

Protection of Green Zone in the Mahableshwar-Panchgani Eco- Sensitive Zone

A project by the

Bombay Environmental Action Group

Final Report

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I INTRODUCTION

In September 2007, the Bombay Environmental Action Group (BEAG) received a grant of GBP 4700 from the Rufford Small Grants Foundation (Ref:12.05.07). This grant was for the BEAG’s PROTECTION OF GREEN ZONE IN THE MAHABLESHWAR-PANCHGANI ECO SENSITIVE ZONE project (“Project”).

This Final Report summarizes the work done on that project under the RSGF grant. Given the complexity of the project, and its many ramifications, we have found it difficult to adequately incorporate this report in RSGF’s prescribed format; hence this more detailed report, and the delay in preparing it.

At the time when the BEAG applied for the grant, the Project was directed by Mr Samir Mehta, then a full-time activist with the BEAG. In June 2008, before the project-term ended, Mr Mehta left the BEAG and has since then enrolled at the Mason Programme, Kennedy School of Administration, Harvard University for a mid-career programme in public policy. BEAG’s project was seen through to completion by others with the BEAG. Although this Report includes inputs from Mr Mehta based on his field notes and other materials, it has been prepared by Mr Gautam Patel and Ms Hema Ramani.

Mr Gautam Patel is a practising lawyer in the Bombay High Court and has a two-decade association with the BEAG. He serves on its advisory board and represents the BEAG in court and before various tribunals. He is also actively engaged in matters of policy within the BEAG, and oversees some of BEAG’s projects. While he was with the BEAG, Mr Mehta worked closely with Mr Patel, including on this Project.

Ms Hema Ramani is an activist with the BEAG and was one of those named in the Project proposal of 27 April 2007.

II BACKGROUND

Situated at 17°55'N 73°40'E, and at an altitude of 1,353 metres (4,440 ft), Mahabaleshwar is a popular hill resort in the Satara district of the Indian state of Maharashtra. It has some of the finest evergreen forests of the world. Perched on the lip of the Western Ghats overlooking the west coast, it receives over 300 inches of rainfall annually.

Mahabaleshwar is a vast plateau of about 150 sq kms (58 sq miles), and rises from deep valleys on all four sides. At its highest, the plateau is 1,438 mts (4,720 ft) above sea level. It is the watershed of five distinct river systems: the Krishna, Koyana, Venna (or Veni), Savitri and Gayatri rivers all have their sources in the Mahabaleshwar plateau. Of these, the Krishna is a major inter-state river network.

Mahabaleshwar has been inhabited since at least the 13th century. Archaeological evidence points to the construction of several shrines and temples, principally around the river sources, from that time. In the mid-17th century, the area came under Maratha rule; a large fortress, Pratapgarh, was built on a hilltop just below the plateau. It is one of the few 'living' forts today, with a settled population within the precincts of the fort, itself a historical monument. Under British rule, Mahabaleshwar was brought into the territories of the local Raja of Satara; it remains in that district to this day.

Mahabaleshwar was one the many "hill stations" established during the British Raj. With its cool climate and lush forests, it provided an excellent retreat from the oppressive humidity and heat of the plains of Bombay (Mumbai), some 280 kms to the north-west. Among its regular visitors, and those who helped develop it, were Sir Peter Lodwick, Sir John Malcolm, Sir Bartle Frere, Brigadier-General John Carnac and Montstuart Elphinstone. It soon became the summer capital of the province of Bombay, and the Governor's summer residence still stands. It is now Raj Bhavan, the official residence of the Governor of the State of Maharashtra.

Mahabaleshwar is famed for its fruit, particularly strawberries and mulberries, its vegetable produce, and varieties of honey. The vegetation is moist deciduous with some patches of evergreen. Plant diversity is exceptionally rich as the area covers varied eco-climatic zones.

Some 18 kms to the north is the hill station of Panchgani. In the rain shadow of its much larger neighbour, Panchgani has a more equable climate. While Mahabaleshwar is primarily a tourist destination, Panchgani is a well-known educational hub, with over 30 schools, most of them with residential boarders. Panchgani's notable feature is a huge mesa called "The Tableland", a geomorphologic phenomenon unlike any other in the state.

In early 2001, the Government of India's Ministry of Environment & Forests notified a 236 sq km area covering Mahabaleshwar, Panchgani and about 60 villages between and around them as an Eco Sensitive Zone ("ESZ").¹ This notification was issued under a central statute, the Environment (Protection) Act, 1986. The notification recognized the ESZ as an ecological hotspot and imposed numerous restrictions on its development and planning including, importantly, for the preservation of its heritage, both natural and man-made. It also required the preparation of a Master Plan to regulate future development of the ESZ.

¹ Available online at: <http://envfor.nic.in/legis/legis.html#G>

III THE BEAG PROJECT

BEAG proposed to lobby with the Mahabaleshwar-Panchgani Regional Planning Board, the Director of Town Planning and the Government of Maharashtra (in that order) under the provisions of the state-enacted planning statute, the Maharashtra Regional and Town Planning Act, 1966, seeking—

1. deletion of various provisions in the ESZ Master Plan detrimental to the preservation and conservation of the ESZ, or contrary to the provisions of the ESZ notification, and
2. the inclusion of areas which, though forested, had not been legally so designated, as forest areas protected under the ESZ.

The objective was to protect, preserve and expand the “Green Zone”, a compendious term for non-built areas. The BEAG perceived this Green Zone to be fundamental to the continuance of a meaningful and effective Eco-Sensitive Zone. BEAG feared that losing the Green Zone, or having it markedly reduced in size, would have a catastrophic effect not only on the ecology of the region, but far beyond. For it is this Green Zone that is essential to water supply not only of the ESZ but the well into the plains below; it is this Green Zone that stabilizes the annual climatic rhythms of the wider region, especially during the monsoon; and it is this Green Zone that is the habitat of a myriad species of flora and fauna, some of them rare and some even endangered.

IV THE ESZ GREEN ZONE

The Green Zone includes forested areas that are not so designated in law; hill slopes including steep hill slopes; plateaus including rocky plateaus and tablelands; wastelands; and agricultural and horticultural lands. One of the criteria used by the MOEF in notifying an area as ecologically sensitive is whether the area features steep hill slopes. The ecological sensitivity of rocky plateaus in this part of the Western Ghats has been extensively studied in the last few years. The Mahabaleshwar-Panchgani ESZ (MPESZ) has a number of these rocky plateaus. The BEAG's Samir Mehta was part of the special Sub-Committee that identified and listed these rocky plateaus. This sub-committee was set up by the High Level Monitoring Committee for the ESZ set up by the Ministry of Environment and Forests under its notification.

Evidently, all construction or development activity contemplated in the Master Plan could only be at the cost of the Green Zone. The intention was therefore to contain development and to balance it with the larger objective of Green Zone preservation.

Till mid-2007, the BEAG's experience in this area was unhappy. The then Mahabaleshwar-Panchgani Regional Planning Board constituted a Land Use Committee and an Environment Committee. The BEAG was represented on both by Mr Samir Mehta. These Committees made several recommendations for the protection and conservation of the Green Zone.

The Planning Board's Chairman, however, had some singular ideas. He refused to permit any presentations by the committees to the Board. He ignored all representations and vetoed objections from other Board Members. It seemed that this gentleman's idea of Green Zone conservation was to open it up without restriction to all manner of residential and tourist development.

Fortunately for the BEAG (and the Green Zone), this gentleman resigned from the administrative services. His successor was altogether more receptive. The Collector of the Satara District, too, realized that the earlier Board Chairman's approach was little but a land scam. An independent investigation was launched.

This gave the BEAG the window it desperately needed to lobby with these officers and those above them for the protection of the Green Zone, by trying to remove those portions of the ESZ Master Plans that were inimical to the ESZ Notification. Specifically, the intention was to enlarge the areas shown as legally designated 'forests' in the Master Plan.

Under an order of the Supreme Court of India, no non-forest activity is permitted on forest land; and the word 'forest' is interpreted as broadly as possible. All these forests are protected by a central enactment, the Forest (Conservation) Act, 1980. In response to a public-interest litigation filed by the BEAG and Mr Samir Mehta, the Bombay High Court ordered the State Government to identify, survey and demarcate such forests in the ESZ.

The ESZ notification does not itself specify the life of a Master Plan prepared under that notification. Regional Plans prepared under the Maharashtra Regional & Town Planning Act, 1966 are revised only every 20 years, and this Master Plan is expected to follow the same pattern. By a process of early intervention at the planning stage, something rarely attempted in India on a sustained basis by any non-profit, the BEAG sought a twenty-year protective cover for the Green Zone.

Specifically, the BEAG planned to incorporate in the Master Plan itself forested areas that were not so marked on any map or plan. Under the Bombay High Court order in the BEAG petition, these forests were to be identified, surveyed and demarcated. It then remained to have these areas recognised in the Master Plan, thereby ensuring their protection under provisions of the Forest (Conservation) Act, 1980. These provisions are stringent; no forest can be used for a non-forest purpose save with the permission of the Central Government's Ministry of Environment & Forests itself.

To achieve this, the entire 236 sq km area was to be surveyed so as to identify the precise areas (in acreage and location) of the Green Zone genuinely required for specific non-green uses, such as expansion of village settlements; and to then suitably incorporate these into the Master Plan.

The Maharashtra Regional & Town Planning Act, 1966 sets out a rigorous procedure for drawing up such a plan, and this was followed. The BEAG had several rounds of discussions, meetings, representations and proposals with the Planning Board; the Deputy Director of Town Planning associated with the Board, and the Collector, Satara District, to explain how the draft Master Plan needed to be changed.

The Planning Board then submitted the Master Plan to the Government of Maharashtra some time in July 2007. The Government in turn sought comments from the Director of Town Planning. The BEAG intervened at this stage too, and had several meetings with the Director.

The plan was then returned by the Director to the State Government in its Urban Planning Department, at which stage it is today. The BEAG continues to have meetings with the State Government at this level. The next stage is for the Master Plan to be submitted to the Central Government's Ministry of Environment & Forests for sanction under the Environment (Protection) Act, 1986 and the ESZ Notification.

At the time of the funding proposal, we expected to complete our work at the level of the State Government in Urban Planning Department. That may or may not be the case. If required, the BEAG will continue to make representations even before the Ministry of Environment & Forests.

The BEAG believes that the future of the Mahabaleshwar-Panchgani Region and, indeed, of a vast area stretching to the coast depends on the environmental soundness of this Master Plan.

V PROJECT PROGRESS

The BEAG's work has not been limited merely to survey and demarcation of forest areas, as the BEAG realized fairly early in the process, that mere delineations are insufficient. The BEAG has, therefore addressed itself to a host of ancillary issues, including drafting development regulations and addressing matters of policy, all of which affect the size, stability and continuance of the Green Zone.

Forested Areas

The most ecologically fragile parts of the region are its forests. Forest destruction is virtually irreversible, and there is already ample evidence of this on the ground. It is here that accurate demarcation is the most useful. BEAG's work in getting this done at all is, it is believed, seminal to long-term ecological viability.

Demarcation of the forests hinges on obtaining accurate base land data. Ground verification was done by Mr Mehta and Mr Panchal (BEAG's local representative). They found that certain areas had not been marked accurately. These major errors were brought to the notice of the Collector of Satara as well as the Chairman of the Mahabaleshwar-Panchgani Regional Planning Board.

The BEAG was assured that the survey results would be incorporated both into the Regional/Master plan as also into the Development Plans for the town of Mahabaleshwar and Panchgani.

Village Expansion Areas

The Land Use Committee suggested huge expansions of the village areas (called "*gaothans*"). All areas within a radius of 50 metres, 100 metres and 150 metres of the existing *gaothans* (depending on the type of villages) were to be included in the *gaothan* expansions. This was a massive increase.

The Regional Planning Board went even further. It increased the areas to 200 meters, 300 meters and 500 meters in the Draft Regional Plan. This meant area increases of upto *sixteen* times of the proposed buildable area—and a corresponding diminution of the Green Zone.

The BEAG opposed this strenuously, arguing that these increases were against the principle of preservation of green areas and also against the basic fabric of the Eco Sensitive Zone Notification which clearly says that existing green areas cannot be diverted for non-green purposes.

The BEAG's persistence led to a final acceptance that almost all *gaothans* already have area sufficient for their natural growth for the next 20 years. The BEAG is now informed that it is now proposed to reduce the expansions to 100 metres, 200 metres, and 300 metres. Though still very large, this is only four times that proposed, as against a 16-fold increase.

Non Agricultural Areas

A 400% increase in Non Agricultural (NA) areas was proposed at the expense of the Green Zone. This was because *gaothan* expansion areas would eventually have been converted to NA areas, allowing mindless construction and development. This figure now stands reduced with the reduced area earmarked for *gaothan* expansion.

The draft Regional Plan proposed that all land converted to NA would automatically be zoned as residential. The BEAG argued that this again would greatly increase the pressure on the fragile ecology of the area, and pointed out that the proposal violated the Maharashtra Regional and Town Planning Act. The BEAG is assured that this provision will be deleted.

Hill Slopes

Hill slopes are ecologically highly fragile. Damage to them affects all areas at lower levels. The ESZ notification states that areas with steep hill slopes must be identified, and prevents development on such steep hill slopes. Despite this unambiguous embargo, the Draft Regional Plan permitted construction on steep hill slopes.

The Land Use Committee evolved a method to permit plots that consisted partly of steep slopes (slopes of 20° inclines or more) and partly of flat lands to be developed. Buildable entitlements of the steep slope lands were loaded onto the entitlements of the flat land. The BEAG insisted that the Land Use Committee recommendations be adopted. As a result, steep slopes will remain untouched.

Incongruous Development

The draft Plan permitted unnecessary land development incongruous with the requirements of a hill station, and for which, historically, there has never been a need: airstrips, helipads and amusement parks, for example.

The BEAG has opposed these schemes, arguing that in an Eco-Sensitive Zone, the emphasis should be on nature, especially for children. Amusement parks are facilities more properly located in urban hubs and have no place in ecologically fragile hill resorts. With the new divided-carriageway high-speed expressway between Mumbai and Pune, Mahabaleshwar is now a short drive of little over four hours from Mumbai and less than two hours from Pune. This hardly justifies air transport facilities which, if permitted, will inevitably increase noise levels beyond permissible ambient levels.

Road Construction

The BEAG objected to the proposed 250% increase in road area. The region is already reasonably well connected. Road construction entails massive ecological destruction and directly affects the Green Zone, as it requires the removal of hundreds of old-growth trees. On BEAG's representations, it was agreed that the proposed expansion would not take place. Instead, where required, some of the existing roads will be upgraded to all-weather roads.

Highway for Through Traffic

One of the Regional Plan proposals was for a new highway cutting through this ecologically fragile region, to serve as a conduit for traffic from the coastal Konkan Region to the upland areas. The BEAG argued that this was wholly unnecessary, not being for the benefit of either the fixed or floating population of the region. Besides, several existing alternative routes are all in use.

The proposed highway seriously threatened the region and raised a number of issues, all against the intent of the ESZ notification: extensive deforestation, earth removal and consequent ecological damage, demolition of heritage buildings, vehicular emissions, noise pollution and traffic congestion.

BEAG's arguments appear to have succeeded and we are told that the new highway is being realigned so as to bypass the Mahabaleshwar Panchgani Eco Sensitive Zone Region.

Resorts

The Draft Regional Plan permitted over 390 hectares to be used for resorts. This was wholly unjustified. The Planning Board's Land Use Committee assessed the need at a mere 98 hectares. The BEAG's objections resulted in the proposal being halved. The BEAG continues to argue that even this is far too high, given that there is no infrastructure to support new hotels and resorts.

Local Vested Interests and the Regional Plan

The Municipal Councils of Mahabaleshwar and Panchgani, both statutory, elected bodies, are entirely dominated by local stakeholders with significant interests in commercial development. The draft Regional Plan proposed regulations to the effect that, should there be a conflict between the Regional Plan (which covers a wider territory) and the Development Plans for the two towns (which are more limited, and cover portions included in the Regional Plan), the latter would prevail over the former. Evidently, this was a method to dilute the efficacy of the Regional Plan and allow the commercial interests of local stakeholders, usually in positions of authority at the local Municipal Council, to take precedence over wider ecological concerns.

The BEAG successfully demonstrated that such a provision was not only ecologically damaging but inherently illegal, being contrary to S.27 of the parent planning statute, the Maharashtra Regional & Town Planning Act, 1966 which specifically requires every development plan to be consonant with a regional plan. On the BEAG's representation, it has been agreed that this provision in the Regional Plan's regulations will be deleted.

Panchgani Tableland

A lateritic plateau or mesa 100 acres in area and 60 metres above Panchgani town, the Panchgani 'Tableland' is a unique geomorphological feature of the region. It gives splendid views of the surrounding countryside and of the valleys below.

Reportedly, it is the only place in the region offering a 360 degree view of the entire area, particularly of the Krishna Valley.

While the terrain is not suitable for the growth of trees, several rare and endemic species of plants are found on the Tableland. For some visitors, the Tableland holds religious significance, because they believe that the Pandavas spent some time there; a footprint embedded in the plateau is said to be that of one of the Pandava brothers.

A High Court order of 2006 on one of BEAG's petitions restricted vehicles and horse-drawn carts to a small, 20-acre part of the Tableland and prohibited them from the main Tableland campus of some 80 acres. This order is not being followed. The BEAG has petitioned the High Court, contending that the local authorities are in contempt.

The Tableland is an integral part of the Green Zone. To permit vehicular movement on this area is to ignore the essence of the Eco-Sensitive Zone notification. Besides, permission to use motorized vehicles on the Tableland defies logic: there is simply nowhere to go, for the Tableland does not sit over any commuting corridors. Vehicles are permitted for joyrides; the commercial interest is self-evident, and inimical to ecological preservation.

Sewage and Solid Waste Management

As part of its Green Zone protection campaign, and independently of its role in planning, the BEAG has actively lobbied with authorities at all levels to institute systems for sewage and solid waste management. The BEAG has even petitioned court to have these systems put in place, as they are mandated by law. The municipal approach to these issues is cavalier: sewage is pumped out into the forest, and solid waste, where it is collected at all, is simply dumped over a ridge. The forest floors, especially around the many trails and vista points, are littered with plastic of all description.

A number of alternatives have been suggested, including, most recently, a biogas production technology developed by a research division of the Bhabha Atomic Research Centre. This technology degrades all non-synthetic waste and produces high-grade fertilizer and biogas. The BEAG continues to lobby for its adoption at the domestic level while simultaneously pursuing Municipal-level sewage and waste treatment proposals.

As part of its lobbying strategy, the BEAG has gathered support from local stakeholders, including hoteliers, tourist guides, owners of refreshment stalls and residents. The BEAG is finalizing its proposals to the three major manufacturers of bottled water (Bisleri, Coca Cola and Pepsi) to evolve a public-private partnership for collection, segregation and recycling of plastic waste in the area.

VI RESULTS

The BEAG's work on the funded project has not yet ended. The time-to-completion projected in the funding proposal, although reasonable at the time when it was made, was ultimately inaccurate. This was largely beyond the BEAG's control: officers resigned or were transferred, with inevitable delays as the next incumbent took charge. It is also difficult to predict with certainty the working of government departments, as these tend to move at a glacial pace.

However, the BEAG's representations and lobbying efforts have had a high success rate. Several deleterious and ecologically objectionable proposals in the Master Plan have been diluted or dropped altogether. The BEAG is the only non-profit pursuing this objective in a sustained, planned and systematic manner. It remains committed to its objectives and ideals.