

## CO-RELATION BETWEEN OPEN & BUILT SPACE

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**Abstract** - What is the relationship with the Open Built? I briefly tell about this. Built is like open oxygen. Opening itself is the life itself. But can not survive built without the open. This happens when we realize this. When we are locked in a room. In the room where all the windows are closed, in a few minutes we will start getting suffocated. And when a window in the same room is opened, then the room will also be raised along with us. So we got to understand that how important is open for built. So we are planning to open in today's building structure with Open. But I am talking about the Urban Areas which have already been built. Where Open is not at all. There is no ventilation in every building and there is no air circulation So I did some study to solve this problem. It is we know that breaking is not the solution for anything. So I tell what I have thought. There is an act for him. Land Acquisition Act, under which we can create open spaces, after acquiring some land. I have done some data analysis for him. The site of Taraganj area of Gwalior area has been studied. There are some landmarks identified here. Whom we can make a government land from private land. And you can create open gardens there. And in this way we can solve this problem to some extent. And I have tried to solve this problem with another method too. Which is the road to the top of the drain.

**Key Words:** Land Acquisition act, Open & Built Relation, Green Public areas, Types of open & Built spaces, Global warming effect, Health Improve

### 1.INTRODUCTION

Urban Planning is an expression of built ; open and the relationship between them . But built is always perceived when it is associated with open . A historic retrospect gives us the realization that ; the open spaces within the buildings and between the buildings are perhaps more important as centre of activity than the buildings itself.

Spaces is the negative ground or the non-object; and contains the notion of palace. Building are objects ; things – Positive spaces between existing and new buildings become a way to get people there. Or it becomes the place of celebration for the local people there.

Space is a places create and spatially define by the relationship between indoor and outdoor spaces. Spaces has a form –giving role in any settlement and is a container of different function.

### 1.1 TYPES OF OPEN SPACE:

#### 1.1.1 PRIVATE OPEN SPACES:

Include yards enclosed by walls or fences which keep and maintain visual privacy. 1.2 Sub Heading 2



#### 1.1.2 SEMI-PRIVATE OPEN SPACES:

Include open or partially screened and/or enclosed front, side, or rear yards. The semi-private space can be defined by hedges or hard edges but typically there is no demarcation structure on the edge of the lot or yard. The area beyond the edge can be seen and observed. The semi-private view shed defines the landscape which can be seen from the house windows or the porch. It is the most common of american open spaces.



### 1.1.3 SEMI-PUBLIC OPEN SPACES:

Include the spaces typically in the front of the house lot. They contain the front yard and the land on the public right-of-way on which the sidewalks and the area for street tree planting is located. The semi-public view shed can be seen from the street or alley, including the space formed by the facades of the buildings.



### 1.1.4 NEIGHBOURHOOD OPEN SPACES:

Include small parks, local street parkways, boulevard medians, and garden paths which visually link the private spaces with the neighbourhood parks and the larger community open spaces.



### 1.1.5 COMMUNITY OPEN SPACES:

Include larger neighbourhood parks, public greens, parkways along larger streets (most fronted by houses), medians on larger boulevards, bicycles paths, greenways, jogging paths, stream corridors, cemeteries, and field sport recreational facilities.



## 1.2 TYPES OF BUILT SPACES :-

### 1.2.1 Residential spaces

### 1.2.2 Commercial spaces

### 1.2.3 Industrial spaces

### 1.2.4 Civic spaces

### 1.2.5 Other open spaces

## 2. . DESCRIPTION OF STUDY AREA:-

**2.1 Gwalior** - Gwalior is the place known for its rich cultural heritage; Gwalior has played an integral role in Indian history from ancient times, through the medieval era, and later during the Mughal and British colonial rule. The Bustling city a top a hill is dominated by the Gwalior Fort which has been the battleground for many struggles for power. Today Gwalior is an important tourist destination due to its Historical and architectural significance, as well as for being a pre-medieval center of Jainism. Gwalior according to the ancient history was Gopalkash, said to be the same place were Bhima from the epic Mahabharata attained victory. Archaeological excavations reveal that the city dates back to the middle Stone ages and Iron Age. The actual city was founded back in the 8th A.D. by Suraj Sen. The head of the Kachwaha clan. Legend has it, that a sage called Gwalipa cured him of leprosy and thus the king named his city Gwalior. The city became the seat of power for many dynasties to come. From the 11th - 15th century, the medieval era saw the rule of Rajputs.

### 2.2 Accessibility

**2.2.1 By Air** - Gwalior has its own airport that is situated 8 km. from the main city. Gwalior is connected by Indian Airlines to Mumbai, Bhopal, Indore, and Delhi. The services are operational three days a week.

**2.2.2 By Rail** - If you are wondering as to how to reach Gwalior by rail, you have plenty of good options.



**2.2.3 By Road** - Gwalior is very well connected by a good set-up of roads and road transport to all major towns of Madhya Pradesh and surrounding areas. Gwalior is well linked by bus services with the important cities like:

• Delhi	-	321	km.
• Agra	-	118	km.
• Mathura, Jaipur	-	350	km.
• Lucknow, Indore	-	486	km.
• Chanderi	-	239	km.
• Bhopal	-	423	km.
• Jhansi	-	101	km.
• Shivpuri	-	114	km.
• Khajuraho	-	275	km.
• Ujjain	-	455	km.

**2.3 Shopping**

Gwalior is said to be the home of the oldest bazaars in Madhya Pradesh as well as the famous Chanderi saris. If you want to take back souvenirs, a lot of handicrafts shops offer artistic stone carvings and artifacts. Try the shops on the lanes near Chowk at Bara, and at Rajwara, Laskar, and Patankar Bazaar.

**2.4 Local Tourist Place**

**2.4.1 Bateshwar** - The pristine Bateshwar valley is known for the ruins of beautiful temples within verdant woods. The panoramic lush surroundings add a charm to the ruined temples drawing both nature lovers and pilgrims to this site.

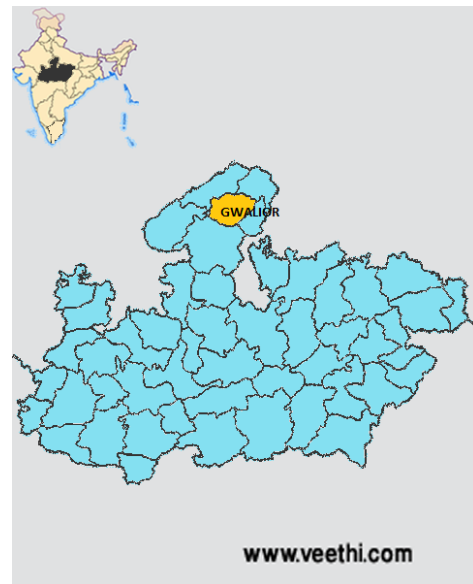
**2.4.2 Gujari Mahal** - The historically significant Gujari Mahal is part of the magnificent Gwalior fort complex and is worth a visit. This beautiful 15th century palace is a lasting monument to the love of Tomar King Raja Mansingh, the founder of the Gwalior fort for his Gujar queen, Mrignayani.

Legend has it that Raja Man Singh while on a Hunt, chanced upon Mrignayani, a Gujar tribal separating two buffaloes locked in combat.

**2.4.3 Gwalior Fort** - A hall under the Palace courtyard with two-storied galleries on all sides once reverberated with the sounds of raagas but now lies silent. The great musicians Tansen and Baiju Bawra are said to have received their early training in the school of music established and monitored by the Man Singh and his Gujar queen. It was in this hall and courtyard that the royal couple created several raagas and Man Singh composed and sang in Brajghosa as against the customary Sanskrit. An erstwhile school for the British soldiers has now been transformed into one of the best schools in India and is run by the Scindia's. Looming majestically at a height of nearly 100 meters overlooking the city of Gwalior is its most famous landmark - the magnificent Gwalior Fort, popularly known as the Gibraltar of India.

**2.5 Introducing the site**

India- Madhya Pradesh



Gwalior



Tarangang Area



## 2.6 Demographic Summary

Males represent 53% of the population and females 47%. The city has an average literacy rate of 87.20%, higher as compared to the national average of 74%. In the city about 13% of the population is under 6 years old. Hinduism is followed by most of the general population in Gwalior (88.84%). Different religions incorporate Islam (8.58%), Sikhism (1.41%), Jainism (0.56%) and Christianity (0.29). Hindi in its standard structure and it is usually spoken in Gwalior. Marathi is the second dialect of the city, spoken by about 20% of its population. There is a strong Marathi impact in the city because of Maratha Rule in the past.

### POPULATION OF GWALIOR IN 2017:

As of 2011's registration, Gwalior has a population of 1,564,981. Talking about population, in order to check out the population of Gwalior in 2017, we need to have a look at the population of the past 5 years. They are as per the following:

1. 2012 - 2.13 Million
2. 2013 - 2.21 Million
3. 2014 - 2.36 Million
4. 2015 - 2.41 Million
5. 2016 - 2.59 Million

The population of Gwalior in 2017 is forecasted to be 2.59 Million + 0.08 Million = 2.67 Million. So, the population of Gwalior in the year 2017 as per estimated data = 2.67 Million.

### Gwalior Population 2017 - 2.67 Million(Estimated)

### POPULATION DENSITY AND GROWTH OF GWALIOR:

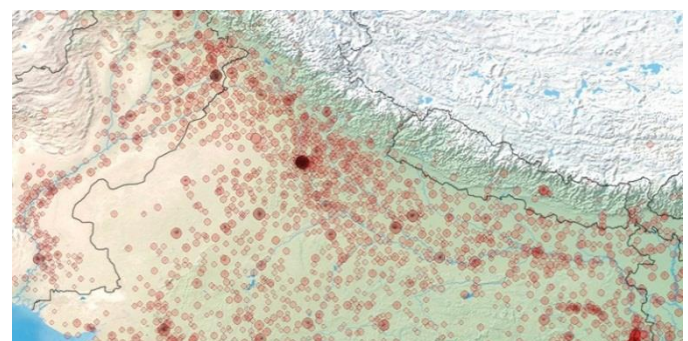
The population density of Gwalior is 5478 persons per square kilometer. Urbanization has lead to many people locating here in the city. The population growth rate of Gwalior per year has a healthy rate and is growing at a faster pace. It is expected that in the coming years the city

will double its growth of rate and would lead to higher population in Gwalior.

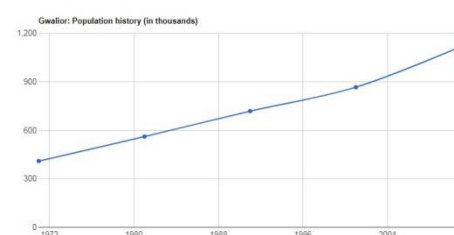
### FACTS ABOUT GWALIOR:

1. Post-autonomy, the city has developed as an imperative vacation spot in central India while numerous businesses and regulatory workplaces came up inside the city.
2. Gwalior turned into a prominent spot for religious practices and different disciplines coming up amid that time in the nation. Around the sixth century BC, it was ruled by the Naad dynasty of Pataliputra.
3. Gwalior is likewise known for not taking part in the 1857 rebellion, for the most part because of non-cooperation with Rani Lakshmibai. After Jhansi fell under the control of the British in 1858, Lakshmibai took shelter at Gwalior Fort.
4. Scindia is a Maratha clan in the country. This group included leaders of the Gwalior State in the eighteenth and nineteenth century, collaborators of the frontier British government amid the nineteenth and the twentieth century until India got to be autonomous and politicians in free India.
5. The city has a sub-tropical climate with hot summers from March to the month of July, the moist rainstorm season from June to October and a cool dry winter from November to the month of February.

### Gwalior on city and population Density map



Population history [1]



Annual population change

[1971-1981] +3.19 %/year  
 [1981-1991] +2.5 %/year  
 [1991-2001] +1.89 %/year  
 [2001-2011] +2.59 %/year

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### 3. METHODOLOGY

In hot-dry climates, compact planning with little or no open spaces would minimize heat gain as well as heat loss. When heat production of the buildings is low, compact planning minimizes heat gain and is desirable. This is how traditional settlements were often planned. However, in modern cities, buildings produce much heat of their own. In such cases heat loss becomes important. In fact, the phenomenon of heat build up in cities leads to the formation of heat islands. The size and scale of open spaces must, therefore, be optimized. If the open space is too large, then there can be too much heat gain. If it is too small, then there may be insufficient heat loss at night. Further, surface characteristics are important. The ground should be soft and preferably green. Building surfaces should not be very reflective. Shading by trees or buildings would also reduce heat gain. Since the hot-dry climate might also have a cold season, trees should be deciduous so as to allow winter sun. In cold climates open spaces should be small. Surfaces could be hard and absorptive. Compact planning is, of course, preferred. They should allow the south sun into buildings. Trees, if any, should be deciduous. In humid climates buildings should preferably not be attached to one another. Streets and the open spaces should be oriented with respect to wind patterns. The open spaces and the funnel effect can be used to maximize airflow within the complex.

### CONCLUSIONS

#### For aesthetics point of view:

The concept of enclosed and open space is partially perceptual. When you are in a building with high ceilings and wide openings to other parts of the building, you feel a sense of grandeur. Inside the space you may experience the feeling of freedom and optimism yet you may feel dwarfed by the presence of something greater than you. For this reason, churches are often built as open spaces.

Closed spaces are typically tightly confined spaces with small openings to other parts of the building. The classic example of a closed space would be a long corridor. Bedrooms, dorm rooms, bathrooms, and business offices are typically closed spaces. In a closed space you feel a sense of security, privacy, comfort, and experience fewer distractions. Staying in an enclosed space too long can result in a feeling of claustrophobia and tension.

#### Sustainable point of view;



### 3.2 Taraganj, Gwalior site solution

Most of Taraganj's land use is residential. But even after having a residential land here, the mix has been used here. Due to this the environment here has become unbalanced. Such as milk dairy, animal husbandry, poultry and many such land, which have been vacant for only several years. And here only the garbage is thrown. That is why there is so much dirt. So there is such a problem. Who I have tried to find As I have said, my research is on the fact that I can make the ones made here open, even without breaking it. I have some points for him.

- Under Land Acquisition Act, we can get land. And you can balance the atmosphere by creating open garden there. For this, I have made some land elections. Those whom the government can get and the land is as follows.
- The land which has been lying vacant for two years and there is no living there.
- Such land that is on the bank of river or stream.
- Land that is disputed.
- The land whose owner has two land, the government may take the first land by ordering it to increase an FIR on the other land.
- Land where the road is proposed.

So this kind of land is available on this site so I will propose an open garden on this whole land. And give the services below the garden. Such as..-

- Sewage treatment plant.
- Water harvesting plant.
- Solid west management plant.

My second proposal is. There is a barge here. Whose width is 12 meters. So I will make this gutter underground and make it a double road. And I will trail both sides of the road. The people here can walk in the morning. And by building this road I will provide public transport facility here. Because of this, people had to walk 1.5 kilometers for public transport. After this the problem will also end.

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