by a fisher woman named ‘Bilasa’ from whom the town derives its name. For many years it was the habitat of fishermen, but in 1770 a Maratha officer took up his residence at Bilaspur and began to build a fort, which was never completed. The remains of the fort still exist an the bank of the river Arpa, known as ‘Pachari Ghat’. The city remained as a part of Kalchuri dynasty till 1860. In 1861 Bilaspur was constituted as a separate district and the town had the advantage of being the seat of district administration.

LOCATION

Bilaspur district is situated on the mid north western part of present Chhattisgarh state. The city of Bilaspur is situated on the right bank of river Arpa a tributary of river Mahanadi. Its cardinal points are 22°05' N latitude and 82°25' E longitude. It is situated at an elevation of 285 meters above mean sea level. The city is the zonal headquarters of South-Eastern Central Railway and is emerging as one of the important urban center of Chhattisgarh state.

ADMINISTRATIVE SET UP

Bilaspur town experienced a rapid expansion during the last 20 years, and many villages located on the fringe of town now form a part of urban agglomeration. Other villages situated is close vicinity of Bilaspur are also gaining urban character.
The Municipal Council of Bilaspur was established in the year 1867 and the municipal area was constituted comprising only three wards. The present municipal limit comprises 56 wards with an area of 2729 sq. hectare.

GEOLOGY

The physical features of an area influence the socio-economic and cultural features. The minimum diversity of geographical system exists in Bilaspur district which is occupied by only 3 geological systems viz. (i) Gondwana, (ii) Dharwar and Archaens, (iii) Cuddapah Bilaspur and its environs occupy the Cuddapah geological formation. The lithological classification of the area is identified into four categories, viz. (i) Alluvium, (ii) Shale, (iii) Limestone and (iv) Quartzite.

The township area occupies the alluvium bed. The Municipal Corporation area is predominantly occupied by alluvium bed consisting of loose formation of sand pebbles and clay beds. The area covered by alluvium beds, therefore offers limitations for the economical foundation as compared to other lithological formation.

PHYSIOGRAPHY

The hard and resistant rocks produce visually appreciable landforms where as the bed rocks susceptible to weathering produce a rolling topography. Bilaspur and its environs occupy a gently sloping terrain, gradually sloping from north to south. The area north of river Arpa possesses variations in landforms as compared to area south of river Arpa. The appreciable varying relief in village Koni and Birkona may be attributed to geological associations of different rock formation north of the river Arpa. The broad valley in Birkona and Koni are visually appreciable.

The site of Engineering College is the highest point in the municipal planning area. The area is Kumharpara is the area of lowest relief below the silted river bed. Therefore the inundation of the city center area is a regular feature which is the major constraint provided by physiographic features.
NATURAL DRAINAGE:

The characteristics of rock formation situated in Koni, Birkona and Lingiyadih villages have produced define drainage channels in the area. The drainage (regular) consists of parallel and rectangular patterns, forming multiple drainage basins as a result of varying topography. The area south of river Arpa, which does not possess variation of topography, is served by irregular drainage pattern.

The river Arpa provides the natural drainage of the city. Jawali nullah, Mama Bhanjha talab and Gokere nullah. The river has a velocity during rainy season and the floodwater enters the town area through Jawali nullah and because of the absence of level difference water logging in the central area of the town is a regular feature.

The river continues to erode the town area resulting in loss of land resource and flooding the low-lying areas. The river is silting very rapidly. This necessitates protection of bank to check erosion and flooding of the town areas. The river is an aquifer and discharging the polluted water in the aquifer.

CLIMATE

The climate is the generalization of variety of day-to-day weather condition. Human response physiologically to heat and cold is a complex one and the heat balance of human body may be affected by any one of the following climate elements.

(i) Temperature, (ii) Rainfall, (iii) Humidity.

A balance set of combination of values within the above climate elements is essential for functioning of the metabolic activity without strain.

TEMPERATURE: The air temperature is controlled by movement of sun, its latitude and attitude, type of surface affecting the radiation and the physiographic features. The temperature starts rising before the month of March and continues to rise till May. The mean average temperature in May raises to nearly 46°C. In this month dust storm are very frequent from mid November the temperature starts decreasing and normally the month of December is the coldest month. The average temperature recorded for this month is 8°C.
RAINFALL – Rainfall depends on the onset of southwest monsoon winds. The branch of monsoon winds coming from Arabian Sea brings rainfall to the Indian subcontinent. Distribution of rainfall is not the same everywhere. The rainy season in Bilaspur starts from end of June and lasts till mid of August. Average rainfall in the city ranges between 50 and 100 cm. July is the month when maximum rainfall occurs. In April and May rainfall occurs from nor westers. After the month of August rainfall starts decreasing. Again is November rainfall occurs from the retreating monsoon winds. The follow table shows monthly rainfall of Bilaspur.

HUMIDITY: The humidity in Bilaspur is maximum in the monsoon or warm humid season. The humidity ranges between 60% and 83% in the morning and 45% and 75% in the evening in this season. Summers are the driest part of the year when humidity ranges between 36% and 38% in morning and 18% and 22% in evening. Monsoon is the warm humid part of the year when the morning humidity ranges between 60% and 87% and evening 45% and 79%.

SOIL

The soils of Chhattisgarh region are identified as Bhata, Matasi, Kanhar and Dorsa. The distribution of these soils is related to physiography of the area affected by natural water, run of and soil erosion. The soils in north of village Koni, Sarkanda, Chatidih, Mopka and Lingiyadih are more light and gravelly. The soils of the city centre under the limits of municipal boundary are medium heavy and light with
CLIMATIC PHENOMENON: BILASPUR

FIG. 3
laterites. The soils in the north of Arpa river are much heavy soil which is suitable for intensive building construction.

VEGETATION

The area consists of diversified tree plantation. The existing tree plantation types are studied to assess its effect on the developed populated areas in respect of moderation of the climatic conditions and for visual effects. The tree plantation within the city area and road side is very insignificant. The railway settlement is rich in vegetation in respect of road side plantation as compared to municipal area. The enclosures of bungalows are also endowed with colourful and comfortable vegetation growth. Besides these scattered and isolated grooves are found in the outgrowth areas. Along the river agricultural fields and graveyards will have to be conserved.

LAND USE

The order to achieve the environmental condition and efficiency in functioning of various activities the land use pattern in Bilaspur city is as follows residential 45.5%, transport and communication 19.4%, public and semi public purposes 15.5% for industrial purpose 12.3%, commercial and recreational purposes only 5.9% and 1.4% land is allotted.

INDUSTRY

In the township area there are small cottage industries like bidi industry, gurakhu factory, matchstick industry, etc. But in the outgrowth area in Sirgitti industrial area paper industry, glass factory industrial alcohol factory and other industries are located.

TRANSPORT

Bilaspur city is known as the transport city of Chhattisgarh. Bilaspur city play’s an important role in National Transport System. The city is connected with different important cities of the country like Bhopal, Delhi, Kolkata, Chennai and Bangaluru by railway line. The southeast central railway headquarter is located here. State Highway
LAND USE MAP : BILASPUR

LEGEND

- YELLOW: RESIDENTIAL
- BLUE: COMMERCIAL
- BROWN: INDUSTRIAL
- RED: EDUCATION
- GREEN: HEALTH
- GREEN: GENERAL ADMINISTRATION
- ROADS
- BUS STAND

- RAILWAY STATION
- RAILWAY LINE
- BRIDGE
- GRAVE YARD
- RECREATION
- ENVIRONMENTAL FORESTY
- WATER BODIES
- AGRICULTURE

Fig. 4
REGIONAL SETTING: BILASPUR

INDEX

URBAN CENTRES

FOREST

STATE HIGHWAY

BROAD GAUGE RLY

OTHER ROAD

RIVER

FIG. 6
No. 5 passes through the city joining it with Raipur. State Highway No. 26 also forms a part of the city normally known by the name Siwarinarayan and Mugeli road. Another road Bilaspur and Sipat road is also a busy road of the city. Besides these ring road connect the city with the out growth region and the other important road of the city. Overall transport and traffic system is well developed in the city.

**DHAMTARI CITY**

Dhamtari is a newly born city of Chhattisgarh. The city owned the status of Municipal Corporation in 1981. Ultimately it emerged with the revised city boundary in 1994. During the British rule between 1818 to 1830 Chhattisgarh along with Mahakoshal was ruled by the Maratha Kings. Due to the inequent economic retours by the colonial rules, which was further followed by the Maratha kings during 1830 to 1850 there was a great increase in revenue rates. Later the region was ruled by Subhash, who lived in district headquarters. Due to large extent and proper administration in the year 1856 Raipur district was divided into two tehsils viz Raipur and Dhamtari. In ancient limes Dhamtari was the capital of Mandlik State, gradually after many ups and downs with the passing of line slowly Dhamtari emerged to its present status.

**LOCATION**

Dhamtari district is located in the east central part of present Chhattisgarh state, and southwestern part of Raipur district Dhamtari city is located on the northwestern side of the district. Its cardinal points are 24°42' north latitude and 31°35' east longitude. It is situated at an average attitude of 319 m above the sea level.

**PHYSICAL SETUP**

Dhamtari district is a part of southeast Mahanadi Basin and its northeast part forms a part of Dandkaranya region. Dhamtari is situated in upper drainage area of Mahanadi. Geologically the region is composed of Cuddapah system of rocks with some plateau of Dharwar and Gondwana rocks. Dhamtari township area lies mainly under the unclassified crystal and gneiss.
NATURAL DRAINAGE: DHAMTARI

FIG. 8
NATURAL DRAINAGE:

Mahanadi is the main river of this region. The general slope of the land is from west to east. Zonk and Shivnath are the other river which flow through this region. Mahanadi river flows from the south - east part of Dhamtari town. A canal, mainly known as main canal passes from the east of the city to meet requirement of the residents. Dhamtari town has its identity in tanks and ponds.

CLIMATE

The climate of Dhamtari is mainly hot. Winter season starts from December and lasts till February. Generally after February the hot summer season emerges and continue till the onset of monsoon. Monsoon season or rainy season continues till September. Due to red mummy soil the region is very hot. Due to forest and other plantation eastern and southern part of the city experience a little different weather in summers.

TEMPERATURE: The maximum temperature is recorded is 32.6°C and minimum temperature 20.11°C, and average temperature is 26.3 °C. Maximum temperature recorded in the year is 41.7°C in the month of May. This being the hottest month of the year. After November the temperature starts decreasing very rapidly and by the end of December the emergence of winter knocks the door. The minimum average temperature recorded is 10.4°C.

Table : 1.2

<table>
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<th>CLIMATIC PHENOMENAN IN DHAMTARI</th>
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<td>27.5</td>
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<tr>
<td>Min Temp °C</td>
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<tr>
<td>Avg. Temp °C</td>
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<tr>
<td>Rainfall in mm</td>
</tr>
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<td>Avg. Humidity</td>
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Source: Indira Gandhi Agricultural University Raipur (C.G.) Metrological Department - 2005

RAINFALL: Rainfall is deposition of atmospheric moisture and is perhaps the most important phase of hydrological cycle. The onset of monsoon marks the beginning of
CLIMATIC PHENOMENON: DHAMTARI

FIG. 9
the rainy season in the region. The maximum rainfall occurs in the month of July (550 mm) and minimum rainfall is recorded 11 mm in month of March. The average rainfall of the area is 133.08 mm.

HUMIDITY: The humidity is the amount of moisture present in air. Humidity is high in rainy season measuring more than 60%. After the monsoon the humidity starts decreasing and by winter the wind is absolutely dry. Summer is the driest part of the year when humidity decrease to 25% or less.

SOIL

The entire Chhattisgarh is mainly formed from Gondwana rocks, in which sand and conglomerate are found. In Rudri and Hatketeshwar red and yellow soils are found which is formed from this Gondwana rocks. This soil is less fertile due to presence of fewer amounts of humus and nitrogen. Bhata or red soil is also found which is very rich in aluminum, silica and iron oxide. Kanhar or Black soil is also found in very less amount. This soil is composed of many mineral. Beside these Dorsa soil is also found in the eastern side of the town ship area.

VEGETATION

The region consists of diversified tree plantation. In the municipal area road side plantation is found. In some roads have been raised to the status of avenues. The enclosures of bungalows are endowed with colorful and comfortable flowering plants. In the southeastern side of the township by the side of the river Mahanadi few vegetative covers are found. Besides some scattered and isolated vegetative covers are viewed in the city outgrowth area.

LAND USE

Due to proper administration and establishment of different sectors of government and public land is of prime importance. To face the increasing population pressure and formation of greater Dhamtari township 1600-hectare land is required. Among the present land use 43.32% for residential purpose, 24.43% for transport.
LAND USE MAP: DHAMTARI

LEGEND

- RESIDENTIAL
- COMMERCIAL
- INDUSTRIAL
- EDUCATION
- HEALTH
- GENERAL ADMINISTRATION
- ROADS
- BUS STAND
- RAILWAY STATION
- RAILWAY LINE
- RECREATION
- ENVIRONMENTAL FORESTY
- WATER BODIES
- AGRICULTURE

Fig. 10
18.38% for public and semi-public uses, 6.86% for commercial purpose, 6.10% for industry and 0.9% for recreational purposes.

INDUSTRY

Dhamtari being a small town is quite rich in industries. The main industries here are rice mills, bidi factory, oil mills, tiles factory etc.

TRANSPORT

The transportation system in Dhamtari is not very much satisfactory. N.H. 43 passes almost through the middle of the city which hampers the traffic of the city. The national high way is connected to the two ring roads are old and other new. The city centre is connected with the outgrowth region by metalled and unmetalled road. The city is connected with Raipur, Jagdalpur and Vishakhapatnam through national high way 43. A narrow gauge railway line connects the city with Raipur, Jagdalpur and Vishakhapatnam.

B. GENERAL INFORMATION OF THE STUDY AREA

20.09% People in Chhattisgarh live in urban area. Bilaspur is the 1st class category city of Chhattisgarh, which is also the head quarters of South Eastern Central Railways, and as important urban centre of the state. Dhamtari, 2nd class city of Chhattisgarh, is an important urban centre and a headquarters of the district of Dhamtari.

The environment and socio-economic factors are responsible for differential fertility rates. The study aims to discuss about the facilities available in the surveyed area and in the following chapters how it influences the fertility pattern of the region. Both, Bilaspur and Dhamtari are important cities of Chhattisgarh. Bilapsur acts, as the transport city where as Dhamtari, is a newly born city of Chhattisgarh.

For the convenience of study the surveyed areas of the two cities are divided into two parts viz. intracity or city center and city outgrowth. Intracity is merely the urbanized area of the city. The term ‘Urbanization’ connotes widely divergent views. In fact its meaning has been changing with time. It is changing because the content
TRANSPORT MAP DHAMTARI

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ROAD

RAILWAY LINE

0 1 2 KM

FIG. 11

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REGIONAL SETTING: DHAMTARI

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<table>
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<th>Symbol</th>
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<td>RAILWAY LINE</td>
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FIG. 12

0 10 20 Miles

20
and nature of the process termed as urbanization is becoming more complex and many-sided towns and cities which are connect manifestation of this process were not so complex as they are now.

Lampard (1965) says that there are three concepts urban area i.e. intracity formation viz. demographic, structural, and social. According to the encyclopedia of social science intracity is characterized by movement of people from small community concerned chiefly with agriculture to other communities generally larger whose activities are primarily centered in government, trade, manufacture or allied interest. Thus intracity is the region where concentration of an increasing proportion of the community is present, Smailes (1953).

When the city becomes overclouded the settlement starts spreading outside the city boundary, so that from those vicinity of the city inflow of population to intracity for jobs, employment and other civic amenities is very smooth. Davis and Golden (1965) viewed that as there is an increase in urban population, a enough number of people in cities tend to settle outside the city boundary and forms the greater and new boundary for city. This area before registered as new or greater boundary is after known as city outgrowth. Those areas also imply a cultural and social psychological process and originate a typical urban area character, (Gist and Fave, 1967).

The general information of the surveyed wards and outgrowth of the selected cities are discussed below.

**BILASPUR INTRACITY**

**KASTURBANAGAR (Ward No. 4)** – This ward is situated near the railway line to the south of the city boundary. Total population of the ward is 4995 persons of which 2567 are male and 2430 are female. Total S. C. population here are 601, of which 309 are male and 292 female. Among total 362 S.T. populations 166 are male and 196 female. About 40% people of this ward are railway employee. This ward is mainly a residential ward. Educational institutions are not very welmarked in this ward except few montesary and a primary school. This ward is an area where some complexes besides railway colonies also exist. Guru Ghasidas School is the only school in this ward. For Medical assistance people have to consult with the private doctors in their
chambers, as no government health centre is located in this ward. For recreational purpose a cinema hall and parks are found in this ward.

GAYATRINAGAR (Ward No. 9) – This ward is located to the north of S. E. Central Railway line. The railway line forms the southern boundary of the ward of total 4361 population among there 52.76% are male and 47.24% are female. The scheduled caste population is 7.5% of the total population of which 173 are male and 154 female of the total 362 S. T. population 166 are male and 196 female. This ward is mainly commercial ward with market complexes and small business centers. This ward serves as the main official center of the city. In the north eastern side of this ward slum area is found. In terms of educational facility this ward consist of every type of school from Montessori to higher secondary school. A government primary health center and two nursing home is located in this ward. There are temples of various gods found in this ward. A sub post office is situated in this ward near the wholesale vegetable market. Sewage facility, communication and transport, water and other civic amenities facilities are well developed in this ward. Many godowns are found in this ward.

PRIYADARSHINI NAGAR (Ward No. 16) – This ward is located is the South ceatial part of the present township area. Total population of this ward is 3020 persons among them 52.05% are male and 4795% are female. Among 227 S.C. population of 127 are male and 100 are female. 5.5% is S.T. population of which 54.22% are male 45.78% female. The residential density in this ward is quiet high. This ward is well connected by roadways with the other wards. Mainly high middle class and middle class people occupy the ward. A pump house is located in this ward. A Private English Medium Higher Secondary School is situated in this ward. More or less every public utility centers are located in this ward. Two big man-made tanks and parks ads beauty to the ward tanks and is a special feature of this ward. A petrol pump near the main road is located in this ward.

SHIVAJI NAGAR (Ward No. 24) – This ward is located more or less at the center of the city. To the north of Mandir Chowk the residential area forms the part of this
ward. The govt. administrative buildings are mainly situated in this ward. Being located in the center of the town the pressure of population is more in this ward compared to other wards. Total population of this ward is 5216 persons among them 52.49% are male and 47.51% are female. Of 2.55% S.C. population 46.62% are male and 53.38% are female. Total S.T. population is 192 of which 114 male and 78 female. High-income group mainly dominates the population in this ward. Residential density is medium high. Transport network is very good. A big market is located here near Mungeli road. The educational institutions here include both private and government schools. A music and dance school is located here. Four health care dispensaries are located in this ward but govt. hospital is in the neighboring ward. For recreation a cinema hall and parks are found in this ward to entertain the dwellers.

RAMDAS NAGAR (Ward No. 33) – This ward is in the central east part of the present city. This ward is far away from railway line. This ward is mainly residential ward, in spite of some scattered commercial land uses. Total population of this ward is 5169 person of them male are 48.99% and females are 51.01%. Of total population 9.19% are scheduled caste of which male female ratio is 50.50%. Out of 176 scheduled tribes 86 are male and 90 female. This ward is mainly residential ward. A pump house is located towards the extreme eastern boundary of the ward. All civic facilities water, electricity, transport and communication, are well developed here. One sub health unit with some private dispensaries in different colonies is viewed area. Along with high and middle class residents poor families living in slums are also observed here. Private primary school and crèche are found in this ward.

SHASTRI NAGAR (Ward No. 46) – This ward is located to the north of river Arpa. River Arpa forms the southern boundary of the ward. Total population of this ward is 8023 person of them 52.75% are male and 47.25% are female. Among total 6.31% S.C. population 271 are male and 235 female. 833 S.T. populations are divided into 52.22% male and 47.78% female. Just on the other side of the old Arpa Bridge the highly dense residential area of the ward exists. The settlement in this ward is clustered in a place thus residential density is very high. A industrial zone with few
factories are found is the north of this ward. Ayurvedic hospital is just in the neighbouring ward and for health care dispensaries and private nursing home serves the purpose. A private middle school and a government primary school is located in this ward. A family planning office is there in the neighbouring ward no. 45. Jora Talab and another small tank is there in this ward. The ward is a well-connected road with the city center. A sub-post office is situated in this ward.

LOCO COLONY (Ward No. 54) – This ward includes the southern limit of railway area and is located to the south of the present township. The population consists mainly of railway class three and fourth class staffs. This ward is a part of Juna Bilaspur. Total population of this ward is 4004 person of them 2084 are male and 1920 are female. Of 11.64% S.C. population 49.57% are male and 50.43% are female and of 260 S.T. population 51.5% are male 48.46% are female. Maximum of this ward is engaged in engineering and technical works of southeast central railway. Thus for civic facilities the ward dwellers have to depend on the neighbouring ward. Transport is well developed and well connected to other wards.

BILASPUR CITY OUTGROWTH
NAGPURA - This village forming the outskirts of Bilaspur city is situated on the southwestern side of the present township at an distance of approximately 7 kms. Total area of this region is 381.6 hectares. Total population of this village is 2828 persons of them 1405 are male and 1423 are female. Of 899 S.C. population 48.39% are male and 51.61% are female. Of total 511 S.T. populations 258 and 253 are the numbers of males and females respectively. Total number of household in this village is 478. Physiographically the village is situated in a plain land. Net sown area of this village is approximately 282.418 hectares paddy being the main crop for cultivation. It has a primary school, a middle school and a sub health centre. The facility of drinking water is supplied from hand pumps and Municipal Corporation pipelines along with the talabs. An unmetalled road passes through this region towards the city.
SELECTED OUTGROWTHS AND WARDS BILASPUR

INDEX

SELECTED OUTGROWTHS

VILLAGE BOUNDARY

CITY BOUNDARY

INDEX

SELECTED WARDS

RIVER

RAILWAY LINE

FIG. 14

0 1 2 Miles

0 5 10 Km
KONI – This village forms a part of Bilaspur Municipal Corporation situated on the northern side of the township north of Arpa River. Total area of the village is 443 hectares. The village is divided into two parts – Chhoti Koni and Bari Koni. Total population of the village is 5872 persons of them 55.67% are male and 44.33% are female. Of total population 20.08% are S.C. and 11.80% are S.T. Of the total S.C. population 647 are male and 532 are female and number of S.T. male & female are 391 and 302 respectively. Koni is a developed village compared to the other villages. Katghora Sipat road is passing through the village. Here all facilities like hospital, primary health center, educational institution like Primary & Middle school, Engineering college, University are available here. It is about 12 km. away from the railway station. For drinking and other water tap, hand pump, and pond are there. Electricity connection is there in every household. A bi-weekly market is there to meet the needs of the dwellers.

SILPAHARI – It is situated on the southwestern side of the Bilaspur city, total area of the outgrowth in 417.2 hectares. Total population is 1874 persons of them 950 are male and 924 are female. Of 441 S.C. populations 217 are male and 224 are female. Of total 78 S.T. population male are 43 and female are 35. Many industries are located in this region and the people here are mainly either industrial worker or agricultural labour. Approximately net sown area of village dwellers are 225 hectares. Many of the families living here are below the poverty line. Primary school is present in this outgrowth but no health care center is found in this area. Source of water both for drinking and household works is ponds and Tube wells. Electricity facility is not there in every household.

MOPKA – This situated in the east of Bilaspur city. Total area of the village is 1290.4 hectares and total population of the outgrowth is 7286 persons of them 51.32% are male and 48.68% are female. Here total S.C. population is 24.07% of which 51.37% and 48.63% are respectively male and female, and 10.05% is S.T. population amongst which 46.45% and 53.55% are male and female. Total number of household here is nearly 1251 among which majority are residential houses. The outgrowth can be
divided into two categories (i) the colony and (ii) the slum region. Compared to the slum people the standard of living of colony dwellers are high. The colony residents are mainly the families of retired persons of ECCL Chirimiri. This outgrowth area is just 5 kms. away from the heart of the city. The facilities found here are primary and middle school for education. An adult education center is runned by retired personnel of ECCL. For drinking water slum people use hand pump and the colony people get the supply of drinking water from the colony pump service. The area does not have any health center but for primary medical facility and first aid a private dispensary is present. Besides these there is a post office near the village commonly known by the name Vasant Vihar post office.

BAHTARAI – This outgrowth area is situated towards the north eastern side of the township area. Total area of this region is 397.3 hectares. The settlement is clustered in a place in this region. Total population of this region is 2134 persons, (1089 male and 1045 female). Among 460 S.C. persons 52.22% are male and 47.78% female and of total 12.61% S.T. population, 140 are male and 129 female. Total net sown area here is 186.34 hectares and the main crop here is paddy. A stadium is under construction in this area. An unmetalled road and some kuccha roads from the well knit transport system. An Anganbadi, a primary school, a sub health center are the facilities found in this region. Drinking water source of the dwellers are tube well and ponds.

BIRKONA – This is a part towards the north of the present township area. The total area of this region is 1710.0 hectares. The maximum land of this region is under cultivation and is also a part of outgrowth of Bilaspur city. Thus here both mixtures of urban and rural characteristics are found. The area is physiographically a high region. Total population of the outgrowth region is 6412 of the 50.05%and male and 49.95% are female. 682 male and 731 are female of total 22.04% S.C. population. Among 733 S.T. populations 349 are male and 334 are females. The area is 13 km far from the heart of the city. In this area thus are many tanks. The residents here are economically well off. Source of drinking water is tube-wells A small canal passes through the area
and meets the need of water of the people. Only a primary school, and a sub-health center are located in this region. Maximum houses here are of semi pucca type.

DHEKA – This region marks the eastern and of the outgrowth area. The total area of the region is 313 hectares. Total population of this region is 1345 persons of them 687 are male and 658 are female. Of 222 S.C. population 47.75% are male 52.25% are female. Among 0.97% S.T. population 5 and 8 are respectively the number of male and female. The dwellers have to depend on the neighbouring areas for civic facilities like schools, medical facility, market, post office, etc. Only an Anganbadi is present is this region. Mostly all the villagers consume the electricity facility. Its distance form city center is about 6 kms.

DHAMTARI INTRA CITY
SUNDERGANJ (Ward No. 4) : This ward is situated to the north western portion of the city. Total population of this ward is 2286 persons male 1144 and female 1142. Of 0.52% S.C. population male is 5 and female 7. The number of S. T. population is 412 of which 47.81% are male and 52.18% are female. A metalled road, which is connected to ring road, passes through this ward. This ward is mainly industrial and commercial zone of the city with some settlements is mainly concentrated along the roadside. There is a park for the amusement of the people. The settlement is in two parts slum and pucca colony. A small private primary school is present which the women of the locality run. The railway station and bus terminal is very near to this ward.

AMAPARA (Ward No. 11) – This ward is located at the center of town area. A road, joining the ringroad, passes through the western side, forming its western boundary. This ward is mainly a residential ward with a total population of 1784 persons (943 male and 841 females. Of total 10 S.C. populations 2 are male and rest females. Only 2 male S.T. populations are present in the ward. Total number of household here are 222. Total residential are is 2.92 hectares. The main market area forms a post of this ward. A part of Makai Talab lies within this ward. A middle school under C.G. board
is in this ward. Primary health center of this ward is very much developed. A pumping house near the Makai Talab is located in this ward from where this ward along with other neighbouring wards gets its supply of water.

DAKBANGLA (Ward No.16) – This ward is situated towards the extreme border of the city. Total area of this ward is 4.71 hectares and residential density is 70.01 person per hectare. Total population of this ward is 2430 person (49.96% male and 50.04% female). Of 7.65% S.C. population 86 are male and 100 are female and the numbers of S.T. are 204, male, female ratio 100/104. Government hospital is in this ward few administration offices are located in this ward. The roads are well developed here compared to the other wards. The municipal corporation water pipes are very often found in this ward.

TIKRAPARA (Ward No. 19) – This ward is located on the southwestern part of the city. Along with residential purpose the ward has social-cultural and administration units. Total residential area of the ward is 6.12 hectares. A Police Station is located in this ward. Total population of this ward is 2529 persons of them 1250 are male and 1279 are female. Of 343 S.C. population 44.61% are male and 55.39% are female. 9.37% are S.T. among than 117 are male and 120 are female. There are two big bonds in this ward. A big stadium is under construction in this ward. English Medium High School and two Montessori and play schools are found in this ward. The source of water is Municipal pipeline. The ward has a good network of roads and is connected with other wards.

POST OFFICE WARD (Ward No 24) – This ward is located at the heart of the city. Total area of the ward is 4.55 hectares. The land of this ward is mainly used for administrative purposes along with residential use. Total population of this ward is 2133 person of them 50.16% are male and 49.84% are female. No S.C. population is found in this ward. S.T. population comprises 1.22% of the total population in which 16 are male and 10 are female. It is clear from its name that the main post office of the city is located in this ward. The Tehsil headquarters, Municipal corporation office,
town-planning office, city kotwali all are situated in this ward. Two private nursing home are also found here. Along with primary and high schools a college in also situated in this ward. Roads are well developed in this ward. Ring road is just at 2 km. distance from this ward. Two tanks and one children park is also viewed in this ward.

MARATHAPARA (Ward No. 29): This ward is located just next to the post office ward. The western boundary of this ward forms the eastern border of post office ward. Total area of this ward is 4.86 hectares. This ward is mainly residential but some commercial places like wholesale market, Sabji Mandi (Vegetable Market) etc. are seen in this area. Total population is 1779 person of them 50.59% are male and 49.41% are female. No S. C. population of and only 10 person of S.T. population with male female ratio 50:50 reside in this ward. The settlement mostly comprises middle class family. Montessori school, middle school is located in this ward. Private dispensary of the area serves the health care services. A maternity home is also situated here. Municipal Corporation and tube wells supply the source of water both for drinking and other purposes. Roads and streets are well developed with proper sewage system and street lights. State Bank of India is located in this ward.

RAMPUR (Ward No. 35) – Located to wards the south of the township area. Total area of the ward is 10.31 hectares. Residential density is medium. Total population is 3053 persons (Male 51.29% female 48.71%). Among 4.88% S.C. population 72 are male and 77 are female, and of 323 S.T. population 53.56% are male and 46.44% are female. The settlement is mainly is slum region. Thus the environment here is not very healthy. Source of water is from “Nagar Nigam” pipeline. No school, a sub health center is only found in this ward. Conditions of roads are not very good in this ward.

DHAMTARI CITY OUTGROWTH
HARAFTARAI – This area is situated to the east to the township region. Total area of this region is 151.0 hectares. Total population of this area is 563 persons (51.33% Male and 48.67% female). 85.08% are S.C. population of which 247 are male and 232 are female. Of 57 S.T. populations 27 are male and 32 are female. A canal connecting
SELECTED OUTGROWTHS AND WARDS DHAMTARI

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SELECTED WARDS

CANNELS

FIG. 15
Mahanadi passes through this region. A tank with a park surrounding it forms the center of the settlement area. The road network is developed. A metalled road passes through the middle of this region. A primary school, an Anganbadi and a private dispensary is present in this area. The whole area is consumer of electricity.

ARJUNI – This area is located to the north of the present city region. Total area of this region is 324.04 hectares. Total population of this area is 2415 persons of them 50.39% are male and 49.61% are female. Of 7.95% S.C. population 104 are male and 88 are female, and total S.T. population is 36.23% in which 457 are male and 418 are female. The region has approximately 254.03 hectares of net sown area. The main crop is paddy. The highway towards Raipur and Jagdalpur passes through this region. A cold storage is found in this area two tanks are found where fishing is in practice. The area has a middle school a sub post office, a government health center. Source of drinking water is hand pump and tanks. An industrial zone is found outside the residential zone. Overall the region is a developing one.

RATNABANDHA – This area is located in the west of the township area. Total population is 1449 among them male are 737 and female are 712. Out of total 62 S.C. population 28 are male and 34 are female. Among 20.70% S.T. population male and female are 160 and 140 respectively. The area is not very much developed. The ring road passes through the side of this area. No. civic facility is available in this region. Tube well or ponds are the source of drinking water. All the houses are electrified in this area.

RUDRI – To the south of the city area is Rudri. Total area of this region is 326.99 hectare. Total population of this area is 3800 persons (52.11% Male and 47.89% Female). S.C. population is 5.92%, among them 122 are male and 103 are female. Total S.T. population 491 persons of them 276 are male and 215 are female. River Mahanadi passes through the south of this region. The main canal along with some sub canal fulfils the requirement of water in the region. Gangrel Dam is in the vicinity of this area. Along with residential area district administrative office, a high school
and a college is located in this region. A nursing home and a govt. health center is here to meet the medical problems of the dwellers Collectorate is situated at the neighbouring area of this region.

BHATAGAON – This region is located on the southwestern side of the city area. Total area of the region is 496.15 hectares. 3610 is the total population among them male are 1841 and 1769 are female. Out of 58 S.C. populations male and female are 50:50 i.e. 29:29. Of 738 S.T. populations 378 are male and 360 are female. The area is well drained by small canals. There are also many tanks and ponds in this region. The dwellers here are mainly cultivators. The main staple crop is paddy. The area posses a primary school, Anganbadi, sub health care unit, a post office and some public and semi public administration institution. A metalled road passes almost through the middle of this region. Purana ring road forms the northern limit of the region.

KOLIYARI – Located on the southeastern corner of the city area. Mahanadi forms its southern border. This region is a backward region but it interacts as the outgrowth of the Dhamtari city. Total population of this area is 2485 persons, (50.38% male and 49.62% female). Total number of S.C. is 104, male are 49 and female are 55. 258 are male and 246 female among total 504 S.T. populations. Maximum of this region is covered with forests. The road network is quiet developed. Only a primary school is situated in this region. Source of drinking water is tube well and ponds. For medical assistance the people have to go to the neighbouring areas. One mentionable fact is that electricity is not present in the total village. Only a few area is electrified but maximum region is devoid of electricity.