

A Report on
Draft Development Plan
of MATHERAN
(Second Revision)

(Published under section 26 of M.R.&T.P. Act 1966)

Matheran Hill Station Municipal Council,
Matheran, Dist. Raigad

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District- Raigad

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Development Plan, MATHERAN(R)

Chapter 1
General

Chapter –I

General

1.1 Location & Regional Setting

Matheran is a Hill Station Municipal Council in Raigad District in the Indian state of Maharashtra. It is located on the Western Ghats range at an elevation of around 800 m (2,625 feet) above mean sea level. Matheran is located at 18°59'N 73°16'E 18.98°N 73.27°E, around 90 km from Mumbai, 120 from Pune and about 320 km from Surat. Matheran's proximity to the three Metros makes it a popular weekend getaway for urban residents.

1.2 History

The name Matheran means either "forest on top" or "mother forest". Matheran was discovered by Hugh Poyntz Malet, the then district collector of Thane district in May 1850.

Mr. Malet, while camped at Chauk in May 1850, strolled one evening half way up the hill by the narrow steep bed of the Versova stream between Great Chauk and One Tree Hill. Thinking the hill worth exploring he came back next day, filled a basket with earth, struck off some pieces of stone, and went back to Chauk through the Ram Baug between Alexander Point and Little Chauk. He came back in November, lived about a month in a small hut and cleared footpaths to several of the points. He came once more in February 1851, built a stone house now called the Byke and in 1852 obtained a grant of Rs. 500 and so improved the path from Chauk through the Ram Baug forest. Shortly after this, Government ordered the Quarter Master General of the Army to have hill surveyed with a view to make it a military sanatorium. The survey was carried out by Captain Ponsonby in 1852, who drew a map of the hill, laid out a road from the north to Neral and marked sites for a church, a hospital, a barrack for two hundred men, a jail and other public buildings. But the idea of making Matheran a military sanatorium was given up as the medical authorities preferred Khandala. Next year (1853) Captain Peacock traced and cleared some fresh paths and marked sites for private houses. When the survey was completed, a map of the hill was printed and Government, after reserving certain plots, authorized Mr. Malet to allot sites to the public. By the end of May 1853 seventy sites had been applied for.

Between 1855 and 1858, Lord Elphinstone then Governor of Bombay, did much for Matheran. At a cost of Rs. 10,000 the road from Neral, instead of climbing the steep valley, was brought up the gentle slope of the Neral spur. Most of the rides and the paths, leading to the different points were laid out with admirable taste, under Lord Elphinstone's direction. He chose the site of Elphinstone Lodge, built a hut on it and laid a foundation of the present house. His staff followed his example and Matheran became fashionable. Houses rapidly sprang up and building sites were in great demand. The foundation of church was laid in 1858 and in three years building was completed.

A Superintendent's office including a post and telegraph office and a small library, a new market, a sanatorium and rest house for local residents had also been added and Gymkhana with lawn tennis and badminton courts and a large badminton shed, added greatly to the pleasure of life on the hill.

1.3 Development Plan & Eco-Sensitive Zone

Revised Development Plan of this hill station, under the provisions of Maharashtra Regional & Town Planning Act, was sanctioned and in force from 1st march, 1987. It was noticed that many reservations and public sites attract acquisition of land belonging to Forest Department. The State Govt. had directed the Municipal Council to exclude the entire Forest department's land from such reservations. The State Govt. in Urban Development Department had further directed wide letter dated 24.01.1995 that these modifications shall be carried out by effecting procedure under section 37 of the Maharashtra Regional & Town Planning Act, 1966. The Municipal Council therefore followed the directives issued under section 37(1) by the Urban Development Department. The Municipal Council had also decided to effect simultaneously additional modifications which were necessary for the proper development of this hill station including replacement of Development Control Regulations by new set of Regulations. Accordingly the Municipal Council had passed resolution no.474 dated 12.02.1996 and published notice in this effect in Maharashtra Government Gazette dated 05.05.1996.

Thereafter Government of India, vide notification No. S.O.133(E) dated 04.02.2003 had declared the Matheran plateau and its surrounding region as an Eco-Sensitive Zone(ESZ) under section 3 of the Environment (Protection) Act, 1986. The total area under the said zone is 214.73 sq.km. and 200 mt. buffer zone surrounding it. It provides the following points.

- 1) Zonal Master Plan for Eco-Sensitive zone shall be prepared. It shall provide for restoration of denuded areas, management of catchment areas, watershed management, ground water management, soil & moisture conservation.
- 2) The areas within and outside Matheran Municipal Council area shall have separate Sub-zonal Master Plan.
- 3) Tourism Master Plan shall also form component of zonal Master Plan. Master Plan shall be based on carrying capacity study of Eco-Sensitive zone.

Therefore the Government wide letter dated 21.11.2005 had rejected the modification proposal under section 37 of the Municipal Council. The Municipal Council therefore initiated the process of revision of Development plan under section 38 of Maharashtra Regional & Town Planning Act.

Chapter 2

Physiography

Development Plan, MATHERAN (R)

Chapter – 2

Physiography

2.1 Topography

The Matheran hill with an altitude of over 800 mt is isolated from surrounding hills by its sheer height. The north-south stretch of plateau is approximately 7 km with an average width of a kilometer. The Panorama point forms the northernmost tip of the plateau, to the south-east lies the Garbet point and to the south most lays the Chowk point. The area shows large variation in topography. There are few laterite plateaus like Olympia, Rugby, and Rajasthan that are remnant of original geological structures. The undulating topography has slopes ranging from below 5 to above 50. The northern side of the plateau has steep sloping areas with slopes greater than 50 whereas central & southern sides have gentle sloping areas, with slopes ranging from 0 to 20.

2.2 Hydrology

The land surface is generally irregular. This has given rise to various water features such as surface streams, basins, dharas, waterfalls and springs. The general topography of the plateau is so undulating that it is divided into approximately 15 watersheds. These watersheds consist of a dense and intricate network of streams and rivulets. Watersheds of Charlotte Lake and Simpson tank are more important as they feed these water resources of the plateau. Charlotte lake watershed is gentler in slope and spread over larger area compare to Simpson tank watershed.

During monsoon ground water gets recharged. Rate of percolation of water into the ground is also high due to porous upper strata and large areas on the plateau being covered with forest or vegetation. High level of soil moisture has resulted in the evergreen nature of the crest top forest. The underlying trap drains the water absorbed by the porous laterite to the edges of the plateau where springs issue out from the junction of the laterite crest and the trap. These springs are an important water resource for the plateau and the surrounding region.

2.3 Climate

Matheran with its moderate altitude has a climate, which suits to all.

The climate after the rainy season is very pleasant. It's crisp and cool. Even in May, the evenings are delightfully cool and the night pleasant and restful. The average annual minimum and maximum temperature ranges from 18⁰C to 28.5⁰C . As regards the

climate the month of October and November are the best. The refreshing cool and healthy climate of Matheran is very effective for health.

2.4 Rainfall

The average annual rainfall is 4595.56mm. The maximum rainfall recorded during the last five year is 6484 mm. in the year 2006.

The highest quantity of downpour is during July and August. The weather is cloudy and dark throughout these months. The continuous rainfall paralyses all the activities. But there is a different type, of charm of this place during monsoon. The whole of the "Hill-Crest" topped by the rain clouds look majestic.

Table No. 1

Year	Temperature		Rainfall in mm.
	Minimum	Maximum	
2000	18	24	4175.7
2001	18	24	3799.4
2002	18	28	3495.5
2003	18	28	3638.7
2004	18	30	4295.1
2005	18	30	6436
2006	18	32	6484
2007	18	32	4440.1
Average	18	28.5	4596.56

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Chapter 3
Environment
Study

Chapter – 3

Environment study

Matheran is nestled amidst dense forest, which covers an area of about 300 sq.km. It is a home for many species of flora and fauna. The plateau receives high rainfall and thus has origins of many streams. Hill vegetation plays a critical role in the hydrological cycle.

3.1 Water Bodies

The western slopes of the hill comprise a catchment of numerous rivers, which discharge water into Panvel creek and ultimately into the Arabian Sea. The eastern slopes form the catchment of the river Ulhas and the southern slopes the catchment of the river Dhavri that eventually meets the river Patalganga.

As the plateau and hill chains within the eco-sensitive region, form the catchment areas of numerous rivers, reservoirs and tanks, it is of critical importance that they remain adequately covered with forest. This will also prevent erosion, siltation in water bodies, decrease runoff and will in turn allow for percolation and act as a water bank. Thus it is important to protect this unique and fragile ecology.

The plateau water shed is equally interesting because of the unique landform. The plateau shows a great terrain variation in a short span of 12.5 km. giving it a unique undulating character, as well as, rendering every edge in a character of its own, making it interesting for tourists. Also these numbers of watersheds on the plateau serve the water bodies, streams and springs. Stream networks over the plateau also contribute to the formation of small basins, viz. Simpson Tank and Charlotte Lake basin.

(A) Charlotte Lake

Charlotte Lake is one of the main water resources of the Matheran Plateau. It is situated near to the Pisarnath temple and also a major tourist spot. The watershed of Charlotte Lake covers an area of about 1.25 sq.mt. The area immediately surrounding the lake is demarcated as a forest zone. Surrounding this zone are residential, commercial and amenity plots that have undergone large development.

Lake is fed by several streams and springs. Heavy erosion in streams has led to siltation in the reservoir. The lack of culverts at certain crucial points and storm water drain's along roads that are silted, result in large quantities of water flowing on the surface of roads during monsoon causing sheet erosion.

(B) Simpsons Tank

Simpsons tank is the second largest tank on the Matheran plateau, situated on the steep gradient in Patal Stream basin. Initially water was being used for domestic purpose. Now the water is not potable and the storage capacity of the tank has reduced due to siltation and seepage.

The watershed of tank covers an area of about 0.48 sq.km. The catchment area has car park area, horse stand, loading and unloading activities. Around the tank there is a complete loss of ground cover that has resulted in severe erosion and siltation. During monsoon the loose soil gets washed into reservoir. This has silted up the reservoir and reduced its capacity; Water in reservoir is also contaminated by horses.

3.2 Natural Springs

There are about 23 odd springs on the plateau. The principal ones amongst them are Malet's spring, Monkey, Ponsonby and Harrison's spring."

Malet spring, Nala spring, Ponsonby spring, and Monkey spring are present on the western edge of the plateau between Porcupine point and Hart point. Jungle spring is located in the Jungle stream between Hart point and Simpsons tank. The Dhangarwada spring is situated in the main stream feeding Simpson tank. Ghat spring and Chedoba spring are on the terrace to the east of the Panorama Garbut road. Tamdi spring, Blackwater spring, Baumbach spring, are in the Garbut area. Ain spring and Taki spring are found near the plateau edge between Charlotte Lake and Belvedere point.

Several springs that feed the Charlotte Lake, which is the main water storage reservoir, are also found on Matheran plateau. Coolie spring, and several other springs are located on the eastern edge of the plateau in the Bazaar settlement area.

3.3 Vegetation

Matheran vegetation is fairly rich and diverse in its seasonal and ephemeral component.

The type of vegetation changes with the altitude, precipitation and soil strata. Deciduous to moist deciduous vegetation is found on the lower slopes. Moist deciduous to semi-evergreen vegetation is observed on the terraces. The crest forest on the plateau top is a unique climax ecosystem ranging from semi-evergreen to evergreen with a prevalence of evergreen species. The evergreen nature is a result of high rainfall and the retention of ground water in the soil strata.

3.4 Forest

The forest ecosystem of Matheran plateau is unique; The canopy density is variable between 40-90%. At several localities the ecosystem can be designated as a closed forest.

The common and abundantly occurring species are *Actinodaphne angustifolia* (Pisaa), *Memcylon umbellatum* (Anjani), *Persea macarantha* (Gulum), *Olea dioica* (Paarjambhul), *Syzygium cumini* (Jambhul), *Mangifera indica* (Amba), *Xantolis tomentosa* (Kate Kumbal), *Garcinia talboti* (Phansada) and *Glochidion honenhackeri* (Bhoma). Such areas deserve perfect protection as fragile climax ecosystem zone as well as biodiversity hotspots.

Vegetation of Matheran exhibits such a remarkable blending of evergreen and moist deciduous tree species over large area, that dominant species are often deciduous with subdominant evergreen members and vice versa. The common towering top canopy deciduous trees are *Heterophragma quadriloculare* (Waras), *Dillenia pentagyna* (Karmal), *Terminalia bellerica* (Beheda), *Bridelia retusa* (Asana), *Lagerstroemia microcarpa* (Nana), etc. Another interesting feature evident as a result of the preliminary community study is that the floristic composition of the communities in different localities varies considerably.

Thus The forest ecosystem at Matheran is unique and remarkable in many respects- its dense and lofty arboreal growth, peculiar blending of evergreen and moist deciduous species and last but not the least- high percentage of endemism and almost undisturbed natural climatic climax formations. List of Plant species – **flora** of Matheran and list of **fauna** observed at Matheran Plateau is given respectively in table 2 and 3 herewith.

3.5 Heritage sites

The Matheran Hill Station has many buildings and precincts of architectural, aesthetic and historical significance. Indian National Trust for Art & Cultural Heritage Organization (INTACH) on behalf of Mumbai Metropolitan Region Development Authority had prepared the list of heritage sites in Matheran Hill Station and submitted to the Govt. The Govt. in Urban Development Department directed Matheran Municipal Council to follow the procedure u/s 37 of M.R. & T.P. Act to incorporate the said heritage list and resolution in their Sanctioned Development Control Resolutions.

Accordingly Municipal Council published the heritage list and heritage resolutions in Maharashtra Govt. Gazette dt. 1-07-2004 and daily newspaper Sakal & Free Press Journal on 6-07-2004 and appointed a committee to here suggestions/objections. The committee submitted report with suggested modification to the municipal council in 2006. Thereafter the council by resolution no. 145 dated 21-02-2009 had finalized the list and resolutions and wide letter dt.19-03-2009 had submitted modification proposal to Govt. final sanction

Table No. 2**List of Plant species – FLORA at Matheran Platau**

Serial No	Botanical Name	Comman Name
1	<i>Actinodaphne hookery</i>	Pisa
2	<i>Adhatoda vasica</i>	Adulsa
3	<i>Adiantum Unulatum</i>	Hansapadi
4	<i>Alseodaphne semecarpifolia</i>	Phadgus
5	<i>Anclstrocladus heyneanus</i>	Hardal
6	<i>Apluda mutica</i>	Ghagara
7	<i>Aspldopteris cordata</i>	Burvel
8	<i>Atalantia racemosa</i>	Makad Embu
9	<i>Blumea sp</i>	Bhamburda
10	<i>Boehemericia scabrela</i>	----
11	<i>Bombax celba</i>	Katesavar
12	<i>Bridesa retusa</i>	Asana
13	<i>Calicarpa Lanata</i>	Isar
14	<i>Calycopteris floribunda</i>	Ukshi
15	<i>Canthium Dicocum</i>	Tupa
16	<i>Capparis Zeylanica</i>	Wagati
17	<i>Capparis pedunculosa</i>	Kolsana
18	<i>Caralia Brachiata</i>	Phanshi
19	<i>Caretia arborea</i>	Kumbha

20	<i>Caryota urens</i>	Bherali mad
21	<i>Cassia fistula</i>	Bahava Bava
22	<i>Celtis Tetranda</i>	Bhumaj
23	<i>Chellanthus farinosa</i>	----
24	<i>Cocclus macrocarpus</i>	Vatai Phata
25	<i>Combretur ovalifolium</i>	Madavel
26	<i>Colebrookea oppositifolia</i>	Bhamani
27	<i>Clemalia gouriana</i>	Marvel
28	<i>Clerodendron viscosum</i>	Bhandiara
29	<i>Carvia calosa</i>	Karavi
30	<i>Cedrela odorata</i>	----
31	<i>Derris scandens</i>	Karajvel
32	<i>Dilenia pentagyna</i>	Karmal
33	<i>Ecobolum viride</i>	Ranabol
34	<i>Erythina stricta</i>	Pangara
35	<i>Ficus microcarpa</i>	Nandurk
36	<i>Ficus nervosa</i>	Loth
37	<i>Ficus rumphill</i>	Payar
38	<i>Ficus race mosa</i>	Umber
39	<i>Ficus religiosa</i>	Plmpal
40	<i>Firmiana colorata</i>	Kaushi,kavas
41	<i>Flemingea strobilifera</i>	Kanphurti
42	<i>Flucourtia Montana</i>	Akta Ataki
43	<i>Garcinia spicata</i>	Phansada

44	<i>Glochidion elepticum</i>	Bhoma, Bhomba
45	<i>Gnaphalium lento-album</i>	----
46	<i>Gnidia glauca</i>	Rametha
47	<i>Gnetum ula</i>	Ombar
48	<i>Gymnopteris subcrenata</i>	-----
49	<i>Gymnosporia rothiana</i>	Henkel
50	<i>Haplanthes tentaculatus</i>	-----
51	<i>Hemigyrosa canescens</i>	Karap, Amba karap
52	<i>Heterophragma quadrioculare</i>	Varas
53	<i>Hippocratea grahamilia</i>	Lokhandi, Yesti
54	<i>Horarrhena pubescens</i>	Pandara Kuda
55	<i>Ixora brachiata</i>	-----
56	<i>Jasminum malabaricum</i>	Kusar
57	<i>Knema Attenuata</i>	Raktamara
58	<i>Lagerstroemia mocrocarpa</i>	Nana
59	<i>Lannea coramandelica</i>	Mol.Shemati
60	<i>Leea Indica</i>	Dinda
61	<i>Flucortia Indica</i>	Tambat
62	<i>Garcinia Indica</i>	Kokam
63	<i>Ixora arborea</i>	Raikuda, Lokhandi
64	<i>Litsea stocksii</i>	Pisi
65	<i>Loranthus obtusatus</i>	Bandgul
66	<i>Macaranga peliata</i>	Chandada

67	<i>Mackenziaea intergrifolia</i>	Waiti
68	<i>Maliotus philippensis</i>	Kunda, Shendri
69	<i>Maliotus stenanthus</i>	-----
70	<i>Mammia suriga</i>	Surangi
71	<i>Mappla foetida</i>	Ghanera
72	<i>Memecylon umbeliatum</i>	Anjani
73	<i>Meyna spinosa</i>	Alu, Alvi
74	<i>Mezeneuron cucculatum</i>	Ragi, Gargini
75	<i>Murraya koeniglia</i>	Kadilimb, Kadipatta
76	<i>Neolitsea cassia</i>	Kirkira
77	<i>Pavetta Indica</i>	Papat
78	<i>Piper Hookeri</i>	Ranmiri
79	<i>Pogostemon parviflorus</i>	Pangali
80	<i>Rourea prainlana</i>	Tambada Telya
81	<i>Sageraea laurifolia</i>	Sajeri
82	<i>Sapium insigne</i>	Hura
83	<i>Schlechera oleosa</i>	Koshimb, Kusum
84	<i>Smilax zeylanica</i>	Ghotvel
85	<i>Sterculia guttata</i>	Kukar
86	<i>Strychnos minor</i>	Kajravel, Kanal
87	<i>Syzygium cumini</i>	Jambhul
88	<i>Terminalia belirica</i>	Beheda, Bheta
89	<i>Terminalia chebula</i>	Hirada
90	<i>Terminalia crenulata</i>	Ain

91	<i>Tinospora sinensis</i>	----
92	<i>Tragia involucrata</i>	Khejel, Khajvel
93	<i>Tylophora datzeli</i>	Patal garudi
94	<i>Trema orientalis</i>	Got
95	<i>Ventillgo sp</i>	Kanvel
96	<i>Vitex negunda</i>	Nigadi nirgudi
97	<i>Wrightia tinctoria</i>	Kalaudda
98	<i>Woodfordia fruticosa</i>	Dhayati
99	<i>Xontolis tomentosa</i>	Kate kumbai
100	<i>Ziziphus rugosa</i>	Toran
101	<i>Ziziphus xylopyrus</i>	Ghatbor
102	Lichens, dried mosses, dried ferns	

Table No. 3**List of FAUNA observed at Matheran Platau**

BUTTER FLIES	OTHER INSECTS	BIRDS	MAMMLS
Common crow	Odonata 7sp	Red vented bulbuls	Tree striped palm squirrel
Common morman	Orthoptera 2 sp	Small green barbet	Bonnet macaque
Blue mormon	Dictyoptera 1 sp	Shama	Glant squirrel
Common sailor	Mantodea 1 sp	Hobby	Jerbil
Common leopard	Phasmodea 1 sp	Creasted serpent eagal	Hanuman langur
Zemon pansy	Isopterea 1 sp	Red whiskered bulbul	
Chocolate pency	Hemiptera 4 sp	White spotted fantail flycatcher	
Common evening brown	Diptera 8 sp	Whitye throated ground thrush	
Common grass yellow	Hymenoptera 8 sp	Lora	
Mottled emigrant	Coleoptera 1 sp		
Common emigrant	Trichoptera 1 sp		

Striped tiger	Moths	13 sp		
Plain tiger				
Danakd eggfly				
Dark blue tiger				
Common caster				
Lime butterfly				
Common jezebel				
Red plerrot				
Blue oakleaf				
Dark palm dart				

Chapter 4
Tourism

Chapter – 4

Tourism

Tourism is the main economy of Matheran. The Matheran plateau and region present a vast scope for alternate forms of tourism like historic, architectural and nature based. The SEZ notification stipulated that the State Govt. shall prepare the Tourism Master Plan based on carrying capacity study of the area. The State Govt. has entrusted this work to MMRDA.

As per the information collected from Municipal Council, annual average tourists visited Matheran during last 5 years is 3,40,780. Most of the visitors especially the week enders prefers to stay at hotels. During the hot season most of these hotels are full and there is hardly any vacancy. There are total 66 hotels, Holiday Homes of companies/Bank, 2 Govt. Rest houses, 3 sanatoriums and 30 restaurants.

The main attraction of Matheran is that it offers long and quite walks and the chief aim of all the visitors is the site seeing.

4.1 Points

There are 38 points which command panoramic vies of the surrounding landscape and Geology. Every point has its own specialty. Followings are the description of some important points.

1. Panorama point

Panorama point, the north end of the eastern wing or ridge, takes it's name from it's stretching views to the east and north. It's native name is Gadaci sound or the Fort Head, The point commands one of the widest views on the hill, both of Matheran itself and of the plain and hills to the east, north and west. In the foreground, north- west from the end of point, stretches the great Bawa Malang range. To the left, is a fine view of the wooded ravines and bare cliffs of Hart, Monkey and Porcupine points. There is a fountain constructed by Shri Barmukh of Mumbai.

2. Mount Barry

It was named after Captain Barry. It is one of the highest spots on the hill. It reveals the beautiful view of Sahyadri and perfect view of Neral can be seen.

3. Garbut point :-

Garbut point, the south end of the eastern wing takes its name from the quartz crystals or gars found on the spur that runs east towards Karjat. A little further the point shrinks into a narrow open neck with clusters of bushes and trees. On the west of

Garbut point hill side falls into the Khatyan ravine and again rise in steep slopes and cliffs of Alexander point and little chauk.

4. **Alexander point** :-

Alexander Point, headland standing out from the eastern face of the Main hill between the top of the Khatvan and little Chauk point takes its name from captain Alexander who married a niece of Mr. Malet, the founder of Matheran as a hill station. From here we can obtain a good view of Garbut point, Chauk valley, Karjat. The river Ulhas are also visible.

5. **Little Chauk Point**

Little chauk, located at south-east end of the main hill takes its name from the country town of chauk, Near the point the hill top flattens and the ground is base and covered with black rocks. It commands a wide view of rugged south.

6. **Great chauk**

Great chauk form the southern face of Matheran, takes its name from overlooking the country town of chauk. The point commands a wide view across the plain.

7. **One tree hill**

One tree hill takes its name from a large battered Jambul tree that grows on hill top. From the upper rock are seen, western portion of chauk point and the flat massive rock of Louisa point. Also a fine view of chauk village and Mumbai Pune road centre obtained. From the point a path goes down and it names Shivaji Ladder. Mr. Malet first comes here by this Path.

8. **Louisa Point**

Louisa Point, the southern end of the smaller western wing, takes its name from the wife of Mr. Fawcett, who was Revenue commissioner between 1855 & 1859. Its local name is Taurichi sond or the pillar head from the short isolated buttress like crag at its point.

This is a flat and wide point. The Prabal and Vishalgad are seen to the south-west. To the left is seen beautiful view of the western side. One of the hillocks on this point is called lions head.

9. **Porcupine Point**

Porcupine point, the north end of the western wing, probably takes its name because it was formerly a resort of Porcupines, though according to one's account, its long thick snout and ragged bushes like the quills of the Porcupine, suggested the name. This

spot commands an excellent view of the cathedral hills. It is famous for the beautiful sunset scene.

10. Hart Point

Hart point, at the north end of the central block of the hill, takes its name from Mr. W. Hart of the Bombay Civil service, who was secretary to Govt. in 1858. Its native name is Kaleraika Pada or the black forest plateau. It is located on low level. The tiny train hugging the hill on the curve can be seen. A good view is seen from this point in September and October of the waterfall of the simpsons tank.

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Chapter 5

Demography

Chapter – 5

Demography

5.1 Permanent population

The hill station is less populated and its local population as per census data is as below –

Table No. 4

Year	Population	% growth
1931	2734	--
1941	2775	1.49
1951	2808	1.18
1961	2857	1.74
1971	3397	18.90
1981	3920	15.39
1991	4708	20.10
2001	5139	9.15

This shows that it's permanent population was more or less stagnant up to 1961 giving annual growth rate only between 1.18 to 1.74 percent. However, since 1971 and onward, the growth rate is on the increase which is annually between 9.15 to 20.10%. This is due to the fact that tourist population is being largely attracted since 1971 which has provided some means of livelihood to local & surrounding population.

5.2 Structure of Population

The Population of 5139 souls in the year 2001 census contains 2979 males and 2160 females giving the sex ratio of 1000 females to 1379 male.

Out of total population 3614 persons are literates i.e literacy percentage of town is 70%. Population in the age group of 0-6 is 588 i.e. 11.5% of total population.

5.3 Distribution of Population

The Municipal area of 723.67 Ha. is divided into 17 electoral wards. It is observed that out of permanent population majority of populations is accommodated in ward no. 1,2,8,9 & 12

5.4 Floating Population

The floating population, mainly of tourists and holiday makers is generally increasing every year. This is a nearest hill station from Mumbai and Pune and people from these cities visit Matheran frequently on week-ends in order to get rid of weary city life. For the purpose of working out maximum floating population, necessary statistics regarding annual floating population & the number of passengers coming to Matheran every month during the year 2007-08 was collected from the municipal authority.

Table No. 5

Year	Total floating population	Annual% growth
2000-01	2,35,152	--
2001-02	2,59,400	+ 10.31
2002-03	2,83,386	+ 9.24
2003-04	3,08,000	+ 8.68
2004-05	3,76,000	+ 22.07
2005-06	2,16,900	-- 42.31
2006-07	NA	NA
2007-08	4,42,644	-

Table No. 6

Sr.No,	Duration	Railway Naka		Dasturi Naka	
		Adult	Children	Adult	Children
1	01/04/07 to 15/04/07	3,740	676	13,395	1,647
2	16/04/07 to 23/06/07	22,549	2,287	95,200	18,650
3	24/06/07 to 30/06/07	0	0	3,150	170
4	01/07/07 to 31/07/07	0	0	21,150	1,066
5	01/08/07 to 31/08/07	0	0	20,800	1,534
6	01/09/07 to 30/09/07	0	0	14,100	1,832
7	01/10/07 to 30/10/07	1,684	128	14,900	1,530
8	01/11/07 to 30/11/07	7,305	2,121	37,200	8,488
9	01/12/07 to 31/12/07	7,789	2,304	42,700	7,299
10	01/01/08 to 31/01/08	6,462	1,359	28,470	4,308
11	01/02/08 to 29/02/08	5,144	827	15,130	1,600
12	01/03/08 to 18/03/08	3,788	392	9,050	760
	Total	58,461	10,094	3,15,245	48,844

5.5 Occupation Structure

The occupational structure of population in 2001 is such that workers engaged in tertiary sector are more to the tune of 97% out of the total workers which are 44.3 % of the population. The workers engaged in primary sector are negligible as agriculture activities are totally absent. These workers are mainly engaged in live stock and forestry. Workers in secondary sector are mainly engaged in construction and industry but they are only 2.72% of the total workers. The workers from tertiary sector are mainly engaged in trade and commerce, transport & communication & other service. Industrial activity is absent in this hill station, except making of hand made presentation articles. The workers recorded as engaged in industry work in industries located outside.

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Chapter 6
Land Use

Chapter – 6

Land Use

6.1 Existing Land Use

The existing pattern of land use is the result of past growth and the present activities of the town. The survey of the existing land use helps one to know how much land is put to various uses and what are the factors in fixing the extent of land use for a particular activity and how much more is needed for providing for future growth. Such survey of all the area within municipal limit was carried out with a view to ascertain the present use of the land and to prepare an existing land use map as required under section 25 of Maharashtra Regional and Town Planning Act, 1966.

The total area within Matheran Hill Station Municipal limit is 723.67 Ha.. In past some plots were carved out to used for public purposes and remaining were allotted on lease to the public. As per the information received from superintendent, Matheran and Municipal Council, lands details are as below-

Table No. 7

Details	Matheran Plots		Bazar Plots		Total Plots	
	NO.	Area in Ha.	No.	Area in Ha.	Total	Area in Ha.
1. Total Plots	254	243.50	256	10.84	510	254.34
2. Govt. Plots	23	12.546	31	1.04	54	13.588
3. Tranferred to M.C.	19	17.044	39	3.32	58	20.324
3. Plots allotted to public charitable trust.	9	6.39	5	1.08	14	7.47
4. Plots under lease	203	207.56	181	5.40	384	212.96

Table No. 8**Existing land use Analysis**

Sr. No.	Existing Use	Area in Ha.	% to development area	% to total area
1.	Residential	128.65	56.01	17.77
2.	Commercial	46.61	20.30	6.44
3.	Industrial	--	--	--
4.	Public-Semipublic	17.24	7.50	2.38
5.	Public Utilities	0.33	0.15	0.05
6.	Recreational (Gardens & Playground)	18.30	7.97	2.53
7.	Transport & Communication	14.57	6.35	2.01
8.	Cremation/Burial ground.	3.97	1.72	0.55
	Total development area	229.67	100%	31.73%
9.	Forest	419.15	84.84	57.92
10.	Open areas	68.72	13.91	9.50
11.	Water bodies	6.13	1.25	0.85
	Total undeveloped area	494.00	100%	68.27%
	Total	723.67	--	100%

It is seen that 68.27% of area is undeveloped and is covered by Forest land, vacant land and water bodies. About 17.77% is under residential 6.44% under commercial & 2.01% under roads. 2.38% area is used for public uses viz school, hospitals other public buildings and 2.53% is used for Garden, Play Ground and Park. The industrial activities are nil.

6.2 **Distribution of Land Uses**

The existing developed area works out to 31.73%. The study of existing land use analysis has revealed following important information.

1. **Residential Area**

Generally leased plots used for residential bungalow/Holiday Homes are included in residential area. Also residential areas called Indira Nagar situated as Municipal Plot

No. 159 and small residential houses built on unleased area behind Railway Station are also included in this area.

The population of 5139 souls (as per 2001 Census) is accommodated in total residential area of 128.65 Ha. giving a net density of population of 40 soul/Ha.

2. Commercial

Shops, commercial establishment hotels, lodging, boardings and all such users which are mostly found to occupy the frontage of busy streets as well as some Matheran/Bazar plots situated in the interior are included in above category. It is seen that 46.61 Ha. area is occupied by the commercial use i.e. about 6.44% of total area of town. Most of hotels, lodging, and sanatorium are scattered over the Matheran plots in the middle part of Matheran plateau and on small portion on Bazar Roads. Shops and other commercial units are located only in Bazar area which is major commercial spine near the railway station.

3. Land under Public Use

The area occupied by Educational/Medical institutes, Govt./Municipal offices, Religious buildings, Public Recreational/Cultural centers are included in this user. The total area covered under public use is 17.24 Ha. i.e. 2.38% of total area.

4. Recreational Area (Garden & Play Ground)

This cover the area under play ground, garden and organised open spaces in the Municipal Council. The Municipal Council had developed 3 Gardens namely Pay Master Garden, Shivaji Maharaj Udhyan and Navroji Lord Udyan and 1 play ground on plot No.211. There is large open plot known as " Olympic Race Course" admeasuring 4.19 Ha. situated in the southern part of Matheran. Total area covered under such use is 18.30 Ha i.e. 2.53% of total area.

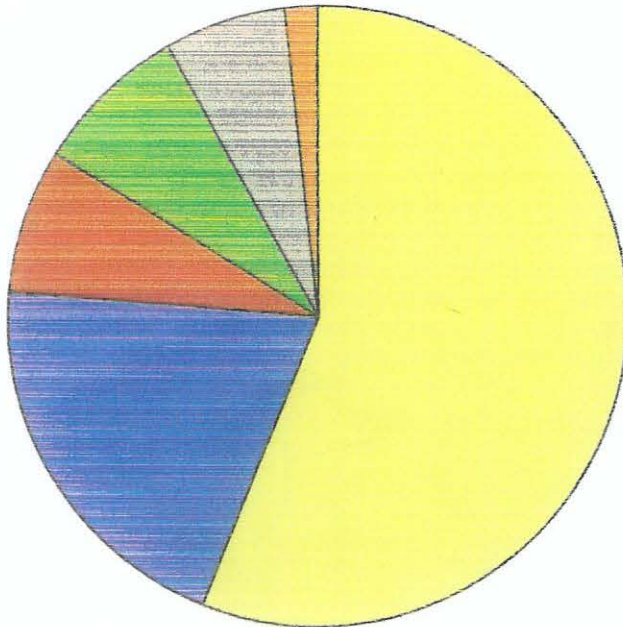
5. Other Uses

The land under burial/Cremation ground admeasures about 3.97 Ha. i.e. about 0.55% of total area. Matheran Railway Station and internal roads of Matheran such as Mahatma Gandhi Road, Kasturba road, Elphistone Road, Charlotte road and other road/paths leading to points have occupied area of about 14.57 Ha. i.e. 2.01% of total area.

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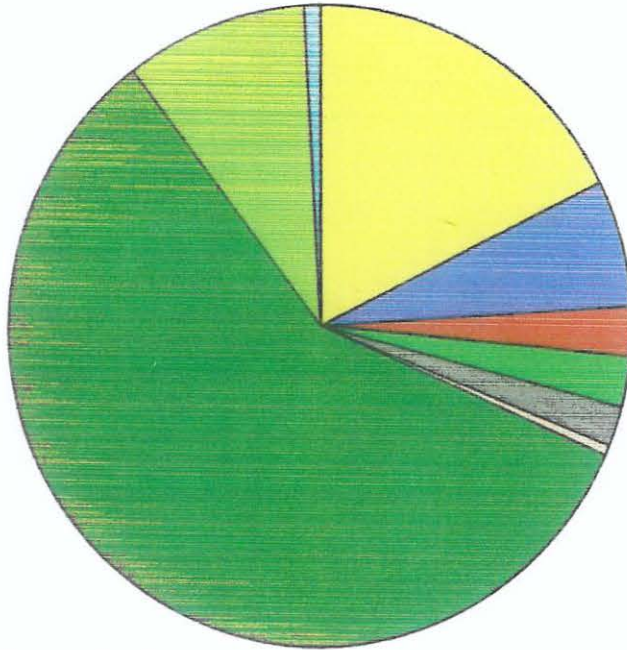
EXISTING LAND USE PIE DIAGRAM

(FOR DEVELOPED AREA)



- Residential 56.01%
- Commrcial 20.3%
- Public semi public 7.5%
- Public utility 0.15%
- Garden Play Ground 7.97%
- Transport & communication 6.35%
- Cremation /Burial Ground 1.72%

EXISTING LAND USE PIE DIAGRAM (FOR TOTAL AREA)



Residential 17.77%

Commercial 6.44%

Public semi public 2.38%

Public utility 0.05%

Garden Play Ground 2.53%

Transport & communication 2.01%

Cremation /Burial Ground 0.55%

Forest 57.92%

Open Areas 9.50%

Water Bodies 0.85%

Chapter 7
Social
Infrastructure

Chapter – 7

Social Infrastructure

7.1 Education

The educational facilities up to secondary levels are only available in Matheran. There is no college facility.

There is one Municipal Council Primary School situated in main Bazar area opposite to Railway Station. Also there are two private schools namely Saraswati Vidya Mandir and St.Zavier School situated in southern area of town and imparting education from 1st to 10th std.

Table No. 9

School	Area of plot in sq.mt.	Std.	No. of rooms/Class	No. of students
1. Mun.council Primary school	3718.40	1 to VII	14	287
2. Saraswati Vidya Mandir	14,891.10	1 to X	12	294
3. St.Zavier English School	24,989.40	1 to X	11	99
Total	43,598.9		37	680

7.2 Health

There is one Municipal Hospital know as “ B.J. Medical Hospital” managed by Municipal Council, where there is provision of 12 beds. The hospitals provides for the facility of Maternity word, minor operation and basic health treatment.

There are two private dispensaries in the main Bazar area in rented premises. Also there is one veterinary dispensary of Zilla Parishad.

Table No. 10

Health Centre	Area of plot sq.mt.	No. of beds	Medical Facilities
1. Municipal Council's Byramjee Hospital	7336.20	12	Minor operation maternity home, Basic health service
2. Zilla Parishad Veterinary Clinic	2478.80	-	Medical Facilities for Animals.
3. Dr.Bhosale Clinic	100sq.ft.	-	General practice
4. Dr.Varman's Clinic	200sq.ft.	-	----"-----

7.3 Recreation Facilities

A) Gardens & Play Ground –

There are 4 existing garden namely Paymaster Garden, Shivaji Maharaj Udhyan, Navroji Lord Udyan and Forest Garden. Shivaji Maharaj Udyan & Navroji Lord Udyan are located in the same plot adjacent to each other. The pay Master Garden which admeasures 1.48 ha is situated opposite to Rugby hotel and it has the provision of Band stand. The Forest park admeasures 0.78 ha and is maintained by Forest Dept.

Olympia Race course admeasure 4.18 ha, is situated at southern portion of hill station. It provides facilities for horse race, cricket matches, and schools sports programs. Municipal Council had developed stand for spectators. There is a small play ground namely Pande play ground situated as Mahatma Gandhi Road

B) Other Facilities

Matheran town does not have any Cinema or drama theatre. There is an old public library i.e. Kavasandes Moolji Library run be Municipal Council.

Table No 9

Recreational Facilities	Plot No	Area In Sq.mt	Facilities
A)Garden /Play Ground			
i) Pay Master Garden	MP 223	14,894.80	Band Stand & Garden
ii) Chatrapati Shivaji Maharaj Udyan	BP 224	3380.50	Garden
iii) Nauroji Lord Udyan			Garden
iv) Pande Play Ground	MP 221	1517.60	Playing toys like swings, see-saw
v) Forest Garden	MP 245	7891.4	
vi) Olympia Race Course	MP 233	41986.20	Stand for Spectators
Total		69,670.05	

B) other			
i) Karsandas Library	MP178	2634.10	Library

7.4 Commercial Facilities

Being a hill station, major economic activities is to run hotel, lodgings and eating hubs. There are 66 hotels and 30 restaurants. Also there are total 30 Lodges.

The shops for tourists generally provide chikki, foot wares and honey. They also sale homemade presentation articles. The shops of video games are also became popular. Kapadia Market is only Municipal Market situated at the centre of Bazaar on M.G.Road in this market there are 16 shops for vegetable Market and 20 gales for Mutton Market. The shop line is also developed along the road. Total No of Shops are 240.

Horse keepers and hand driven cart keepers are engaged in providing transportation facilities of goods required in commercial activities of hill station.

Chapter 8

Transport & Communication

Chapter 8

Transport & Communication

Presently there are two primary modes of transport to Matheran, by Road up to Dasturi Naka and by train up to Bazaar area. No vehicles entry is permitted on the plateau. The only mode of transport are horses, ponies and hand rickshaws for tourists and goods carts and ponies for goods.

a) Mini Train Service

The Neral Matheran Mini train was made operational in 1907 and is still one of the engineering marvels in today's time. It is a narrow gauge, single track train service, which takes tourists & goods from Neral station up to Bazar area. This train makes three trips to and fro in a single day. The journey, though very appealing, takes about 2 hours. The rail service is shut for 4 months during monsoon period.

b) Road & car Parking

There is regular taxi service which takes tourists from Neral up to Dasturi Naka, recently mini bus is also started. From Dasturi Naka, tourists reach their destination, either walking or on horse or by hand rickshaws.

Pay & Park facility for private vehicles is available at Dasturi Naka on the plateau and near Neral Station also. There is no organized parking space near Dasturi naka. The vehicles are parked along the road leadings to Panorama point and Simpson tank. The area around Dasturi Naka is used for loading and unloading of goods. These goods are then transported to their destination by freight horses or by goods carts.

Mahatma Gandhi road is the main road of the town having all the commercial activities concentrated on its frontage. The width of road is about 4.5 to 9 Mt. Important Public Buildings like railway station, Kapadia Market, post office, Municipal office, Superintendent's office are situated on this road. Recently the Municipal council has developed some part of this road with pavers block on both side and central muddy belt for movement of horses.

There are many other sub-ordinate roads like Kasturba Road, Pande Road, Charlotte road, Madhavji road, Panorama road which serve to Resi./commercial development and to the points All the roads are muddy with laetrile storm water drainage at certain parts and having the width between 3 to 9 mt.

Chapter 9

Infrastructure

Chapter 9

Infrastructure

9.1 Water Supply ---

Town has filtered water supply. The original water supply scheme was drawn from Charlotte Lake. The lake has storage capacity of 127.2 million liters and can be augmented up to 148.5 million liters. The Charlotte scheme was commenced in the year 1930 for the capacity of 0.80 million liters. The additional water supply scheme was commenced in 1987 from Ulhas River. Its capacity is 0.60 million liters. Water from both these sources is treated in the filtration plant, built by British in 1926, near Rugby hotel. The filtration plant has the capacity of 1.37 million liters/day and has three reservoirs of total capacity of 16 lakh liters. After purification, the water is distributed all over the plateau at the rate of 100 liters/head/day.

There are total 1003 pipe connections, out of which 672 are residential, 40 for Municipal council, 334 for institutions and 257 for commercial

Under the programme of 'Sujal Nirmal Abhiyan', Maharashtra Jeevan Pradhikaran has proposed new water supply scheme of the total cost of Rs.29.26 Crore. The scheme is designed for the estimated population for the year 2040 of the total capacity of 3.1 million liters. The scheme included replacement of uplift pipes, old pumps and expansion of filtration Plot. Thus the total capacity of the scheme will be 4.5 million liters, which will be sufficient for the estimated population of 2031.

9.2 Drainage & Sewerage ----

There is no underground drainage system in the town. Bungalows and hotels have their individual septic tanks. Very few hotels have their sewage treatment plants. The densely populated local settlement near the Bazaar area has no proper facilities for sewage treatment and disposal. Recently, Municipal council had done the contour survey for underground drainage system.

There are 32 public toilets provided by Municipal council. The road side gutters constructed by the council carry sullage and storm water.

9.3 Solid waste Management

Municipal council has taken measures for collecting solid waste, like segregating of wet and dry garbage etc. Solid waste from the plateau is collected, segregated and disposed off at the old Gymkhana plot. Organic waste material is processed near council office and Bio-gas is produced. This in turn supplied to various hotels.

9.4 Cremation & Burial Ground

There are total 5 plots of crematorium for various communities in the southern area of plateau. Their total area is 0.52 Ha. Parsi tower of silence is situated at little chowk point and admeasures about 0.40 Ha.

There are Bohra burial ground and Sunni Mommhedian burial ground adjoining to each other in bazar area and Sojay Burial ground in southern area of the town. The Christian burial ground is situated near st. Paul church admeasure about 0.19 ha. The existing provision is sufficient to meet the requirements of various communities.

Chapter 10

Planning Proposals

Chapter 10

Planning Proposals

10.1 Demographic Projection

Population of planning area is always considered as base for distribution of social and physical infrastructural facilities. Followings table indicates the decadal growth of population from 1931

Table No.12

Sr No	Year	Population	% Variation	Increase per decade	Incremental increase per decade
1	1931	2734	-	-	-
2	1941	2775	1.49	41	-
3	1951	2808	1.18	33	-8
4	1961	2857	1.74	49	+16
5	1971	3397	18.90	540	+491
6	1981	3920	15.39	523	-17
7	1991	4708	20.10	788	+265
8	2001	5139	9.15	431	-357
	Average	3542		343	+390

Accordingly, projected population by various methods are worked out as below ---

Table No.13

Sr No	Method	P 2021	P 2031
1	Arithmetical increase	5825	6168
2	Incremental Increase	6995	7728
3	Geometrical increase	7000	7625
4	Percent Variation	6136	6731
5	Public Health	6125	6685
6	Graphical	6100	6600
	Average	6363	6922

As per the information received from Matheran Mun. Council, monthly floating population observed during the year 2007-08 is as follows;

Table No.14

Month	Total floating population	Maximum floating population in a day
March 2007	-	-
April 2007	-	-
May 2007	-	-
June 2007	-	950
July 2007	22,216	2,582
August 2007	22,234	2,290
September 2007	15,932	1,350
October 2007	18,242	1,734
November 2007	54,072	4,326
December 2007	60,092	4,571
January 2007	39,588	6,356
February 2007	20,401	1,982
March 2007	33,990	1,652
Total	4,42,644	

Accordingly maximum floating population in a day during the year 2007-08 was considered as 5000. By considering the tourism importance, nearness to major cities and expected development in near future, 25% growth per annum is expected and accordingly floating population in 2021 is expected to be about 6500 and 8500 in 2031.

Accordingly total population of 13,000 is estimated in the year 2021 for providing social amenities and 15,800 is estimated in the year 2031 for the purpose of zoning.

10.2 Proposed Land use -----

For the purpose of framing proposals for the purpose of zoning, the entire municipal area has been considered as one unit.

As mentioned before, in past 254 Matheran plots and 256 Bazar plots admeasuring about 254.34 hectares were allotted/leased for development and remaining area is almost the forest land. Therefore development has to be restrained in these plots only. In the Existing land Use plan, hotel/lodging user is included in commercial use and accordingly area under residential use is 128.65 Ha and area under commercial use is 46.61 Ha. However hotel/lodging is of residential type of development and also this use is permissible in residential zone and therefore in Proposed Land Use plan, existing plots under hotel/lodge are included in residential zone.

Thus total municipal area of 723.67 hectares is now divided in following broad zones:-

A)-Residential zone-

The existing population of 5139 souls occupies nearly 128.65 hectares of residential area, giving the gross density of about 40 persons per hectare. Total existing area under hotels, lodges, and sanatoriums is about 40 Ha. As reported by the council, total no of hotels in the town is 66 and 30 lodges. By considering average 10 rooms per hotel/lodge, total no of available suits/rooms are about 1000. This will accommodate about 5000 tourists. Also as per sanctioned Development Control Regulations, FSI of 0.1 is permissible for residential/hotel use on Matheran plots and 1.33 FSI on Bazar plots.

Therefore all the Matheran plots and Bazar plots under residential and hotel/lodge user, except some area required for public-semipublic use, is proposed for residential use and its total area is 192.72 ha i.e 26.63 % of total land.

It is observed that some structures under residential use are existing outside Matheran/ Bazar plots in the market area. However their status of land ownership cannot be ascertained due to non-receipt of documents about exact area of forest land in Matheran town. Therefore such residential structures, as existing on site are shown under residential use in development plan. However, they are not entitled for regularization unless otherwise permitted by concerned departments/forest department.

B)- Commercial Zone

Existing commercial development along Mahatma Gandhi Road, Kotwal Road is proposed for commercial zone up to Matheran/Bazar plots.

10.3 Social Facilities

10.3.1 Education Facilities

a) Primary School –

There are already 3 no of primary schools. According to the planning norms, 15% of the population is considered as primary school going population Each Primary School will have minimum 4000 sq.mt. land (inclusive of play ground) with student strength of 400-500. Accordingly for 1950 (0.15x13, 000) children, about 4 schools of total 1.6 ha area will be required.

The existing area under educational user is about 4.3 Ha. Therefore no additional site for primary school is proposed.

b) Secondary school –

Accordingly to the planning norms, secondary school going population is 7.5% of total Population. One Secondary school for 750 to 1000 students with an area of 1.2 Ha to 1.5 Ha (inclusive of play ground) is required to be provided. Accordingly for 13,000 population, secondary school going population will be 975 and 1 Secondary school is required. There are already secondary schools in the town.

However, 1 site is proposed for Ashramshala for tribals

c) College ---

The area being proximity to Neral Mamdapur Township area and Karjat Municipal Council, no sites for college is proposed.

10.3.2 Health Users

a) Dispensaries --

At present there are two existing private dispensaries. Also as per the Development Control Regulations, additional dispensaries may be developed in commercial areas. Therefore no separate provision is made for such reservation.

b) Health Centre –

As per planning norms, one site of 0.25 ha for every 25,000 persons is required to be provided. Presently there is an existing Municipal council hospital of area admeasuring 0.73 ha. However one site for Meditation centre is proposed.

There is one existing veterinary dispensary on the land admeasuring 0.24 Ha. By considering no of horses/ponies in the town various sites for stable and one site for horse care center is proposed.

10.3.3 Commercial Facilities -----

As per planning norms, vegetable market of 0.2 ha for every 10,000 population is required to be proposed. At present some part of Kapadia Market is used for veg Market and Mutton Market is separately developed behind it. Also commercial development is permissible on Matheran plots and commercial user is proposed along Mahatma Gandhi Road and Kotwal road and therefore no new site is proposed.

10.3.4 Library

As per planning standard norms, a site of library at the rate of 0.50 ha. per 10,000 population is required to be provided. The town has old library situated on plot admeasuring 0.2634 ha and therefore no new site is proposed.

10.3.5. Cultural Centre

There is no existing facility of cultural activity, theatre in the town and therefore one site of Cultural Centre is proposed in the Development plan. also two sites of civic center are proposed in plan

10.3.6 Recreational Facilities (Garden & playground)

As per the planning standard, the land required for play ground and garden is at the rate of 0.4 Ha and 0.2 Ha respectively. Accordingly 5.2Ha is required for play ground and 2.6 Ha is required for garden facility. The existing provisions of play ground/stadium are 4.35 Ha and of garden/park is 2.6 Ha. The existing schools have independent play ground. In addition, two sites of play ground are proposed in plan.

Museum and nature park is proposed on 9.03 Ha land and a garden is proposed near Pisarnath Mandir.

10.3.7 Site for Municipal Purpose

one site is proposed for Municipal Purpose on 0.18 Ha land.

10.3.8 Housing for D.P.affected persons

For the resettlement of persons affected by D.P. proposals, a separate sites of Housing for D.P.affected persons is proposed in plan..

10.3.9 Solid Waste management

One site admeasuring 1.40 Ha is proposed for Solid Waste Management in the town. This site is isolated from residential development. Also a site for sewage treatment plant is proposed.

10.4 Public utilities

10.4.1 Water Supply Scheme

Under the programme of 'Sujal Nirmal Abhiyan', Maharashtra Jeeven Pradhikaran has proposed new water supply scheme of the total cost of Rs.29.26 Crore. The scheme is designed for the estimated population for the year 2040 of the total capacity of 3.1 million liters. The scheme included replacement of uplift pipes, old pumps and expansion of filtration Plot. Thus the total capacity of the scheme will be 4.5 million liters, which well be sufficient for the estimated population of 2031.

10.5 Transport & Communication

No vehicles are allowed in the town except ambulance. There is one major arterial road namely Mahatma Gandhi Road running from Dasturi naka up to southern area of the town. Also there is parallel road to MG road in Bazar area namely Kasturba road. Therefore widening of total 9.0 mt.is proposed for Mahatma Gandhi road and widening of total 6.0 mt. is proposed for Kasturba road.

At Dasturi naka, for parking of cars/taxies, buses and for loading/unloading of goods, one site is proposed for " Bus stand,logistic hub and parking ' on land admeasuring 2.92 Ha.

The ambitious project of Ropeway is proposed from Bazar area to Garbut Point and further downhill at Bhivpuri.The length of ropeway in the valley between Bazar to Garbut point is about 1.4 k.m. Therefore Ropeway station is proposed in the Lord Udyan on the valley side.

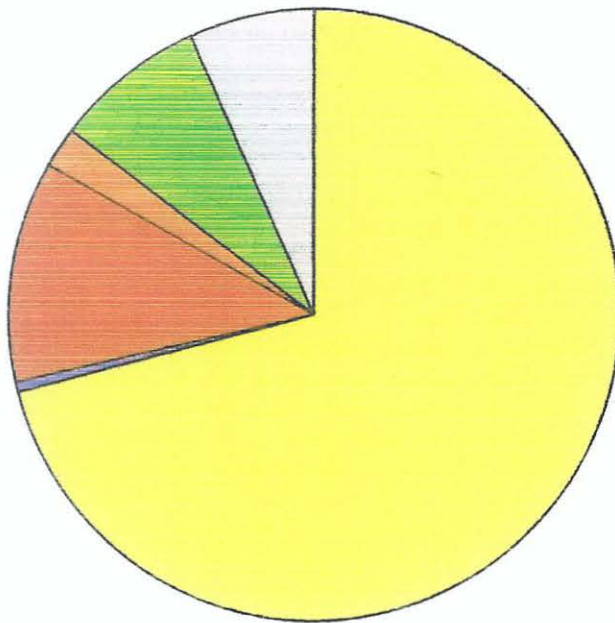
Table No.15

Proposed land use Analysis

Sr. No.	Proposed Use	Area in Ha.	% to developed area	% to total area
1.	Residential	192.72	70.87	26.63
2	Commercial	1.20	0.44	0.17
3	Industrial	--	--	--
4.	Public-Semipublic	32.02	11.78	4.42
5.	Public Utilities (including cremation/ burial grounds)	5.79	2.13	0.80
6.	Recreational (Garden, Park, Play Grounds etc.)	21.72	7.99	3.00
7.	Transport & Communication	18.47	6.79	2.55
	Total developed area	271.92	100%	37.57%
8.	Forest	434.57	96.19	60.05
9.	Water bodies	6.13	1.36	0.85
11.	No Development Zone	11.05	2.45	1.53
	Total undeveloped area	451.75	100%	62.43%
	Total	723.67	--	100%

PROPOSED LAND USE PIE DIAGRAM

(FOR DEVELOPED AREA)



■ Residential 70.87%

■ commercial 0.44%

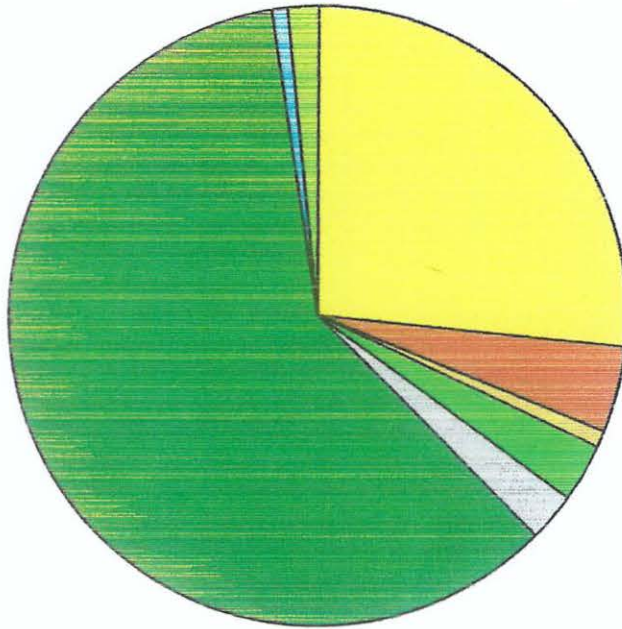
■ Public semi public
11.78%

■ Public utility 2.13%

■ Garden Play Ground
7.99%

■ Transport &
communication
6.79%

PROPOSED LAND USE PIE DIAGRAM (FOR TOTAL AREA)



- Residential 26.63%
- commrcial 0.17%
- Public semi public 4.42%
- Public utility 0.80%
- Garden Play Ground 3.00%
- Transport & communication 2.55%
- Forest 60.05%
- Water Bodies .0.85%
- No Development Zone 1.53%

Chapter 11

Implementation

CHAPTER-11

Implementation

11.1 General

Under the provisions of the Maharashtra Regional and Town Planning Act 1966, it is obligatory to the Planning Authority to acquire the land reserved, allotted or designated for any public purposes specified in the plan by an Agreement or by way of acquisition within a period of ten years from the date of which the final Development Plan comes into force.

To ease financial restraints for acquisition and development of public sites, Govt. in past had introduced the concept of "Accommodation of Reservation" This concept is proposed in draft Development control Regulation of the said Revised Development Plan.

Under the provisions of Accommodation of Reservation, the owner of land under certain reservations are permitted to develop the reservation land with the condition of handing over certain percentage of reservation area to the council free of cost. Under this regulation, the council will get the area under reservation/built-up space free of cost.

It is assumed that about 50% of total reservation will be available/developed under above regulation and Municipal council has to bear the development cost for remaining reservations.

11.2 Development

The development plan proposals were framed on leased matheran plots /Bazar plots. These plots are leased by govt. for residential /commercial user for different lease periods. The leaseholder either can develop the reservation or municipal council can develop the reservation after getting transferred the holding of leased govt. land. According to govt. revenue and forest deptt. resolution dated 29.6.1977 and 27.8.1980 ,all govt. lands earmarked in D.P for playground, schools & public convenience should be given revenue free to municipal council in accordance with rules 5 & 6 of land revenue rules. For other purposes, the market price prevalent on date of publication of draft D.P. will be charged.

The municipal council is supposed to apply for transfer of govt land to revenue deptt. for the same.

11.3 Phase Programming

The programme of acquisition/Possession and development of sites have been worked out as follows

Table No.16

Sr.No	Years of Implementation	Possession		Development	
		Site No	Designation	Site No.	Designation
1	1 st year	1	Bus stand, logistic hub & parking	43	Shopping centre
		2	Museum & nature park	30	Garden/rop e way station
		11	Extn. to water filtration plant	24	Solid waste management
		15	Housing for D.P affected persons	31	Municipal market
2	2 nd year	34	Municipal clinic	27	Sewage treatment plant
		10	Horse stable	11	Extn. to water filtration plant
		3	Horse stable	2	Museum & nature park
		4	Horse stable		

3	3 rd year	6	Cultural center	32	Mutton market
		9	Ashramshala for tribals	6	Cultural center
		14	Civic centre	33	Slaughter house
		16	Library	3	Horse stable
				34	Municipal clinic
				35	Horse stable
4	4 th year	17	Civic centre	4	Horse stable
		18	Play ground	10	Horse stable
		19	Garden	15	Housing for D.P affected persons
		23	Tourist garden	11	Extn. to water filtration plant
		20		1	Bus stand, logistichub & parking
5	5 th year	21	Guest house	8	Pay master park
		22	Play ground	9	Ashramshal a for tribals

		28	Primary school	14	Civic centre
		29	Information /recreation center	16	Library
				17	Civic centre
6	6 th year	39	Community center	18	Play ground
		40	Nursery /K.G.	19	Garden
		41	Govt godown	26	Horse care centre
				25	Stadium & race course
7	7 th year			23	Tourist garden
				20	Meditation center
				21	Guest house
				22	Play ground
8	8 th year			28	Primary school
				29	Information /recreation center
				37	Horse stable

9	9 th year			39	Community centre
				40	Nursery /K.G.
				41	Govt godown
10	10 th year			42	Community centre /hutatma smarak
				44	Tourist information centre

However, considering the necessity and importance of reservation, the above phase program may be revised/alterd by chief officer, Municipal Council Matheran in consultation with Deputy Director of Town Planning, Kokan Division, Navi Mumbai

Chapter 12

Legal Formalities

CHAPTER-12

Legal formalities

12.1 General

The Matheran Municipal Council had prepared the revised Development Plan of the town which was sanctioned by the State Government vide Urban Development Public Health and Housing Departments Notification No.TPS/1484/2662/ CR-367/86/UD-1,Dt.16th January 1987. This development plan is in force with effect from 1st march 1987 and will remain in force till the date of enforcement of the revised development plan. The section 38 of the Maharashtra Regional and Town Planning Act,1966 provides for revision of every sanctioned development plan at least once in twenty years period and Matheran Municipal Council has taken decision to revise the sanctioned development plan as well as to prepare development plan for the area which is within municipal limits of sanctioned D.P.in light of the present planning standards and new trends of developments considering new techniques of implementing the plan proposals. The legal formalities followed by the Municipal Council under the Maharashtra Regional and Town Planning Act 1966, are given below :-

A) section—23

Declaration of intention

1. The intention to prepare a revised development plan, under section 23 & 38 of M.R.& T.P.act 1966 was made by the Municipal council by passing the General Body Resolution No.486 Dt.2.03.2005
2. The notice inviting objections and suggestions from the public under section 23(1) in English as well as in Marathi was published in Maharashtra Government Gazette, Kokan Division, dt.30th June 2005

B) section—24

Appointment of Town planning officer

Matheran Municipal Council had passed resolution for appointing the Astdirector of Town planning Alibag as Town Planning Officer to carry out the survey and to prepare an existing land use map and to prepare the draft revised development plan of Matheran for submitting to the Municipal Council as provided under section 24 of the Act.

The Dy.Director of Town Planning, Kokan Division, Navi Mumbai has approved this Municipal proposals vide order No.DP Matheran (R)/DDKDN/588 Dt.20.4.2005.for appointment of the "Asistant Director of Town Planning Alibag"as a Town Planning Officer."

(C) section—25**Existing land—use map**

The Town Planning Officer had carried out various surveys of the town, collecting requisite information and prepared the existing land-use map as required under section 25 of the Act and handed over to the Municipal Council on 8.8.2006. The required extension of time limit for preparation of existing land use map was sanctioned by Director, Town planning, Maharashtra state vide order dt.23.11.2007

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Chapter 13

Development Control

CHAPTER-13
Development control

13.1 Development Control Regulations

Separate set of Development Control Regulations for Matheran town is prepared.

13.2 Conclusion :-

The revised Development plan is not the end but the right beginning. This plan would provide the guidelines both for the public and for the Municipal council and other authorities responsible in town development for programming their future action which is expect to lead the evaluation of a healthy and beautiful place to live in and to work on.



Town Planning Officer,
For Development Plan, Matheran
&
Assistant Director of Town Planning
Raigad-Alibag



President,
Matheran Municipal Council
Matheran



Table No.17

Statement Showing List of Reservations in Matheran D.P.(Second Revision)

S No.	Site No.	Purpose	Plot Details		Area (Sq.Mtr.)	Owner	Implementing Authority
			Plot No.	CTS No			
1	2	3	4	5	6	7	8
1	1	Bus stand, Logistic Hub and Parking	MP .93 Forest land	3 --	29278.70	Ratanbai Wadia / Forest	M.C./ Forest
2	2	Museum & Nature park	MP 41 (Part)	20(P)	90328.0	Rustam K.Adenwala etc 5	M.C.
3	3	Horse Stable	MP 206	185 (p)	1264.70	Govt	M.C.
4	4	Horse Stable	MP 187	38	1264.70	Govt	M.C.
5	5	Horse Stable	MP 189	34	1264.70	Govt	M.C.
6	6	Cultural Centre	MP 262	505	4451.50	Govt	M.C.
7	7	Municipal purpose	MP 200	74	1840.00	MD of Sarvoday Hospital Ghatkopar	M.C.
8	8	Paymaster Park	MP 223	67	14894.80	Mpl. Council	M.C.
9	9	Ashremshala for Tribals	MP 66A	86	5776.80	Sharda Pandit	M.C.

10	10	Horse stable	MP 197	90	1264.60	Govt	M.C.
11	11	Extn. to water filtration Plant	MP 20 (Part)	106 (P)	1920.00	Cent Paul church	M.C.
12	12	Govt. Offices	MP 20 (P) MP 19 (P)	106 (P) 125 (P)	9046.0 -	Central Paul Church Govt (B & C)	M.C.
13	13	Telephone exchange	MP 20 (p) MP 234 (p)	106 (p) 107 (p)	1600.00	Cent Paul church, President Municipal council Matheran	BSNL
14	14	Civic centre	BP 231 BP 232	172 173	1478.20	Secretary, Hindustan Vyayam mandir M.C.	M.C./ owner
15	15	Housing for DP affected persons	MP 10 (p)	135	13940.00	Harmitage Bunglow	M.C.
16	16	Library	MP 178	119	2634.10	Bipin Mortajia	M.C./ owner
17	17	Civic Centre	MP 283 A	262	5130	Govt	M.C.
18	18	Play Ground	MP 283 B MP 98A(part)	263 264	5047.20	Govt R.N.Mehra-2	M.C./ owner
19	19	Garden	MP 82 (p)	192 (p)	7133.00	Fatima Pirbhai & 5	MC/ Owner
20	20	Meditation Centre	MP 80 B	233	6828.70	Evaleen K.Desoja	M.C.

21	21	Guest House	MP 273	202	13801.10	Govt	M.C.
22	22	Play Ground	MP 90 A	507	8093.70	Parvatibai Minchandani	M.C.
23	23	Tourist Garden	MP 76	205	6153.90	Govt	M.C.
24	24	Solid waste Management	MP 102	213	14062.80	Govt	M.C.
25	25	Stadium & Race Course	MP 233	220	41986.20	MC	M.C.
26	26	Horse care centre	MP 226	242	303.50	MC	M.C.
27	27	Sewage treatment plant	MP 241	271	885.30	MC	M.C.
28	28	Primary school	BP 171	174	3718.30	Chairman, School board, Colaba	M.C./ owner
29	29	Information / Recreation centre	BP 6	284	910.50	A.R.Valimhamad	M.C./ owner
30	30	Garden/ Rope Way Station	BP 224	285	3380.50	MC	M.C.
31	31	Municipal Market	BP 169	288	5120.80	MC	M.C.
32	32	Mutton Market	BP 170	287	374.60	MC	M.C.
33	33	Slaughter House	BP 225	387	71.60	MC	M.C.
34	34	Municipal clinic	BP 76	368	163.90	Govt	M.C.

35	35	Horse Stable	BP 159 BP 160	395 394	1595.30	MC	M.C.
36	36	Burial Ground Sunni Mommedan	BP 157	430	2124.60	Burial Ground Sunni Mommedan	M.C.
37	37	Horse Stable	BP 158	404	4046.90	MC	
38	38	Bohra burial ground	BP 156	429	1745.0	Bohra burial ground	M.C.
39	39	Community centre	BP 109 BP 110 BP 111	416 415 414	265.10	Govt.	M.C.
40	40	Nursary/K.G	BP 141 BP 142	476 477	140.40	Govt	M.C.
41	41	Govt Godown	BP 218 (P)	57 (P)	4563.8	Anjuman Islam Bombay	M.C./owner
42	42	Community centre /Hutattma Smark	BP 164	62	1766.70	MC	M.C.
43	43	Shoping Centre	BP 165	115	234.10	MC	M.C.
44	44	Tourist Information Centre	BP 178 A	154	67.70	MC	M.C.

Table No.18

Statement showing deviation from sanctioned development plan of Matheran

S.No	Site No.	Proposal of sanctioned Development plan	Deviation from sanctioned plan		Remarks
			Site No.	Purpose	
1	2	3	4	5	6
1	1	Garden	----	---	Forest land
2	2	Additional Holiday Home	----	---	Forest Area
3	3	Holiday home	----	----	Forest Area
4	4	Parking	----	----	Forest Area
5	5	S.T.Stand	----	----	Forest Area
6	6	Forest Park	----	----	Existing forest park
7	7	Extension to municipal rest house & camping ground	-----	-----	Forest Area
8	8	Garden	----	---	Forest land
9	9	Parking	-----	----	Forest Area
10	10	Garden & Swimming pool	----	----	Forest Area
11	11	Parking	-----	-----	Existing Public Semi Public use

12	12	Extension to pay master Park	----	----	Deleted site in sanctioned D.P.
13	13	Veterinary dispensary & staff Quarters	41 (Part)	Govt.Godown	Anjuman Islam Trust Property
14	14	Community centre	42 (Part)	Community centre Hutatma Smarak	Site reinstated
15	15	Godown	----	---	Forest Area
16	16	Primary School	----	----	Forest Area
17	17	Childrens Playground	----	----	Unauthorised developments & forest area
18	18	Extension to municipal servants quarters	----	-----	Deleted site in sanctioned D.P.
19	19	Dispensary	----	----	Deleted site in sanctioned D.P.
20	20	Stables	37	Horse Stable	Partly reinstated as horse stable & partly occupied by unauthorised developments

21	21	Telephone exchange & staff quarters	----	----	Forest area
22	22	Forest rest house, servants quarters & fuel Depot	----	----	Forest area
23	23	Garden extension	30	Garden/Rope way station	Municipal Land
24	24	Island	----	----	Forest area
25	25	Children Playground	----	---	Existing forest office
26	26	PWD Quarters	----	----	Forest Area
27	27	Extension of Pande Playground	----	----	Forest Area
28	28	Police quarters	20(Part)	Meditation centre	-----
29	29	Housing for dishoused & economically weaker section	----	----	Deleted site in sanctioned D.P.
30	30	Garden	----	----	Forest Area
31	31	Garden	-----	-----	Forest Area
32	32	Garden	23	Tourist Garden	Govt.Land
33	33	Housing for municipal employees	-----	-----	Forest Area
34	34	Housing for dishoused, E.W.S.and hostel for Adiwasi students	-----	-----	Forest Area
35	35	Municipal Holiday Home	-----	-----	Forest Area
36	36	Housing for dishoused	-----	-----	Unauthorized

					developments
37	37	Municipal Rest house	-----	-----	Forest area
38	38	Municipal stall	16(Part)	Library	-----
39	39	Extension to municipal office	-----	-----	Existing Public Semi Public
40	40	Helipad	25 (P)	Stadium & Race course	Olympia Ground

