

Ratnagiri and Sindhudurg districts: Summary report of the Maharashtra Government consultation, 30th September & study tour, 4th to 11th October, 2010

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The setting

The districts of Ratnagiri and Sindhudurg lie at the heart of Konkan, a charming stretch of land on the west coast of India, endowed with a beautiful seashore, picturesque mountains and scenic natural beauty, and known for tropical fruit like the delicious golden Alphonso mango, cashew, jackfruit, spice crops, coconut, areca nut and kokam. The region is bordered by Sahyadri hills on the east and Arabian Sea on the west. It is a tract of high rainfall ranging between 3000 to 5000 mm a year. Indeed the Maharashtra Sahyadris, a part of the mountain chain of Western Ghats, are one of the country's water towers, source of Krishna and Godavari, two major east-flowing rivers of Peninsular India, and a large number of west flowing rivers. The latter flow into the sea through highly productive estuaries fringed by mangroves. These abut upon long stretches of beaches, where, on a clear day, you can see the sea-bed through a depth of 20 ft. The natural vegetation cover of the region is mangrove forest on the coast and tropical evergreen forest inland, with stunted tree growth and a rich herbaceous flora on the wind swept plateaus. Today, the fertile alluvial valleys produce rice and coconut as the main crops; the hill slopes harbor mango and cashew nut orchards. The estuaries and the coast support rich fisheries.

Konkan is also a land of culture and human heritage, with many famous hill and sea forts and pilgrimage centers. Agriculture, horticulture, fisheries and tourism have therefore been the traditional pillars of economy of these districts. More recent times have witnessed industrial development, with a chemical industry hub springing up at Lote, coal and natural gas based power production and mining, and a proposed nuclear power facility. Konkan is a highly literate part of the country, and has been the birth place and theater of action of many well known public figures.

WGEEP Mandate

In view of the environmental sensitivity and ecological significance of the Western Ghats region and the complex interstate nature of its geography, as well as the possible impacts of climate change on this region, the Ministry of Environment & Forests Government of India has constituted a Western Ghats Ecology Expert Panel.

The Panel has been asked to perform, the following functions:

- (i) To assess the current status of ecology of the Western Ghats region.
- (ii) To demarcate areas within the Western Ghats Region which need to be notified as ecologically sensitive and to recommend for notification of such areas as ecologically sensitive zones under the Environment (Protection) Act, 1986. In doing so, the Panel shall review the existing reports such as the Mohan Ram Committee Report, Hon'ble Supreme Court's decisions, recommendations of the National Board for Wildlife and consult all concerned State Governments.

- (iii) To make recommendations for the conservation, protection and rejuvenation of the Western Ghats Region following a comprehensive consultation process involving people and Governments of all the concerned States.
- (iv) To suggest measures for effective implementation of the notifications issued by the Government of India in the Ministry of Environment and Forests declaring specific areas in the Western Ghats Region as eco-sensitive zones under the Environment (Protection) Act, 1986.
- (v) To recommend the modalities for the establishment of Western Ghats Ecology Authority under the Environment (Protection) Act, 1986 which will be a professional body to manage the ecology of the region and to ensure its sustainable development with the support of all concerned states.
- (vi) To deal with any other relevant environment and ecological issues pertaining to Western Ghats Region, including those which may be referred to it by the Central Government in the Ministry of Environment and Forests.

The Ministry has subsequently asked the Panel to examine the entire stretch of Ratnagiri and Sindhudurg districts, including the coastal region.

The mandate specifies that the Panel should make recommendations for the conservation, protection and rejuvenation of the Western Ghats Region following a comprehensive consultation process involving people and Governments of all the concerned States. In line with this mandate, Madhav Gadgil participated in a detailed briefing by the Government of Maharashtra convened by Secretary, Environment, Government of Maharashtra at Mantralaya, Mumbai on 30th September, 2010, and then undertook a study tour of Ratnagiri and Sindhudurg districts, from 4th to 11th October, 2010, visiting a number of localities of interest ([Fig 1](#)), meeting many industry representatives, scientific and technical experts and community groups. He was accompanied throughout by officials of State Pollution Control Board. There was also a meeting at the office of District Collector, Ratnagiri with many district officials. The observations noted below have therefore been confirmed in consultation with concerned officials. We believe that institutional issues are very important in any endeavor involving conservation, protection and rejuvenation of the ecology of these districts. Hence, this summary addresses the following key issues:

- Is environment being effectively protected?
- Are environmental costs acceptable?
- Are transfers of environmental costs (Inter-sectoral, Inter-regional, Inter-class, Inter-generational) acceptable?
- Are people being involved in good management of environment?
- Are people being involved in deciding upon an appropriate development path?
- Are development policies leading to sustainable development?
- Are decision-makers at centres of power aware of what is happening on ground?
- Are people's civil rights being respected?

An attempt is made to answer these questions based on observations made and information obtained during the course of the study tour.

Is environment being effectively protected?

The answer seems to be an unequivocal 'no'. There is little enforcement of environmental protection laws including pollution control, very inadequate monitoring of the situation on ground, and quite unsatisfactory measures for grievance redressal.

Consider the case of chemical industry MIDC at Lote near Chiplun. We had a detailed discussion with the local Abhyas gat (Study Group), and a field visit to Common Effluent Treatment Plant and some surrounding areas, as well as visits to Dabhol creek and discussions with many community members. It is notable that contrary to information provided by authorities

in the meeting in Mumbai, the Abhyas Gat has been totally inactive, with no meetings over more than two years. In spite of their demand, a representative of Kotavale village that has suffered maximally from pollution is not included in the Abhyas Gat. It was revealed that the CETP cannot handle the quantity of effluent it is receiving, and its functioning is highly defective. We saw large overflows of untreated effluent from the plant going into streams serving Kotavale village. Since the situation is not being brought under control, the Sarpanch of Kotavale attempted to commit suicide by drinking the polluted stream water. He was rushed to Mumbai and saved, but there has been no abatement of pollution affecting Kotavale. Also, in 2000 around 30 School children near Lote MIDC became unconscious due to inhalation of poisonous gases. The company involved took no notice, and did not come forward to take children to the hospital. People also reported that solid toxic sludge from industries was mixed with soil and dumped in the ghat area. It is understood that many industries at Lote are pumping toxic waste into ground water through bore wells. Apparently, three such cases were brought to light, but there has been no action. Very recently, some unidentified party has dumped toxic wastes via a tanker in the Boraj Dam which is the water supply of Khed town. The town water supply had to be stopped for several weeks, but nobody has been brought to book. There has been significant decline in fish landings from Dabhol creek due to Lote chemical pollution, and severe loss of employment opportunities for members of fishing communities. With all these problems persisting all that the Pollution Control Board has done seems to be to transfer the Lote office to Chiplun, rendering any chances of effective action even more remote than before. With all these persistent and unrectified problems, we were informed by an MIDC officer that they are planning to setup new Petro Chemical MIDC area nearby existing on 550Ha.

In the context of mining, there are clear cases of mining activity by Ashapura Mining Company at Umbarshet without any permission as trial pits. We have as yet been unable to obtain definite information on whether such trial pits can be taken without any clearance whatsoever, but, in any case, the activity in the field seems to be actual mining and not just trials. Also in another case at Sakhari Velas mine site (by the same company), villagers informed that mining was continued even after the expiration of permission and far more material was excavated than the permitted quantity. As per the discussion with mining officer (Mr.Bhoge) at Ratanagiri Collector Office, Environment permission of Sakhari Velas got over in around November 2009 and they have stopped giving transport permission to the company in around January 2010, and mining activity at Sakhari Velas have stopped completely. But villagers reported that activity is temporarily stopped during monsoon only. Thus it seems that there is contradiction between what government official said and information from local people. In case of Umbarshet, Mining officer told that there was no permission and government official have already charged the company. In neighbouring Kolhapur district, there is some evidence of mining on Reserve forest land without any Forest Clearance having been obtained.

The closed down ENRON plant has started operating as RGPCL plant using natural gas. It is claimed that this is totally pollution free power generation. However, the cooling towers of RGPCL apparently suffer from engineering defects and some pollutant percolates into streams and wells of neighbouring Katalwadi village.

There is unsatisfactory disposal of fly ash from coal based power plants. Apparently it is mandatory to use fly ash in brick or cement industries. In this region with abundance of laterite stones, there is no demand for bricks, and only one cement factory. Fly ash utilization in the cement sector is only to the tune of 25 % and that too if cement factory approves the quality of fly ash. There has been recent disposal of fly ash in laterite stone quarries, with the claim that these are mines, and disposal in mines is now permitted. But the laterite is highly porous and there is a fear that fly ash disposal in such quarries will lead to pollution of water sources from close by these quarries. Such disposal has therefore been temporarily stopped.

Are environmental costs acceptable?

An important tool for deciding on whether environmental costs of various human interventions are acceptable is the Environmental Impact Assessment (EIA), including Environmental Cost-Benefit Analysis. Almost without exception such EIAs are flawed. They uniformly ignore important issues, such as environmental impacts of power transmission lines. As power production increases, these are a serious factor, and ignoring these is quite improper. Another common defect is dismissing the 'sada's or the wind swept plateaus with stunted tree growth and a rich herbaceous flora as barren land. These plateaus are very rich in biodiversity, being habitats of many endemic herbaceous plants, are a major source of fodder for livestock and sources of streams that are vital to the life in valleys surrounding them. In fact, Dr Sanjappa, Director, Botanical Survey of India states that these plateaus are, for their size, the country's richest repository of endemic plant species.

There are other important environmental resources that are ignored, such as bivalve production on tidal mudflats. A recent study in Aghanashini estuary of Uttara Kannada district some 150 km to the south of Sindhudurg has revealed that the annual value of this production was 5.6 crores of rupees. In absence of proper EIAs, and acceptance of very defective EIAs by the Appraisal Committees, we are very likely incurring unacceptable environmental costs.

A vital element of our attempts to avoid undue environmental costs, and minimize unavoidable ones is proper planning of land use. This is attempted in several ways; in particular, by matching land capability to land use. For instance, it is prudent to maintain fertile, agriculturally and horticulturally productive lands under cultivation, using less fertile lands for settlements and industry. It is also important to disperse industry and ensure that the pollution load it generates does not exceed limits of tolerance. With this in view, the state and central governments have put in substantial technical effort, including careful gathering of data and its analysis to generate two important documents, namely, [1] Ratnagiri Regional Development Plan (RRDP), and [2] Ratnagiri Zonal Atlas for Siting of Industry (RZASI). Clearly, violation of recommendations generated in these two pains-taking exercises is likely to inflict undue environmental costs. This is what is happening today. The recommendations of both these reports are being comprehensively violated in the current practices. We are therefore surely inflicting undue environmental damage in these districts.

An important objective of RZASI was to look at potential cumulative impacts that may cross some unacceptable thresholds. With this in view the report assesses the pollution load-bearing capacity of various parts of the district, existing levels of pollution and estimates levels of permissible additional pollution generating activity. Thus, it importantly begins to examine cumulative, rather than isolated impacts, one by one. However, this attempt has its limitations. For instance, it does not pay adequate attention to role of maintenance of habitat continuity in conservation of biodiversity, so vital for these treasure troves of biodiversity. It is imperative that we should now build upon the RZASI exercise and look carefully at the region's carrying capacity before undertaking further major interventions.

There are of course many imponderables in the ongoing human interventions in the region. For instance, we have little understanding of the impact of gases like SO₂ and NO_x on the mango and cashew plantations and forests of Western Ghats slopes. The available scientific information is limited to studies on temperate herbaceous plants. Given the high winds and heavy rains of the region, the impacts could be very substantial. An attempt is being made to understand the possibilities through some experimental studies being conducted by Konkan Krishi Vidyapeeth, Dapoli. It is notable that KKV has never before paid any attention to such issues despite the long standing complaints of Chikoo cultivators with respect to negative impacts of Dahanu Power Plant, although the University has research stations in the region. It has now set up an experimental study. This study has many serious flaws, in particular, very inadequate sample size and duration. It also suffers from the fact that it completely ignores the

possible effect of pollutants dissolved in water, since the experiment is fully shut down during the rains. In view of our ignorance, and the inadequate attempts to generate new understanding, it would be prudent to apply the precautionary principle and try and avoid air pollution in this district noted for its horticulture and forest wealth.

Are patterns of allocation of environmental costs (Inter-sectoral, Inter-regional, Inter-class, Inter-generational) acceptable?

It is relevant to enquire not only whether overall environmental costs in environmental, social, economic terms exceed the benefits, but also who is benefiting, and who is paying the costs. If our endeavour is to promote inclusive growth, then it is not acceptable if merely the overall economic benefits exceed the costs, in case the benefits flow to those who are already well off, and the costs have to be borne by those who are amongst the poorest. Hence it is relevant to look at the allocation of the costs and benefits amongst different economic and social segments of the society, amongst different regions, and also between the present generation and the future generations.

Inter-sectoral – Rurban divide

The overall pattern of development in India has so far favoured the urban, and the organized sector at the cost of rural, and the unorganized sector. Indeed, the rate of growth of agriculture has been far lower than that of industry and organized services. The organized sector growth has failed to create employment opportunities at a rate sufficient to absorb new entrants to the job market in our growing population with a preponderance of young people, and rural unemployment and underemployment has been mounting. Tragically, rural distress in the state of Maharashtra has led to a large number of farmer suicides. Hence, possible infliction of environmental costs on the agriculture/ horticulture/ fishery/ tourism sector of Ratnagiri-Sindhudurg districts is clearly undesirable.

There is considerable evidence that this has been happening. Over years, our development plans have taken advantage of the natural endowments of the districts, and given a thrust to promotion of fruit production, especially mango and cashew nut. Large numbers of cashew nut plantations have also been development on lands of economically weak sections of the population through NREGA programmes. These mango and cashew orchards may in the long run suffer seriously from growing air pollution; and the ongoing highly inadequate investigations by the Agricultural University certainly cannot provide any assurance to the contrary. Moreover, both these crops are exported in substantial quantities. Recently, the doors of the Global export market for the Alphonso Mango have opened through Global GAP certification, and some 80 farmers made their orchards Global GAP certified, and others are in the pipeline. Also MSAMB (Maharashtra State Agricultural Marketing Board) had given subsidy for the certification. The global standards demand that there be no seriously air polluting industries in their vicinity. So, even if it turns out that pollution, such as from thermal power plants do not harm the orchards, the inevitable loss of export market is bound to hit the horticulture hard.

Fisheries constitute a very significant economic activity of the region and these have been declining over the years, with total annual landings of Ratnagiri falling from 52000 tonnes in 1980 to 37000 tonnes today. Fisheries have been suffering in several ways; from unchecked water pollution, from reduced access to the fishing grounds and from lack of support for development of fishing jetties. Despite the Savant committee recommendations to take up development of fishing ports, there has been no action, while the industries have been permitted to rapidly build jetties to facilitate downloading of coal to support their functioning. These industrial jetties have greatly restricted movements of fishing crafts. More glaringly, a telling

example is the High Court stay order obtained by Finolex against the construction of fishing jetty at Golap-Ranpar.

Tourism has been prospering in Ratnagiri – Sindhudurg districts. The number of tourists visiting the temple town of Ganapatipule has gone up 16,70,000 in the year 2008-2009. However, pilgrims at Ganapatipule are beginning to be discouraged by the sight of coal based power plants which will certainly have adverse impacts on tourism.

Inter-regional

Regional imbalances in development have been a major bane of India's development efforts. It is therefore appropriate to focus development of any region on its own inherent strengths and not sacrifice these to meeting requirements of other regions. So the focus of development of energy or mineral resources of Ratnagiri-Sindhudurg may, very appropriately be put on meeting their own requirements. The current energy requirements of these districts are 180 Megawatts megawatts a year, while the current production is 4,543 Megawatts (Koyna 2000 MW, RGPCL 2200 MW, Finolex 43 MW, JSW 300 MW and remaining 900 MW proposed within 2-3 Months) a year. So these districts are more than meeting their own requirements and contributing to the national pool. If Mumbai has huge requirements, one may reasonably propose that a giant coal based power plant be located on the Malabar Hill, which offers a topographical situation identical to the current site of Jindal plant. Such location will have the further huge advantage that the power will not have to be transmitted over huge distances, greatly reducing transmission losses, and the huge losses of horticultural production under power lines in the Ratnagiri-Sindhudurg districts.

An important benefit of new economic activity is of course employment generation. Clearly, we need to analyse the situation in very concrete terms. Reportedly, the Chemical Industry hub at Lote employs around 11-12 thousand people, while the loss of employment amongst fishing community due to water pollution has been estimated at around 10-20 thousand.

Inter-class

There is evidence of widening social and economic disparities accompanying India's rapid economic growth in recent years. Hence it is germane to enquire whether environmental costs of developments in Ratnagiri-Sindhudurg districts are being passed on to the weaker segments of the society. There is considerable evidence that this is so. For instance, mine overburden often ends up on farmers' fields; as reported from Kalane village survey nos. 5715 and 60 belonging to Mansingh Desai, Atmaram Desai, Sadashiv Desai and Sunit Salgaonkar. Also allegedly, a farmer at Umbarshet has deposed that the Ashapura Mines have forcibly mined on his land without his consent. In fact these mines have apparently been involved in a number of other violations of law as well. These include excessive amount of explosive material used for trial pit mining, maintenance of transport roads without permission and failure at restoration of mining land. Examples have already been given above of considerable costs being passed on to fishing communities.

Inter-generational

To ensure that we do not inflict undue costs on future generations, it is obviously prudent to first tap the environmentally least damaging of resources in any sector. In this context it is important to note that a Government of Maharashtra Committee, headed by Shri D R Pendse, formerly Secretary, Irrigation has assessed the micro- and mini-hydel potential of Ratnagiri district and shown that it is as high as 2000 megawatts using only 30% of total water available in Konkan. These decentralized energy resources have their own special advantages, including

development of tourism, fresh water fisheries, and small scale industries. Another worthwhile model for energy generation is that of Gadre Foods at Ratnagiri. In this factory, substantial quantities of energy (along with fertilizer) are being generated from fish waste through the biogas route. Ratnagiri-Sindhudurg has many food processing industries and large quantities of energy can be generated through this route.

It is also prudent not to rush into environmentally damaging options if there is evidence that much less damaging options are likely to become available in near future. In the energy sector the progress in development of solar energy has been very rapid; at a far greater pace than is the case with thermal or nuclear energy; and it may be very reasonable to be patient, especially if there is strong public resistance to these sources, as is the case today in Ratnagiri-Sindhudurg districts.

Are people being involved in good management of environment?

The experience world over is that people, and not Government or industry have led movements to protect the environment. The Indian society has rich traditions of nature conservation, and some of the best preserved remnants of indigenous vegetation of Western Ghats are in the form of Sacred Groves. For instance, we saw a remarkable patch of untouched primeval vegetation of 40 hectares, which includes a sacred grove of about 9 hectares at Pandhari Gudghe in Dapoli taluka. We also saw excellent secondary forest growth on private hill lands in Dapoli taluka, whose existence has not been recognized in any official records or scientific studies.

It is therefore important that people be vigorously inducted into protecting, managing, monitoring the environment. In this context the Ministry of Environment and Forests had an excellent scheme of district level Paryavaran Vahinis. Under this scheme concerned citizens were conferred authority to monitor environmental degradation such as pollution and deforestation and report to the District Collector, who would then enquire into the matter. The programme was very effective in districts like Dakshin Kannada during 1990's and the Steering Committee for Environment and Forests for the 11th Five Year Plan has strongly recommended that as a part of the effort to promote partnerships, the 11th Plan should revive the programme of district level Paryavaran Vahinis to promote a broadly participatory process of environmental monitoring and management. During the meeting with Government of Maharashtra officials in Mumbai on 30th Septemebr, 2010, I therefore enquired if there were any on-going programmes of involving the people in environmental monitoring in Ratnagiri-Sindhudurg districts. I was informed that a similar function was being performed by a Ratnagiri District Environment Committee chaired by the Ratnagiri District Collector, and additionally there was a very active 'Lote Abhyas Gat' attached to Lote MIDC.

I immediately contacted Ratnagiri District Collector, as well as the Lote Abhyas Gat with the help of Maharashtra State Pollution Control Board. On 5th October I had a meeting with the Lote Abhyas Gat. During the meeting, it was reported that although the Lote Abhyas Gat was constituted in 2006, only two meetings have been held so far, the last being in 2008, more than two years ago. The *Abhyas Gat* had prepared some norms on effluent discharge, but these were not being followed. They had brought to notice disposal of toxic waste by some industries into ground water through bore wells, but no action was taken. Representatives from Kotavale, the worst hit village were not included in the Lote Abhyas Gat despite their request. Shri Sachin Ambre, Upsabhapati, Khed Panchayat Samiti, and a member of Lote Abhyas Gat insisted that the functioning of the Lote Abhyas Gat was thoroughly unsatisfactory. This was followed by a meeting at the office of the Ratnagiri District Collector on 7th October, 2010. Contrary to what I was informed by State level officials in Mumbai on 30th September, 2010, I was told that while there was a proposal to constitute a Ratnagiri District Environment Committee, no such committee was in existence. It is further learnt that there have been a large number of public hearings about various projects, and the overwhelmingly unanimous sentiments of people have

been completely ignored. In public hearing of Finolex (1000 MW) coal TPP at Ranpar Ratnagiri Taluka and nuclear power Station (1600 MW X 6) at Jaitapur Rajapur Taluka, public opinion was unanimously against these projects. In Kalane village, the first Public hearing was held on 20-9-2008. At this time, Marathi EIA was not available and therefore the hearing was postponed. The public hearing was held once again held on 11-10-2008, after Marathi EIA was made available. At this hearing, the unanimous resolution of Gram Panchayat dated 6-8-2008 opposing mining was submitted and several objections were raised : 1. Pollution of Kalane river and adverse impact on water supply scheme on this river at Chandel in Goa. 2. Adverse impact on horticulture dependent on natural water sources in Kalane. The villagers were not provided summary minutes during the public hearing. These summary minutes were made available only after 57 days. Despite the unanimous rejection of mining proposal, Government of Maharashtra went ahead and gave Environmental Clearance to the mine on 17th march 2009. Furthermore, several Gram Panchayats, and Panchayat Samitis, including Ratnagiri Taluka Panchayat Samiti have specifically passed resolutions relating to environmental issues that are also being completely ignored by state government. Clearly, people are in no way involved in protecting, managing, monitoring the environment of Ratnagiri-Sindhudurg districts.

Ecologically Sensitive Areas

The latest interesting developments related to the concept of 'Ecologically Sensitive Areas'. Identification of potential 'Ecologically Sensitive Areas' area is an important mandate of WGEEP. The concept of 'Ecologically Sensitive Areas' is very different from that a protected area like a national park which is supposed to be entirely free from human interference, though in reality many management interventions such as creation of water holes and tourism related activities do continue even in the national parks. 'Ecologically Sensitive Areas' are areas under human use, sometimes quite intense human use such as generation of thermal power and cultivation of chikoo in Dahanu taluka. Hence, ESAs are to be viewed as areas where human activities will continue, but be prudently regulated under the Environment (Protection) Act, 1986. ESAs are not at all meant to stop development in ways that would hurt local people, but to ensure that development is environment friendly and people oriented, as well as serves to preserve the ecological heritage on a long term basis. There are no set regulations, such as ban on all new industries, or on conversion of agricultural into commercial land, that would prevail in every ESA; instead, the regulations should be worked out with due respect to local context. More importantly, Ecologically Sensitive Areas are not just about regulation, but about positive promotion of environment-friendly development as well. Thus areas that opt for the status of an Ecologically Sensitive Area could benefit from special programmes such as promotion of development of enterprises based on local plant resources like ratambi or kokam (*Garcinia indica*) whose fruit has been traditionally used in very many ways, and is now known to be an important source of hydroxycitric acid, or establishment of a green technology team of youth trained in setting up and maintaining solar panels, biogas plants, rain water harvesting devices, and so on. Gram panchayats in Ecologically Sensitive Areas could also receive special facilities to add to their incomes through taking advantage of new legal provisions such as charging 'collection fees' for biodiversity resources to which they are entitled under the Biological Diversity Act. They may also be paid specially for maintenance of traditional crop cultivars from the National Gene Fund, or for sequestration of soil carbon on farmlands under organic agriculture as a part of Indian plans for combating climate change.

This interpretation of 'Ecologically Sensitive Areas', though quite appropriate is different from the way these have been viewed so far. The earlier ones like Matheran have been constituted because of initiatives of outside groups like Bomaby Environment Action Group with little support from local community members. The regulations, too, have been very rigid, and local people have complained that under these regulations, not even an ambulance is allowed

to enter Matheran. Similarly, there is currently in progress in many parts of Western Ghats a process of deciding on the extent of Ecologically Sensitive Zone around Protected Areas to comply with a recommendation of the Indian Board for Wild Life. The management regime being proposed in this context is grounded solely in rigid, and to people unacceptable regulations, without any positive incentives, as indicated in Box 1 below. For instance, how does one interpret the regulation that 'No artificial lighting will be used in ESZ'. Does this imply no street lights at night, or may be total darkness at night throughout the zone? And, what does 'There shall be no industrial establishments in ESZ' mean? Does it mean even rice mills will be prohibited? So the prevalent view of 'Ecologically Sensitive Areas' is that this is yet another rigid bureaucratic institution that will only mean more harassment to them. On this background, the Zilla Parishad in neighboring Kolhapur district passed a resolution on 6th October 2010 that no areas in the district be brought under 'Ecologically Sensitive Areas' designation. Several political leaders belonging to many different parties from Sindhudurg also met me and submitted memoranda to the same effect. Notably enough, in the same Sindhudurg district some 25 Gramsabhas of villages including Asaniye, Kumbhal, Panturli, Talkat, Zolmbe, Kolzar, Shirval, Ugade, Kalne, Bhikekonal, Kumbhavde, Khadpade, Bhekurli, Padvemajgaon, Bhalaval, Tamboli, Sarmale, Nivali, Dabhil, Otvane, Konshi, Phukeri, Gharpi, Udeli, Kesri-Phansvde of Taluka – Sawantwadi / Dodamarg have passed resolutions requesting their areas to be constituted as 'Ecologically Sensitive Areas'. I had the opportunity of visiting many of these villages on 9th October and discussing the WGEEP conception of 'Ecologically Sensitive Areas'. It has been made clear to them that there need be no rigid regulations associated with ESAs in their villages; instead they should themselves suggest an environment and people friendly management system that they believe to be appropriate. Many of these Gramsabhas are taking steps in this direction.

Box 1: Kolhapur Wild Life Division's proposed management rules for Ecologically Sensitive Zones around Protected Areas

- Within the 10 km extent of ESZ an area of 1 km will be declared as a buffer zone. There will be no construction within the buffer zone. Buffer zone will be maintained free and green.
- There shall be no noise pollution in the ESZ.
- No artificial lighting will be used in ESZ.
- There shall be no industrial establishments in ESZ.
- There will be no stone quarries and mining in ESZ. No new proposal will be entertained
- No tree cutting will be permitted in private /revenue land without permission of District Collector.
- It will be essential to guard natural heritage.
- There shall be no Modifications to waterfalls, caves etc.
- Special efforts will be made to save endangered plant species.
- Human heritage such as forts etc will be protected.
- Excessive use of natural water sources for industrial establishments /residential buildings will be prohibited. Similarly care will be taken to prevent water pollution.
- Use of plastic will be banned.
- Construction on hill slopes will be prohibited.
- It will be necessary to properly manage sewage.
- Pollution resulting from burning of solid wastes will be banned.
- Pollution from vehicular emissions will be controlled.

Are people being involved in deciding upon an appropriate development path?

In our democratic republic, development programmes are meant to bring benefits to people, and therefore must be formulated with their active involvement. But the brand of 'development' that is currently being practiced is development grounded in patronage, where powers that be outside the community decide on how the thousands of crores of rupees are to be spent. By now we know from vast experience that just throwing money at problems will not work; on the contrary it is bound to be counter-productive. It is vital that how the money is to be spent is primarily decided by those for whose benefit it is earmarked. Only then will there be appropriate schemes, only then will people own them and ensure that the money is spent prudently. The only solution then is that the decision as to what the money should be spent on, where and when should be in the hands of those for whom the money is being spent. Such collective decisions are best arrived at in small face-to-face communities; hence such decision making should be made the primary responsibility of gram sabhas, and in urban areas mohalla sabhas and other democratic institutions including Gram Panchayats, Panchayat Samitis, Zilla Parishads and Nagarpalikas.

This is certainly not being practiced in Ratnagiri-Sindhudurg districts. When I talked to them, people are very keen on energy development through mini- and micro-hydel power as proposed by the Pendse Committee, or development of fishing ports as proposed by the Savant Committee; but this is being ignored and coal and nuclear based energy generation and ports to serve power companies at the cost of fishermen are being thrust upon the people of Ratnagiri-Sindhudurg districts.

Are development policies leading to sustainable development?

The answer seems no. Initially, several development programmes building upon the region's natural advantages and endowments were being promoted. These included mango cultivation, cashew plantations using EGS funds, and promotion of tourism in Sindhudurg district and Ratnagiri taluk. But now the direction seems to have been suddenly changed. It is ignoring the land use policies worked out with considerable effort through [1] Ratnagiri Regional Development Plan (RRDP), and [2] Ratnagiri Zonal Atlas for Siting of Industry (RZASI). Today, the development policies seem to be headed in an environmentally and socially non-sustainable direction.

Are decision-makers at centres of power aware of what is happening on ground?

Part of the problem obviously is that the decision-makers at centres of power are simply not aware of what is happening on ground. This is why I was informed that a Ratnagiri District Environment Committee chaired by the Ratnagiri District Collector was in place, and additionally there was a very active 'Lote Abhyas Gat' attached to Lote MIDC. This was simply not the case.

Are people's civil rights being respected?

Not only are people not being active partners in the process of development and of nurturing the rich natural resource heritage of Ratnagiri-Sindhudurg districts, but their civil rights of expressing their feelings are being systematically suppressed. For the first time in life, I had the unfortunate experience of being denied the opportunity of talking freely to people. I was shocked on being informed on the morning of 8th October that my plans for field visit and open consultations with people had to be drastically modified because the Collector had promulgated Bombay Police Act 1951 Sec, 37(1)(3), prohibiting public gathering of more than five people.

My understanding is that there has never been any violent demonstration of protest in Ratnagiri-Sindhudurg districts, yet such prohibitory orders are being routinely clamped to suppress any expression of dissent against industrial, mining or other development activity being imposed on the region (see Annexure 1). Notably, many such activities meet near-unanimous opposition in public hearings, yet these sentiments are totally ignored.

Residents of Tamboli village in Sindhudurg district narrate that they suddenly discovered some four years ago that mining had been entered as 'other rights' on their land records without so much as informing them, although this can only be done with their full concurrence. They had to resort to prolonged agitation, including fast unto death in 2007 to have these illegal entries removed.

There are other notable examples of people being misled and being forced to accept activities against their wishes. PTIANA now plans to set up a coal-based power plant on land people sold on the understanding that it was being purchased to set up an ecotourism resort. Finolex changed the product it was to produce from PVC Pipe to Resin to coal based TPP. Finolex is also now forcibly closing fishermen's traditional access to fishing areas. Ratnagiri Gas Power Corporation Limited, that took over from ENRON is refusing to accept commitments to local communities made by ENRON.

Concluding remarks

Konkan is a treasure trove of human resources. It was the birth-place of the great freedom fighter, Lokmanya Tilak and of three Bharat Ratna Awardees; Dhondo Keshav Karve, Vinoba Bhave, Pandurang Vaman Kane. Dr. B R Ambedkar's ancestral village lies in Konkan, and Konkan has been his karmabhoomi. Surely the people of this most literate part of Maharashtra have the ability to decide on a desirable development path; a path that will protect the environment that they treasure. These are the communities that have over thousands of years preserved their natural world through practices like sacred groves. I have received thousands upon thousands of letters from people all over the region that they wish to see the natural heritage of their region protected. It is they who should be empowered to do so.

A century ago, Lokmanya Tilak had declared that "*Swaraj is my birthright, and I shall have it!*" We have achieved the independence he cherished, and moved on to development. It is now significant to enquire what development means. Notably enough, India's leading economist, Amartya Sen echoes Lokmanya Tilak in his book 'Development as Freedom'. He asks, 'What should development mean?' His clear answer is that it is not merely growth in GDP or per capita incomes, after all, American Blacks have a much higher income, but a far lower life expectancy than Sri Lankans or Keralites. He goes on to propound that development should be viewed as 'A process of expanding real freedoms that people enjoy'. He has defined these freedoms as: Access to adequate food, clean water, unpolluted air, shelter, education, health care, and gainful employment. He says that above all development should lead to an enhanced capacity to engage in social, political, and economic decision making.

I believe that we should aim at taking the development of Ratnagiri-Sindhudurg districts in these directions as enunciated by Amartya Sen. It should not be decided upon by experts alone, after all the submission of hundreds of highly unsatisfactory EIAs by experts, and acceptance of very defective EIAs by the Appraisal Committees, show that we cannot simply rely on experts, though, of course, they should play a positive role. The very unsatisfactory state of pollution control and the suppression of civil liberties by officials shows that we cannot simply rely on the officials either, though, of course, they, too, should play a positive role. The limited job of an expert is to objectively bring out what is happening on the ground. This is a sincere attempt to do so.

But I have faith in our democracy of the people, by the people and for the people. So the ultimate remedy must lie in empowering the people. I strongly recommend that the Ministry of

Environment and Forests seriously undertake this task; WGEEP would be happy to help work out in detail how this mission may be approached.

Annexure 1: Some examples of use of Bombay Police Act 1951 Sec, 37(1)(3) prohibiting gathering of people in Ratnagiri district connection with protests against ‘development’ activities unacceptable to them

Sr.No.	Date	Under Section	Reason	Number of Days
1	28.8.07 to 11.9.07	Bombay Police Act 1951 Sec, 37(1)(3)	Andolan against Ranpar Project, of Finolex	15
2	9.12.07 to 11.12.07	Bombay Police Act 1951 Sec, 37(1)(3)	Jindal Project at Jaigad	3
3	22.3.08 to 4.4.2008	Bombay Police Act 1951 Sec, 37(1)	Protest Against Finolex Company	14
4	5.4.08 to 19.4.08	Bombay Police Act 1951 Sec, 37(1)(3)	Protest Against Finolex Company	15
5	16.4.08 to 30.4.08	Bombay Police Act 1951 Sec, 37(1)(3)	Protest against project of Dhopave Tal. Guhagar,	15
6	28.4.08 to 12.5.08	Bombay Police Act 1951 Sec, 37(1)(3)	Protest against Finolex of Ranpar Golap Sangarsh Samiti.	15
7	19.6.08 to 30.6.08	Bombay Police Act 1951 Sec, 37(1)	Protest of Villagers against Lote Parshuram MIDC Zone	12
8	15.7.08 to 30.7.08	Bombay Police Act 1951 Sec, 37(1)(3)	Protest of 17 Gaon Sangarsh Samiti against Water Polution in Lote Parshuram Area	16
9	2.8.08 to 2.8.08	Bombay Police Act 1951 Sec, 37(1)	Protest against Lote MIDC by MNS	1
10	6.8.08 to 6.8.08	Bombay Police Act 1951 Sec, 37(1)	Protest against Pintoki Co. by Khed Shivsena	1
11	19.8.08 to 31.8.08	Bombay Police Act 1951 Sec, 37(1)	Protest against Lote Parshuram MIDC by Local Parties.	13
12	17.9.08 to 30.9.08	Bombay Police Act 1951 Sec, 37(1)	Protest against Pintoco Co. and Pending Question of	14

			11 workers to take on work.	
13	1.2.09 to 10.2.09	Bombay Police Act 1951 Sec, 37(1)(3)	Protest agaisnt Lote MIDC by Shivsena and other Parties	10
14	12.2.09 to 26.2.09	Bombay Police Act 1951 Sec, 37(1)(3)	Protest agaisnt Lote MIDC by Shivsena and other Parties	15
15	23.5.09 to 1.6.09	Bombay Police Act 1951 Sec, 37(1)(3)	Protest of 17 Gaon Sangarsh Samiti against Water Polution in Lote Parshuram Area	10
16	06.06.09 to 15.6.09	Bombay Police Act 1951 Sec, 37(1)(3)	Protest of 17 Gaon Sangarsh Samiti against Water Polution in Lote Parshuram Area	10
17	1. 18.6.09 to 28.6.09	Bombay Police Act 1951 Sec, 37(1)(3)	Protest of 17 Gaon Sangarsh Samiti against Water Polution in Lote Parshuram Area	11
18	27.10.09 to 27.10.09	Bombay Police Act 1951 Sec, 37(1)	Compensation to farmers against Jaitapur-Madban lands	1
			Total Number of Days	191