Kartikeya Sarabhai / Prithi Nambiar
Centre for Environmental Education
Thaltej Tekra, Ahmedabad 380054

1 December, 1993

Dear Kartikeya and Prithi,

Following up our brief conversation at Ahmedabad regarding the need for a national campaign on the issue of denotification of national parks and sanctuaries, could I request you for the following:

1. A complete set of your (Prithi's) articles on Narayan Sarovar and other protected areas (both originals and newspaper cuttings, if possible).

2. Names and addresses of persons/organisations whom you have been interacting with on this issue, or who should be involved in this campaign.

I am meanwhile putting together a list myself, and will send it soon. Do you have the relevant documents from the PAs in Orissa which are threatened? If not, I could send these to you, and we could get more details from Banka Behary Das of the Krushak Unnayan Trust, who has initiated the campaign on Bhitarkanika and Balukhand sanctuaries. Regarding other areas, Bittu Sahgal (Sanctuary), Gautam Narayan (BNHS), and others could be contacted.

Any further progress on the idea of a meeting on the subject, sometime early next year? Perhaps a consolidation of the material and mailing lists would be the first step, apart from preparing a tentative agenda. Has either of you worked on the latter? I would think that the meeting should have at least the following:

a. General introduction to PAs and the various threats to them

b. Legal position of PAs vis-a-vis commercial activities, and procedures for denotification: a general introduction

c. Specific case studies (Narayan Sarovar, Marine National Park, Balukhand, Darlaghat, Melghat ....)

d. Possibilities of action: local/national/international campaigning, legal redress, mass actions ...

This is a rough list, and I am sure both of you can add to it. Please do respond urgently, with the documents requested above. Regards,

Sincerely,

(Ashish Kothari)

Copy:
1. Banka Behary Das, Krushak Unnayan Trust, 14 Ashoknagar, Bhubaneshwar 751009
2. Bittu Sahgal, Sanctuary Magazine, 602 Maker Chambers V, Nariman Point, Bombay 400021
3. Goutam Narayan, Bombay Natural History Society, Hornbill House, Prince of Wales Museum Compound, Shaheed Bhagat Singh Marg, Bombay 400023

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Denotification of Narayan Sarovar Chinkara Sanctuary

Almost ninety percent of the area under the Narayan Sarovar Chinkara Sanctuary in Kutch has been denotified by the Gujarat Government. The 769 sq. km Sanctuary was declared in 1981 to protect the wildlife of the unique desert and scrub habitat of Kutch. Now, the area has been reduced to mere 95 sq. km as the area in Lakhpat taluka were found to be rich in minerals. The State Government has taken this step for economic exploitation of the region. Mineral prospecting, limestone mining and establishment of a cement plant are some of the activities now planned for the area.

Narayan Sarovar is one of the last remaining sanctuaries for some of the most endangered fauna of the region such as the Chinkara, the Great Indian Bustard and the Lesser Florican. The wildlife in the sanctuary also includes the Leopard, Caracal, Wolf, Pangolin and Nilgai, besides rare birds such as the Whitewinged Black Tit and the Redheaded Falcon. It is also the home for many other specialised flora and fauna whose survival is dependent on the unique dry scrub habitat. In fact, it is the only sanctuary of its kind not only in Gujarat but the whole country.

Narayan Sarovar, has some of the best scrub forests in the state of Gujarat. The forest cover of the Sanctuary is crucial for whatever little rainfall the area receives. Its destruction will be disastrous for the whole arid Kutch region. It is well known that the rainfall in any area is closely dependent upon the local forest cover.

The Gujarat Government had promised to carry out compensatory afforestation at several places including Kutch in lieu of the forest cover lost due to submergence in Sardar Sarovar Project. In fact, some degraded parts of Narayan Sarovar was specifically selected for afforestation and better protection. Clearly the Gujarat Government in going back on its words. It is defending the move by saying that forest patches are not being disturbed under the plan and only 'open wasteland' will be used for mining and other purpose. It is natural that scrub forest habitat do have a lot of open patches and these are the integral part of the ecosystem. Any intensive activity in these open areas will certainly affect the forest patches as well as the wildlife of the region, particularly those who favour open areas such as the Chinkara and the bustards.

We should recommended a total rescission of denotification as well as mining plans. One of our old members from Gujarat, Mr. Lav Kumar Khachar, informs that large tracts of land suitable for mining is available east of the sanctuary. Possibility of using these sites away from the sanctuary to mine limestone and erect the cement plant may be explored.

Narayan Sarovar

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Bangalore
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(Dakshinapan)
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Puri
Behala
Calcutta Airport
Howrah Subway
Siliguri
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Maniktala Civic Centre
Vivekanda Super Market
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Haldia
Raiganj
Baharampur
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Dangerous shift

Gujarat's flawed development strategy

PRITHI NAMBIAR

GUJARAT is known for its pioneering role in the field of conservation. A traditional respect for all forms of life has coexisted with a zeal for acquiring material wealth and prosperity. But the two concepts are now in conflict as never before. The State, as well known for the wealth and diversity of its flora and fauna as for entrepreneurship, is reneging on its commitment to conservation.

A development strategy that favours heavy industrialisation at the cost of national parks and sanctuaries is crowding out the State's rich heritage in wildlife. Nature lovers and conservationists worldwide are concerned that a priceless treasure inherited over time is being squandered away. The final frontiers will soon be crossed as the drive to privatise and industrialise storms the last bastions of endangered animal and plant species in the State.

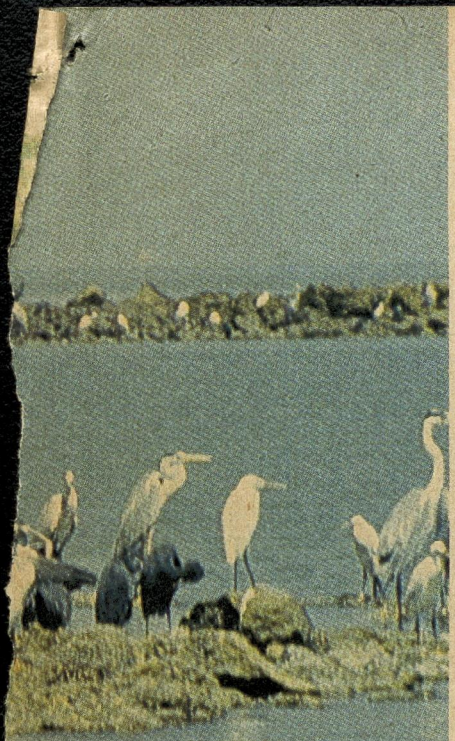
Prithi Nambiar is Coordinator: CEE-NFS at the Centre for Environment Education, Ahmedabad.

The "denotification" of the Narayan Sarovar sanctuary in Lakhpat taluk of Kutch district is the first move of its kind by the Gujarat Government. By a notification issued on July 27, the Department of Forests and Environment summarily "cancelled" an earlier one dated April 14, 1981 declaring the area a wildlife sanctuary. It attempts to justify its abrupt decision saying the area is "substantially in excess of the requirements of a sanctuary". The notification further reclassified a segment of the reserve forest areas in the "former" sanctuary as the new Chinkara wildlife sanctuary.

The July 27 notification appears to be *ultra vires* — outside the powers of the State. Article 3 of Section 26 A of the 1991 amendment to the Wild Life (Protection) Act, 1972 states that "no alteration of the boundaries of a sanctuary shall be made except on a resolution passed by the legislature of the State." A public interest litigation challenging the validity of the notification is before the High Court.

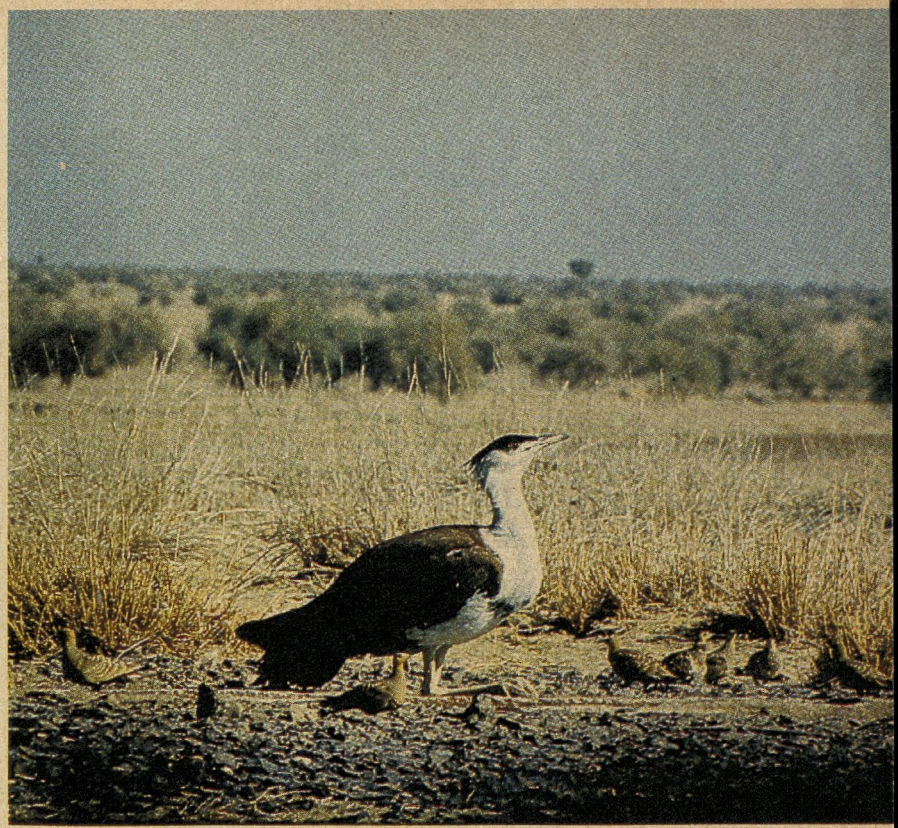
An appraisal of the legalities of the case throws light on the advantages inherent in the trade-off being made between conservation and industrialisation. The first relates to the status of the land released by denotification (assuming it is validated by the State legislature). Land formerly under the sanctuary will revert to *status ex-ante*. Land that is contained by sanctuaries is normally made up of reserved forest areas protected by the Indian Forest Act, 1980, which requires the Centre's approval for dereservation, and non-reserved areas such as reserve wastelands that are not similarly protected. The denotification thus releases large areas that will become available for other uses.

The use of such reserve wasteland for non-forest purposes would violate Rule 5.2(a) of the Forest (Conservation) Rules, 1981, which states that the land in question should not be a part of the habitat of any endangered or threatened species of flora and fauna. Narayan Sarovar is home to six such species — the chinkara, the desert cat,



An avian spread over the marine national park, photographed from the Beyt Dwaraka... the last bastions of endangered species facing the threat of being overrun.

Rajpal Singh



The great Indian bustard , one of the six endangered species protected at the Narayan Sarovar sanctuary... the prospect of progressive decimation of natural heritage.

Mukesh Acharya

the pangolin, the peafowl, the caracal and the great Indian bustard. In addition, it protects a rare gene pool of *Commiphora* (Gugal) and the remnants of the original Kutch thorn forest.

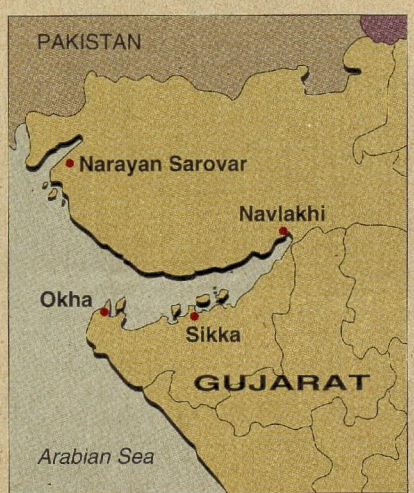
The status of non-forest lands, which generally form a substantial part of a sanctuary, is the main draw for State governments on the lookout for vast contiguous areas that would suit the requirements of large industrial concerns consisting of clusters of processing units.

The revival of private ownership rights in areas that were once sanctuaries or national parks is ruled out in the event of denotification.

Four cement industries are intended to be located in Narayan Sarovar to access limestone reserves in the area. The establishment of cement factories and limestone mining in the sanctuary will destroy the habitat of the endangered species. Studies reveal that cement dust has a destructive impact on vegetative growth and mining will denude the area.

★ ★ ★

Gujarat has committed over 10 per cent of its land area to a protected area network that represents the rich diversity of habitat of its flora and fauna. From saline desert regions, arid lands, hill tracts, moist deciduous teak forests and a profusion of bay inlets, islands,



coral reefs and mangrove forests that are clustered around its delicate filigreed coastline, the network of national parks and sanctuaries shelters unique ecosystems that are a legacy of the State's diverse climatic zones.

Gujarat is also a showcase for over a third of the total variety of birds found in the subcontinent. The State's wetland regions attract flocks of rare birds, including the crested hawk eagle, the crested serpent eagle and the paradise flycatcher. The wild ass of Kutch or the Indian Onager is one of the rarest animals now surviving in the desert habitat. Like the Asiatic lion, the Indian wild ass is found in the inhospitable saline deserts of Gujarat but nowhere else in the world. Realising the fragility of this unique desert ecosystem, the State Government in 1987 declared 7,506 sq km in the Great Rann of Kutch as the Kutch desert wildlife sanctuary, the country's largest.

India's first marine national park and sanctuary is also in Gujarat. The park offers the most spectacular display of live corals seen with the naked eye, just below the water surface. It is contained within 295 sq km of marine sanctuary area that includes 42 islands and the long coastal belt between Navlakhi and Okha. The coral deposits include the brain coral, the sea fan, the star coral and the plate coral and come in resplendent colours. The deeper layers of coral have been carbon-dated by scientists at the Tata Institute of Fundamental Research and found to be over 1,20,000 years old. The most recent layers are over 6,000 years old.

A veritable treasure-trove of marine life, the Gujarat coast has 225 species of algae, 400 species of fishes, 300 to 400 species of molluscs as well as dolphins, sharks, whales and dugongs. Bonnelia, a rare marine animal, is found here. Three species of sea turtles migrate thousands of miles to spawn on the coastline of the Gulf of Kutch.

However, this area is already under



M. Dolakia



Mukesh Acharya

A wild ass on the double... an as yet largely unspoilt scene.

A brain coral at the marine national park... a spectacular display.

threat from a chain of industrial units that have come up along the coast. These include an oil terminal at Vadinar and a fertilizer factory and a thermal power station at Sikka. Several salt farms have also come up near mangrove areas. A Gujarat Forest Department publication highlights the growing concern of conservationists over the impact of industrial pollution in the marine park area. Oil spills and tarballs have been known to result from the bulk handling and transport of oil at the Vadinar refinery. The area's proximity to developed port facilities at Sikka is a feature that would interest a refinery dependent on bulk handling facilities for the transport of oil.

The thermal power unit of the Gujarat Electricity Board at Sikka discharges hot effluents, including coal ash, into the sea. According to the Forest Department report, these industries and the fertilizer unit have encroached upon the marine park area by constructing jetties and other such facilities.

The mangroves and coral reefs serve another purpose. They cushion the impact of ocean breakers, preventing coastal erosion. This unique vegetative system, which survives in the arid and saline conditions, supplies nitrogen through its leaf litter, which in turn supports marine life systems. The mangroves are being threatened by salt farming in the area which is increasing salinity beyond their 'tolerance level'. Being the only vegetation in the area, they are also chopped by the local communities for fuelwood and fodder. According to satellite surveys of the area, mangrove forests have shrunk from 139 sq km in 1975 to 33 sq km in 1985.



Mukesh Acharya

An eye coral.

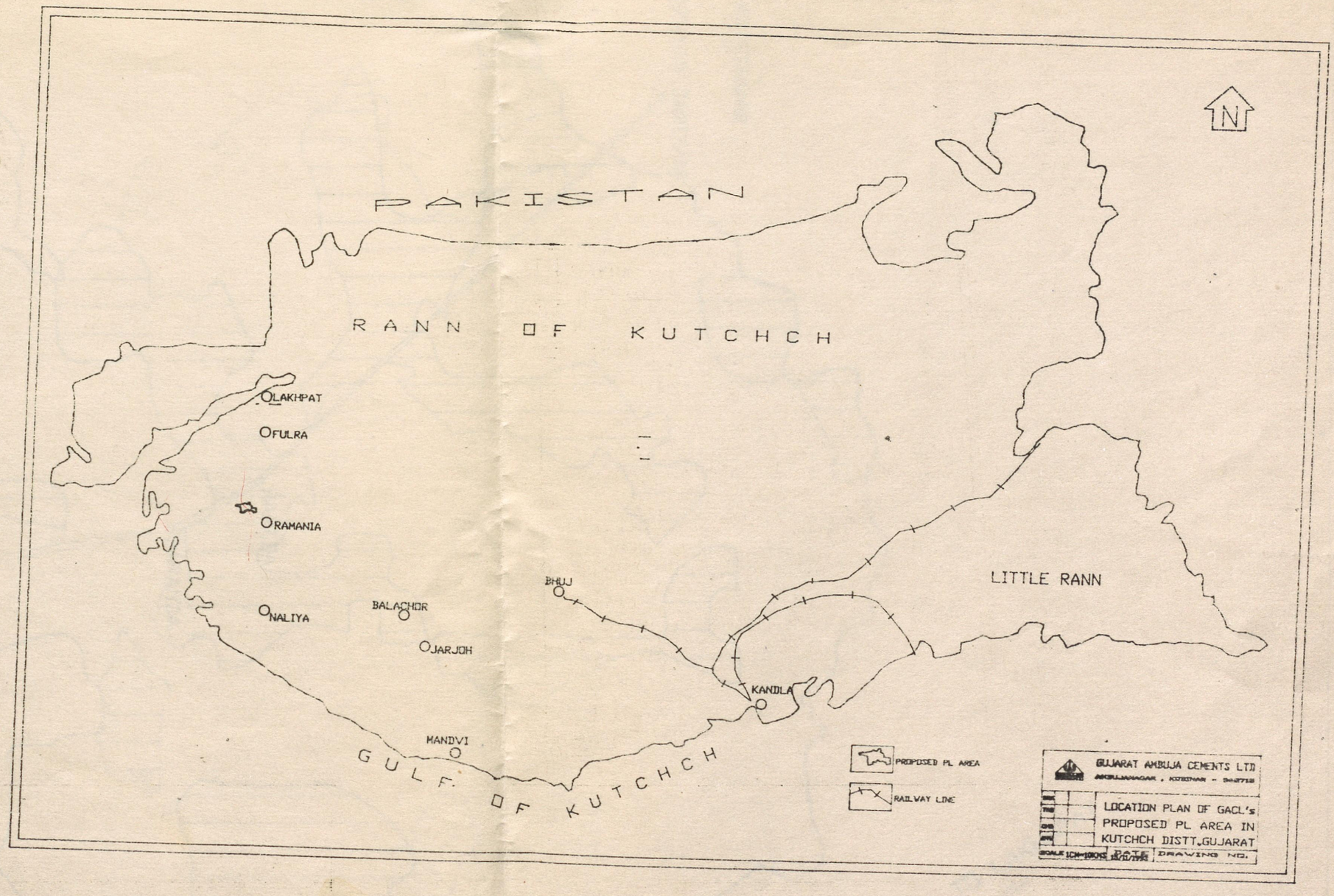
The location of a new refinery project near the marine park and sanctuary area raises once again the issue of effluent disposal. Government sources claim there will be no need to denotify the marine park and sanctuary because the proposed refinery will be located beyond 10 km of the sanctuary's boundary. However, according to a Central Government notification issued on January 29, 1992, no project may be located within 25 km of the boundary of a national park or sanctuary without environmental clearance from the Centre.

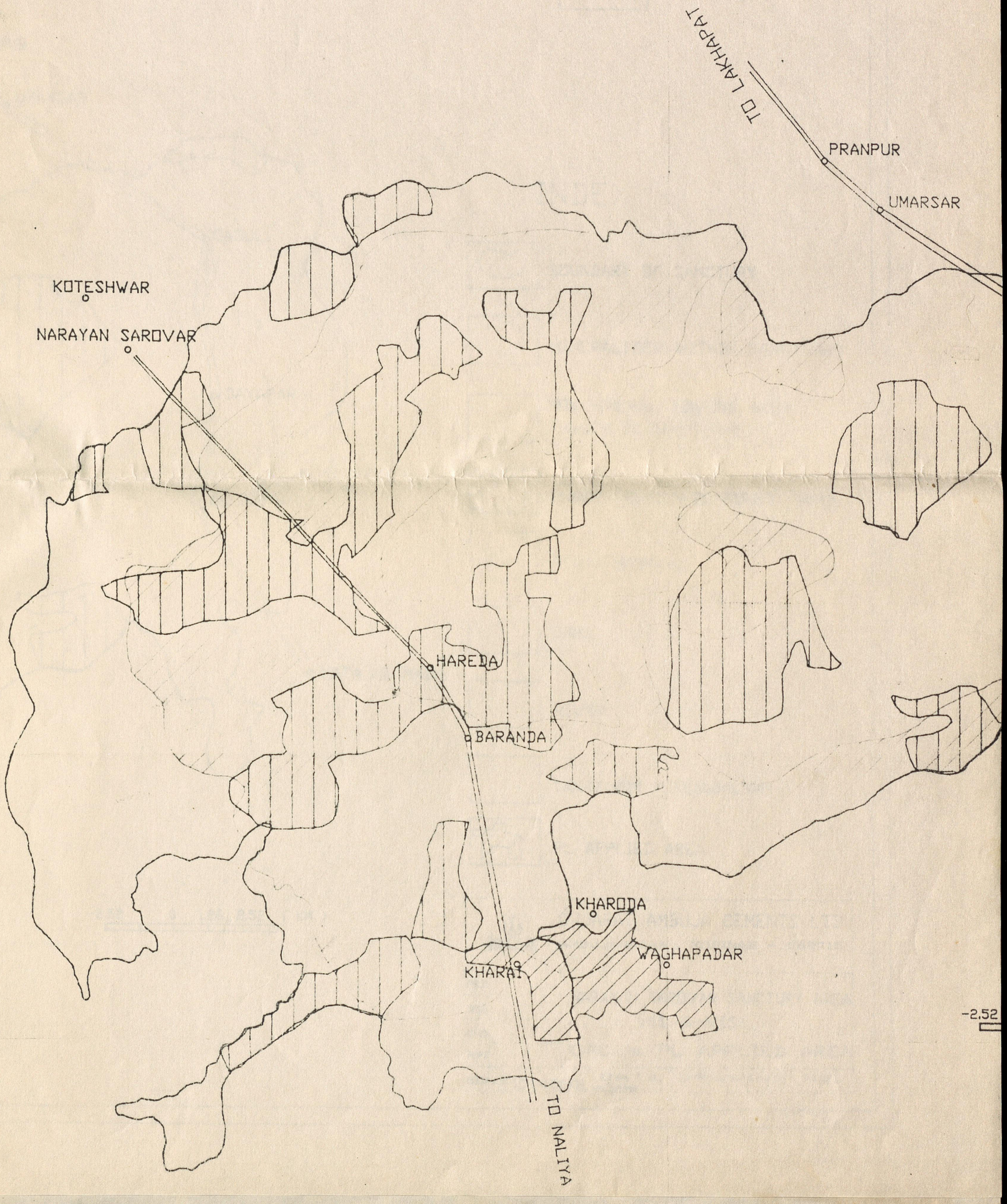
The Gujarat Pollution Control Board has issued a no-objection certificate based on a cursory appraisal of the technology proposed to be used by the refinery and the project authorities' assurance that they would treat effluents prior to discharge. The project is yet to be cleared by the Central Pollution Control Board on the strength of an environmental impact assessment. In the absence of a scientific and authoritative analysis of the possible impact of the refinery project in this ecologically sensitive area, it is premature to conclude that such a major refinery, which is to be the country's largest grassroots refining facility, will have no negative impact on the marine park and sanctuary. There is, in any case, potential for accidental pollution through negligence. The problem of monitoring pollution will grow when the refinery becomes operational as the factory and the surrounding areas will not be open to public scrutiny.

Until recently, the problems that plagued conservation efforts in Gujarat were not unique to the State and involved the management issues common to all "stressed" regions in the country and indeed to most parts of the developing world. However, the recent shift in state policy, evident in the denotification of the Narayan Sarovar sanctuary and the move to provide industries access to areas near the marine national park, is a dangerous development which will result in a progressive decimation of the State's natural heritage.

It is critically important not to trade in resources with a limited capacity for regeneration. Sanctuaries and national parks attempt to preserve indigenous flora and fauna by keeping them out of the reach of decisionmakers through built-in legal safeguards. Turning them in for want of a more sensitive and farsighted development strategy is inimical to the interests of the people of the State for now and in the future. ■

Narayan Sarovar




TO LAKHAPAT
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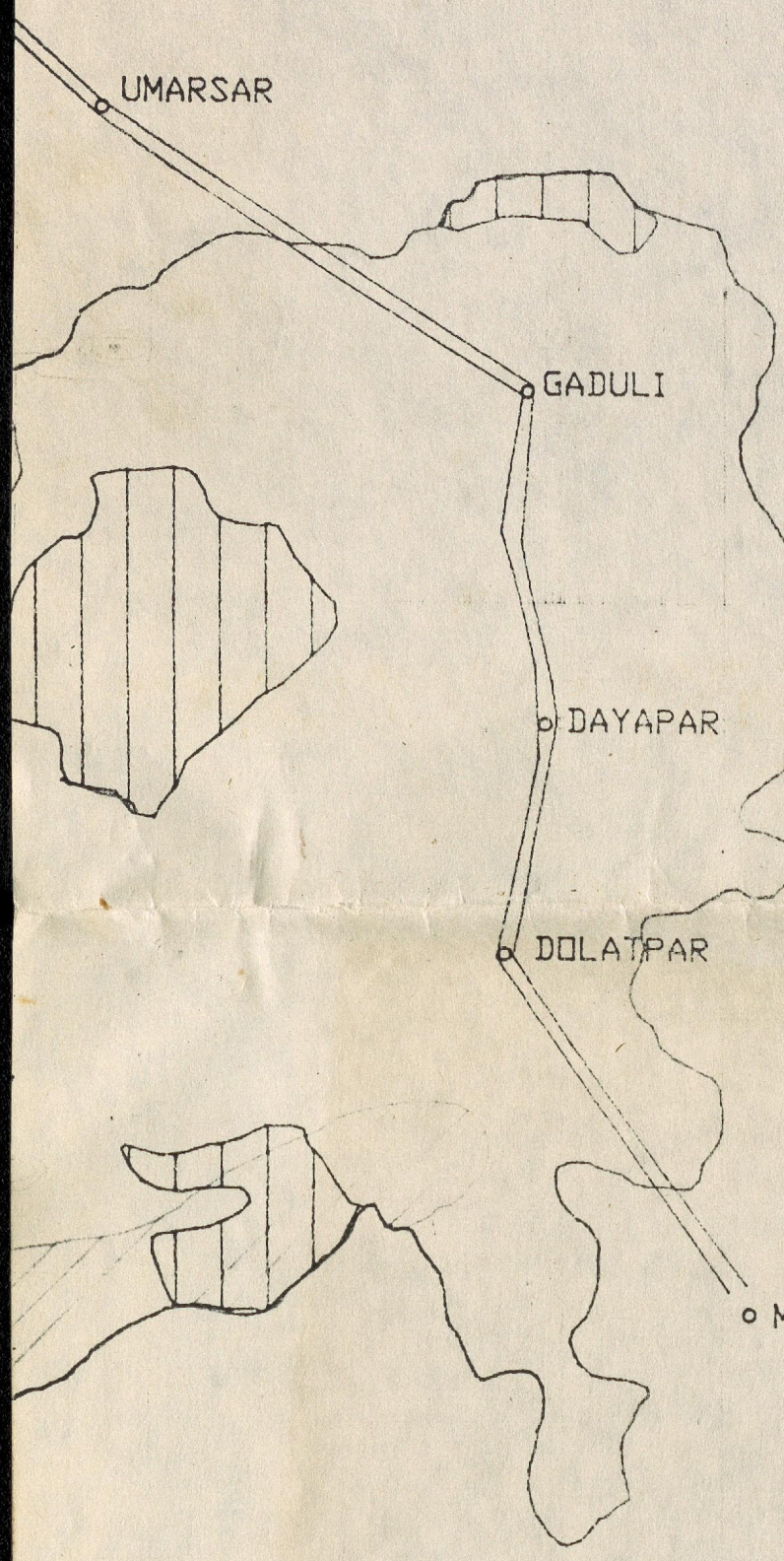
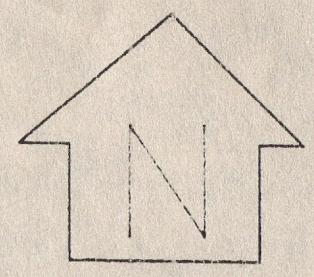
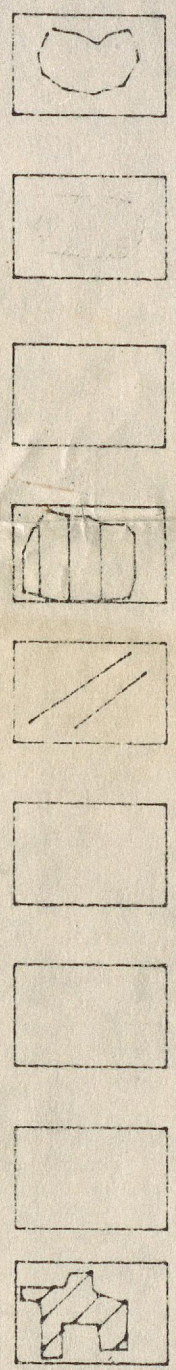




INDEX



BOUNDARY OF SANCTURY

MINERALIZED WITHIN SANCTUARY

NON MINERAL BEARING AREA
(WITH IN SANCTURY)

UNDER SECTION 20 FOREST AREA

STATE HIGHWAY

DAMS

RIVER

TANKS(NON PERENNIAL)NP

PL APPLIED AREA

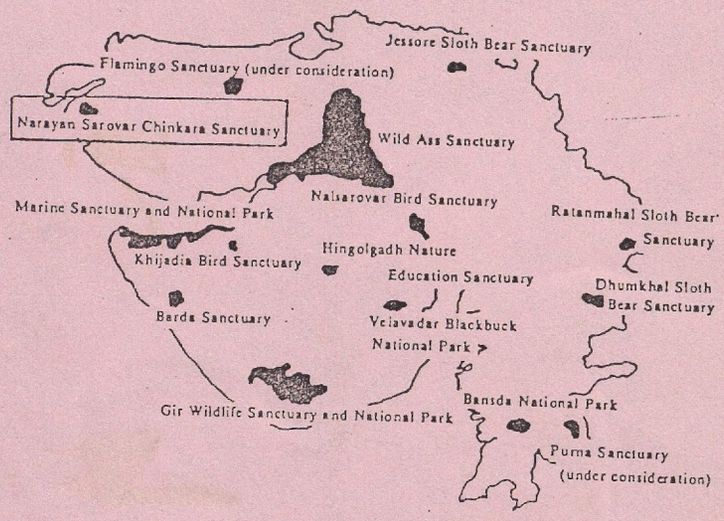
-2.52 0 1.26 2.52 (KM)

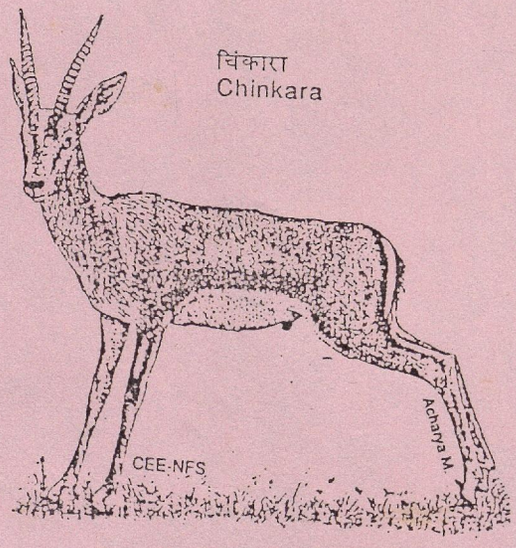
GUJARAT AMBUJA CEMENTS LTD
AMBUJANAGAR , KODINAR - 362715

PRD	NARAYAN 'SAROVAR SANCTURY AREA
DGD	VIS-A-VIS
CHD	
APPD	GACL's PL APPLIED AREA
SCALE 1CM=1.26KM	DATE 13/11/1993 / DRAWING NO.

Narayan Sarovar Sanctuary

The CEE-NFS Reportage





Centre for Environment Education
Nehru Foundation for Development
Thaltej Tekra, Ahmedabad-380 054

THE TIMES OF INDIA, AHMEDABAD

JULY 28 1993

Unmaking a sanctuary?

By PRITHI NAMBIAR

AHMEDABAD, July 27.

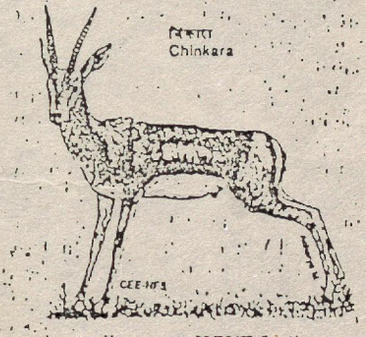
IS there a move afoot to unmake a rare sanctuary in Gujarat? The imminent possibility of denotification of the Narayan Sarovar Sanctuary by the government of Gujarat has been brought to the notice of the World Wide Fund for Nature-India. Following denotification, the government intends to open the area for limestone mining that will feed four cement factories that are currently in the pipeline.

Denotification refers to the cancellation of the official declaration of a specific area as a sanctuary.

What does Gujarat stand to lose by this decision?

A sanctuary which is the last preserve of the original Kutch thorn forest and home to the highly endangered chinkara, a rare and beautiful antelope. Chinkaras have been declared a protected species by the Wildlife Act, 1972, along with the lion and the tiger.

Narayan Sarovar sanctuary, located in the Kutch district, about 110 km. from Bhuj, is remarkable for the diversity in the vegetation and the wildlife it supports. Covering an area 30,754.53 ha in size, the sanctuary consists of an area ranging in altitude from 3 metres above sea level to 140 metres above sea level and subject to a variation in temperature from 48 degree C in the height of summer to 6 degree C in winter. Narayan Sarovar sanctuary has a mixed forest system comprising of dry savannah, desert thorn, tropical euphorbia scrub, acacia senegal and salvadora scrub. Notified a sanctuary in 1981, the Narayan Sarovar sanctuary is home to the chinkara, the caracal, the desert cat, the Indian wolf, the pangolin, the great Indian Bustard and the Peafowl.



According to WWF-India, the sanctuary is the only one of its kind in India where the chinkara is protected and still roams freely. Unlike most other protected areas in India, the Narayan Sarovar sanctuary has been under relatively low pressure from local people and grazing animals. No cases of illegal hunting have gone on record as per a 1984 report. There is no evidence of any management problem that could possibly warrant the denotification of a sanctuary that protects a unique and rare ecosystem.

The impact of denotification and the subsequent entry of industry into a hitherto protected zone could result in the desertification of a fragile ecosystem. Regeneration of the original forest system would be practically impossible, says WWF-India.

Before going ahead with the decision to denotify the sanctuary, the government may have to contend with objections raised under section 26A of the wildlife Act that does not permit the alteration of the boundary of a sanctuary without legislative sanction, and article 48-A of the Indian Constitution that makes it the duty of the state to preserve the environment and natural resources. The government of Gujarat can expect to be challenged by citizens, who are, incidentally, enjoined by the Constitution to preserve and protect the environment, on the above grounds.

It has been suggested that the government considers using the large revenue wasteland outside the sanctuary area for the limestone quarries. The government must consider other alternatives before it resorts to denotification.

Once the sanctuary is denotified and a habitat destroyed, it might be too late to save the beautiful chinkara.

(CEE-NFS)

THE TIMES OF INDIA, AHMEDABAD JULY 28 1993

Bid to barter sanctuary for cement factory

The Times of India News Service

GANDHINAGAR, July 27.

A MOVE is afoot to denotify the sprawling Narayan Sarovar sanctuary area in Lakhpat taluka of Kutch district to enable a private party set up a cement factory in the area zone.

According to state government sources here, the Chief Minister, Mr. Chimanbhai Patel, is determined to go ahead with the proposal to denotify the area despite opposition from a section of the bureaucracy and others. The state cabinet is understood to have approved the Chief Minister's move.

A petition has been filed in Gujarat high court challenging the move to denotify the sanctuary zone to accommodate industries. Though at the moment it is only one cement factory has been mentioned to be located in the zone, the government apparently may slowly open up the entire area to boost industrial development in the underdeveloped border district.

Narayan Sarovar is the only sanctuary of its kind in the country housing the largest number of Chinkaras (Indian Gazelle) — a highly endangered species, and desert animals and birds including rare varieties of migratory birds.

The sanctuary spread over 766 square kilometres provides natural habitat to over 1,400 Chinkaras.

Chinkaras are found in some other desert areas in the country including Rajasthan and Haryana as well as in small numbers in the gir forests and small sanctuaries in Gujarat but Narayan Sarovar has the largest herds of the species.

Due to the very high risk of its total extinction, the Centre had recently included Chinkaras in the number one category of endangered species along with lions and tigers.

In addition to Chinkaras, Narayan Sarovar, which was declared a "protected" in 1981, also houses some wild boars, jackals, foxes, a large variety of rodent species, lizards and other animals and birds including some migratory birds. Besides, it was the only forest area of some rare green foliage like acacia, senegal, guggul and some other species.

The move, it is learnt, has been initiated to accommodate Sanghi Cement Company of Hyderabad to erect a large cement plant with 2.5-million tonnes per annum capacity exploiting the rich deposits of limestone in the area.

Under the Wildlife Protection Act, no Central clearance is required to notify or denotify a sanctuary area. The power is vested in the state government unlike under the Forest Act where Central clearance is necessary. However, an approval from the state legislature is compulsory.

The Chief Minister, however, has sought the advice of the government legal department to suggest ways to short-circuit the route and issue the notification without being required to place the proposal before the state assembly.

The move, it is believed, was taken up in right earnest immediately after the Centre issued a circular under the Environment Protection Act in January this year, to all state governments seeking opinion on a proposal to ban setting up of any industrial unit within five kilometres from the boundary of a declared forest or sanctuary zone.

This amply makes it clear that the Centre is opposed to the idea of any industrial unit being set up within a sanctuary.

The state government had earlier decided to issue a notification on July 5 this year to denotify the Narayan Sarovar sanctuary zone but has shelved it for the time being, apparently awaiting opinion from the legal department. The government is yet to reply to the January Central circular.

Environmentalists fail to see any justification for the government move since cement factories could easily be set up anywhere outside the sanctuary zone as well since most parts of Kutch district are rich in minerals and have abundant deposit of limestone as well as lignite, which has also been found in the sanctuary zone.

Besides, Narayan Sarovar sanctuary is located in such an arid area where rainfall is not only far from adequate, but it does not even rain every year.

A water-intensive unit like a cement factory will have to carry water from long distances and it could perhaps been easier to transport limestone if the factory is located elsewhere.

Cement manufacturers could have purchased limestone-rich land from farmers in the district which would have proved economically beneficial to poor agriculturists besides saving the sanctuary.

Under the mineral concession development rules, no company can be given on lease more than 10 square kilometre area of land for mining.

A cement factory requires 1.4 tonnes of limestone for one tonne production and for the next 25 to 30 years, considered to be the lifespan of a cement factory, Sanghi Cements will require about 100 million tonnes of limestone which will be available to it from a 10 square kilometre area.

For accommodating one unit that requires only 10 square kilometre area, there is no justification for denotifying the entire sanctuary zone.

The entire sanctuary zone is not forest area and has large chunks of revenue wastelands but setting up of an industrial unit will disturb the eco-system of the entire region.

Experts like Dr. Meher Homji, renowned scientist and professor at Pondicherry university, have established that rainfall intensity is closely linked with forest coverage and any destruction of Narayan Sarovar sanctuary could further disturb the rainfall pattern in the arid regions of Kutch.

Unmaking a sanctuary?

By PRITHI NAMBIAR

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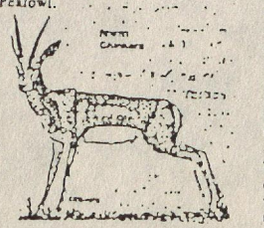

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The impact of denotification and the subsequent entry of industry into a hitherto protected zone could result in the desertification of a fragile ecosystem. Regeneration of the original forest system would be practically impossible says WWF-India.

Before going ahead with the decision to denotify the sanctuary, the government may have to contend with objections raised under section 26A of the wildlife Act that does not permit the alteration of the boundary of a sanctuary without legislative sanction, and article 48-A of the Indian Constitution that makes it the duty of the state to preserve the environment and natural resources. The government of Gujarat can expect to be challenged by citizens, who are, incidentally, enjoined by the Constitution to preserve and protect the environment, on the above grounds.

It has been suggested that the government considers using the large revenue wasteland outside the sanctuary area for the limestone quarries. The government must consider other alternatives before it resorts to denotification.

Once the sanctuary is denotified and a habitat destroyed, it might be too late to save the beautiful chinkara.

(CEE-NFS)

No letter to CS from MP agency on SSP

By A Staff Reporter

AHMEDABAD, July 27: A state government spokesman tonight clarified that the state Chief Secretary had not received any letter from the Narmada Rehabilitation Authority of Madhya Pradesh to stop further construction of Sardar Sarovar dam.

He said that some newspapers had published a news item about such a letter sent to the then Chief Secretary, Mr. K.V. Hariharadas. The spokesman said that the Sardar Sarovar Project (SSP), was implemented jointly by Gujarat, Maharashtra and Madhya Pradesh as per the decision taken by the Sardar Sarovar construction committee.

Environmentalists' concern

AHMEDABAD, July 27.

ENVIRONMENTALISTS and other concerned groups have expressed alarm over the possibility of losing the Narayan Sarovar sanctuary in Kutch if the State government goes ahead with its plan to denotify the sanctuary to facilitate the setting up of a cement factory.

Mr. Lavkumar Khacher, noted naturalist, described the proposed move as unwise. "I personally think this is a very unwise move on two counts. First, the state government is already under fire for appearing insensitive to environmental concerns. This move will only add fuel to the fire. It may be recalled that the state government has attempted to demonstrate its commitment to the environment by pledging part of the Narmada Nigam funds to develop sanctuaries. Then it turns around and denotifies an existing sanctuary."

Secondly, Kutch is a very important rendezvous for a host of migratory birds moving down the Indus, or along the Makran coast into India or westwards to Arabia and the Horn of Africa.

Asked about the need to locate a cement factory near limestone deposits occuring around the Narayan Sarovar sanctuary area, Mr. Khacher believed that locating a cement plant in the region for whatever reasons was "highly insensitive." There were huge tracts of land available for such purposes further to the east of Narayan Sarovar. What was the need to locate a factory there, he asked.

He felt that it would be inadvisable to locate an industry so close to the border with Pakistan. Anti-social elements would be attracted to the area as a result of urbanisation and it would cause a problem already prone to narcotic smuggling.

About the argument to open up a backward area to industry for economic benefits to the people, he said if it was to improve the economy of the area, there were a whole lot of other actions that were possible.

Narayan Sarovar could benefit from a well planned development of tourism, and the sanctuary, along with the pilgrim centre, could become a major draw.

Mr. Khacher thought that the area in Kutch still retained indigenous desert flora and for this reason alone, the sanctuary must not be denotified. In fact, it should be further developed, he added.

(CEE-NFS)

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July 28, 1993

2

AHMEDABAD

JULY 29 1993

Political pressure erasing sanctuaries?

By PRITHI NAMBIAR

AHMEDABAD, July 28.

THE reported move to denotify the Narayan Sarovar sanctuary in Kutch has focused attention on the vulnerability of sanctuaries, national parks and other protected areas in the country to changes in policy that may occur from time to time. The last bastions of the highly endangered forest and wildlife resources, national parks and sanctuaries may find themselves slowly erased by the increasing pressure of political and economic interests. How are we making sure that they are protected under our existing laws?

The unified legal framework protecting our national parks and sanctuaries, game reserves and closed areas is codified in the wildlife protection Act of 1972.

Under the Act, the highest level of protection is accorded by national parks in the sense that no grazing or other activity is permitted within its limits.

The sanctuaries offer a lower level of protection as certain kinds of activities that may be carried out for any "good and sufficient reason... compatible with the interests of wildlife protection", can be undertaken with the permission of the concerned state government.

However, when it comes to the level of protection available to national parks and sanctuaries there are a number of problems with the process of legalisation itself. The legalisation of the status of a national park or sanctuary involves the legal steps of notification, identification and exclusion of existing rights to property within the demarcated area. As a national park does not permit other activity within the park limits, there is an imperative need to identify and settle claims on property before the national park can claim a legal status.

Sanctuaries, it appears, are not bound by such stringent requirements as some level of activity is conditionally permissible within its limits. There is no final notification that needs to be issued regarding their legal status.

In other words, sanctuaries are considered legally constituted as soon as they are notified. The remaining steps required to complete the legalisation process can be taken after the notification. Even if the legalisation process is incomplete, sanctuaries are protected by the forest conservation Act of 1980 under the dereservation of forest land or even the use of forest land for non-forest purposes is prohibited unless the concerned state government obtains the prior permission of the Central government.

Nevertheless, we find ourselves in a piquant situation. While the number of national parks and sanctuaries have shown a gratifying increase from a total of 65 in 1960 to 445 such areas in 1989, there is a disturbing fact that mocks this encouraging trend.

The fact is that, as of 1989, out of these 445 national parks and sanctuaries only 21 national parks and 16 sanctuaries have actually completed the legal steps required in order to become fully fledged protected areas.

It takes a national park some three years, on an average, to complete all legal procedures after the initial step of declaration of intent.

The delay in completing these procedures often occur at the district level.

Not only is the legal status of our national parks and sanctuaries somewhat precarious, they are also subject to alternations. While most alterations have added to the size of the protected area, a significant number have been deletions.

India supports 15 per cent of the world's human population and 14 per cent of the world's livestock on a mere 2 per cent of the world's land. But India is also home to 45000 plant and 65,000 animal species ranging over 25 biogeographic zones.

We have already lost two-thirds of our forest area to agriculture, river valley projects, industries, the construction of roads and other uses besides degradation. While much is made of the trade off between development and environmental concerns when these issues come to a head, very little attention is paid to the need to ensure that protected areas are made legally inviolable as swiftly as possible. (CEE-NFS).

THE HINT WEEKLY, NEW DELHI, 15 AUGUST 1993

Will We Lose the Chinkara?

By: Prithi Nambiar

Is there a move afoot to unmake a rare sanctuary in Gujarat?

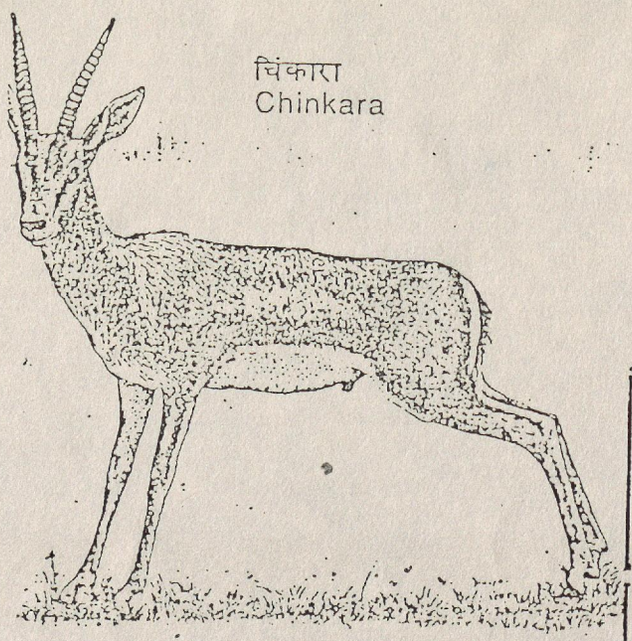
The imminent possibility of denotification of the Narayan Sarovar sanctuary by the government of Gujarat has been brought to the notice of the World Wide Fund for Nature-India. Following denotification, the government intends to open the area for limestone mining that will feed four cement factories that are currently in the pipeline.

Denotification refers to the cancellation of the official declaration of a specific area as a sanctuary.

What does Gujarat stand to lose by this decision?

A sanctuary which is the last preserve of the original Kachchh thorn forest and home to the highly endangered Chinkara, a rare and beautiful gazelle. Chinkaras have been declared a protected species by the Wildlife Act, 1972, along with the lion and the tiger.

Narayan Sarovar sanctuary, located in Kachchh district, Gujarat, about 110 kms. from Bhuj, is remarkable for the diversity in the vegetation and the wildlife it supports. Covering an area 30,754.52 ha in size, the sanctuary consists of an area ranging in altitude from 3 metres above sea level to 140 metres above sea level and subject to a variation in temperature from 48 degrees C in the height of summer to 6 degrees C in winter. Narayan Sarovar sanctuary has a mixed forest system comprising of dry savannah, desert thorn, tropical euphorbia scrub, acacia senegal and salvadora scrub. Notified a sanctuary in 1981, the Narayan Sarovar sanctuary is home to the Chinkara, the Caracal, the Desert Cat, the Indian Wolf, the Pangolin, the Great Indian Bustard and the Peafowl.



According to WWF-India, the sanctuary is the only one of its kind in India where the Chinkara is protected and still roams free. Unlike most other protected areas in India, the Narayan Sarovar sanctuary has been under relatively low pressure from local populations of people and grazing animals. No cases of illegal hunting have gone on record as per a 1984 report. There is no evidence of any management problem that could possibly warrant the denotification of a sanctuary that protects a unique and rare ecosystem.

The impact of denotification and the subsequent entry of industry into a hitherto protected zone could result in the desertification of a fragile ecosystem. Regeneration of the original forest system would be practically impossible says WWF-India.

Before going ahead with the decision to denotify the sanctuary, the government may have to contend with objections raised under section 26-A of the Wildlife Act that does not permit the alteration of the boundary of a sanctuary without legislative sanction, and article 48-A of the Indian Constitution that makes it the duty of the State to preserve the environment and natural resources. The government of Gujarat can expect to be challenged by citizens, who are, incidentally, enjoined by the constitution to preserve and protect the environment, on the above grounds.

It has been suggested that the government consider using the large revenue wasteland outside the sanctuary area for the limestone quarries. The government must consider other alternatives before it resorts to denotification.

Once the sanctuary is denotified and a habitat destroyed, it might be too late to save the beautiful Chinkara. (CEE-NFS)

An endangered sanctuary

THE Narayan Sarovar sanctuary, a safe haven for rare and highly endangered flora and fauna, is itself in imminent danger of being wiped off the face of Gujarat. Should the reported attempt by the State Government to denotify the sanctuary fructify, we stand to lose a precious part of our diminishing natural heritage.

The denotification of the sanctuary is being planned in order to enable the establishment of privately owned cement factories which will derive their limestone requirements from mining in the area.

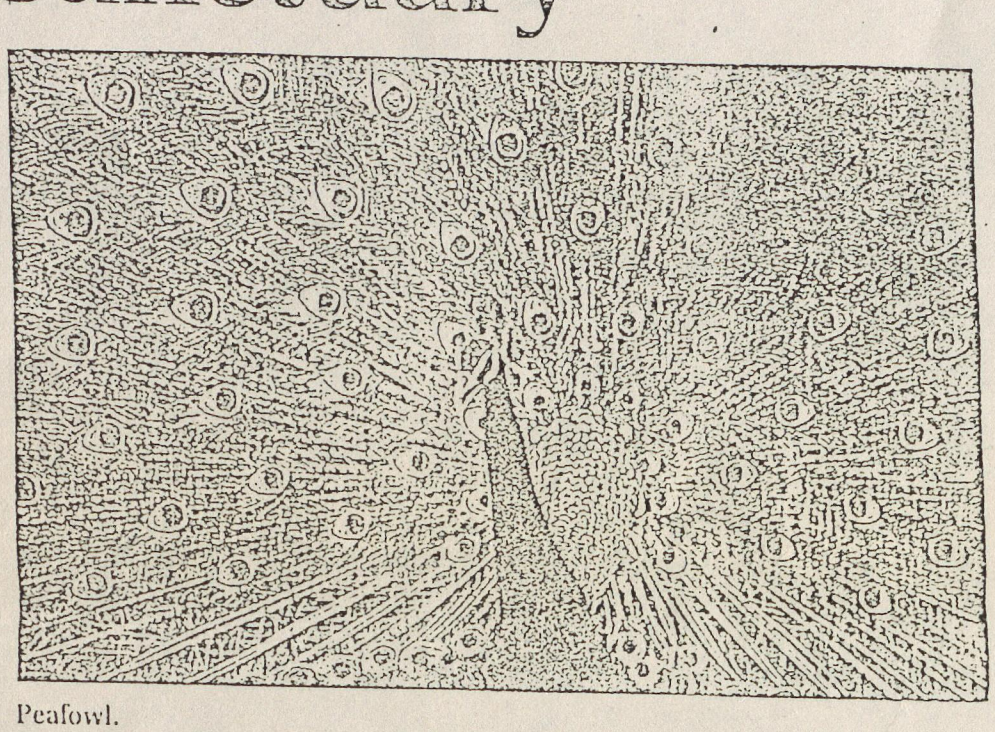
With this move, Gujarat and India will lose a sanctuary which is the last preserve of the original Kutch thorn forest and home to the highly endangered chinkara, a beautiful Indian gazelle, the caracal, the desert cat, the pangolin, the great Indian bustard and the peafowl, all of which have been declared protected species under Schedule 1 of the Indian Wildlife Act, 1972.

The Narayan Sarovar sanctuary, located in the district of Kutch, roughly 110 km. from Bhuj, is remarkable for the diversity in the vegetation and the wildlife it supports. Encompassing an area of 30,754.53 ha, the sanctuary has a topography ranging from three metres above sea level to 140 metres above sea level and is subject to a variation in temperature from 48 degrees C in the height of summer to 6 degrees C in winter. Narayan Sarovar sanctuary has a mixed forest system comprising dry savannah, desert thorn, tropical euphorbia scrub, acacia senegal and salvadora scrub.

According to WWF-India, the sanctuary, notified in 1981, is the only one of its kind where the chinkara is protected and still roams free. Unlike most other protected areas in India, the Narayan Sarovar sanctuary has known relatively low pressure from local people and grazing animals. As per a 1984 report, no illegal cases of hunting have gone on record, although there are reports, off the record, of the Indian armed forces, posted in Kutch, improving their marksmanship on the chinkaras in the sanctuary. There is no evidence, however of any management problem involving the local people that could possibly warrant the denotification of a sanctuary that protects a unique and rare ecosystem.

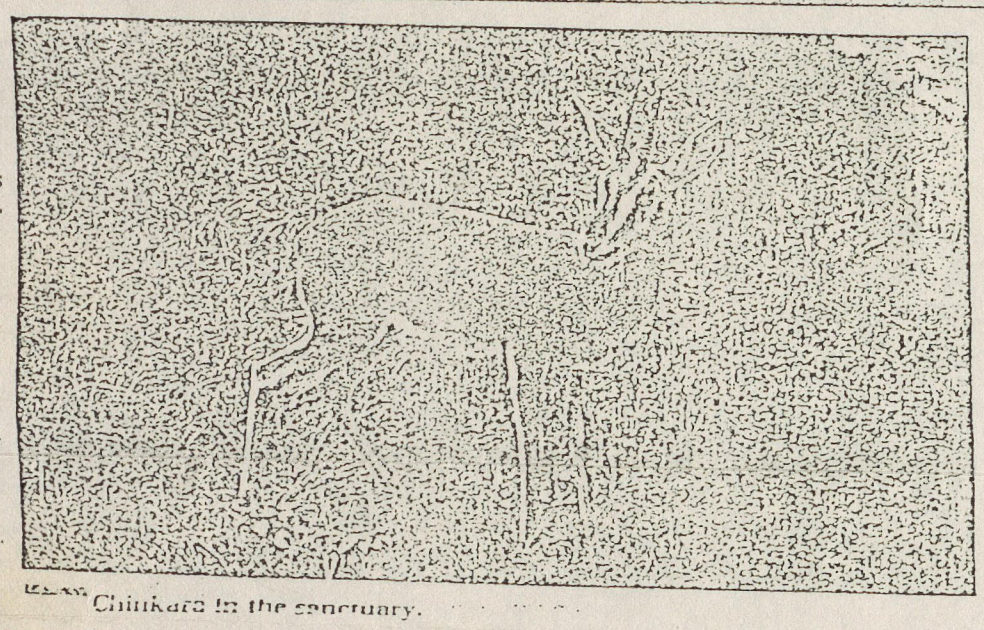
In such circumstances, the attempt to denotify this unusual sanctuary in favour of mining and industry will have an entirely negative impact upon the region. The entry of industry into the area, bringing urbanisation, attendant pressures and pollution in its wake would spell the destruction of a fragile ecosystem already under threat of desertification. Since it is well known that the fall out of industrial activity is widespread and will threaten the viability of the entire sanctuary, the argument that a part of the sanctuary, if degraded land, can be safely released for industrial use, holds little water.

The Government of Gujarat, it appears, is bent on denotifying the sanctuary and has passed a cabinet resolution to this effect. A citizen who challenged the attempt to denotify the sanctuary by filing a petition in the Gujarat High Court was informed that the sanctuary was not legally notified to begin with. According to a press report on the High Court petition the sanctuary was not a legal entity because there had only been a draft notification to this effect. There is however no provision for a draft notification such as the one that the Gujarat Government speaks of, under the Wildlife Act, 1972. In other words, sanctuaries are considered legally constituted as soon as they are notified. The remaining steps that complete the legalisation process can be undertaken after the notification.

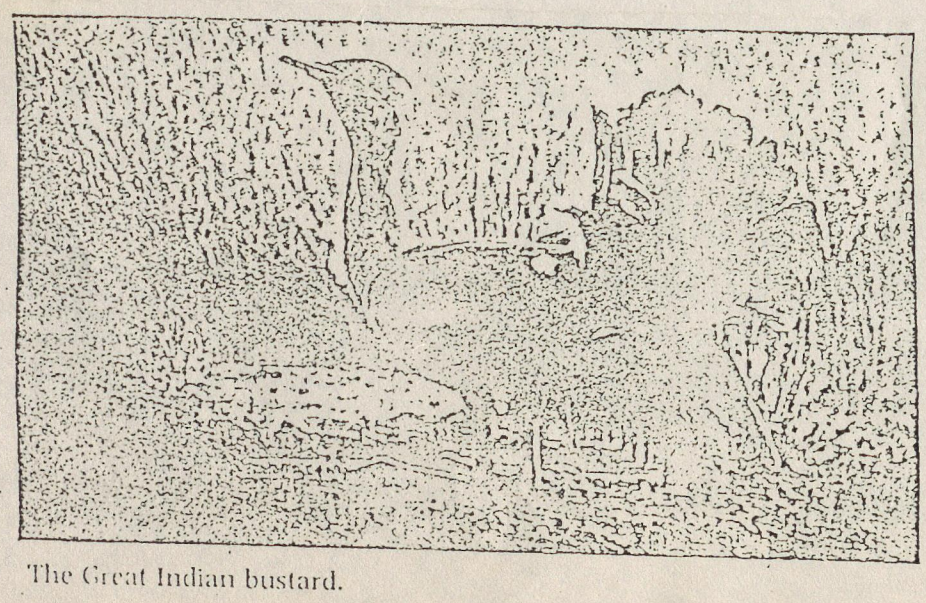


Peafowl.

CONSERVATION



Chinkara in the sanctuary.



The Great Indian bustard.

Even if the legalisation process is incomplete, the sanctuary remains protected by the Indian Forest (Conservation) Act, 1980, which applies to any forest land. The Forest Act, 1980, clearly states that the declaration of a forest land as a reserved forest under section 20 of the Indian Forest Act of 1927, is not necessary for the application of the same. In fact, section 2 of the Indian Forest Act, 1980, explicitly states that "not withstanding anything contained in any other law for the time being in force in the State, no State Government or other authority shall make, except with the prior approval of the Central Government any order directing that... any forest land or any portion thereof may be assigned by way of lease or otherwise to any private person or to any authority, corporation, agency, or any other organisation not owned, managed or controlled by the Government."

It is therefore obligatory on the State Government to obtain the prior permission of the Centre for the use of forest land for non forest purposes. Mining has been clearly defined in the Act as a non forest purpose. The Forest Act lays down the prescribed method and manner of application for approval that must be forwarded for the consideration of the Central Conservation Committee by any State Government contemplating such action. A detailed application may be summarily rejected by the committee if it contravenes rule 5.2.(a) of the Forest (Conservation) Rules, 1981, which lays down that the forest land should not be a part of a wildlife sanctuary or form a part of the habitat of any endangered or threatened species of flora and fauna.

In the case of Ambika Quarry works vs the State of Gujarat, the Supreme Court held that an application for the renewal of an existing mining lease can be justifiably rejected as it violates the principle of section 2 of the Indian Forest Code, 1980. Since the quarries were already functional, it could have been argued that there was no longer any forest land left to be protected. The Supreme Court obviously did not entertain this belief.

The Narayan Sarovar sanctuary is home to not just one but six highly endangered species of native fauna. Is their future negotiable?

Transparencies by Mukesh Acharya

CEE-NTS

PRITHI NAMBIAR

PUNE

AUGUST 24 1993

Sanctuary under threat

By Prithi Nambiar

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THE TIMES OF INDIA, AHMEDABAD

AUGUST 28 1993

Uneasy calm over Narayan Sarovar

By PRITHI NAMBIAR

AHMEDABAD, August 27.

AN uneasy calm prevails over Narayan Sarovar sanctuary a month after it was denotified. The notification published in the Gujarat Gazette (extraordinary) dated July 27, 1993 cancelled the earlier notification dated April 14, 1981 that declared a wildlife sanctuary in Lakhpat taluka of Kutch district -better known as Narayan Sarovar sanctuary. The notification of July 27, 1993 teresely justifies the denotification of the sanctuary with a comment that the area is "substantially in excess of the requirements of a sanctuary."

It may then be inferred that the Gujarat government has succeeded in developing suitable criteria, as yet known to itself, that may be safely used to determine adequate size of sanctuaries.

The notification of July 27, 1993 goes on to upgrade the reserve forest segment of the now-defunct Narayan Sarovar sanctuary to the status of the new Chinkara wildlife sanctuary. The act of reviving a fresh sanctuary in place of an old one need not normally interest the people. But a quick appraisal of the facts reveals that with a couple of strokes of pen, the Narayan Sarovar sanctuary encom-passing an area rich in the diversity of its flora and fauna of over 765.79 sq.kms is now a mere apology for itself in its abbreviated reincarnation as Chinkara wildlife sanctuary. The new sanctuary in 94.87 sq.kms is approximately one eighth of the size of the original one.

The fact that the Gujarat government is of the view that wildlife appears to require only one eighth of the habitat it once enjoyed is not the only disturbing aspect of Narayan Sarovar. A quick review of the progress of public interest litigations filed by concerned citizens in the state reveals not just the uncertainty over the status of sanctuaries but also loopholes that exist in the laws

NEWS ANALYSIS

which protect them.

For one thing, there are two issues at stake. Whether the denotification of the sanctuary is valid at all and secondly, if valid, what would be the status of the land which is no longer part of a sanctuary.

The first issue has been addressed by a petitioner, Mrs. Gadhvi from Kutch, who has challenged the legality of the government's attempt to denotify the sanctuary. According to Article 3, Section 26 A of the 1991 amendment to the Wildlife Act 1972," no alteration of the boundaries of a sanctuary shall be made except on a resolution passed by the legislation of the state."

As such, the July 27, 1993 notification of the state government appears to be ultra vires or clearly outside its legal authority as per provisions of the Wildlife Act. Although the government has quoted the absence of such guidelines in Section 18 of the Wildlife Act, 1972 in conjunction with Section 21 of the General Clause Act as legal basis for denotification of July 27, 1993, clause 3 of Section 26 A in the 1991 amendment to the Act will take legal precedence. It is only in the absence of legal guidelines on the process of alteration of the boundaries of a sanctuary that the state government can expect to issue a notification of the kind it did in July this year. The high court is yet to deliver judgment on the case.

The public interest litigation filed by the noted naturalist, Mr. Lavkumar Khacher, related to the second issue; what would be the status of the land that is no longer part of a sanctuary. He challenged the move to dereserve the forest area on the ground that it was illegal to do so without the Central government's clearance. The petitioner withdrew the case when the secretary, forest department, stated in the court that no reserved forest would be dereserved without following the due course of law.

The statement by the secretary on the strength of which Mr. Khacher's litigation was withdrawn was obvious. It is a fact as per the Indian Forest Act, 1980 that a reserved forest may not be dereserved without prior clearance from the Central government. What is not so obvious is the fact that no such protection is offered to non- reserved land which forms a substantial part of the original Narayan Sarovar sanctuary.

Whatever the case may be, if the denotification proves valid, the Gujarat government will have no further quarrel with the law, for it has not only desisted from dereserving forest area but has restored it to sanctuary status. It is rather unfortunate for Chinkara and other highly endangered denizens of the Narayan Sarovar sanctuary that their homes will have to be shrunk to one eighth of the original size. The denotification of July 27, 1993, if found valid, will release 670.92 sq.kms. of land from the former Narayan Sarovar sanctuary for many limestone quarries and cement factories as one might hanker after.

Should all efforts fail and the state legislature ratify the denotification of the sanctuary, there is still one legal premise which might help restore the Narayan Sarovar sanctuary to its former status. Rule 5.2 (A) of the Forest (Conservation) Rules, 1981 lays down that any land which forms part of a wildlife sanctuary or part of the habitat of any endangered or threatened species of flora and fauna may not be used for non-forest purposes. Narayan Sarovar sanctuary is home to six highly endangered species: the Chinkara, the Caracal, the Desert Cat, the Pangolin, the Great Indian Bustard and the Peafowl -all of which have been declared protected species under schedule one of the Indian Wildlife Act.

- CEE-NFS.

...DUNIYA, SEPTEMBER 4. 1993
INDORE

नईदुनिया

इंदौर शनिवार ४ सितंबर १९९३ — कीमत एक रुपया

चिंकारा नहीं बचेगा

गुजरात के एक संरक्षण क्षेत्र का क्या निकट भविष्य में नामो-निशान मिट जाएगा? गुजरात सरकार द्वारा नारायण सरोवर संरक्षण क्षेत्र को हटाने संबंधी निराशाजनक आदेश निकाले जाने की संभावना है। उक्त [illegible] विश्व प्रकृति निधि के द्वारा [illegible]श में लाई गई है। इस रद्दीकरण आदेश में उक्त संरक्षित क्षेत्र को चूना पत्थर खनन कार्य के तहत खोल दिया गया है ताकि भविष्य में स्थापित होने वाली सीमेंट फैक्ट्री को कच्चा माल मिल सके।

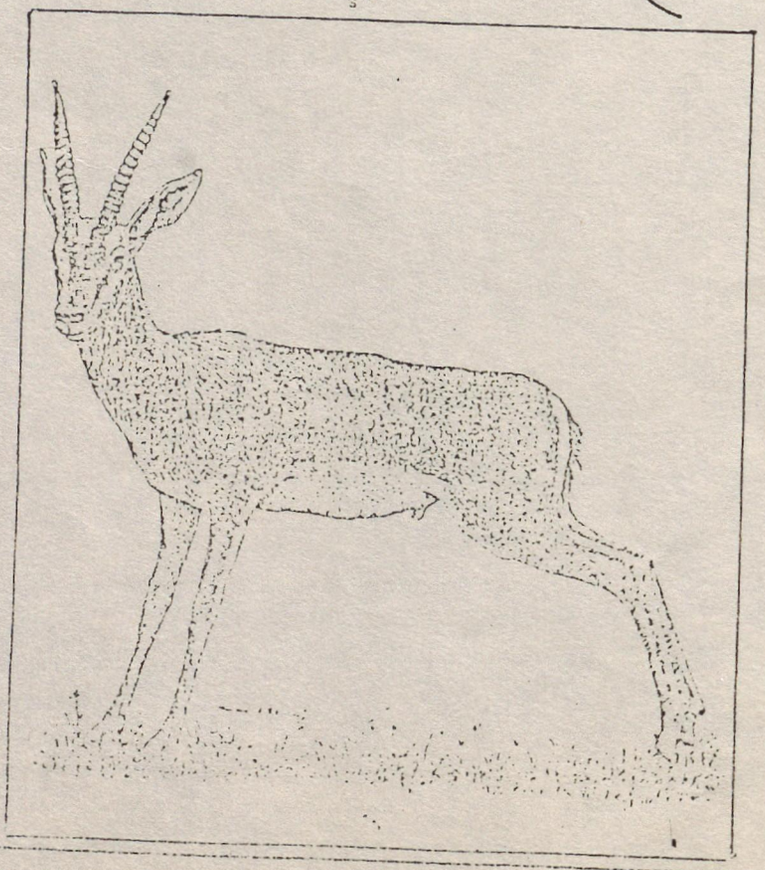
गुजरात सरकार की सूचना एक निश्चित क्षेत्र को संरक्षित होने की शासकीय घोषणा को रद्द करने से संबंधित है। इस संरक्षित क्षेत्र के हाथ से निकल जाने पर गुजरात का इस कार्य के प्रति रुख कैसा रहेगा? यह संरक्षित क्षेत्र मूलतः कच्छ की कँटीली झाड़ियों वाला अंतिम संरक्षित जंगल है जो अत्यधिक संकटग्रस्त, दुर्लभ और खूबसूरत सींगधारी चिंकारा का प्राकृतिक आवास स्थल है। वन्यजीवन अधिनियम १९७२ के तहत बाघ और शे[illegible]हित चिंकारा को भी संरक्षण प्रदान करने वाला प्राणी घोषित किया गया है।

नारायण सरोवर संरक्षित क्षेत्र कच्छ जिले में भुज से लगभग ११० किलोमीटर दूर स्थित है। जहां वनस्पति और उस पर आधारित वन्यजीवन की सघनता आसानी से देखी जा सकती है। यह संरक्षित क्षेत्र में ३०,७५४.५३ हेक्टर क्षेत्र आता है। इसमें कुछ क्षेत्र ऐसे भी है जो समुद्र सतह से मात्र तीन मीटर की ऊँचाई पर स्थित हैं और कुछ क्षेत्र ऐसे भी है जो समुद्र सतह से १४० मीटर की ऊँचाई पर हैं। जहां तक तापमान में [illegible] या उसमें होने वाले अंतर के संबंध में है तो गरमी में यहां तापमान ४८ डिग्री सेल्सियस तक रहता है तो [illegible] मौसम में ६ डिग्री सेल्सियस [illegible] जाता है।

नारायण सरोवर संरक्षित क्षेत्र का वन तंत्र मिश्रित है जिसकी तुलना सूखे सवाना जंगलों से रेतीले कंटकों वाले जंगलों से उष्णकटिबंधीय यूफोबिया झाड़ी, अकेसिया सेनेगल और साल्वेडोर के झाड़ियों वाले जंगलों की जा सकती है। इस क्षेत्र को १९८१ में संरक्षित क्षेत्र घोषित किया गया। नारायण सरोवर संरक्षित क्षेत्र चिंकारा, स्याहगोश, रेगिस्तानी बिल्ली, गोडावन, वज्रशल्क, भेड़िया और मोर का प्राकृतिक आवास है।

विश्व प्रकृति निधि के अनुसार भारत में यह अपने प्रकार का एक मात्र संरक्षित क्षेत्र है जहां चिकारा को संरक्षण प्राप्त है और जहां वह निर्भय होकर विचरण करता है। भारत में अधिकतर संरक्षित क्षेत्रों के विपरीत नारायण सरोवर संरक्षित क्षेत्र पर स्थानीय लोगों और चराई करने वाले मवेशियों का दबाव बहुत कम है। १९८४ की रिपोर्ट के अनुसार उस समय से लेकर अब तक यहां पर शिकार किए जाने का एक भी प्रकरण दर्ज नहीं हुआ है। यहां प्रबंध के दृष्टिकोण से एक भी समस्या उभरी हो इसका भी कहीं उल्लेख नहीं मिलता है। ये सब बातें इस अद्वितीय दुर्लभ पारिस्थितिकीय तंत्र को समाप्त किए जाने संबंधी अध्यादेश के खिलाफ जाती हैं।

इस सूचना के प्रभावित होने और कारखानों के प्रवेश के परिणामस्वरूप संरक्षण प्राप्त क्षेत्र का नाजुक पारिस्थितिकीय तंत्र नष्ट हो सकता है। विश्व वन्य प्रकृति निधि के अनुसार मूल वन तंत्र के एक बार नष्ट हो जाने पर उसकी पुनरुत्पत्ति असंभव है। संरक्षण क्षेत्र की अधिसूचना को रद्द करने संबंधी उदघोषणा की ओर आगे बढ़ने से पहले सरकार द्वारा वन्यजीवन अधिनियम की धारा २६ अ के तहत उल्लिखित नियमों के उल्लंघन किए बगैर और बगैर विधिक अनुमति के संरक्षित क्षेत्र की सीमा को कम नहीं किया जा सकता है और भारतीय संविधान के अभिलेख ४८ अ के अंतर्गत इस बात का उल्लेख है कि इन संरक्षित क्षेत्रों, पर्यावरण और प्राकृतिक संसाधनों की रक्षा करना राज्य का कर्तव्य है, अतः कोई भी नागरिक राज्य सरकार के इस कदम के विरुद्ध आवाज उठा सकता है। इन बातों का सामना तो राज्य सरकार को करना ही होगा साथ ही नागरिकों द्वारा यदि कोई केस दायर किया जाता है तो उसका भी।



यह सुझाव भी दिया गया है कि सरकार अधिक आय प्राप्त करने के लिए संरक्षित क्षेत्र के बाहरी भाग का चूना पत्थर खनन हेतु इस्तेमाल कर सकती है। यह सूचना अमल में आए उसके पहले सरकार को विकल्पों के बारे में अच्छी तरह विचार करना चाहिए। एक बार यह आदेश लागू हो गया और प्राकृतिक आवास नष्ट हो गया तो खूबसूरत चिकारा का बचना मुश्किल हो जाएगा। (सीईई-एनएफएन)

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TIMES OF INDIA, AHMEDABAD

7.9.1993

BNHS chief's plea to CM on Chinkara

By A Staff Reporter

AHMEDABAD, September 6

Scientists and members of the Bombay Natural History Society, led by its president, Mr. B. G. Deshmukh, the renowned environmentalist, have urged the Chief Minister, Mr. Chimanbhai Patel, to reconsider the reported decision to denotify a part of the Narayan Sarovar Chinkara sanctuary in Kutch to facilitate industrial development.

In a letter to the Chief Minister, Mr. Deshmukh hoped that Mr. Patel would take the necessary steps to save an important heritage from destruction.

He said the scientists and the members of the BNHS felt extremely concerned over the fact that about 90 per cent of the sanctuary area had been denotified or was in the process of denotification to accomodate mineral and limestone mining activities for the setting up of a cement plant in the region.

The Narayan Sarovar sanctuary was a unique desert and scrub habitat of Kutch protected for some of the most endangered species and fauna of the region, particularly Chinkara and Bustard, and also had the best scrub forests in the state. The only of its kind in the country, it was also the home for many other specialised flora and fauna whose survival depended on the unique habitat.

Besides, the forest cover was also most crucial for whatever little rainfall the Kutch district received and its destruction would be disastrous for the entire arid region, he reminded.

Mr. Deshmukh said the state government was making the move for economic exploitation of the region but it could be possible to develop the other areas industrially while sparing the sanctuary. He urged the chief minister to examine the possibilities of using alternate sites away from the sanctuary for mining operations since large tracts of suitable lands were reportedly availaible east of the Narayan Sarovar, he pointed out.

He reminded the Chief Minister that the Avian Consevation Worskhop organised by the Birdlife International and Salim Ali Centre for Ornithology and Natural History at Coimbatore last month had unanimously deplored the move and had appealed to the authorities to stop the retrograde step. He hoped that Mr. Patel would consider to rescind the denotification plan and protect the important sanctuary and its surroundings as per the existing wildlife protection act.

Times of India, Ahmedabad
August 3, 1993

Mr Khacher applauds the Narmada project and condemns the denotification of the Narayan Sarovar Sanctuary in the same breath. May I remind him that the Narmada project is going to submerge some 40,000 hectares of rich forest lands in Madhya Pradesh. Some of these are primeval forests harbouring a diversity of plant and animal life. It was in the backdrop of these forests that the 'Jungle Book' known worldwide as Rudyard Kipling's masterpiece was conceived. These are the only forests in India where some of the finest and purest stands of Anjan (Hardwickia Binata) and Salai (Boswelia Serrata) are to be found. Both these species do not regenerate naturally any more and if felled will disappear from the region.

In addition in these forest where Sal dominates, the Sal trees with their associated plant communities have combined with the elevation of the plateau to form a unique habitat where a number of endemic plant and animal species have evolved. These are not found anywhere else in India. With the construction of the Narmada dam this genetic wealth with undiscovered potential will be lost for ever.

RUPA DESAI ABD

Bhavnagar

THE TIMES OF INDIA - AUGUST - 7, 1993

Narayan Sarovar

Sir,- The news of denotification of the Narayan Sarovar Sanctuary, located in Kutch, on the pretext of development of the economically backwared areas of Gujarat is unfortunate. However, the environmentalists must guard against the anti-industry phobia before passing a final judgment on the issue. It is not necessary that every industry contributes towards the depletion of flora and fauna. For example, till recently the salt industry was being blamed for all the woes of wild ass (an endangered species) and other animals in the Little Rann of Kutch. After I carried out a study, the findings of which have been published (TOI, May 23), I found that the industry occupies only two per cent of the total Wild Ass Sanctuary area, which is negligible; in this negligible area, only one person works in five acres of salt fields; and during the peak season (April-June) on an average only one truck operates in an area of 112 acres.

In view of this, I suggest a detailed study of this area be carried out, keeping in mind the history and the availability and utilisation of scarce natural resources. Then a decision should be taken whether to permit the construction of the cement factory in place of the Narayan Sarovar Sanctuary. Maybe the cement factory can be constructed without denotifying the Narayan Sarovar.

Maj K.K. SETH (Retd)

Ahmedabad

Sabarmati

THE TIMES OF INDIA, AUG. 30, 1993

Narayan Sarovar

Sir, - The Narayan Sarovar area or, for that matter, Kutch, the Ranns surrounding it and the gulf to its south form a very important biological region where changes thoughtlessly brought about may seriously affect the status of Eurasian Avi-fauna, in addition to the survival of the Great and Lesser Flamingos, the Floriken, the Great Indian Bustard, the White-bellied Minivet and the White-winged Black Tit, all birds breeding in the area. Already immense damage has been done to extensive areas of the Kutch mainland by the wholesale plantation of Prosopis Juliflora, and even now forestry efforts are afoot to plant this species on the sedge meadows bordering the Little Rann, effectively destroying foraging grounds for thousands of Demoiselle Crane which are so integral to the Gujarat countryside.

Among the mammals, apart from the much-publicised Wild Ass—a magnificent animal by all standards—the graceful Chinkara, the Black Buck, the Neelgai, the Indian Wolf, the Indian Desert Fox, the Caracal and the Leopard are all on the way out, if not already exterminated, and with the wild animals the pastoralists with their magnificent cattle are fading away.

Above all, our traditions are being shattered. The traditions which I would like to believe come down to us from the time of the Indus valley civilisation. All Gujaratis and Kutchis, in particular, must raise their voice against the despoiling of Garvi Gujarat by those who use only foreign exchange as a measure for prosperity. All concerned should write to the governor of Gujarat to prevent further damage to the biological base of an area of international importance. Above all, it is for the people of Kutch to raise their voice against the Hadakyayo Baval culture dominating our administration.

LAVKUMAR KHACHAR

Ahmedabad

THE TIMES OF INDIA, SEPT, 2, 1993

Unique Habitat

Sir, - Most parts of Kutch have lost their flora and fauna due to anthropogenic influences. Narayan Sarovar is a relict representative of the whole set of flora and fauna of which many are critically endangered. Importance of this area as a stronghold of this unique biodiversity and its habitat therefore is even more as compared to other areas.

Narayan Sarovar has tree species such as Gugal and Gorad which grow on limestone deposits. This very limestone will be taken out for making cement, thus endangering the existence of these species. Other plant species typical of desert region are also found growing over here. This type of habitat with thorn forest and scrub is crucial for many animal species which are characteristic of this region.

Among these we have the Whitewinged Black Tit and Whitebellied Minivet as breeding resident birds. The Whitebellied Minivet is almost extinct throughout its distributional range. The Whitewinged Black Tit is endemic to India with its range confined to Kutch, parts of Rajasthan and a distinct population in Tamilnadu. Outside Kutch the bird is almost extinct.

Kutch is pivotal for Eurasian bird migrants. Important passage migrants and migrants include Houbara Bustard and Lesser Florican (both highly endangered), Kashmir Roller, Spotted Flycatcher, Indian Whitethroat, Rufoustailed Chat and many others. Changed landscape and flora of this sanctuary will certainly harm the traditional migratory patterns of these bird species.

Among the mammals, apart from Chinkara, there are mammals such as Caracal, Desert Cat, Desert Fox in this area which are endangered and more or less confined to this part of Gujart.

These are the typical elements of flora and fauna which are more noticeable and therefore we can foresee the effects on them due to the denotification and subsequent quarrying; but there are many other elements of desert biodiversity which will suffer from the after effects of this step. It should be borne in mind that denotification of this area will cause irreversible changes in this unique habitat and its biodiversity and we will lose a representative ecosystem forever giving a setback to the whole conservation movement in India.

PRANAV TRIVEDI
Ahmedabad

CITY

Towards realistic accounting systems

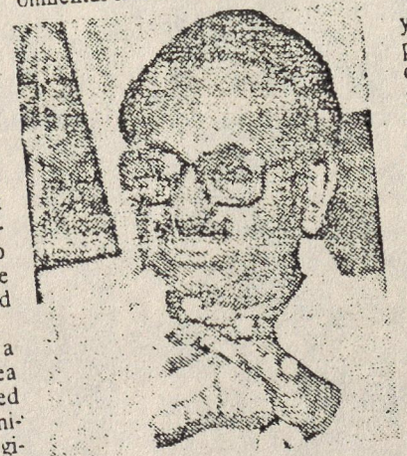
By PRITHI NAMBIAR

AHMEDABAD.

MR. THOMAS MATHEW, Director, Biodiversity, Worldwide Fund for Nature, India, was in Ahmedabad on an official visit to the Centre for Environment Education. He stressed the need to look at conservation in a different context, shifting the existing emphasis on protection and isolation to participatory involvement of people in the management of protected areas.

He felt that policing must play a less important role in protected area management although he admitted that tribal and indigenous communities do not any longer retain ecologically sustainable practices following their integration into the market economy.

Mr. Mathew said there was an encouraging trend in the manner in which general awareness on environmental issues has increased in recent years. "Very few moves that flout environmental good sense now go unchallenged", he said: "However this concern does not always translate into better policy".



Mr. Thomas Mathew

Referring to the case of the Narayan Sarovar sanctuary, Mr. Mathew pointed out how the communication of the vital importance of the sanctuary for the human community helped to focus public interest on the denotification of the sanctuary. He drew attention to the need for work behind the scenes, to increase general awareness on the issues underlying conservation such as carrying capacity and the limits of nature's resilience. The people need to understand that intervention is necessary before we reach that point of no return when the damage done becomes irreversible.

"Conservationists must take care not to appear merely negative or obstructive, else we will lose general sympathy for our case", he said. Mr. Mathew commended the role of the Centre for Environment Education in providing unbiased, scientific and analytical information and a platform for contending groups to come and thrash out issues. He emphasized the need for integrating the true value of resources into our national accounting systems in order to enable policy-makers to take decisions on more realistic grounds". Regenerating living resources is itself a highly productive exercise and it was time our policies reflected this", he said.

Mr. Mathew felt that international debt was also responsible for building up pressure on developing nations to deplete their natural resources. He felt that managing existing protected areas better was more important than extending the system further. In view of the current economic pressure on land, he pointed out that extending the network further is a luxury that the country may not be able to afford (CEE-NFS).

'Big effort needed to revive textile industry'

By A Staff Reporter

evident by the industry registering a negative growth rate during the year.

Effluent treatment plant at Naroda

By A Staff Reporter

AHMEDABAD, September 17: Nearly 100 industrial units of Naroda and nearly industrial estates have formed a co–operative to set up a concentrate effluent treatment plant at a cost of Rs. 1.50 crores.

According to Mr. Deepak Babaria, chairman of the Green Environment Services Society, the plant will have a capacity of treating 1.5 million litres per day of concetrated effluents (ten per cent of the total) discharged by industrial units situated in the eastern industrial belt of the city. The remaining 90 per cent of the non–toxic or harmless discharges would be connected to the municipal sewer disposal system, called NOVAD, now underway.

The Chief Minister, Mr. Chimanbhai Patel, will lay the foundation stone of the plant on September 20. The first phase of the project is expected to go into stream by June next year.

NEW BOOKS

List of new titles to be released on Saturday 25 September 1993 at the British Library

Agriculture/Catering Science :Ebrahim, G.J. : Breast-Feeding: The Biological Option.

Applied Sciences/Engineering :Langford, David : ,Coulthard, Derek : Personnel Policy. ,Cross, Michael : Changing Job Structures. ,Davies, Howard : Managerial Economics for Business Management

MAHARASHTRA HERALD, PUNE, SEPT 27, 1993

Sanctuary endangered

ALIGARH: Environmentalists here have expressed their "serious concern" over a recent move of the Gujarat Government on the proposal to denotify the Narain Sarovar Sanctuary in Kutch district reportedly to set up a cement factory.

Dr. Asad Rehmani, a grassland ecology expert at the centre of wildlife and ornithology of the Aligarh Muslim University has in a letter in to the government of Gujarat made a strong plea to drop this proposal. Dr. Rehmani who returned here after a survey of the Narain Sarovar Sanctuary, said that the significance of the move lay in the fact, that it would set a "dangerous precedent" and also raise serious doubts about the sincerity of its commitment to use effectively funds of the Narmada Nigam projects.

Several environmental groups including international organisations have also expressed their concern over. This move, which they said was bound to further endanger the survival prospects of the "Chinkara", antelope, an endangered species. According to officials of Wildlife Society of India, the move would also threaten the survival of the white winged it, an endangered bird, colonizing in that area.

15

TIMES OF INDIA
OCTOBER 14, 1993

Environmental thrust vital

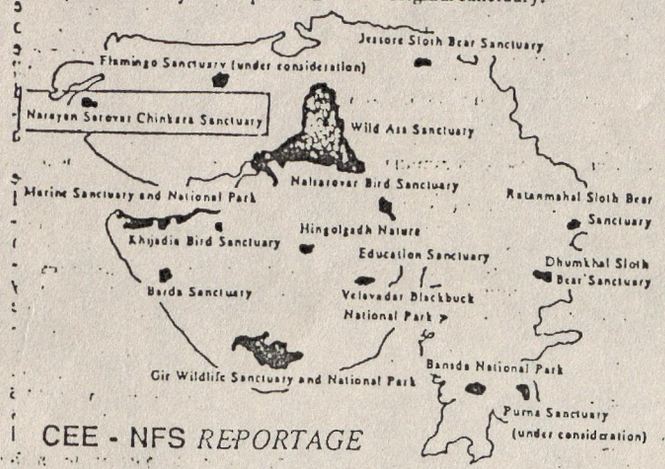
By PRITHI NAMBIAR

LAKHPAT, October 13.

A SHORT distance from the line of control, the Narayan Sarovar Sanctuary, in Lakhpat taluka of Kutch district, borders no-man's land in more ways than one. Victim of a clumsy legal sleight of land, the sanctuary will require concerted efforts on the part of environmentalists and concerned citizens if it is to re-emerge from the limbo to which the government of Gujarat appears to have consigned it.

The dubious notification of July 27, 1993 by the governbment of Gujarat will, if allowed to go unchallenged, make short shrift of Narayan Sarovar sanctuary, home to the remnants of the original acacia thorn forests of Kutch and the last refuge of the chinkara, caracal desert cat, pangolin and the great Indian bustard, all of which are highly endangered species, according to Schedule I of the Indian Wildlife Act of 1972. The July 27 notification cancelled the April 14, 1981 declaration of the sanctuary status of 765 sq.kms of thorn forest territory in Lakhpat taluka of which 94 sq.kms of reserve forest areas were simultaneously declared the new chinkara sanctuary.

QUESTIONABLE NOTIFICATION: The July 27 notification is questionable on the grounds that it is clearly ultra vires or outside the authority of the state government, according to clause 3, section 26A, of the 1991 amendment to the Indian Wildlife Act, 1972. Not only has the government of Gujarat arrived at the somewhat baffling conclusion that the Narayan Sarovar sanctuary area was far in excess of the requirements of a sanctuary, the new sanctuary is just one-eighth the size of the original sanctuary.



CEE - NFS *REPORTAGE*

The July 27 notification is an unfortunate act by a government that has in the years past established a reasonably good record in conservation, chiefly because the new chinkara sanctuary is not only merely 94 sq.kms in size, but is composed of a dozen fragments of reserve forest area scattered through the once whole sanctuary. The evident lack of concern for wildlife protection and the preservation of natural habitat is compounded by the fact that some of the finer patches of chinkara habitat are either termed wasteland or are unclassified forests which are not entitled to protection under the Indian Forest Act of 1980. Ironically these wasteland areas now released by the denotification of the sanctuary are one of the few areas where chinkara are still frequently sighted.

ANOMALOUS SITUATION: These anomalous situations are a direct result of the contempt that policy makers now seem to entertain for i[n]vironmental issues that involve conservation and t[h]e protection of habitate. An apparent misapprehension of the habitate4 preferences of the gentle Indian gazelle, popularly known as chinkara, has made a farce of the new chinkara sanctuary. The chinkara prefers grassy flatlands that are contiguous, free from human interference and bordered by thorn forests. These are the very areas then, that the July 27 notification makes inaccessible to the chinkara and available for industrial use. Twenty mining companies have already filed claims for land in the former sanctuary area.

Unable to touch the reserve forest areas which are protected by the Central government under the Indian Forest Act of 1980, the state government dedicated these dozen scattered tracts of land that do not connect at more than two points to the new chinkara sanctuary.

In the light of the fact that it is hard for a relatively well-informed human to offhand tell a reserved forest area from an unclassed forest or a wasteland, the plight of the chinkara who might have to stop every dozen kilometres to determine the legal status of its land of passage through the dozen fragments of its new snctuarty, is understandably rather unfortunate. The problem will intensify as the areas that separate the shreds of the sanctuary that was, are laid open by mining operations that are to commence shortly.

BLEAK PROSPECTS: A large cement company from Andhra Pradesh is in the process of acquiring land released by the notification of the July 27, 1993, in large tracts around the reserve forest/sanctuary areas. If the land laid waste by the mining activities of the state-owned mineral development corporation is an indication, the fate of the former sanctuary is bleak indeed at Panandro earthmovers and dump trucks surry around evacuating loads of lignite to open lots where the raw material is sundried with the help of casual labour.

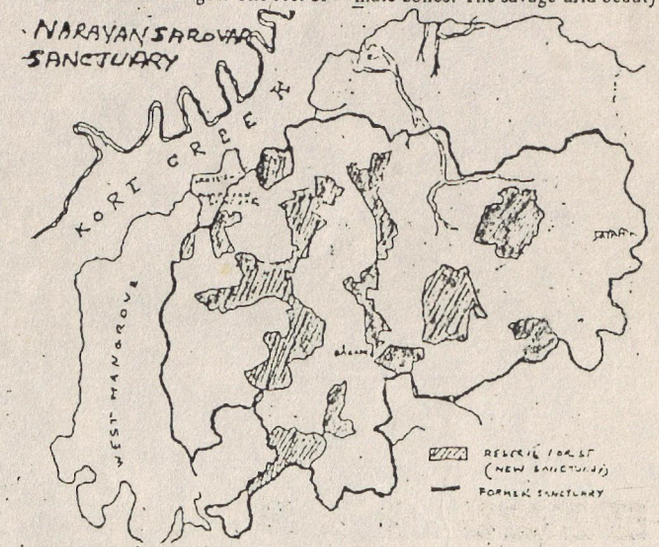
The lignite is then transported out of Panandro by truck. Over five hundred trucks leave Panandro every day heading for Bhuj and beyond.

The manner in which the are mined, laid waste and ignored in the absence of forward integration in the mining industry of Kutch is strongly reminiscent of the economic policy of Imperial India.

DELICATE QUESTION: The region is dry as a bone and industries get their drinking water supplies through pipelines that tap the water sources of local villages. The rest of the water requirement is met by drilling bore wells in the area. The impact of draining water in a region that is on the edge of survival is not hard to imagine. Will industrial development come to Kutch, or will economic activity stop at mining? Only the waterline can tell.

In the absence of an integrated development plan that invests in building local skill and infrastructure, the coming of the mining industry to Kutch will bring in minimal gains at entirely disproportionate costs to the local economy. On the other hand, the thorn forest habitat that was once a sanctuary is an asset that can generate income at very little extra cost. The shrines at Narayan Sarovar and Koteswar are pilgrim centres that are in desperate need of developmental attention. Judicious investment can transform the shrine-sanctuary complex into a focal point for tourism. Those interested in finding sustainable development strategies for Kutch might do well to remember that the region once prospered through trade. An entire tradition will support a way of life that is rooted in local realities.

The loss of Narayan Sarovar sanctuary will cripple a protected are a network that has sought to preserve a part of each of Gujarat's varied climate zones. The savage arid beauty of Kutch is at once a precious legacy and an asset that if managed well, can attract people and attendant prosperity to Gujarat. There must be a way to save the dust-flecked acacia thorn forests of the region while they still harbour life. — CEE-NFS.



INDIAN EXPRESS, SUNDAY 17 OCT

State offering forest land to industry

by Usha Rai

NEW DELHI – Wildlife enthusiasts and nature lovers have been appalled by reports trickling that the Gujarat Government has set up a small committee of foresters and bureaucrats to identify "surplus" forest and sanctuary land in the state which the government wants to denotify and give on a platter to industries.

The grand design for capture of green areas is being worked out quietly and at the highest level. Forest officers who are not pliable are being transfered and Chimanbhai Patel is bringing in people who will carry out his fiat without questioning. Before the denotification of the Narayan Sarovar sanctuary, chief conservator for wildlife Sinha was transfered. There has not been a whimper of protest about his banishment from forest officers.

What is worse, environment groups like the Centre for Environment Education, that depend on state largesse, are too scared to confront the government. People want to keep their options open with the government and they have not forgotten the treatment meted out to officers who spoke up against the Narmada dam at the height of the agitation against the project.

Lavkumar Khachcher, a member of the Worldwide Fund for Nature (WWF) committee in Gujarat, who was in Delhi trying to get the support of the WWF central office as well as other environment groups, feared for the future of the Gir lions as well as the famous wild ass in the Rann of Kutch.

"There is limestone in the Gir sanctuary and the government in its drive for land for industries could grab some area there too," he said. Narayan Sarovar, the home of the bustard and chinkara, has already been denotified for limestone quarrying. The Marine National Park is also under seige.

Khachcher who has just done a study of the erstwhile chinkara sanctuary, says limestone quarrying for setting up cement factories has been permitted without working out where the water for these factories will come from. The only water available is from the sea and it has to be desalinated first.

While the government will be able to generate employment through quarrying, Mr Khachchar says the famous Kutchi cow will lose its grazing ground when the sanctuary is dug up. There is no talk of compensation to the traditional cattle herds of the area.

Since the limestone in the area is almost at surface level they will not have to dig too deep initially. limestone has water retaining properties and if disturbed, the water situation, which is already precarious, will get worse. As in Doon Valley, quarried for limestone, small streams will dry up. The water famine in this area of Kutch has been created by people, he says. Bore wells have been sunk deep to tap the aquifiers and at the northern edge of the sanctuary a thermal power plant has been set up. Right next to it is a lignite mine which has left gaping holes.

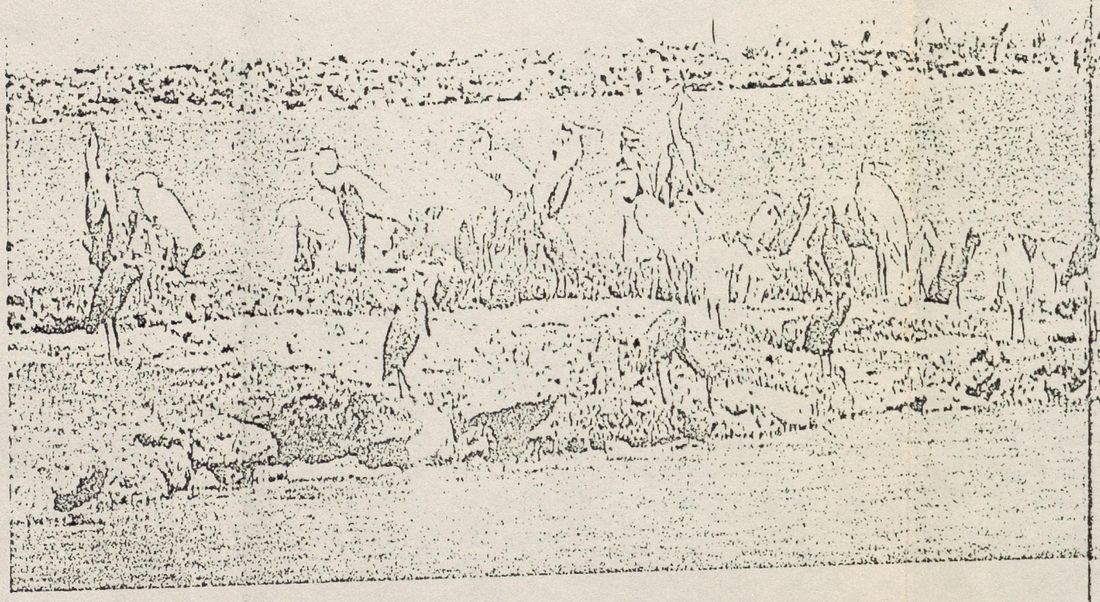
Khachcher fears that all this development will bring in anti-social elements and heighten the smuggling across the Kori Creek to Pakistan.

Gujarat had a large number of nature lovers, says Khachcher, but today the state has been portrayed as being anti-environment. Emboldened after having beaten back the Narmada Bachao Andolan, the chief minister is now gunning for forests and wildlife reserves.

repl... people in India suffer from ... condition and a large number of them could benefit from th... operation which involves removing the worn-out knee to implan...

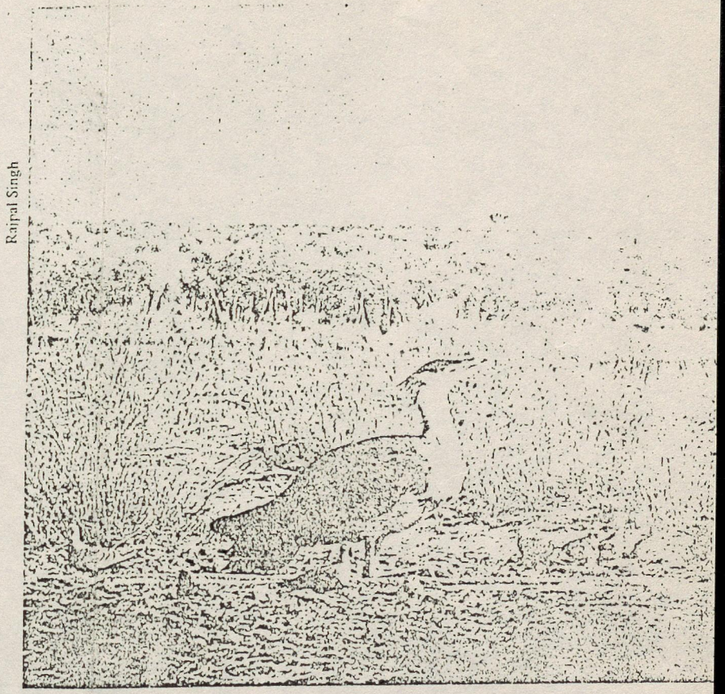
Frontline Oct 22, 93

CONSERVATION



An avian spread over the marine national park, photographed from the Beyt Dwaraka... the last bastions of endangered species facing the threat of being overrun...

Mukesh Acharya



Rajpal Singh

The great Indian bustard , one of the six endangered species protected at the Narayan Sarovar sanctuary... the prospect of progressive decimation of natural heritage.

Dangerous shift

Gujarat's flawed development strategy

PRITHI NAMBIAR

GUJARAT is known for its pioneering role in the field of conservation. A traditional respect for all forms of life has coexisted with a zeal for acquiring material wealth and prosperity. But the two concepts are now in conflict as never before. The State, as well known for the wealth and diversity of its flora and fauna as for entrepreneurship, is reneging on its commitment to conservation.

A development strategy that favours heavy industrialisation at the cost of national parks and sanctuaries is crowding out the State's rich heritage in wildlife. Nature lovers and conservationists worldwide are concerned that a priceless treasure inherited over time is being squandered away. The final frontiers will soon be crossed as the drive to privatise and industrialise storms the last bastions of endangered animal and plant species in the State.

Prithi Nambiar is Coordinator: CEE-NFS at the Centre for Environment Education, Ahmedabad.

The "denotification" of the Narayan Sarovar sanctuary in Lakhpat taluk of Kutch district is the first move of its kind by the Gujarat Government. By a notification issued on July 27, the Department of Forests and Environment summarily "cancelled" an earlier one dated April 14, 1981 declaring the area a wildlife sanctuary. It attempts to justify its abrupt decision saying the area is "substantially in excess of the requirements of a sanctuary". The notification further reclassified a segment of the reserve forest areas in the "former" sanctuary as the new Chinkara wildlife sanctuary.

The July 27 notification appears to be *ultra vires* — outside the powers of the State. Article 3 of Section 26 A of the 1991 amendment to the Wild Life (Protection) Act, 1972 states that "no alteration of the boundaries of a sanctuary shall be made except on a resolution passed by the legislature of the State." A public interest litigation challenging the validity of the notification is before the High Court.

An appraisal of the legalities of the case throws light on the advantages inherent in the trade-off being made between conservation and industrialisation. The first relates to the status of the land released by denotification (assuming it is validated by the State legislature). Land formerly under the sanctuary will revert to *status ex-ante*. Land that is contained by sanctuaries is normally made up of reserved forest areas protected by the Indian Forest Act, 1980, which requires the Centre's approval for dereservation, and non-reserved areas such as reserve wastelands that are not similarly protected. The denotification thus releases large areas that will become available for other uses

The use of such reserve wasteland for non-forest purposes would violate Rule 5.2(a) of the Forest (Conservation) Rules, 1981, which states that the land in question should not be a part of the habitat of any endangered or threatened species of flora and fauna. Narayan Sarovar is home to six such species — the chinkara, the desert cat, the pangolin, the peafowl, the caracal and the great Indian bustard. In addition, it protects a rare gene pool of *Commiphora* (Gugal) and the remnants of the original Kutch thorn forest.

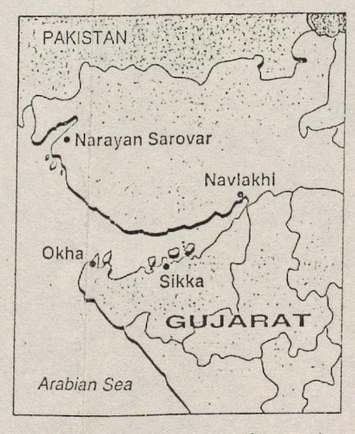
The status of non-forest lands, which generally form a substantial part of a sanctuary, is the main draw for State governments on the lookout for vast contiguous areas that would suit the requirements of large industrial concerns consisting of clusters of processing units.

The revival of private ownership rights in areas that were once sanctuaries or national parks is ruled out in the event of denotification.

Four cement industries are intended to be located in Narayan Sarovar to access limestone reserves in the area. The establishment of cement factories and limestone mining in the sanctuary will destroy the habitat of the endangered species. Studies reveal that cement dust has a destructive impact on vegetative growth and mining will denude the area.

★ ★ ★

Gujarat has committed over 10 per cent of its land area to a protected area network that represents the rich diversity of habitat of its flora and fauna. From saline desert regions, arid lands, hill tracts, moist deciduous teak forests and a profusion of bay inlets, islands,



coral reefs and mangrove forests that are clustered around its delicate filigreed coastline, the network of national parks and sanctuaries shelters unique ecosystems that are a legacy of the State's diverse climatic zones.

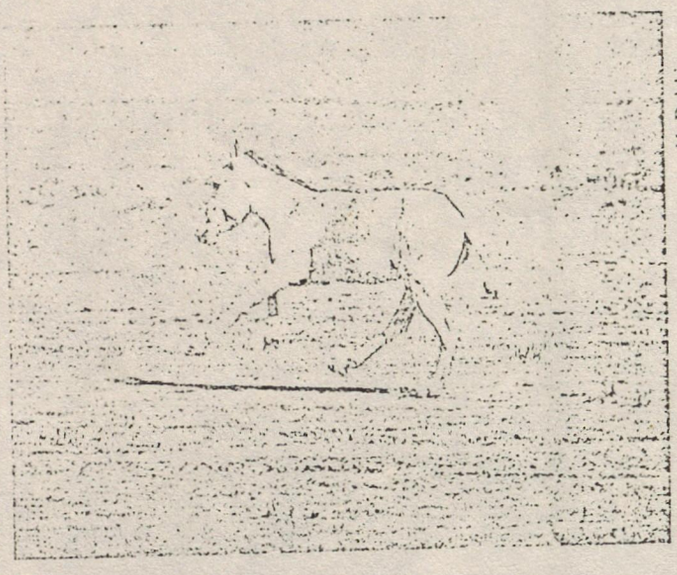
Gujarat is also a showcase for over a third of the total variety of birds found in the subcontinent. The State's wetland regions attract flocks of rare birds, including the crested hawk eagle, the crested serpent eagle and the paradise flycatcher. The wild ass of Kutch or the Indian Onager is one of the rarest animals now surviving in the desert habitat. Like the Asiatic lion, the Indian wild ass is found in the inhospitable saline deserts of Gujarat but nowhere else in the world. Realising the fragility of this unique desert ecosystem, the State Government in 1987 declared 7,506 sq km in the Great Rann of Kutch as the Kutch desert wildlife sanctuary, the country's largest.

India's first marine national park and sanctuary is also in Gujarat. The park offers the most spectacular display of live corals seen with the naked eye, just below the water surface. It is contained within 295 sq km of marine sanctuary area that includes 42 islands and the long coastal belt between Navlakhi and Okha. The coral deposits include the brain coral, the sea fan, the star coral and the plate coral and come in resplendent colours. The deeper layers of coral have been carbon-dated by scientists at the Tata Institute of Fundamental Research and found to be over 1,20,000 years old. The most recent layers are over 6,000 years old.

A veritable treasure-trove of marine life, the Gujarat coast has 225 species of algae, 400 species of fishes, 300 to 400 species of molluscs as well as dolphins, sharks, whales and dugongs. Bonnelia, a rare marine animal, is found here. Three species of sea turtles migrate thousands of miles to spawn on the coastline of the Gulf of Kutch.

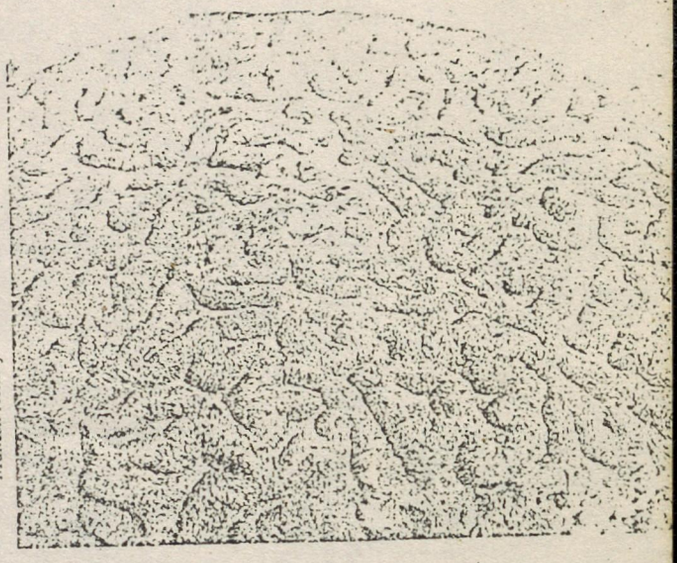
However, this area is already under

Frontline
Oct 22, 1993



M. Dolakia

A wild ass on the double... an as yet largely unspoilt scene.



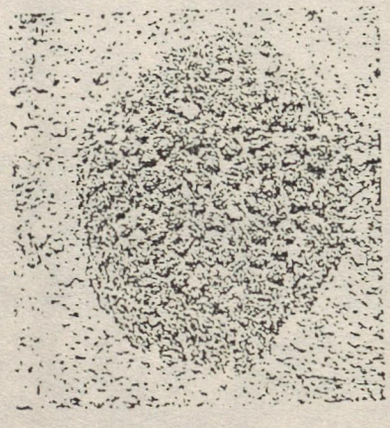
Mukesh Acharya

A brain coral at the marine national park... a spectacular display.

threat from a chain of industrial units that have come up along the coast. These include an oil terminal at Vadinar and a fertilizer factory and a thermal power station at Sikka. Several salt farms have also come up near mangrove areas. A Gujarat Forest Department publication highlights the growing concern of conservationists over the impact of industrial pollution in the marine park area. Oil spills and tarballs have been known to result from the bulk handling and transport of oil at the Vadinar refinery. The area's proximity to developed port facilities at Sikka is a feature that would interest a refinery dependent on bulk handling facilities for the transport of oil.

The thermal power unit of the Gujarat Electricity Board at Sikka discharges hot effluents, including coal ash, into the sea. According to the Forest Department report, these industries and the fertilizer unit have encroached upon the marine park area by constructing jetties and other such facilities.

The mangroves and coral reefs serve another purpose. They cushion the impact of ocean breakers, preventing coastal erosion. This unique vegetative system, which survives in the arid and saline conditions, supplies nitrogen through its leaf litter, which in turn supports marine life systems. The mangroves are being threatened by salt farming in the area which is increasing salinity beyond their 'tolerance level'. Being the only vegetation in the area, they are also chopped by the local communities for fuelwood and fodder. According to satellite surveys of the area, mangrove forests have shrunk from 139 sq km in 1975 to 33 sq km in 1985.



Mukesh Acharya

An eye coral.

The location of a new refinery project near the marine park and sanctuary area raises once again the issue of effluent disposal. Government sources claim there will be no need to denotify the marine park and sanctuary because the proposed refinery will be located beyond 10 km of the sanctuary's boundary. However, according to a Central Government notification issued on January 29, 1992, no project may be located within 25 km of the boundary of a national park or sanctuary without environmental clearance from the Centre.

The Gujarat Pollution Control Board has issued a no-objection certificate based on a cursory appraisal of the technology proposed to be used by the refinery and the project authorities' assurance that they would treat effluents prior to discharge. The project is yet to be cleared by the Central Pollution Control Board on the strength of an environmental impact assessment. In the absence of a scientific and authoritative analysis of the possible impact of the refinery project in this ecologically sensitive area, it is premature to conclude that such a major refinery, which is to be the country's largest grassroots refining facility, will have no negative impact on the marine park and sanctuary. There is, in any case, potential for accidental pollution through negligence. The problem of monitoring pollution will grow when the refinery becomes operational as the factory and the surrounding areas will not be open to public scrutiny.

Until recently, the problems that plagued conservation efforts in Gujarat were not unique to the State and involved the management issues common to all "stressed" regions in the country and indeed to most parts of the developing world. However, the recent shift in state policy, evident in the denotification of the Narayan Sarovar sanctuary and the move to provide industries access to areas near the marine national park, is a dangerous development which will result in a progressive decimation of the State's natural heritage.

It is critically important not to trade in resources with a limited capacity for regeneration. Sanctuaries and national parks attempt to preserve indigenous flora and fauna by keeping them out of the reach of decisionmakers through built-in legal safeguards. Turning them in for want of a more sensitive and far-sighted development strategy is inimical to the interests of the people of the State for now and in the future. ◘

17

INDIAN EXPRESS, Oct 21, 1993

CEE's clarification ✓

Sir, – This has reference to the article titled "State offering forest land to the industry" (IE, Oct 17). While the author's concern regarding the denotification of the Narayan Sarovar sanctuary of Gujarat is appreciated, it is incorrect to imply that the Centre for Environment Education has not reacted to the matter. But for CEE's News and Feature Services (CEE-NFS), the denotification of the sanctuary may have gone generally unnoticed. The CEE-NFS press campaign on the denotification of Narayan Sarovar Sanctuary opened precisely on July 27, 1993, the day the Gujarat Government issued the notification cancelling the declaration of the Narayan Sarovar Sanctuary. The fact that the denotification of the sanctuary was legally questionable was brought out in a series of objective and analytical articles in the press. The focussing of attention on the denotification issue has evoked a response from societies like the Bombay Natural History Society, concerned ecologists and citizens across the country. CEE believes that it is vital to rescue environmental issues which are as complex as they are critical, from the world of rumour and conjecture. Usha Rai's criticism of CEE is rather unfortunate in the light of the fact that the only sustained campaign on the Narayan Sarovar Sanctuary has come from the organisation which she claims is "too scared to confront the government."

PRITHI NAMBIAR
The Centre for Environment Education
AHMEDABAD

Throwing ecological factors to winds

By PRITHI NAMBIAR

AHMEDABAD, November 4:

THAT environmental considerations have not been a part of the decision to locate a major refinery in the vicinity of the Marine Park area in Jamnagar district, Gujarat is amply demonstrated by the timing of the environmental impact assessment which comes long after the public issue of the company. The initial marine environmental examination prepared by the NIO (National Institute of Oceanography) appears to focus instead on mitigation measures for the environmental fallout that take the location of the project in the vicinity of the marine park and sanctuary area for granted.

Reacting to press reports on the possible environmental impact of the refinery project on the Marine National Park and sanctuary, the project authorities claimed that two expert committees at the NIO and NEERI would assess the possible consequences of locating the refinery in the vicinity of the Marine Park area. However the announcement that heralded the giant public issue by the company which followed on the heels of this controversy made no mention of the fact that there could be a conditionality attached to the project in the requirement for an environmental clearance. The relevance or importance attached to the environmental clearance from the ministry of environment and forests which is a requirement for a major industrial project intending to locate in an ecologically sensitive zone is revealed by the sequencing of the application for environmental clearance. The point to be made is not so much project specific but procedure specific. An environmental impact assessment is intended to be a critical decision making tool and must be treated as such.

The NIO has since prepared an "Initial Marine Environmental Examination of the refinery complex at Moti Khavdi, Gujarat" (September 1993) although the IMEE defines its scope as making a 'quick appraisal of the suitability of the site near Moti Khavdi' the report does not divulge an opinion on the matter in its conclusion. The IMEE study based on historical data concludes that the Gulf of Kutch is in good health with no evidence of deterioration due to anthropogenic fluxes of pollutants and that existing crude oil transport despite being significant had left no evidence of contamination of sediment by toxic metals and petroleum hydrocarbons of anthropogenic origin.

The IMEE report points out that heavy siltation resulting in degradation of coral reefs is evident in the area, due to destruction of mangrove areas and unplanned dredging for coraline sand. The report lists the problems that might occur during the construction phase of the project which will necessitate the building of the single buoy mooring facility and the laying of pipelines under the ocean bed. The pumping of sea water for cooling is expected to decrease the dissolved oxygen levels in the water and cause a disturbance in flow pattern and sediment transport, as well as an increase in the temperature. The report also mentions the danger to the marine ecosystem from accidental large spills that could occur albeit rarely from pipeline rupture. The intake of sea water on a massive scale as would be required for a refinery of a 9MMTPA capacity will have to be managed, say the experts, in a manner that does not affect tidal flushing in the area.

The initial marine environmental examination is clear, despite its professed objective to discuss location suitability, focused on recommending further studies that will detail management and mitigation measures and, as such, is hardly an aid to decision making. In response to a letter from noted naturalist Lavkumar Khacher expressing concern regarding the fate of the marine part, Reliance has indicated its willingness to undertake whatever mitigation measures may be necesary to rectify and negative consequences the refinery may have on the marine ecosystem. However, the location of the refinery complex is obviously not an issue and that is open for negotiation.

The environmental clearance for the two refineries (Reliance and Essar) bound for the vicinity of the Marine Park and sanctuary is yet to come through. The industries appraisal committee is scheduled to meet to discuss the matter on November 29, 1993 following site inspection, visits which have already been completed according to highly placed sources in New Delhi.

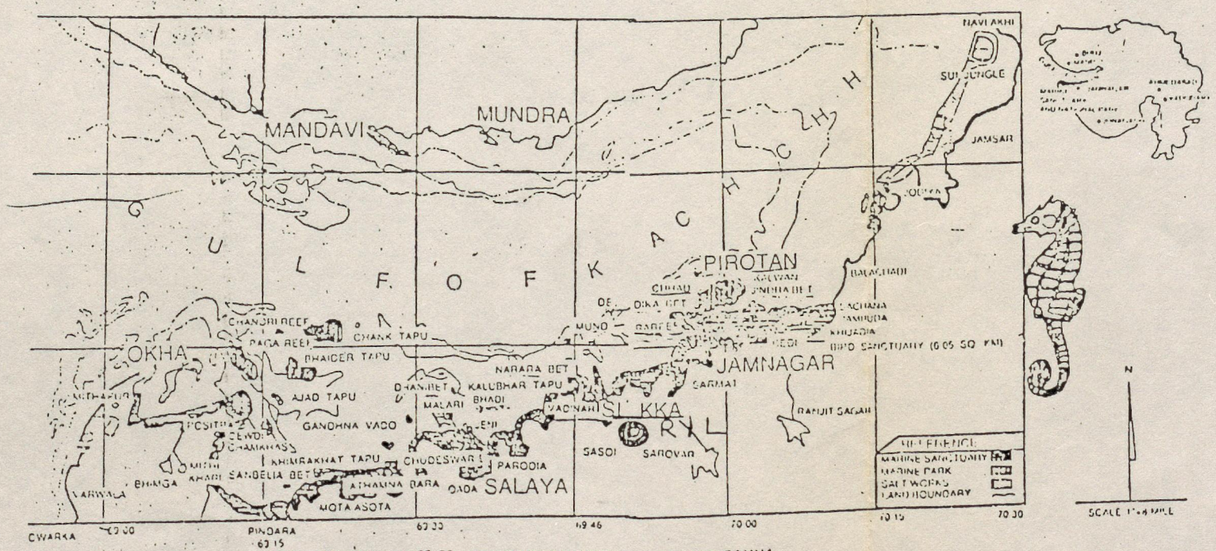
Although the no objection certificate issued so promptly by the Gujarat Pollution Control Board is normally considered sufficient for the purpose of siting a project in the state, the fact that the site is in the vicinity of an ecologically sensitive zone and involves the laying of a pipeline through a section of the protected area makes environmental clearance from the Central government a must. The refinery project authorities are currently going through the required process. Regardless of what the outcome may be, it is clear that any attempt to blunt the edge of environmental concerns by sidestepping or glossing over them may meet with increasing resistance in the future as the recent move to challenge the location of the refinery project has proved.

Since parameters have been established that make it incumbent upon industry to follow recommended guidelines before it makes a locational decision, presenting the community with a "fait accompli" may not any longer be an advisable move. Use of the environment is use of scarce community resources and industry will become increasingly accountable to the people simply because the pressure on land will progressively increase areas of conflict. It was in recognition of the pressures of development that the concept of protected areas came into existence. The idea was to conserve some portions of the natural environment for the present and the future by keeping them out of the reach of decision makers.

The rolling back of protection which is emerging as a clear trend in the state of Gujarat is particularly unfortunate in a state which has held a reasonably good record in conservation. Despite being a forest poor state, Gujarat possesses considerable diversity in flora and fauna. The state has a protected area network that represents each of its varied eco-climatic zones. However, the ham-handed, hasty attempt at denotifying the Narayan Sarovar Sanctuary and the evident lack of concern demonstrated by the government of Gujarat for the possible impact of large scale industrial projects on the rest of its protected area network bodes ill for the future of conservation in the state.

CEE-NFS

MAP OF THE GULF OF KACHCHH WITH MARINE PARK AND SANCTUARY



AREA OF MARINE NATIONAL PARK : 162.89 SQ KMS
AREA OF MARINE SANCTUARY : 295.03 SQ KMS
NUMBER OF ISLANDS : 42
TREES FOUND : MANGROVES (AVECENNIA RHIZOPHORA CERIOPS, ETC)

SOME PROMINANT MARINE FAUNA

MAMMALS: DOLPHINS, WHALES, DUGONG, ETC.

FISHES: SHARKS, CORAL FISH, BUTTERFLY FISH, RAYFISH, PORCUPINE FISH, STARFISH, SEAHORSE, ETC.

REPTILES: GREENSEA TURTLES, BLACK BANDED SEASNAKES, LEATHER BACK TURTLES, OLIVE RIDLEYS, TURTLE ETC.

OTHER MARINE FAUNA: OCTOPUS, CORALS, SPONGES, SEA ANEMONES, SEA CUCUMBER, CRABS, BONNELIA, STARFISHES, LOBSTERS, PRAWNS, ETC

US double standards

■ Sir: With reference to news item "US questions validity of Kashmir accession" (IE, October 30) I would like to highlight the double standards followed by the US Administration.

In spite of clear evidence of Pakistan's involvement in Kashmir the USA is turning a blind eye towards the fact and is accusing India of 'human rights violation'. The constant American meddling in Kashmir is making matters worse. We Indians being sovereign people need no tips as to how to run our country.

Instead of interfering in the affairs of other countries the USA should set its own house in order. If it is really concerned about 'human rights violation' then it should check its own record first. What about the Rodney King episode, the consequent acquittal of the four white policemen involved and the Los Angeles riots? Electric chair is the norm in America's prisons and 70 per cent of those who are sent to jail are blacks.

The USA should do a lot of soul searching. After all one must remember the age-old adage that those who live in glass houses should not throw stones at others.

ASHISH PANT
Veterinary College
MATHURA

Congress vanity fair

■ Sir: There is a well-known saying: No man is a prophet in his own country. And in his more earthy form no man is a hero to his valet. This, I believe, was why the Kashmiris, by and large, did not exactly become rapturous about Nehru. However, when it came to the Congress party they were less fastidious: they were and are hostile.

It is this coolness towards Nehru and dislike of the Congress party that has irked that political party for the last 46 years. Now, the Congress party has convinced itself that it is India. It assiduously carries on the propaganda that to be anti-Congress is to be anti-India. It has even designed the National Flag after its own party flag to retain this psychological advantage permanently. How long has India to pay for the vanity of the Congress party?

M.R. RAO
DELHI.

■ Sir: V.N. Gadgil, spokesman of the Congress party says: "The real thing is to provide security to the life and property of the Muslims, and the Congress stands committed to it". Was such a statement needed? Is he trying to woo Muslims by injecting in them a feeling of insecurity? What about his party's concern for the non-Muslims?

Narasimha Rao has suddenly woken up to the fact that thousands of Imams are poorly paid and has offered to pay proper salaries to each one of them. The Muslim Personal Law Board considers this as a conspiracy to wrest control of mosques. Secularism seems to be a paper pledge for the Congress, whereas communalism is its creed. It is clear that the Congress politicians are the past masters in the art of fanning the fire of religious fanaticism to serve their interests.

A.C. GAUR
Arera Colony
BHOPAL.

Women ignored

■ Sir: Apropos the news item, "Women remain second sex" (IE, Nov. 1). The writer Yogesh Vajpeyi has rightly quoted Shakespeare, saying, "Frailty thy name is woman" when fair sex have not been given proper share of tickets to contest the assembly elections. It is not only in UP but also in other states that women are discouraged or ignored to contest for the legislature. Perhaps political bosses feel that women are not competent to participate in development work or they feel that there would be a revolt in parties if men are not given lion's share in seats.

It is natural if women feel unhappy for not being given their one-third share of seats. It is up to women to build a strong opinion and bring pressure on their respective parties to get their due.

HOTI LAL
NEW DELHI

CEE clarifies

■ Sir: On my return from North India, I saw a report on the sorry state of Gujarat's environment by Usha Rai in *Indian Express* of October 17. The interview was telephonic. While I stand by all the criticism of the Government of Gujarat quoting me, there are two important clarifications which need to be made. I am fully involved with CEE, Ahmedabad as Director of Sundarvan Nature Park and am on its governing council. I have always received powerful qualitative support in my crusade against official follies. Contrary to what was reported, my visit to Delhi was on work involving CEE and WWF-India and not to seek support from either WWF-I or any other environment group.

Criticism of CEE is uncalled for because it certainly has no mandate to take on an activist role. CEE as the national centre for environment education is involved in various specialised programmes and activities relating to education, rural development, wildlife interpretation and training in environmental education. The statement made appears to be based on a misunderstanding of the role and mandate of this organisation. In conclusion, it must be placed on record that CEE-NFS (News and Feature Service) has carried out the only sustained campaign for Narayan Sarovar and I have been very much involved with the team.

LAVKUMAR KHACHER
Director Sundarvan
AHMEDABAD

Usha Rai replies: There was no criticism of CEE. Based on statements of officials of WWF-Delhi, who are finding it difficult to get the support of Gujarat-based NGOs to file a suit against the Gujarat Government, the article says NGO groups like the CEE, dependent on state largesse, are scared to confront the Government. If this is not true I stand corrected.

Airport nightmare

■ Sir: I first came to India in 1963, to Madras, in the warship H.M.S. Tiger. I have been coming to India ever since. For the past six to seven years I have escorted groups here for a British Travel Company.

The immigration procedure at Delhi International Airport is a little short of a national disgrace. My latest experience was to arrive on Saturday, October 30, 1993 on board IC 814 from Kathmandu. The queue was not more than 45 people yet it took two hours to clear immigration — a job that should have been completed in 45 minutes maximum. At my particular desk the staffer suddenly left his post for 15 minutes without any explanation.

The first thing that should be done is to give the immigration staff a friendly appearance with blue trousers and white shirts instead of them looking like soldiers making tourists feel they are entering a war zone. The second thing is that someone should visit Bangkok, Singapore or even tiny Kathmandu airports to see how it should be done. They put India to shame.

MAX GOSLING
Purbrook
Hants
ENGLAND

સંદેશ સાપ્તાહિક સંસ્કાર પ્રતિ

14-11-93

વિકાસ, વિકાર અને વિનાશના વિરોધાભાસી પ્રવાહો

* સૌરાષ્ટ્રનાં સિમેન્ટ ઉદ્યોગ રીફાઇનરીઓ સામે નબળા અને સ્થાનીય સમૂહોનું સૂચક આંદોલન

રાજકીય રંગપટ

-પ્રવીણ શેઠ

* ગુજરાત ઔદ્યોગિક ક્ષેત્રે બે ડગ આગળ પણ પર્યાવરણક્ષેત્રે એક ડગ પાછળ!

સૌરાષ્ટ્ર વિરોધાભાસી પટના પ્રવાહોમાં ડંગોળાવા માંડ્યું છે શું? અલ્પ ઉદ્યોગને કારણે લાંબા સમયથી જેની ઉપેક્ષા સેવાતી હતી, તેવો અસંતોષ વ્યક્ત થતો હતો તે પછાત સૌરાષ્ટ્રમાં એક પછી એક મોટા ઉદ્યોગો સ્થપાઈ રહ્યા છે. બીજી બાજુ જે રૂપના ઉદ્યોગો, જે રીતે સ્થપાઈ રહ્યા છે, તેની સામેની જાગૃતિ લોકોમાં આવતી જાય છે. આવા ઉદ્યોગો પર્યાવરણને ભારે નુકશાન કરશે, તેવી ચિંતા સકારણ વ્યક્ત થવા માંડી છે, અને તેથી ઉદ્યોગો અને તેને સાનુકૂળ બનતા શાસન સામે સ્વૈચ્છિક અને પર્યાવરણીય સંગઠનો આંદોલન કરવાને આગળ આવી રહ્યા છે.

સુરેન્દ્રનગર વિસ્તારમાં મરડીયા ગ્રુપ તરફથી ઉદ્યોગ નખાયો ઉપરાંત એક વખતની 'લીલી નાયેર' ગણાતા જાફરાબાદથી માધવપુરની (અમરેલી-જૂનાગઢ) સાગરપટ્ટીમાં ગુજરાત અંબુજા સીમેન્ટસ (કોડીનાર), નર્મદા સીમેન્ટસ (જાફરાબાદ), ગુજરાત હાઇટેક ઇન્ડસ્ટ્રીઝ, સિમેન્ટ કોર્પો., ગુજરાત હેવી કેમિકલ્સ, સોડાએશ વગેરે વિરાટ ઉદ્યોગો સ્થપાયા છે.

જામનગર જિલ્લામાં બે ઉદ્યોગગાંધાતાઓ- રીલાયન્સ અને એસ્સાર બે મોટી રીફાઇનરીઓ નાખી રહ્યા છે. આ બંને રીફાઇનરીઓ નેશનલ મરીન પાર્ક અને (કચ્છના) નારાયણ સરોવર અભયારણ્યની નજીક ઊભી થશે. રાજય સરકારની મંજૂરી મળી ગઇ છે. અંકલેશ્વરની ઔદ્યોગિક વસાહતનો ભારતમાં જ સમગ્ર એશિયામાં રાજયની સહાયથી ઊભી થયેલી સૌથી મોટી વસાહત ગણાય છે. ત્યાં દવા ઉદ્યોગમાં તો હેકસ્ટ, ગ્લેક્સ જેવી વિદેશી કંપનીઓ સાથેના સહયોગમાં કારખાનાં ચાલે છે. કેડિલા, ટ્રમીસ વગેરે અગ્રીમ દવા ઉદ્યોગ કંપનીઓ પણ આવેલી છે. હાલમાં ગુજરાતમાં આશરે ૧૨૫૦ થી વધુ પ્રોજેક્ટો અમલીકરણના વિવિધ તબક્કામાં છે જેનું કુલ મૂડીરોકાણ ૫૦,૦૦૦ કરોડથી વધુ થવા જાય છે. તેથી છેલ્લાં ત્રણ વર્ષમાં ઉદ્યોગો વધતા, વધુ રોજગારીની તકો પણ ઊભી થઇ છે. મુખ્યમંત્રીશ્રીની ગતિશીલ ઔદ્યોગિક નીતિની તેથી સરાહના થઇ છે.

બીજી બાજુ, મોટા ભાગનું મૂડી રોકાણ- ૬૦ ટકાથી વધુ રોકાણ કેમિકલ્સ અને પેટ્રોકેમિકલ્સ આધારિત ઉદ્યોગોમાં થયું છે. રાજયમાં સ્થપાઇ રહેલી રિફાઇનરી પ્રોજેક્ટોમાં જ કુલ મૂડીરોકાણ તો ૨૨,૦૦૦ કરોડ જેટલું થવા જાય છે. ઉપરાંત રાજયમાં દહેજ પાસે ગાંધાર ગેસ આધારિત અને હજીરામાં રિલાયન્સ ગ્રુપના પેટ્રો-સંકુલોમાં ૮૦૦૦ કરોડ જેટલું મૂડીરોકાણ થશે. (કાઇનાન્શીઅલ એકસપ્રેસ''નો માહિતીસભર દીપોત્સવી અંક જોવા જેવો સરસ છે).

સૌરાષ્ટ્રમાં વાઇમ સ્ટ્રોનનો ઉપયોગ કરીને સિમેન્ટ પ્રોજેકટ ચાલુ છે ને નવા આવી રહ્યા છે. તાજેતરમાં અંબુજાના ૧૧ લાખ ટનની ક્ષમતાવાળો નવો પ્રોજેકટ ઉત્પાદન તબક્કે પહોંચી ગયો છે. ઉપરાંત ૧૦ લાખ ટન સિમેન્ટની ક્ષમતાવાળા બે પ્રોજેકટો સ્થપાઇ રહ્યા છે. બીજા ત્રણ નવા પ્રોજેકટોની દરખાસ્ત છે. સિક્કા અને પીપાવાવ નવા મહત્ત્વનાં ઔદ્યોગિક કેન્દ્રો તરીકે ગુજરાતના ઔદ્યોગિક નકશા પર મોટા બિન્દુ બનવાનું ગજું ધરાવે છે.

આમ પ્રથમ દ્રષ્ટિએ આવકાર્ય અને આંજી નાખે તેવો ''વિકાસ'' થઇ રહ્યો હોય તેવી છાપ પડે. પરંતુ તેની થોડી વિગતોમાં જઇએ, ને આ બાબત પૂરતી વિચારણા કરીએ તો વિકાસની શી કિમત ચૂકવવી પડશે અને સરવાળે આપણે કેવી સ્થિતિમાં મૂકાઇ જઇશું, તેનું વિચાર કરતા કરી મૂકે તેવું ચિત્ર પણ ઊભું થાય છે.

નાનામોટા બધા ઉદ્યોગ માટે ઓછાવત્તા પ્રમાણમાં પાણીની જરૂર પડે છે. રસાયણ અને પેટ્રોસંકુલ વધુ પાણી વાપરે છે. રિફાઇનરી માટે પાણીનો જે પુરવઠો જોઇએ તે તો કરોડો ગેલન જેટલો થવા જાય. એક કિલો કૃત્રિમ ફાઇબર કે કાગળના ઉત્પાદન માટે વીસ હજાર લીટર પાણી જોઇએ. પ્રવાહી કચરાના નિકાલ માટે પણ સારું પાણી જોઇએ. આ ક્ષેત્રના જાણકાર શ્રી જયનારાયણ વ્યાસ અનુસાર આવતાં પાંચ વરસમાં ગુજરાતને રોજ વધારાનું ૧૧૨.૫ કરોડ ગેલન પાણી ઔદ્યોગિક વપરાશ માટે જોઇશે. એક બાજુ ગુજરાત દેશમાં સૌથી ઓછા જળસંસાધન ધરાવતો દેશ છે. બીજી બાજુ, દેશના પ્રથમ નંબરના રસાયણ રાજય તરીકે તે સૌથી વધુ ઔદ્યોગિક વપરાશનું પાણી શોષી લેશે. આ બાબત આમે ગુજરાતમાં હાલકડોલક બનેલ પર્યાવરણીય સ્થિતિને તથા પ્રાકૃતિક સમતુલાને ઓર નબળી બનાવી મૂકશે.

બીજી ને મહત્ત્વની ઘટના પ્રજાકીય રાહે વિકસી રહી છે. નાયેર વિસ્તારમાં નવા ઉદ્યોગો કે તેના વિસ્તૃતીકરણને નામે જે ભૌતિક વિકાસ થઇ રહ્યો છે તે લોકોને રોજી આપશે તેવી દલીલ કરવામાં આવે છે. વળી છેલ્લાં દોઢ બે દાયકામાં આમે ય નાયેર સહિત સૌરાષ્ટ્રના કાંઠાળ પ્રદેશમાં દરિયાના પાણી પ્રવેશતા, ક્ષાર પ્રવેશ અને પાંખા વરસાદને કારણે હરિયાળી જમીન હવે વેરાન કે સૂકી થતી ગઇ છે એમ બતાવીને ઉદ્યોગો માટે રાજકર્તાઓ અને ઉદ્યોગપતિઓને બહાનું મળી ગયું છે. જો કે લોકોને રોજી આપવી હોય તો સરકારે ક્ષારઅંકુશ અને જમીનસુધારણાના ઠોસ કાર્યક્રમો તથા યોજનાઓ સાથે બહાર આવવું જોઇએ. કીમતી અને ફળદ્રુપ સરકારી પડતર જમીનો ચુનાપથ્થર કાઢવા માટે ઉદ્યોગોને આપી દેવાને બદલે ગરીબ ભૂમિહીન ખેતમજૂરોને કુટુંબદીઠ ફળઝાડ કે ખેતી માટે આપવી જોઇએ. અથવા તો અશોક ચૌધરીએ માંગણી કરી તેમ ખેતઉદ્યોગો, ફૂડપ્રોસેસીંગ, કોપરેલ કે સિમેન્ટ ઝોન વ. સ્થાપીને રોજ કે રોજગારી ઊભા કરી આપવા જોઇએ. પણ ''વિકાસ'' અને ''રોજગારી''ને નામે સિમેન્ટ કોડાએશ ઉદ્યોગોને અગ્રતા આપવી જોઇએ નહિ. આવા ઉદ્યોગો નાયેરના સમૃદ્ધ પર્યાવરણ માટે ગંભીર હાનિ પહોંચાડશે.

નાયેરની બાગાયતી હરિયાળી અને મુજલામસુફલામ ભૂમિ પાછળનું એક કારણ તેના પેટાળમાં એકત્રિત થયેલો ચુનાનો મોટો જથ્થો છે. ચુનાના પથ્થરમાં પાણી અને ભેજને જાળવવાની ક્ષમતા હોય છે. હજુ આજે ય ચુનાના પથ્થર પર લીંબુડી વૃક્ષરાજ જોવા મળે છે. ક્ષારપ્રવેશને કારણે જે ખવાણ કે સહયોગ સરકારે અંકે કરવો જોઇએ પણ અહીં તો ઝેરીલા તત્ત્વો ઓકતા ઉદ્યોગો સ્થપાઇ રહ્યાં છે. હવે તો માંગરોળ પાસે ૬૫૦ કરોડની દિલ્હીની ડિનીકસ ઓવરસીઝનું ૬. સિમેન્ટનું રાક્ષસી કારખાનું નાખનાર છે. આ બધાં માટે સૂત્રાપાડા, દુદાણા, ઠાચરીઆ, રંગપુર એવા સંખ્યાબંધ ગામોના ખેડૂતોની જમીન યેનકેન રીતે લેવાઇ ચૂકી છે. તેમની ખેતીવાડીની જમીનો, સરકારી પડતર જમીનોને ભારે નુકશાન થશે.

આથી નાયેર પંથકના બે એક ડઝન ગામોના આજના ને માજી એવા ૩૧ જેટલા સરપંચો, પછાત વર્ગોની સહકારી મંડળીઓ વગેરેએ બિન-રાજકીય રૂપમાં નાયેર બચાવ આંદોલન શરૂ કર્યું છે. સૌરાષ્ટ્ર પર્યાવરણ સંરક્ષણ સમિતિને ઉપક્રમે તેના સંમેલન (૭ નવેમ્બર) મોટી સંખ્યામાં લોકોએ હાજરી આપી અને આવા ઉદ્યોગોની સ્થાપના તથા તેની પર્યાવરણીય અને સ્થાનીય લોકોના હિતની દ્રષ્ટિએ જે વિપરીત અસરો થાય તેમ છે, તેને વાચા આપવામાં આવી છે.

વર્ગીય સ્વરૂપ? આ નાયેર બચાવ આંદોલનનું સૂચક લક્ષણ એ છે કે તેમાં દલિતો અને પછાત વર્ગોના અગ્રણીઓ મોખરે છે. તેઓ કહે છે કે જયાં પ્રભાવક જ્ઞાતિઓ ઓછી છે તેવા કચ્છ, જામનગર અને નાયેર-સુરેન્દ્રનગરમાં આવા ઉદ્યોગો નખાય છે. તેથી પટેલ-કણબીઓની જમીન જતી નથી. પણ આહિર, કારડિયા, કોળી, મેર, વગેરે જ્ઞાતિઓના લોકોની જમીનો જાય છે. મજૂરોની રોજી જાય છે. ગીરના અભયારણ્ય (સેન્કચ્યુઅરી) સુધી ઉદ્યોગવિકાસની અવળી અસરો પહોંચશે. ત્યારે અહીંના એક મોટા ઉદ્યોગની સહાયથી પોતાનું ''સેન્કચ્યુઅરી'' મેગેઝીન ચલાવનાર બીટ્ટુ સહગલ જેવા પર્યાવરણવાદીને કશું કહેવાપણું હશે ખરું? સામાજિક કાર્યશીલ શ્રી અચ્યુત યાજ્ઞિક પૂછે છેઃ ''અંબુજા'' એટલે જળમાંથી ઉત્પન્ન થનાર, લક્ષ્મી- અંબુજા- લક્ષ્મી શું ગાંધીનગર પહોંચી ગઇ છે? જેથી પર્યાવરણ બાબત પૂરતી સાવધાની વિના આટલી ઝડપે બધી મંજૂરી ને બીજી સુવિધા અંબુજા સિમેન્ટને મળી ગઇ?

વિકાસ એટલે સામાજિક ન્યાય + પર્યાવરણઃ- કોડીનારમાં રસસભર શેરડીના ખેતરો અને દોઢ-બે રૂપિયે વેચાતા પાણીવાળાં નારિયેળીની બાગાયતને ભોગે અને નાગરવેલ પાનની વાડીઓ સામે ઝેર ઓકતા પ્રદૂષણકારી ઉદ્યોગો સ્થાપવાની જરૂર કેટલી?

આમાં ઉદ્યોગપતિ- રાજકારણી અને અમલદારોની સાંઠગાંઠ વિરો પણ પ્રશ્ન ઉઠે છે. (૧) સ્થાનીય લોકોને સ્થાનીય સાધનસ્ત્રોતનો ઉપયોગ કરવાનો હક હોવો જોઇએ. પણ મોટા ઔદ્યોગિક મગરમચ્છો તેનો લાભ લઇ જાય છે. (૨) વાપી-ભરૂચના પાણીસિક્ત પ્રદેશનો ઉપયોગ કરીને હવે સિમેન્ટ-રસાયણીઆઓ સૌરાષ્ટ્રના સંગઠન, ''વેસ્ટર્ન ગુજરાત ચેમ્બર ઓફ ઇન્ડસ્ટ્રીઝે'' તો સરકાર સમક્ષ માગણી કરી છે કે ''ઔદ્યોગિક હેતુની જમીન અંગેના કાયદાઓને સરળ બનાવવા જોઇએ.'' પણ પરિણામ શું? જે સ્થાનીય અને નબળા વર્ગોને તેથી હાનિ પહોંચશે તેઓ સંગઠિત વિરોધ કરવા માંડ્યા છે. ''પર્યાવરણની જાળવણી સાથેના વિકાસ''નો મુદ્દો પણ મહત્ત્વનો બનશે. સાચો વિકાસ કોને કહેવાય? તે પૂછવાપણું પ્રશ્ન રહે છે.

Wildlife

A change for the worse

A recent state government notification seems to indicate that Gujarat, once considered to be committed to wildlife protection, has now moved industry to the top of its priority list.



PRITHI NAMBIAR

RECENT press reports have cast aspersions on the Gujarat government's commitment to wildlife and biodiversity conservation. A notification issued by the state department of forests and environment on July 27, cancelled a 1981 notification, under which specified areas of Lakhpat *taluka* in Kutch were designated as the Narayan Sarovar sanctuary. The notification attempts to justify its abrupt decision with the comment that the area is substantially in excess of the requirements of a sanctuary. It then goes on to declare a segment of the reserve forest area of the sanctuary as the Chinkara wildlife sanctuary.

The notification is *ultra vires* in view of Article 3, Section 26 A, of the 1991 Amendment to the Wildlife Act, 1972. This states that "no alteration of the boundaries of a sanctuary shall be made except on a resolution passed by the legislature of the state".

While a public interest litigation challenging the validity of the notification is pending in the Gujarat high court, the future of all sanctuaries and protected areas is a cause for concern. The state's 15 sanctuaries and four national parks cover an area of 20,191 sq km, which is approximately 10.3 per cent of its total area. They protect such diverse ecosystems as deserts, arid lands, hill tracts, moist deciduous teak forests, mangroves and coastal areas. The sanctuaries are the last refuge of the tiger and the Asiatic lion. Gujarat also boasts of being home to more than a third of the total variety of birds found in the Indian subcontinent.

First instance

The denotification of the Narayan Sarovar sanctuary is the first move of its kind in the state — once considered to be committed to wildlife protection — and may mark a new thrust in state policy, under which protection for sanctuaries would be rolled back in order to make more land available for mining and industrialisation.

A study of the legalities involved in the Narayan Sarovar case reveals the advantages inherent in the trade-off being made between conservation and industrialisation. In the event of denotification, land formerly under the sanctuary will revert to its earlier status. Sanctuaries normally contain reserved land that is protected by the Indian Forest Act of 1980 and require Central government approval for dereservation. The denotification thus releases large areas, which will become available for other activities that are not conducive to environmental protection.

The non-forest lands that generally form a substantial part of a sanctuary are the main attraction for state governments on the lookout for large contiguous areas that would suit the requirements of big industrial concerns. So, cement manufacturers intending to establish units in the Narayan Sarovar sanctuary will now be able to access the limestone reserves in the area.

As for the marine parks, their proximity to the developed port facilities at Sikka would be of considerable help to refineries, which are dependent on bulk handling facilities for oil transportation.

However, limestone mining will result in denudation of indigenous vegetation and soil erosion. The establishment of cement factories will cause substantial air pollution and hinder growth of vegetation.

Drastic impact

The move to locate a petroleum refinery in or around the sanctuary area will also have a drastic impact on the marine ecosystem. The processes involved in refining such as desaltation and fractionation of crude oil, thermal cracking, catalytic cracking and polymerisation will generate vast amounts of wastes, which will pollute the marine environment regardless of where the plant is located. Refineries are notorious for leakages and accidental spillage of crude oil, which create difficult-to-control oil slicks.

The denotification of the Narayan Sarovar sanctuary, which is home to six endangered species — the chinkara, the desert cat, the pangolin, the peafowl, the caracal and the great Indian bustard — may set a dangerous precedent in the present circumstances, with industrialisation and privatisation clearly winning the battle against conservation of flora and fauna. ■

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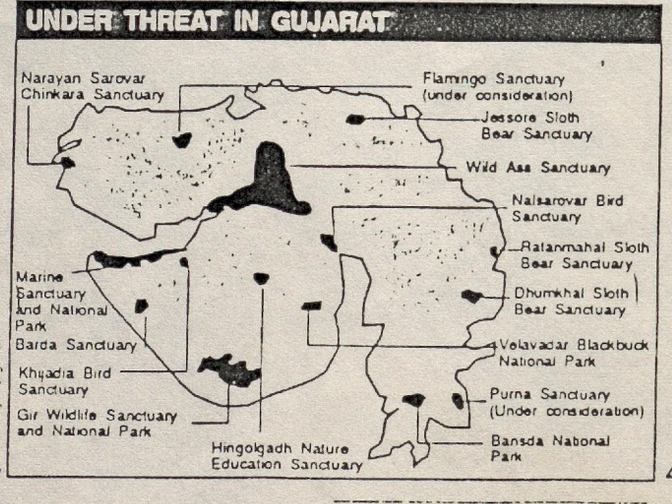
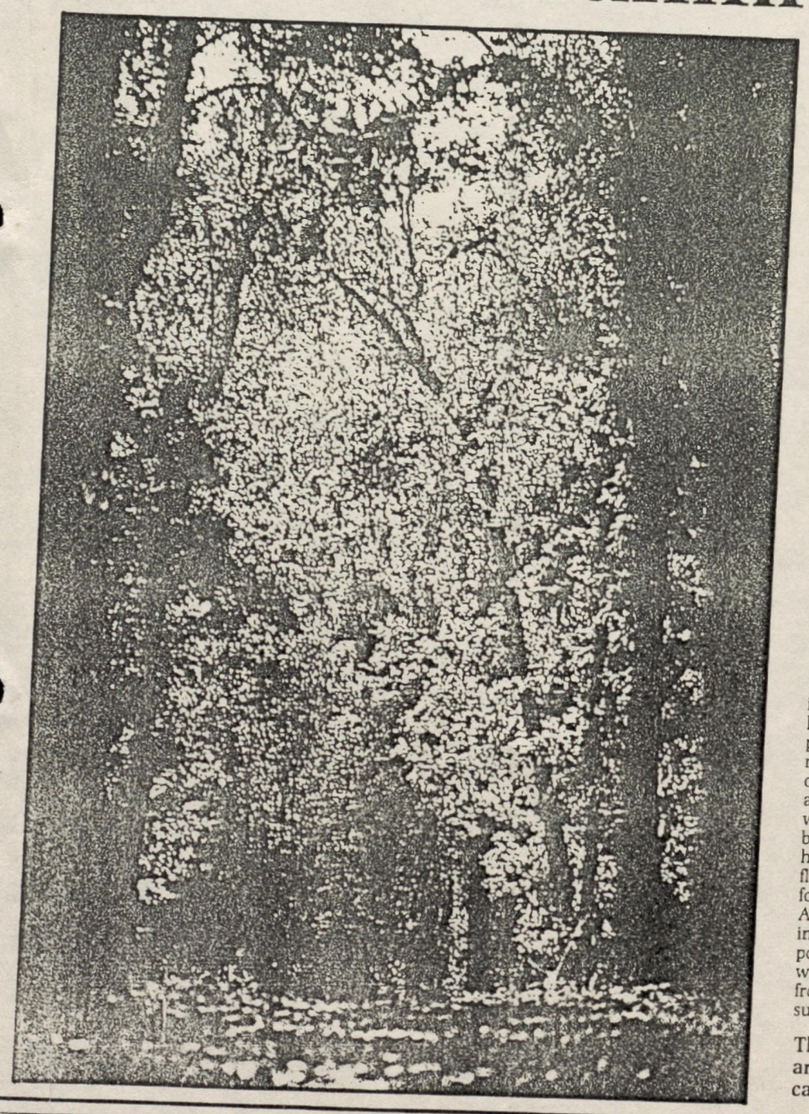


24

Banking on biodiversity



THE battlelines that have often been drawn between development and environment is the direct result of a general misconception of the relationship between the two. In the bitter debates that have ensued between supporters of either issue, the conflict has been somewhat picturesquely described as the struggle for survival between man and animal.

The relationship between man and his environment that consists of natural reserves of indigenous flora and fauna is better described as the relationship between man and capital. Wildlife and forest resources, as storehouses of a biodiversity unique to our region, have an economic value that must not be discounted because it does not lend itself as easily to assessments of market value as do limestone or mineral deposits. Wildlife and forests are also more at risk from neglect by virtue of being living resources than our limestone and mineral deposits. Yet the attempts to denotify part of the Sariska forest reserve and more recently the Narayan Sarovar sanctuary, reveal a sudden interest in opening up existing islands of protection to access mineral resources for industrial development. This limited interpretation of development is characteristic of business and government in many countries of the third world.

The ongoing discussions regarding intellectual property rights at a national and international level, reflect the conflict of interest between nations grappling for control of intellectual capital with the help of international legal and institutional muscle. Intellectual property or the assets created by the human mind, in a simplistic sense, represents the value of originality. So it follows that the assets which are exclusive to a nation, unique and original, will command the greatest value precisely because of this exclusivity. A cement mill can hardly compensate a nation for the loss of rare flora and fauna which are the breeding grounds for developments in science and biotechnology. A nation with the capability for the creation of intellectual assets (India has one of the largest pools of skilled manpower in the world), can, with substantial financial commitment to R&D from business and government, profit substantially from the use of the knowledge of

The precarious legal status of reserved areas makes them easy game for political moves: The Kanha National Park.

As part of a continuing series on biodiversity, PRITHI NAMBIAR touches upon the need to save our sanctuaries

CONSERVATION

biodiversity. This is more than most other nations of the developing world can hope to do. Is there any reason then, to abandon these islands of protection which will power the creation of intellectual assets in the new age?

It is an undeniable fact that, given our population pressure, the need to increase income growth overwhelms the issue of land management. But given that we have set aside at the cost of this concern, islands of biodiversity in our sanctuaries, national parks and protected areas; is it not vitally important that we preserve the same?

Yet the race is on to accommodate industrial growth concerns at the expense of indigenous flora and fauna. It will not be long before we are in the potentially dangerous position of having insignificant reserves of biodiversity. A world in which biodiversity commands a high premium is an idea whose time has come.

Income from the use of the knowledge of biodiversity can, if managed well, contribute phenomenally to national growth and development. A recent Congressional Research Service report (U.S.A.) on Biotechnology, Indigenous Peoples and Intellectual Property Rights, discusses the economic importance of maintaining biodiversity not just for the fact that plant and animal species are disappearing at an accelerating rate but also because there has been a "resurgence of interest" in the pharmaceutical industry and other research agencies in biodiversity screening which is the examination of plant and animal species for latent medical value.

Almost fifty per cent of all prescription drugs are derived from natural sources or are synthetic substitutes for the naturally derived compound. The tropical region which contains half the world's biodiversity is currently suffering the highest rate of loss of the same.

On the other hand, more significant than the heightened global interest in the medical prospecting of living resources in the face of accelerating loss is the substantial improvement in international technological capability to screen biodiversity. Automated screening equipment which enables speedy and simultaneous analyses of plant and animal species for properties of medical value coupled with a far clearer understanding among scientists of the precise manner in which plant derived compounds impact upon chemical pathways in humans have revolutionised prospects for biodiversity screening.

Apart from the potential for medical prospecting, the need to maintain wild gene pools is of critical importance for agricultural health. Agriculture has been increasingly characterised by monoculture to the extent that today only three plant species supply 60 per cent of the world's food needs when nearly 80,000 species are capable of feeding man. Any improvements through genetic engineering of existing crops are possible only through these gene pools.

The developed world has been quick to recognise the value of biodiversity, moving swiftly to protect its own share of it and attempting to 'intellectually harvest' the share of the third world through legal system that enforce ownership of intellectual property, on a first-come first-served basis. Indifferent to the rush for the new capital, nations like India are absorbed in a strange and rather ironic exercise: we cry foul at the developed world's interest in accessing our biodiversity but we do not have any interest in either protecting or harvesting it for ourselves. We entertain a robust contempt for our biodiversity on a practical and political level at home thus losing out on an asset that could potentially increase our bargaining power at the international level.

To make things worse, incompletely informed but nevertheless vocal public protests attempt to drag policy makers away from international negotiating tables where the deals of the new era are being made. Only if we carry the consciousness of the value of the biodiversity still in our possession, a value which must be endorsed by an enlightened public and reflected in our official economic and political concerns, can we hope to strike a better deal.

We should be working on the logistics of managing and eventually profiting from biodiversity. To begin with, what are the visible signs of national commitment to the preservation of biodiversity?

A quick look at our existing forest and wildlife preserves in the form of national parks and sanctuaries reveals the encouraging fact that the number of such areas has actually increased tremendously from 65 in 1960 to nearly 500, covering 4 per cent of our total land area at present. The Indian forest law of 1980 is a vigorous articulation at the national level of the need to protect our wildlife and forest resources. However, despite the proliferation of reserved and protected areas, the alarming fact is that roughly only 35 per cent of national parks and 25 per cent of sanctuaries have actually completed the legal steps required to become fully fledged protected areas.

It takes a national park some three years on an average to complete all legal procedures after the initial step of declaration of intent.

The apparently precarious legal status of our protected areas makes them relatively easy game for political moves that endorse visible development projects. It is therefore vital to drive home the critical value of natural capital that is exclusive to our nation. Biodiversity holds the key to advancement in an age that will increasingly be dominated by biotechnology, genetic engineering and trade in intellectual property. We need to save our sanctuaries, our national parks, our reserved areas at any cost. ■ CEE-NES

AK 17.5

Narayan Sarovar

Delegation of 40-50 villagers, w. ~~Sa~~ Ravi Sangi came to CEE.

Vill. issue 1: After having declared sanctuary, what has F.D. done? No forest there, no ~~W~~ WL there.

— Only trees are Prosopis juliflora, which creates problems with livestock & chinkara.

"What is ~~[illegible]~~ - we don't understand"

Vill. issue 2: Only livelihood now is by Sangis — why is CEE stopping it?

Kartikeya had to point to Yatra as ~~[illegible]~~ escape route — need to involve people in planning for area!

AK gave example of Sariska & requested that these villagers go to talk to TBS people, & vice versa.

Sangi says this is "most backward area in the world" & they are first to go there to "develop it".

F.D. seen as representative of environmentalists — all given a bad name.

Also, was whole 799 sq. km. justified as a sanctuary? (Does it incl. lot of barren area?) Was it (or subsequent 95 sq. km.?) scientifically demarcated?

[Also, we were sitting in an airconditioned hall!] →

A NGO-govt.
~~[illegible]~~ proposal is to have a smaller sanctuary, ~~[illegible]~~ managed with full involvement of local people & a new Kutch Env. Board. Space will be left for factories also.

Sanghi Cements

Nature demanded a cement plant in coastal Kutch!

"No forest, no grass" — how >1000 chinkara

"No sensible wildlife"

Ask vill.

How did vill. exist for centuries?

Chinks eat melon.

No Dense fores → Ecosys.

↓

Bhargava's: ~~not~~ no spec. flora & fauna

↓

Visited in June

Bad process

~~F~~ PA demarcatn ~~& sta~~ v. inadequate. No consultatn Poor staffing → No benefits

Cement for export

What have env. done to ensure that chinkaras are conserved?

Earlier denotificatn illegal new one not — what are CEL's grounds ~~of~~ now?

ecological

5162

Malghat

~430 sq. km. reduced

S. Choudhury
INDAL

To meet the participants of the Workshop on

"Conflict Resolution in Biodiversity Conservation"

the Director General, EPCO cordially invites you to

Dinner

at the Jehan Numa Palace Hotel

on Friday the 28th July'95 at 8.45 PM.

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THE TIMES OF INDIA

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Court intervenes to save sanctuary

By Bisheshwar Mishra
The Times of India News Service

NEW DELHI, March 13.

But for the intervention of the Gujarat high court the 766 sq km land area of the Narayan Sarovar sanctuary, already banished from the map by the state government, would have been handed on a platter to cement manufacturing companies for mining purposes.

Among others, Sanghi Cements had applied to the state government for grant of lease for mining in 2,000 hectares of land in the Jadava region of the sanctuary. The company planned to set up a modern mega cement plant of 2.5-million-ton annual output.

The state government, through a letter dated June 17, 1993, recommended to the Central government for approval of the lease in favour of Sanghi Cements. And on December 27, 1993, the Central government accorded permission, and exposed the habitat of the region to the risk of extinction.

However, on the plea of environment-friendly organisations like the World Wide Fund for Nature- India (WWF), a division bench of the Gujarat high court, presided over by Chief Justice B N Kirpal, on March 8, 1995, restrained the state government from leasing out any portion of the sanctury land. The judges ordered that the status quo of the sanctuary land should be maintained as per the demarcation made in the first notification of 1981. The matter has been listed for final hearing on March 20.

Thus, for the time being the life of the sanctuary and its habitat has been protected. But one wonders for how long. Past actions of the state authorities, obsessed with the mirage of economic development, leaves little faith in their sincerity to protect the sanctuary. The legal challenge posed to the state government by the WWF through counsel Raj Panjwani has brought out in the open many a misdeed of the authorities in the matter.

Located in the Kutch district of Gujarat about 110 km from Bhuj, the Narayan Sarovar sanctuary, a long stretch of dry land with marshes at several places, had been earmarked in 1981 for protection of several endangered species.

It is an ideal habitat for endangered animals like caracal, desert cat, Indian wolf, pangolin, the great Indian bustard and, in particular, the Indian gazelle called 'chinkara' (a kind of antelope, soft-eyed but smaller in size).

It may sound unbelievable but on July 27, 1993, the state authorities, with one stroke of pen, banished from the map the sanctuary along with its 766 sq km land, by denotifying the area.

They did so on the pretext that large deposits of minerals — lignite and limestone — were found in the sanctuary area. To prevent the wrath of conservationists, the authorities created a new sanctuary called the Chinkara wildlife sanctuary, consisting of only 94.87 sq km, that too over a scattered and disconnected area.

In effect, the authorities wound up the sanctuary and doled out its larger area, 672 sq km, to cement, mining and power industries.

In September 1993, a consumer education research society had moved the Gujarat high court challenging the denotification of the original sanctuary. The was joined by the WWF centre for environment and law.

At present the court has temporarily halted further dismemberment of the sanctuary, which is already swarmed by a host of industries for lignite and limestone. Conservationists have argued before the court that huge deposits of these minerals are also found in other areas but the state government is taking the easier option of using an area already notified.

Gujarat HC restores area of sanctuary

TOI
3/4/95

Puts industrialists in limbo

By Bisheshwar Mishra
The Times of India News Service

NEW DELHI, April 2: A recent Gujarat High Court order reviving the Narayan Sarovar Sanctuary, to its original area of 766 sq kms, has thrown a spanner into the mega plans of several industrialists wanting to exploit the mineral wealth embedded in the sanctuary.

In particular, the court order has upset the plans of Sanghi Cements who were setting up a mega cement plant costing more than Rs 650 crore with an installed capacity of 2.5 million tonnes per annum. There was all the more reason for them to be upset because they had already obtained permission from the state as well as Central governments for mining limestone used for manufacturing cement, in as much as 2,000 hectares of land in the sanctuary.

The Narayan Sarovar Sanctuary, comprising 766 sq km dry land area of of Kutch district, was created by the government through a notification in 1981, for the protection and propogation of endangered species, in particular the "Chinkaras" (almost extinct, small-size deer).

In August 1991, prof M G K Menon, while speaking in Rajya Sabha, had pointed out that some cement industries were trying to set up cement plants in the sanctuary. Following this debate, the government had made an amendment in the Wildlife (Protection) Act 1972. As per this 1991 amendment of the Wildlife Act, "boundaries of a sanctuary could be altered only by resolution passed by the state legislature."

However, the state government simply overlooked this new amendment in the law and on July 27, 1993, without getting a resolution passed by a state legislature, abolished the entire Narayan Sarovar sanctuary, along with its 766 sq km from the face of the map itself. In its place the state government created a miniature Chinkara Wildlife sanctuary, with an area of merely 94 sq km, and that too scattered in 16 small pockets, each tens of km away, wihtout any corridor.

Nevertheless this provided the golden opprtunity to cement manufacturers to move in with a bid for mining minerals. A survey was done by director of geology and mining. It reported that certain areas of the sanctuary consisted of huge mineral deposits of lignite, limestone, bauxite and bentonite. The state government too opened its arms, saying the industrialists and the economy of the state could benefit from this mineral deposit.

But before the vested interests in league with the state government could have completely banished, the wildlife sanctuary and with it, all the endangered species and plants of the region, the World Wide Fund for Nature- India, moved in. Through their counsel, Mr Raj Panjwani, they challenged the two notifications of July 27, 1993, abolishing the Narayan Sarovar sanctuary, on the ground that the said notifications violated the due process of law.

The plea was heard by the chief justice of Gujarat High Court, justice B N Kirpal, with justice Gokhale, who by their historic judgement, pronounced last week, quashed the two notifications.

In other words, the Gujarat high court order has revived the once abolished Narayan Sarovar Wildlife Sanctuary of 766 sq km and restored its pristine glory.

AK 17.5

BJP ministry may bypass HC order on Chinkara sanctuary

TOI (Ahm.) 6/6/95

By Ashraf Sayed

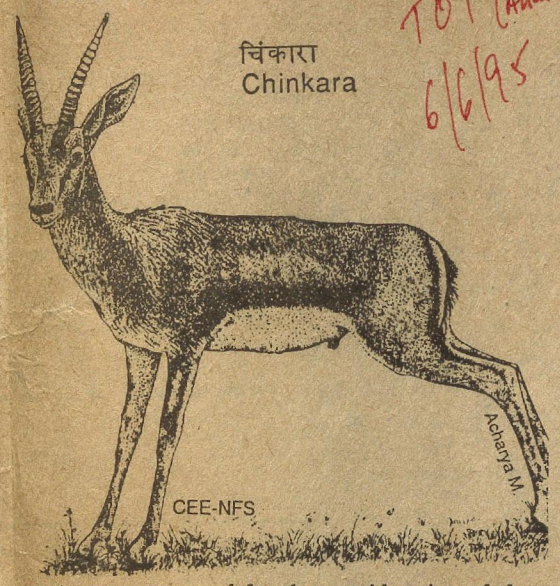
GANDHINAGAR, June 5: As the world celebrates the World Environment Day today, the Keshubhai Patel ministry seems determined to push through the Sanghi cement project by circumventing the Gujarat High Court judgment striking down the State government notification of drastically reducing the Narayan Sarovar sanctuary, housing the world famous Chinkaras in the border district of Kutch.

The cement project was conceived at the time of late chief minister Chimanbhai Patel but got bogged down in an environmental controversy. The issue ultimately went to Gujarat High Court which nullified the government notification on the ground that the state government was not within its authority to take such an important decision.

Now it is learnt that the first Bharatiya Janata Party ministry has prepared a motion to be moved in the next session of the State assembly to reduce the area under the sanctuary to around 96 sq km from the present 765.75 sq km. The BJP had earlier criticised the original proposal mooted at the time of the Chimanbhai Patel ministry, suspecting some "underhand dealings". On the floor of the assembly, prominent BJP legislators had strongly castigated the ministry for pursuing the project. But now the BJP government is considering a *de novo* exercise to draw a new limit of the sanctuary.

Minister of industries, mines and minerals Suresh Mehta, who belongs to Kutch district, is the main force behind reviving the giant Sanghi cement project with a capacity of 2.5 million tonnes, involving a massive investment of around Rs 700 crore. Mr Mehta is credited with the view that the project of such big size will go a long way to change the socio- economic scenario of the district.

It is argued by top officers in the industries department that the reduction of the wildlife sanctuary limit was initiated by the State government for the optimum utilisation of abundant mineral resources of limestone, bauxite, bentonite, soderite and barytes. It is estimated that reserves of cement grade limestone of the order of 7,765 million tonnes falling in the sanctuary limits are lying unexplored in the Kutch region, particularly in the Lakhpat-Abdasa-Naliya talukas, encompassing an area of 400 sq km, almost covering all the limestone reserves falling within the wildlife sanctuary limits.



A note prepared for the consideration of the State assembly outlines the importance the limestone serves for economic development of Kutch.

It points out that the total quantity of limestone required per million tonnes of cement production would demand an allocation of 30 million tonnes of limestone. Going by this calculation, the limestone reserves in Kutch district could be utilised for the production of 258 million tonnes of cement per annum.

It is also estimated that at least 43 plants of six million tonnes per annum could be set up in this arid zone. A plant with a capacity of six million tonnes at the current price is estimated to cost around Rs 3,000 crore and, therefore, an investment of Rs 1,29,000 crore could be attracted in 43 projects. To further strengthen the government argument, the note highlights the direct gains from each project. It is believed by the government that each project, producing one million tonnes of cement, could generate direct or indirect employment for 2,000 persons.

Thus, the production of 258 million tonnes of cement over the years would have an employment potential for 5.16 lakh people. Pinpointing the likely economic benefit to the State government, the note says that the State may get around Rs

Continued on Page 5 Column 3

State may bypass order on sanctuary

Continued from Page 1 Column 7

1,931 crore as a royalty on the utilisation of limestone at the rate of Rs 25 per tonne. In addition, other minerals like bauxite, bentonite, siderite and bartytes could also be exploited.

Bauxite deposits in Lakhpat taluka have been planned to be utilised for the proposed joint sector alumina project to be set up by the Gujarat Mineral Development Corporation and the Gujarat Alkalies Company Ltd. Moreover, the mining of lignite by the GMDC in Panandhro area of Lakhpat taluka since 1978, which falls under the wildlife sanctuary area, will also have to be stopped in view of the recent judgment of the Gujarat High Court.

Another important factor that is causing the concern to the State government is that the two proposed lignite-based power stations of Akri Mota and Panandhro may become non-starters if the sanctuary boundaries are not altered to take the critical mineral bearing areas outside the sanctuary.

A "scientific study" conducted by the industries department in consultation with the forest department now reveals that an "excessive area" was allocated for the Chinkara sanctuary in 1981 without analysing many relevant factors. Sources in the government now believe that the environment department had taken a "hasty" step of declaring 765.79 sq km of area, spread over 56 villages of Lakhpat taluka, without consulting any department like revenue and industries.

The so-called scientific survey has assessed that the Chinkara sanctuary will roughly require only 35 sq km area considering the fact that the population of Chinkaras ranged from 1,100 to 1,200. As the government found that the area of 765.75 sq km was too large for the sanctuary, it issued a notification on July 27, 1993 delimiting the sanctuary to some 96 sq km of area. Of the reserved area, the government proposed to allot nearly 2,000 hectares or 20 sq km to the Sanghi cement for its export-oriented project to produce 2.5 million tonnes of cement.

The State government has proposed that the sanctuary may have an area of around 96 sq km which it believes will be adequate for the maintenance and preservation of Chinkaras in Kutch. As the High Court had struck down the government notification of reducing the area of the sanctuary on the ground that the state government had no such authority to do so, now the Keshubhai Patel ministry will move a motion in the State assembly to circumvent the High Court order.

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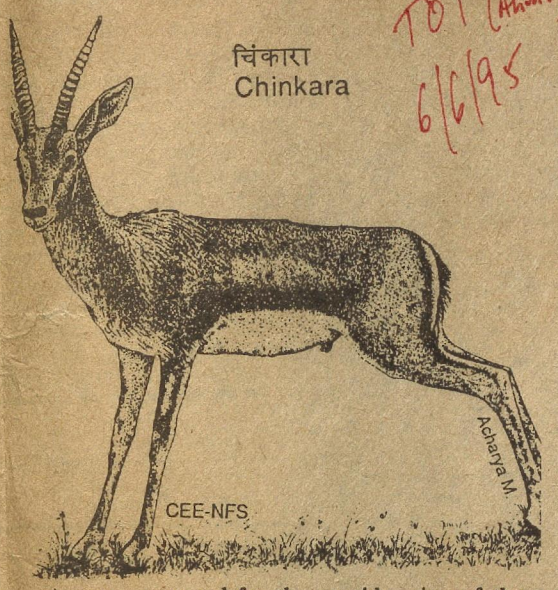

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AK 17.5

Courting Disaster

TOI 13/6/95

THE Gujarat government's move to locate a giant private sector cement project in Kutch through a state assembly resolution that would limit the Narayan Sarovar Chinkara Wildlife Sanctuary area from the present 765.75 sq km to a mere 96 sq km is a reflection of the type of industrial policy that it is likely to follow. This is despite the Gujarat high court directive in 1993 vetoing the then Chimanbhai Patel ministry's idea to denotify the sanctuary. Ironically, the move comes weeks after the high court expressed concern over the ecological disaster caused by Gujarat's industrialisation. If the Congress government overlooked the need to reconcile industrial and environmental concerns, the BJP regime's lack of interest in a matter that deserves urgent attention is fraught with serious implications.

The BJP government appears to have learnt nothing from the havoc the state's haphazard industrialisation has caused in a number of Gujarat Industrial Development Corporation estates, especially Vapi, Ankleshwar, Vatva, Naroda and Chhatral. The high court has ordered closure of the ecologically-damaging chemical factories operating at some of these places and a state committee has recommended remedial measures to control the environmental damage caused.

In fact, the policy of allowing cement and soda ash factories on a large scale in the Saurashtra-Kutch region has been pursued since the late 1970s. Both cement and soda ash units depend on limestone, a natural water conservator along the Saurashtra and Kutch coasts. Once mined, salinity ingress affects the fertile soil. With the sea already advancing, limestone mining aggravates the problem further. Environmentalists have warned that if the massive invasion of soda ash and cement factories in the belt is not stopped, such areas such as the Lili Nagher, the fertile region of Gujarat between the Gir forests and the south Saurashtra sea coast, might be devastated, affecting some 550 villages. Already, about 40 villages have been deserted by people because the soil has become infertile.

With the Kutch- Saurashtra region facing serious water scarcity it is difficult to understand how such environmentally disastrous schemes can help improve the employment scene. The government plans to have not one but 43 plants within the vicinity of the current Chinkara Wildlife Sanctuary at an estimated cost of Rs. 3,000 crore. However, if the experience of Saurashtra coastal region is any indication, the projects would ruin the already delicate ecological balance of the area.

AK 17.5

Allotha

Sanghi Industries committed to Gujarat cement project

Ex 12/7/95

Our Ahmedabad Bureau

AHMEDABAD 11 JULY

THE HYDERABAD-BASED SANGHI Industries Ltd has no plans to back out or relocate its Rs 664-crore 2.5 million tonne cement plant, the largest single location Indian plant coming up in Kutch district of Gujarat, Mr Ravi Sanghi, managing director of the company has affirmed.

Mr Sanghi said he was hopeful that the state government would take the necessary steps to facilitate quarrying of limestone in the Lakhpat area, adjacent to the production site.

In a chat with *The Economic Times*, Mr Sanghi said about Rs 45 crore has already been spent on the project. About Rs 445 crore additional investment has been fully committed. The plant and equipment has begun arriving on the site.

"There is no question of our withdrawing the project from Gujarat", he emphasised.

Mr Sanghi was asked whether the company intended to reconsider the locational aspect of the project in view of a recent Gujarat High Court order which quashed two state government notifications which denotified the wild life sanctuary established in Narayan Sarovar covering an area 765.79 sq km and created a new sanctuary of only 94.67 sq kms.

The effect of the order was that Narayan Sarovar wild life sanctuary has been revived. The sanctuary included the area where limestone quarrying was intended. In quashing the notifications, the court held that altering the boundaries of wild life area under the Wild Life Protection act required a prior sanction from the state legislature and it could not done through an administrative act.

Mr Sanghi said in the wake of the court's judgement talks have been held with the state government on the follow-up measures needed to be taken. "We are awaiting them and we do not forsee any hiccups". In any case, the quarrying is scheduled for early next year. Right now "our undivided attention" is on erecting the plant according to schedules.

He emphasised that the Sanghi group was not concerned with making profits alone. It was equally concerned, conscious of and totally committed to clean environment. This commitment is reflected in the group's heavy investments in pollution control measures at Sanghi Nagar in Hyderabad which housed a cluster of petro-chemicals units whose propensity to pollute the environment was far greater than that of any other industry.

Mr Sanghi maintained that several foreign groups including World Bank teams which have visited Sanghi Nagar in the last few years have appreciated "our concern for clean environment and steps we had taken to sustain it."

AK 17.5

Many firms in line to share Narayan Sarovar's limestone treasure

by Tanushree Gangopadhyay

NARAYAN SAROVAR (KUTCH), Aug 23: It is not only the Sanghi Cement company, but an avalanche of other companies are coming to set up their cement plants in and around the limestone-rich, controversial Narayan Sarovar Sanctuary area, despite the Gujarat Ecological Commission's warning that the fragile ecology of the Lakhpat taluka in this sensitive border district might be damaged further.

The decision of delimiting the area by the Chimanbhai Patel government in 1993 got the legal sanctity by the present Keshubhai Patel government last month apparently under influence by the giant Sanghi group. Along with this, the government has been approached by nine other major groups including JK Cements and Raymond Woollen Mills with proposals to invest a whopping Rs 5,000 crore in the Narayan Sarovar area. The proposals of another 12 companies are in the offing and the government is attracted by the prospects of a whopping royalty of Rs 45,000 crore.

To justify the dereservation, the State Industries Minister and the MLA of Kutch, Mr Suresh Mehta, recently organised a trip to acquaint journalists with the advantages of the dereservation of the Chinkara Sanctuary to 445 sq kms to help industrial development of Kutch.

The Hyderabad-based Sanghi Cements with a capacity of 2.5 million tonnes had applied for land in July 1992. It has been granted revenue land in Berimoti in Abdasa taluka adjoining the sanctuary and construction has already been started on massive scale.What is surprising that to date no mining lease has been acquired by the State Government from the Centre. The Government through an affidavit in the Gujarat High Court on Monday admitted that "it had agreed in principle to grant the Sanghi Cement a lease of 20 sq kms of land within the sanctuary area, but so far no lease and no such land has been granted to the company."The mining plan, the affidavit continued, "will have to be approved by the Indian Bureau of Mines , Udaipur, and the environment clearance certificate to be obtained from the Impact Assessment Agency, as required under the notification dated January 27, 1994". Then other companies also have to wait for the lease.

Another giant from Delhi, the Delhi Lease Finance India Limited with a capacity of 3.50 million tonnes had applied for mining lease of 8,888 hectares in Kharach, Kharari, Jadva, Pankho, Kahroda and Vaghapadar villages in February this year. The JK Corporation Limited, New Delhi had also applied for land in Harudi, Lakhmirani and Mori villages on November 19, last year.

The other Bombay-based companies – the Raymond Woollen Mills on February 2 applied for 2,426 hectares in Dedhdi, Dedaparanda Baiyavi villages; Essar India, for 7,126 hectares in Sheh, Kaiyari and Gothtad villages on December 5; Agross Leasing Company, Bombay, on April 26 for 4,181 hectares in Duriyani, Mudhavav and Kuyari; Lok Housing Company Limited, on March 18, 1995 in Jadva and Harudi villages; Magdalla Shipping Yard Private Limited on April 26 for 1,500 hectares in Kharai and Harudi villages and P K Ruparel (Chakradhar Cement Ltd), Bombay in November for 33,576 hectares in Khari and Harudi.

The Sanghi cements has been constructing its factory on the revenue land in Bermoti located on the periphery of the Chinkara sanctuary. Significantly, the company is slated to be the largest company with a capacity of 2.50 million tonnes. At an investment of Rs 550 crore and royalty of Rs 12 crore, the 50 per cent export oriented cement plant, the company has been sanctioned to build its own jetty with support from the Gujarat Maritime Board. The company will be given an exemption in sales tax on purchases of raw materials for a period of 14 years.

Small wonder then that the project manager of Sanghi, Mr Ganeshan, said the captive coastline with the limestone mines and the lignite in close proximity attracted them to the area. They have also been sanctioned to set up a captive power plant.

That the Government has given land in this area for a pittance to Sanghi and other companies with their offices registered outside the State, did not seem of much consequence to the government officials. The companies will generate a total employment of 50,000. The State Government which boasts of economic development of the area by sanctioning land in the area seems to be under some illusion. For example, the Government will not get any revenue from Corporate tax, or sales tax.

And most importantly, security seems to have been a low priority for the Government even as the BJP government has been shouting itself hoarse about the problems the nation faced from Pakistan.(Karachi is only 80 km away along the coast). That the company will export the cement from its private jetty, with Pakistan a mere 80 km away is not worth any concern to the Government.

Gujarat Ecology Commission's report on the Current Ecological Status of Kutch, 1994, states that geologically Kutch is a very young region. An immense accumulation of volcanic rocks is the most important geological formation. The earthquake in Kutch in 1819 has resulted in the ruin of Lakhpat port. It also raised the land by five to 10 metres and this blocked the flow of Nara river to Kutch.

Mr Hasmukh Shah, the chairman of the GEC, in his forward to the report stated that Kutch suffers more from a lack of holistic management than it does from lack of sophisticated agricultural technologies, has not been taken seriously by the successive governments, who have merely concentrated on the investments in Kutch.

The area was under the Arabian sea a few centuries ago. The forest cover in the district was as low as six percent in comparison to the State's 10 per cent. The livestock number in Lakhpat area was very high and the population's dependence on pastoral life would be disturbed if massive industrialisation was affected.

District Forest officer, Mr M G Patel, had no answer to the inquisitive journalists' question on the dwindling population of chinkaras, which he said were 1019 according to the 1994 census. Mr Virat Vora, the former deputy secretary of mines and metals, said the sanctuary area had 1,200 million tonnes of limestone reserves. According to him, 45 sq kms was enough for the chinkaras survival. Even the GEC report on Ecology of Kutch states that 'for realising the objective of creating the chinkara wildlife sanctuary, political and administrative support is essential'. A retired bureaucrat who was the divisional commissioner of the area in the 1960's recalled that the area was full of chinkaras.

Dr Nima Acharya, the MLA of the area who had supported the delimitation of the sanctuary area in the State Assembly, however objected to making political capital out of the backwardness of Kutch. Objecting to the government's giving land in the sensitive border area, she has written a letter to Sanghi Cement Limited stating that the people of the area were not really impressed by their 'so-called development and has asked how many people will be given permanent employment, or would they be given casual employment.

The cement company has brought in such an illusion among the people in the vicinity, little understanding the ramifications, that all of them will get jobs. However, says Mr Rajgor, who runs a tea stall at Narayan Sarovar village, that the project will help our people who are unemployed. Tapubhai felt that life would be better with the cement company, as the forest department "harass us and fine us if our cattle go across the Sarovar. How do you expect us to restrict our cattle after all they need grazing land."

Another happy man is Hamir Chhadua Padiyar, the Deputy Sarpanch of Baranda, the site office of Sanghi Cement Company. He and his village folk were given petty menial employment at the company. Rama Lakhma Rabari, the Sarpanch of Jadva where the company's mines were located, was particularly happy that the company would give many people jobs even though it is a petty Rs 35 for most of them were casual and unskilled.

AK 17.5

Mining digs deep into India's wildlife refuges

Sanjay Kumar, Delhi

IN the latest of a string of assaults on India's wildlife sanctuaries, the Gujarat state assembly has stripped protection from more than 40 per cent of the Narayan Sarovar Sanctuary in Kutch. The sanctuary is a refuge for the country's largest population of Indian gazelle, or chinkara. It is also home to other species protected under India's Wildlife Protection Act, including the pangolin, caracal, desert cats and the Indian wolf.

In 1992, the Gujarat government's department of mining and geology pointed out that there were huge deposits of lignite (brown coal), limestone, bentonite and bauxite inside the reserve. They argued that the ban on mining in the reserve was holding back development of the local economy.

In July 1993, the state government issued a decree abolishing the sanctuary and establishing a new one, consisting of 16 disjointed patches no more than an eighth the size of the original. Several environment groups challenged the decision in the courts, claiming that it was illegal because it had not been approved by the state legislative assembly. This March, the Gujarat High Court quashed the government decree, restoring the original sanctuary. But it refused to comment on the "desirability or otherwise of the reduction of the sanctuary area".

Earlier this month, the state legislative assembly took advantage of the court's reluctance to support the sanctuary and approved a reduction in the size of the sanctuary from 766 to 444 square kilometres. The assembly maintained that there were around 1200 chinkaras and that the smaller area was more than adequate.

The boundaries of the smaller sanctuary are carefully drawn to exclude the rich limestone and mineral-bearing areas. Environment groups say cement makers, eager for new sources of limestone, were the main driving force behind the state government's actions. The industry department has already received 10 applications to build cement factories. The powerful Sanghi Cement is likely to be the first to build a plant on the edge of the sanctuary.

The state assembly also stressed that a state such as Gujarat with its poor power supply cannot afford to ignore its brown coal deposits. A first lignite-fuelled power station was built inside the sanctuary in 1991 and a second is now planned in Akri.

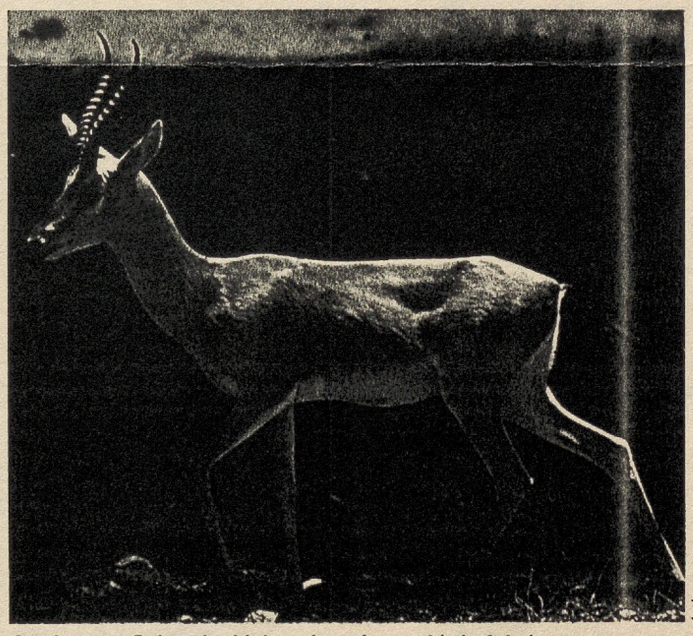
Some miners moved inside the boundaries of the sanctuary even before the 1993 decree abolishing it. Since then, mining and quarrying have escalated.

Local forest officials believe that there are fewer than a thousand chinkara left in the sanctuary and that their numbers are dwindling, as their habitat is being destroyed. Pollution from the power station and the heavy traffic through the reserve also disrupts wildlife. Mining has made the water salty, driving villagers out of the area.

Conservationists see the assembly's decision as a dangerous precedent. Chhatrapati Singh, director of the Centre of Environmental Law, says: "There seems to be a general trend now to reconsider conservation under the liberalised economy". Such actions, he says, could trigger a chain of similar moves by politicians in other states.

"More than forty national parks and sanctuaries face the threat of invasion by commercial interests," says Singh. A chunk of the Sariska Tiger Reserve in Rajasthan was denotified at the end of 1992 to allow mining. Last year, the Melghat Tiger Reserve in Maharashtra was reduced by one-third to allow forestry and construction of a dam. The Radhanagri bison sanctuary is threatened by bauxite mining.

The Centre for Environmental Law is now planning to challenge the state assembly's decision. "Unless such acts are reversed, they will make a mockery of the protected areas programme of the country," says Singh. □



Ardea

On the run: Gujarat's chinkara have lost a third of their sanctuary

Talking heads fall foul of multimedia patent

SCHOOL-LEAVERS in the US can plan their future careers with multimedia training software called Create Your Dream Job. In the top left-hand corner of the screen a talking head guides them through the alternatives. It is fun, and it is instructive. But now the dream is turning into a nightmare.

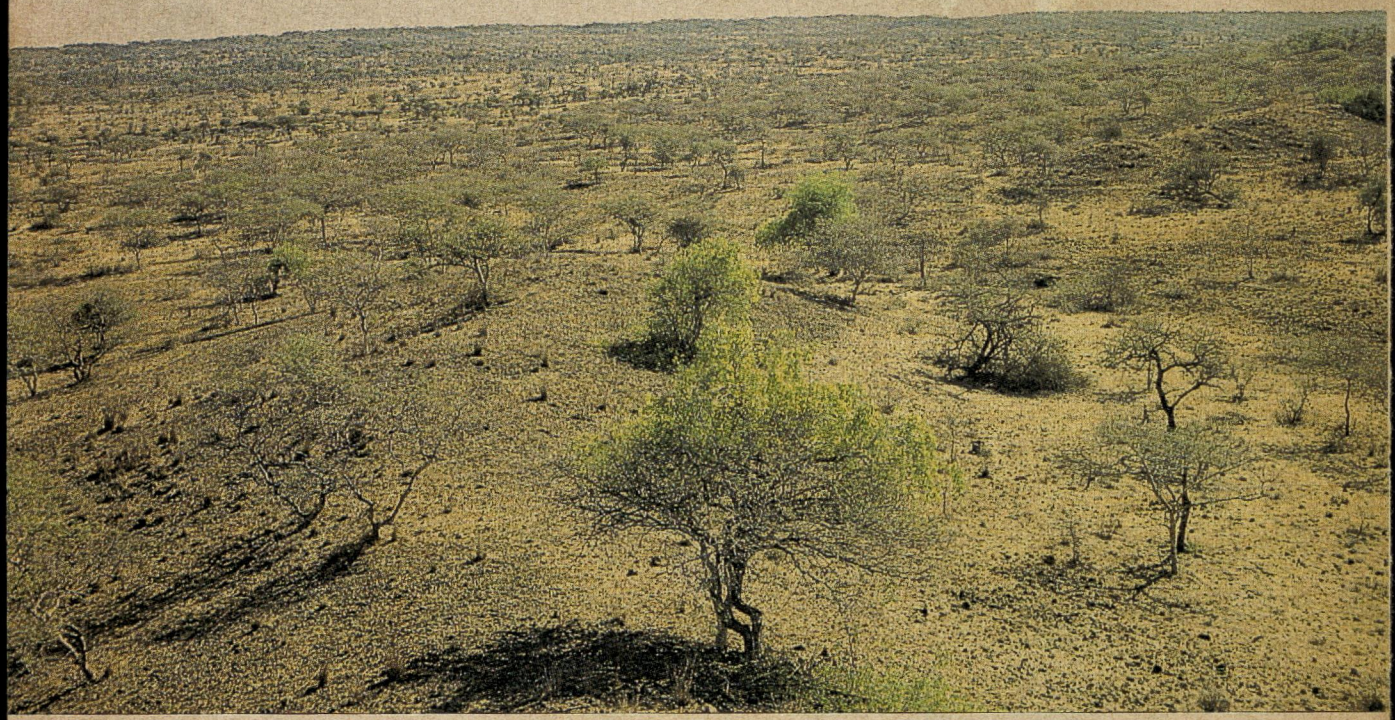
Rick Beye, a lawyer from Fairlawn, New Jersey, was granted a US patent last month that covers the use of a video image in a window on a computer screen to talk students through a task or problem.

Beye has already asked three companies for royalties: the Wilson Learning Corporation, the designer of Create Your Dream Job, and the companies Comskills and Winway. He claims that their products infringe the patent. Beye has asked Wilson to pay $10 000 for each type of medium (CD-ROM, tape or laser disc) which the technique is used on, as well as a royalty payment every time the product is used—$5 for the first hour and 10 cents for each extra minute.

Beye, who has been a lawyer for 22 years and a computer enthusiast since his school days, says he was surprised no one had tried to patent the idea before.

The US-based Interactive Multimedia Association (IMA) has issued a warning to its members telling them to consult a lawyer about whether the patent applies to their teaching aids. Martin Gerich of the IMA says: "We are basically on a holding pattern until we have talked to our attorneys."

On first reading, the patent appears to apply to many of the software training aids created by members of the IMA, he says. But he says that the IMA may challenge the patent if it is "overly broad and non-novel". Beye says his patent will not cause problems at the moment as few companies make software that infringe it. But he expects the number of licences to rise dramatically as multimedia training becomes more commonplace. "It is going to be a major concern for those delivering this in the future," says Beye. Although the patent was granted in the US, Beye has applied for worldwide rights. **Mark Ward**



Shrinking sanctuary

The consequences of denotification

PRITHI NAMBIAR

THE Narayan Sarovar sanctuary has finally been secured for industrial use; it had survived the first attempt by industrialists to gain access to its substantial mineral wealth in limestone and lignite when a landmark judgment by the Gujarat High Court struck down a government denotification dated July 27, 1993, as it did not carry the approval of the State legislature (*Frontline*, May 19, 1995).

Two years after the first notification cancelling the sanctuary status of the thorn forest habitat of several endangered species in Lakhpat taluk of Kutch district, the Gujarat Assembly on July 27, 1995 passed a controversial resolution reducing the sanctuary area from 765.79 to 444.23 sq km.

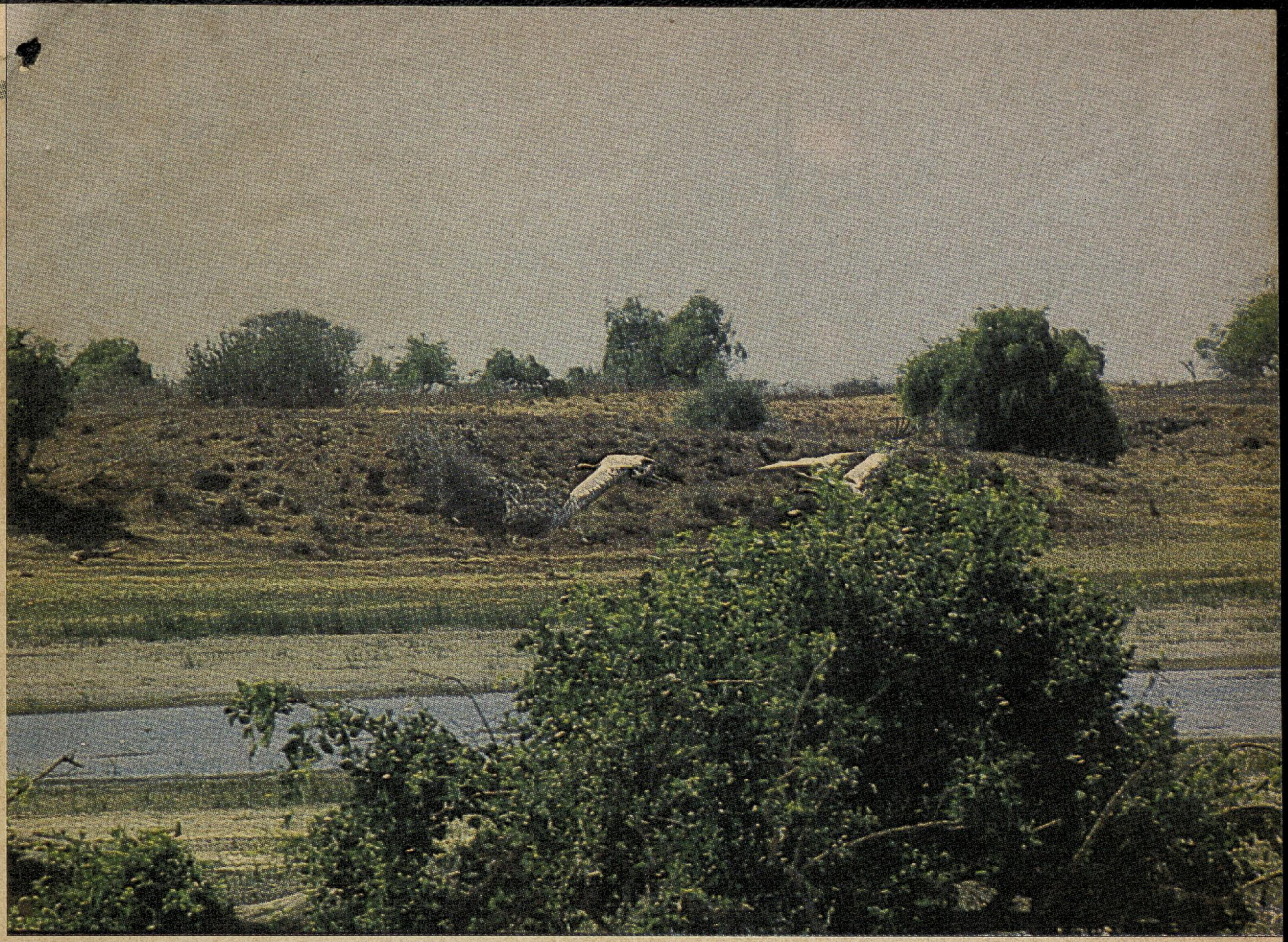
Prithi Nambiar is Coordinator with Centre for Environment Education, Ahmedabad.

Environmentalists and concerned citizens are angered not just by the denotification which has faced considerable opposition for the past two years, but also by the manner in which it was done. Despite the change of Government from the Congress to the BJP, the way the move was carefully planned and the determination with which it was carried out remained the same.

This time, the aggressive Industries Minister of the BJP, Suresh Mehta, launched afresh the customary attack against environmentalists in the State denouncing them as anti-national, anti-developmental terrorists who were serving First World interests by obstructing the move to industrialise Gujarat. When asked why the strongest critics of the 1993 denotification were now perpetrating the same, Mehta offered the amazing excuse that while protesting from the Opposition benches, he had no knowledge of the facts of the case but had now gained more wisdom. Regardless of ideology, the decision appears to have been based on populism rather than any rational concern for ecology, then as now. Neither the BJP nor the Congress has distinguished itself by the manner in which it handled the issue.

Leader of the Opposition Amarsinh Chaudhary and other Congress legislators who were absent (having been forcibly evicted during the voting on the resolution) later charged the BJP Government with having accepted undisclosed sums of money to carry out the denotification at the behest of the cement industrialists interested in the sanctuary. Pointing out that two years ago the BJP had accused the Congress Government of accepting bribes, Chaudhary asked, "Why should one believe that the present Government has not accepted any bribes?" Sanghi Industries had, in a press release, "thanked" the Gujarat Government for its prompt and pru-

Pictures: Mukesh Acharya



(Left) Thorn forests and (above) wetlands within the Narayan Sarovar Sanctuary... shelter for several endangered species.

dent action in denotifying the "technically existent but practically non-existent Narayan Sarovar sanctuary" in the face of the "wild allegations made by a few people against the Government".

Sanghi Industries had earlier flouted a High Court stay by laying the foundation stone of its cement plant (*Frontline*, January 27, 1995). Its contention then was that it was within its rights to locate the plant in land outside the sanctuary.

In the absence of Congress legislators, five independent MLAs registered a strong protest against the resolution. Mahendra Mashru, MLA from Junagadh, appeared well briefed on the background to this case. Quoting the House Committee for Public Undertakings that had found few takers for bauxite and other ores in the sanctuary area, as well as the Gujarat Ecology Commission (GEC) that had said, "Under no circumstances should the sanctuary be exploited for commercial purposes", Mashru accused the Government of using brute majority to "sin against nature" through a nexus with business that went against the interests of Kutch.

Large-scale devastation of the erstwhile sanctuary is expected to have its repercussions all over the State. "Opening up the region to transport will create quick and efficient channels of communication for the drug mafia operating across the Indo-Pak border," says Lavkumar Khacher, a naturalist. He feels there will not be adequate surveillance of anti-national activity once private industry controls land in this sensitive zone.

The conversion of the natural protective barriers of the Rann of Kutch through increasing private acquisition of land might, Khacher fears, intensify salinity ingress all over Gujarat. Water is an acute problem in the region as admitted by top officials of the State-owned Gujarat Mineral Development Corporation (GMDC) which has been mining lignite in the sanctuary for more than two decades. The industrial plan for Kutch foresees the advent of 43 major cement plants in a region where even the few existing ones have had problems in finding adequate water.

The destruction by open-cast mining is extensive, says Khacher, as the depressions collect water containing high concentrations of soluble salts, which become progressively more toxic due to the high rate of evaporation. The entire region can turn into a dead zone, he warns, as mining disrupts the shallow, seasonal water courses that recharge the aquifers during the monsoon. Removal of limestone and loss of subsoil will inhibit the retention of rain water.

Many are concerned about heavy industrialisation in Kutch which could bring severe environmental degradation without expected benefits to the local people. That the Gujarat Government has not given serious thought to these problems is evident from the one-point rationale of its strategy. "Just 40 sq km is sufficient for the chinkara," declared Chief Minister Keshubhai Patel in his latest attempt to justify the Government move.

The entire question of appropriate development for the fragile Kutch has been whittled down to absurd estimations of the land requirements of the chinkara on the basis of so-called scientific studies, which have never appeared in public. Since the first notification on the sanctuary, periodic declarations by politicians have been progressively reducing the chinkara habitat area in blatant disregard of the national conservation policy.

In a letter to the press,

Maharajkumar Himmatsinhji of Bhuj, an expert on the wildlife of Kutch, expressed his annoyance with the level of ignorance on the subject: "No thought is being given to the ominous possibility of the irreparable damage that would be caused to the ecosystems of the area where mining for limestone would take place." Condemning the attempt to arrive at facile estimates of "sufficient" land for the chinkara, Himmatsinhji reiterates that there are several other important species such as the nilgai, the wild boar and the extremely rare caracal, besides ground-dwelling and perching birds in the sanctuary. "What is the scientific yardstick to determine how much of the land concerned would be sufficient for all these animals to maintain themselves?" he asks.

FUTILE MEETING

Government officials met citizens and representatives of the Centre for Environment Education (CEE), the Consumer Education Research Centre (CERC), the World Wide Fund for Nature (WWF) and the Gujarat Nature Conservation Society (GNCS) at the initiative of the Gujarat Ecology Commission (GEC) on February 7, 1995, ostensibly to work out an understanding. The meeting appears to have been futile, as the Government went on to reduce the sanctuary area with the sole intent of accommodating mining interests.

The main point of the meeting, asserts Manubhai Shah, Managing Trustee of the CERC, was to ascertain that no move would be made to tamper with the sanctuary boundaries without first carrying out a thorough study of the area required to ensure the future viability of the ecosystems sheltered within. The meeting drew up the terms of reference for the study and identified experts from a variety of organisations.

According to the minutes of the meeting, it was recommended that the Government set up a trust fund for the sanctuary, levy an environmental cess on industries entering the area and *inter alia* make the State Wildlife Advisory Board functional, a mandatory requirement under the Wildlife Protection Act, with adequate representation to non-governmental organisations (NGOs). It was also recommended that strict conditions be laid down for mining in the area by leasing not more than 5 sq km at a time and releasing additional land only when the topsoil and the vegetation were restored in the area mined.

"We talk about fighting backwardness but where are the politicians or the industrialists when it comes to implementing the environmental safeguards that industry is required to follow in the advanced nations?" asks Nanubhai Amin, chairman, Jyoti Industries Ltd., Baroda. What environmentalists fear is that in the absence of safeguards, monitoring and respect for ecological considerations, unplanned industrialisation could spell disaster for the State.

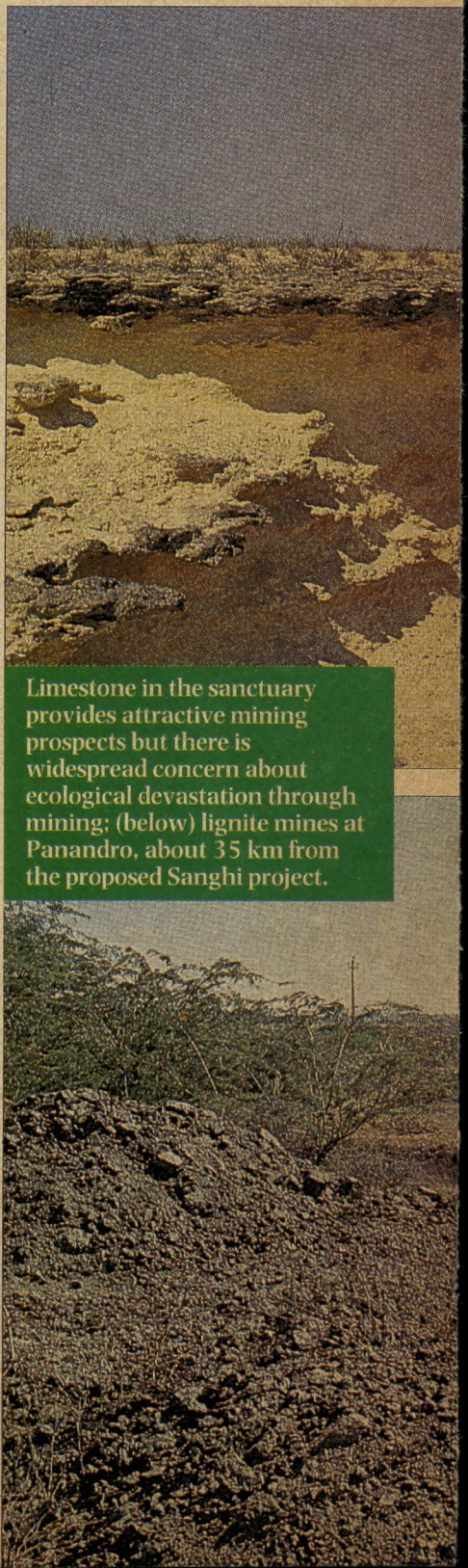
"Where is the transparency the BJP promised us?"Manubhai Shah asks. The greatest failure of Indian democracy is that elected representatives do not believe in participatory democracy even in the land of the Mahatma, he says, pointing out that while the Supreme Court is pushing the Government towards greater transparency, consultative decision-making, access to information and public accountability, there is increasing resistance from vested interests.

Meanwhile, Sanghi personnel have been escorting groups of villagers to the CEE and CERC offices. "Why are we not asked what we want?" says Savabhai, sarpanch of Motiber village where construction work is under way. "Our people are dying of starvation. There are not enough jobs. We cannot trust the Government to do anything for us, so why not let the industries in?" They are loud and aggressive in their support of the cement company. "There is no water anyway in Kutch, nothing except wilderness. The Forest Department has not even spent the money earmarked for the sanctuary. What hope is there for us?" they ask as Sanghi personnel look on.

Gujarat's new industrial policy, which features a wholesale acceptance of natural resource exploitation, could spell ecological disaster for a State already stricken by widespread chemical pollution. There is no attempt to ensure that the new industries are labour intensive and involve the upgrading of local skills. If 20 years of mining near the sanctuary is anything to go by, there is no evidence of any economic growth barring the arrival of trucks and tea shops.

"The pattern of development for Kutch is the same as that propagated by the colonial masters of India. It is nothing but a licence to loot and plunder," says Khacher, "rather like the return of Mahmud Ghazni to Gujarat, this time on the invitation of the Gujarat Government." The only resources that are available are the protected areas of Gujarat which belong to the people, the natural heritage that is the basis of its unique culture. As custodians of public property, the Government is answerable to the people for this transfer of public property to private hands for a nominal royalty of Rs. 25 a tonne of limestone mined, says Khacher.

The denotification has provoked the filing of several petitions against the



Limestone in the sanctuary provides attractive mining prospects but there is widespread concern about ecological devastation through mining; (below) lignite mines at Panandro, about 35 km from the proposed Sanghi project.

Assembly resolution. The first petition to be heard in the Gujarat High Court was filed by a leading city advocate. Even as the High Court asked to know what steps the State Government was taking to safeguard the sanctuary, yet another case was filed by CERC, on the strength of whose earlier petition the first denotification had been quashed. The CERC petition raises several issues that include the necessity for Central Government approval under the Forest Conservation Act before forest land can be used for non-forest purposes such as mining. Other grounds include the need for environmental clearance for the cement project and the violation of India's obligations under various international agreements, including the Biodiversity Convention which makes a specific commitment to the preservation and expansion of the protected area network. Both petitions have claimed that the resolution is unconstitutional and violative of several articles directing the state and the citizen to preserve and protect the natural environment.





The issue continues to attract unprecedented media interest in the State. The Rashtriya Surajya Parishad sent an appeal to Kamal Nath, Minister, Environment and Forests, to intervene on the matter and urged Gujarat Governor Naresh Chandra to withold his assent to the Bill.

The party held a demonstration outside Gandhinagar and sought an audience with Chief Minister Keshubhai Patel who promised to think the appeal over. Meanwhile, activist Medha Patkar condemned the 'manoeuvred' decision to denotify the sanctuary and accused the Government of deceiving the people of Kutch using the pretext of development.

She said that the decision showed the "mind-boggling politicisation of development planning and a shocking callousness towards the loss of natural resources."

The opposite camp has reacted by feeding the press with a stream of disinformation. A few, in letters to the Press, dismiss the need for the sanctuary on the grounds that there are no guesthouses there. Most surprising is the so-called scientific report by P. M. Bhargava who, at the behest of the Sanghis, went on a two-day whirlwind tour of the sanctuary and concluded that it may be denotified as he did not spot a chinkara during his drive through and because the sanctuary bore no resemblance to other protected areas like Kaziranga. WWF-India's Gujarat chapter strongly condemned the report at a recent meeting in Baroda deploring the manner in which scientists supported the case of commercial interests.

The point that protected areas are intended to conserve ecosystem diversity and that semi-arid areas need as much representation as much as tropical ecosystems, is one that is not getting across. The argument of the commercial camp continues to revolve around the unsatisfactory performance of the Forest Department for which, strangely, environmentalists are being held responsible. Whether it is poor management or denotification of the sanctuary, the State Government has a lot to answer for in court. ■

A different tune

Sanctuary status questioned

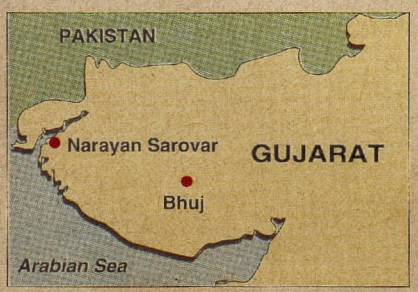
P. VIKRAM REDDY
in Hyderabad

RAVI SANGHI, the brain behind the Rs. 664-crore cement project proposed by the Sanghi group in the Kutch area of Gujarat, does not hide his unhappiness at the concerted efforts by environment groups to thwart the project by making an issue over the denotification of a part of the Narayan Sarovar Sanctuary.

Refuting allegations that the project could destroy the ecology, he says, on the contrary it would bring development to an area where people live under primitive conditions. There is no forestry worth any mention in the area, the land is barren and the water table as low as 800 feet and highly saline, he says, adding that the sanctuary did not have boundaries, fences, gates, foliage or wildlife, and chinkara, the animal for which the sanctuary was created, was rarely sighted. Estimates put the number of chinkara at 150 in the 765 sq.km. area of the sanctuary.

The site (Motiber and Hothiyay villages), he says, was selected because it was ideal for a port-based, export-oriented cement unit. It will be India's first plant to use lignite in place of coal. Lignite is available 25 km from the plant site, bringing down its landed cost to 40 per cent of the world average of landed cost of fuel for cement units. While the plant is outside the sanctuary, the proximity of the 25 sq km area (falling in the sanctuary) which the company has sought for mining limestone is also an advantage.

The company proposes a captive jetty equipped with high capacity loaders and capable of handling ships upto the size of 40,000 DWT (deadweight tonnage). A conveyor belt will take the cement from the plant to the jetty. This would reduce the cost of transporting raw material (limestone and lignite) and the finished product (cement) and solves the problems of availability of railway wagons and trucks. It also eliminates delays in schedules in implementing export orders. Incidentally the company has obtained zero import duty exemption subject to fulfilment of certain conditions, which is expected to result in a savings of Rs. 35 crore.



The project cost itself is put very low, at Rs. 2,544 a tonne of installed capacity (including the cost of captive jetty of Rs. 40 crore), compared to Rs. 3,500 a tonne in India and Rs. 4,977 in Europe.

The initial installed capacity of 2.6 million tonnes per annum is proposed to be expanded rapidly to 10 to 15 million tonnes through four kilns at the same location. The Sanghi group with a Rs. 6,000-crore turnover envisages a big role for itself in the cement industry and boasts of the latest technology, comparable to the best in the world, for its Gujarat plant.

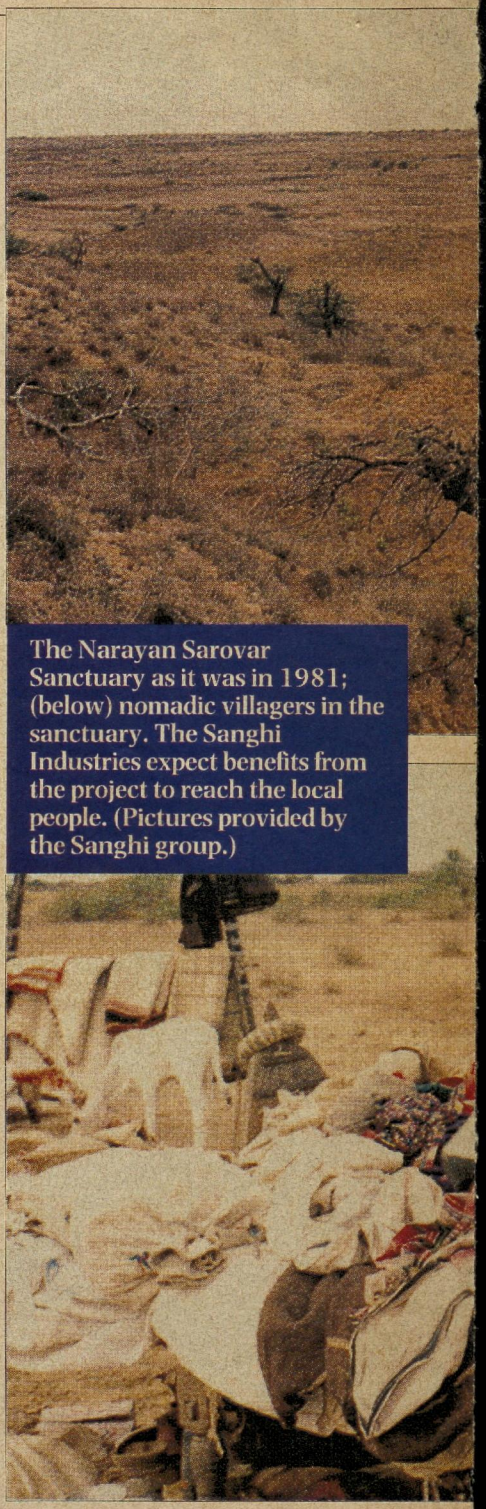
The location is so perfect that half a dozen industrial houses are waiting for the controversy to end, so they could set up units in the area, say industry sources. And there will be plenty of land for it – a 323 sq km area. The Gujarat Government, through denotification, had brought down the sanctuary area from 765 sq km to 442 sq km. Estimates put the limestone deposits at 7,765 million tonnes in an area of 286 sq.km.

But can industrial needs be given precedence over ecological factors, ask environmentalists.

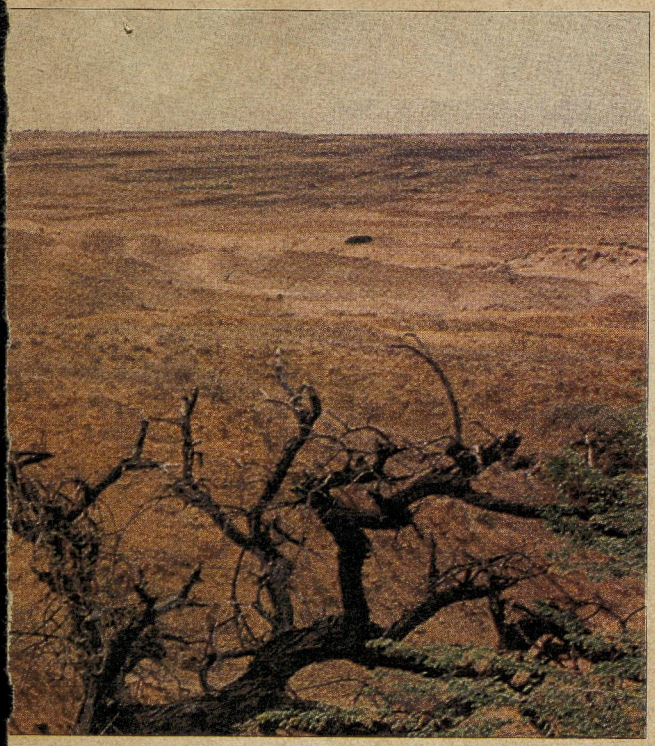
To defend its decision, the Sanghi group falls back on three status reports on the sanctuary, all recent (there was no scientific study in the 1980s to determine the land needed for the sanctuary). Ravi Sanghi points out that the Bombay Natural History Society, after a survey conducted recently, reported that the entire sanctuary has only 150 chinkara (which is also found in 80 sanctuaries in nine States).

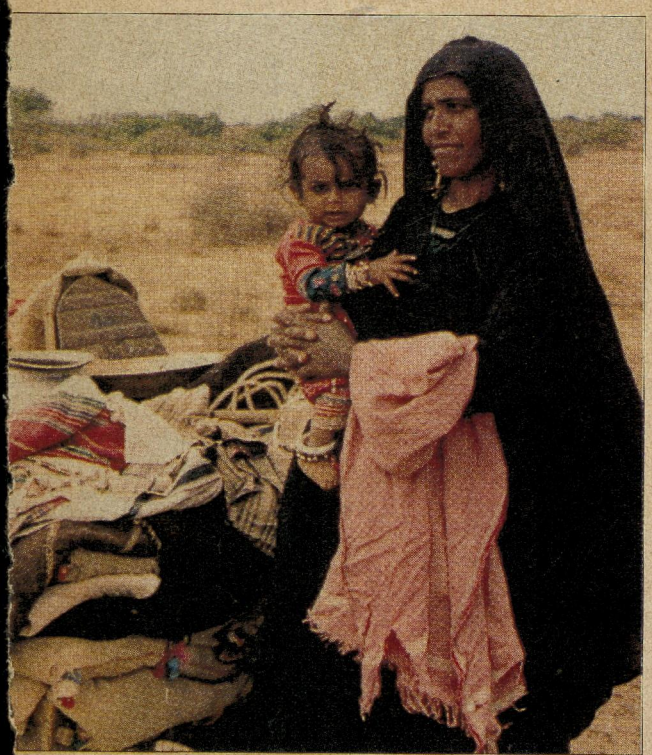
The chinkara density was found to be 0.2 per sq km, as against the national average of 0.88 and 31.6 in some places in Rajasthan. This has been interpreted to mean that the area is far in excess of actual requirements and can be reduced.

A satellite-based study by the National Remote Sensing Agency (NRSA) established that the develop-



The Narayan Sarovar Sanctuary as it was in 1981; (below) nomadic villagers in the sanctuary. The Sanghi Industries expect benefits from the project to reach the local people. (Pictures provided by the Sanghi group.)





ment of the industry will not disturb the chinkara habitat. The third report by scientist P. M. Bhargava (former Director of the Centre for Cellular and Molecular Biology, Hyderabad) states, "virtually no area in the sanctuary can be called dense forest and the entire area between Ratipal and Jadawa (Sanghi mine area) is open barren land", and that the "initial declaration of the sanctuary seems to have been done without proper investigation".

Bhargava says, "There is no special flora and not enough of special fauna to justify having such a large area with one of the richest mineral resource in the country designated as sanctuary".

Ravi Sanghi asks why voluntary organisations like Centre for Environment Education (CEE), World Wide Fund for Nature (WWF) and Consumer Education and Research Centre (CERC), who have been protesting, declined the company's request to visit the sanctuary and see for themselves the grassroots conditions – including the plight of the inhabitants. On the other hand, they have demanded that the company set up a wildlife fund of Rs. 5 crore, he says.

Dispelling fears of widespread ecological devastation, Ravi Sanghi says the plant will be the "cleanest and greenest" in the country. Dust emission will be restricted to 30 to 50 mg per cubic metre of dust as against the industry norm of 115 to 150 mg. It would be less than the stringent standards of 70 mg set in Switzerland.

Most of the limestone deposits are 'nummilitic' (of recent origin) which are soft and can be easily mined, yet do not allow water to seep. Consequently, the water table is rarely replenished by rains. Water is now available only at 800 ft below the surface and that too at high salinity levels of 6,000 to 7,000 TDS (total dissolved solids). Environment norms do not allow one to discharge water with over 4,000 TDS.

The immensely saline groundwater is thus unfit for drinking or irrigation. Therefore, the plant will be using desalinated sea water, and the impact on the water table will be nil.

An environment management cell will be created to monitor regularly the quality of ambient air and water, soil, groundwater and check water quantity, noise level and ground vibration. The company proposes a "garland drain" to prevent inundation from rain water. The streams,if any, that cross the block will be diverted in their natural condition.

Two small reservoirs created by the company have together collected one million cubic metres of water. The periphery of the mining area will be thickly wooded and fenced off with natural barriers. At least 200 hectares of greenery was being planned at a cost of Rs. 2 crore.

Regarding apprehensions of drug smuggling, once the area is opened up, the company feels overall development will reduce crime and denied any instance of drug smuggling had come to their notice.

The benefits to the local population are bound to be many, including employment opportunities, education facilities, health care, income generation and improvements in communication and transportation. As of today more than 1,000 labourers are engaged in construction work at the site – all locals (work has been in progress for two years and machinery worth Rs. 400 crore ordered). The company assures the local people of employment for about 10 years, as it proposes four kilns, each of which will take up about two to two-and-a-half years to be set up. The plant itself can provide employment to 150 unskilled persons, and the jetty another 50, while 150 to 200 can be employed in mining.

Currently many locals go to Panandro – about 35 km away from the Sanghi project – to work at a state power plant being set up. Daily wages, the company maintains, work out to Rs. 5 to Rs. 10 for males locally, while it claims to be paying upto Rs. 50 a day.

The company says it has clearances on all fronts, including the crucial environment clearance from the Centre.

"As of today there is nothing there (in the sanctuary), that even deer can eat. And people walk 10 km to fetch drinking water," says Projects Manager V. Ganesan, adding "will not development help the local people and improve their living standards?" ■

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LETTERS

Criminals in fray

Sir, — Ref. your editorial 'Criminals in fray' (HT, Oct. 2). The presence of criminals and mafia dons in the poll fray has not only reduced elections to a mockery, but it is vitiating the socio-political atmosphere in the country. The corrupt and the criminals are encouraged and eulogised even by the political parties, for their muscle power to capture votes.

Criminals have now acquired a political base of their own and are a law unto themselves. They have been making uncharitable remarks on the Press.

The rise of various groups and gangs in politics hints at the dangers to the rights and dignity of the law-abiding citizens and also to the very survival of democracy. Are we gradually losing our faith in the law enforcement machinery, as also in the power of social censure? Shall we finally have to turn for 'justice' to these dubious people? We need to strengthen our grassroots as mere speeches against criminalisation of politics yield no relief or socio-political reforms. — Yours etc.,

VED GULIANI
1472, Urban Estate-II,
Hisar.

Factual errors

Sir, — There are several errors of fact and logic in Usha Rai's write-up, "Battle to save Kutch ecology" (HT, Sept. 10). She refers to the possibility of mangrove swamps being removed from the proposed site of the jetty "just hours before the experts (expert sub-committee of the Infrastructure Committee of the Department of Environment) visited the site" on Aug. 26 "conveniently at high tide when the beheaded mangroves would be submerged". First, no one prevented the sub-committee from choosing the time of the visit. Second, she herself visited the site at low tide. Third, the NRSA pictures taken in February 1996, as well as several years earlier, show no mangroves at the site. Fourth, no one, including people resident in the area for a long time, have ever seen mangroves there in living memory. Fifth, any mangrove expert will tell you that these plants simply cannot grow at the proposed jetty site. Prof. Maiti, one of the country's well-known experts on mangroves was a member of the sub-committee that visited the site; he has, I believe, concurred with this view. Sixth, for whatever it is worth, I visited the site in early 1995, and there were no mangroves there. It is not fair to make a controversy of a fact where there is no scope for a controversy.

She states that in the above-mentioned sub-committee that visited the jetty site on August 26, there was "at least one person who was quite determined to push through the jetty proposal. . . He seemed oblivious of the fact that he represented the Environment Ministry Committee". This statement implies that every member of the committee is expected to oppose blindly every proposal for development that comes before it. In that case, there would be no need for any such committee.

Usha Rai has endorsed the suggestion of the group headed by M. K. Himmatsinhji that all industries desiring of constructing a jetty, could use the Kandla port. She forgets that, leave aside the governmental bureaucracy (an impediment to which she herself refers), this would make any cement project in the area economically unviable. As an alternative, she suggests the upgradation of Koteshwar where, she goes on to say, elsewhere in the article, "gray heron, Indian reef heron, pond heron and large egrets were found nesting"!

She similarly refers to the sighting in and around the jetty site, by members of the Himmatsinhji group, of dolphins and several other animals. Several of the species named by her are not protected species and are found widely in the country. Some such as the caracal, have not been sighted by anyone else, including members of the Bombay Natural History Society who have spent considerable time in the area. Above all, the sightings have not been corroborated by the residents of the area and by others who have visited the site frequently; these sightings must therefore, represent a unique, uncorraoborated experience of a few individuals which experience alone should not form the basis of an important decision which has the possibility of bringing tremendous benefit to the deprived population of the region. The petition of the Himmatsinhji group that has been widely circulated is full of factual errors.

Lastly, she talks of the 90 species of algae and six rare species of prawns in the belt between Jakhav and Koteshwar. There is no evidence provided that this situation is unique in the country. As regards algae, they can be grown anywhere, in fact easily in the laboratory. — Yours etc.,

P. M. BHARGAVA
Former and Founder Director,
Centre for Cellular and
Molecular Biology,
Hyderabad.

Usha Rai writes: Since Dr Bhargava invited me to visit Bhuj and do an independent journalist's evaluation of the area and the projects, I think he should respect my stand even if he cannot endorse it.

I think it is unfortunate that Dr Bhargava should try to make out factual errors where none exists. Since the report has been picked up by M. C. Mehta and introduced in the Supreme Court, let it take an independent decision on the issue. I have myself seen photographs of mangroves in the area.

I have supported the stand of a group of people, including scientists who live in the area and want industrialisation for the area as well as to preserve its ecology. The group has quoted from a Saurashtra University study on the birds and animals to be found here.

Not many people will endorse Dr Bhargava's rationale that 90 species of algae or six rare species of prawns can be found in other parts of the country and even grown in a laboratory and so need not be preserved in Kutch.

National issues

Sir, — Ref. the write-up "Morality in politics" by Kuldip Nayar (HT, Sept. 28). It urges the need for creating an awareness on our national issues, which at the moment, are being divided on the basis of religion, region, language and last but not the least, the vested interests. In spite of best efforts, even after 50 years of our independence, the politicians have completely failed to usher in togetherness and a sense of belonging among various sections of the society. Our Constitution seems to have failed to bring in Indianisation in the absence of common code and common national language. We continue to thrive more on diversity than in unity.

In his article Mr Kuldip Nayar observes that "intellectuals should build up a national movement to harness the forces of integration." This is a laudable move but in the present context even intellectuals are seeking favours from the political bosses and thus become committed. Even otherwise, it is realised that intellectuals cannot bring about a change in the thinking and movement of a nation, they are confined to the comforts of their air-conditioned abode or to high-level conferences. They fail to reach the grassroot level. The need of the hour is to imbibe a sense of belonging, involvement and dedication at the grassroot level for which we need another revolution in our thought, action and the system of governance. — Yours etc.,

M. M. AGARWAL
21-B, Connaught Place,
New Delhi-110001.

'Death to rapists'

Sir, — I agree with the views expressed in your editorial 'death to rapists' (HT, Sept. 6). There is no denying the hard fact that women have always remained and still are vulnerable to crime such as rape and molestation.

Therefore, the judgment given by the Supreme Court should be welcomed by one and all but one can only hope and wish that everyone treats rape cases with similar seriousness so that no rapist is able to escape punishment. Other measures to curb such cases would be to publicly humiliate rapists and eve-teasers. — Yours etc.,

SEEMA KHANNA
321, Lal Jyoti Apartments,
Plot No 16, Sector-IX,
Rohini,
Delhi-110085.

Ashish, this is for your info & for SPAM update. AK 17.5

9/7/96

NARAYAN SAROVAR --HAZIR HO.....O....O !

Sanjay Upadhyay

Gujarat's Narayan Sarovar Sanctuary, home of the endangered Chinkara, is saved.....but for the time being. Alas! The WWF-India 's legal intervention for saving the Sanctuary has finally prevented Sanghi Cements from constructing a jetty and roads that were set to destroy this unique preserve of thorn forest.

Responding to the hearing on the case in Gujarát High Court, Hon'ble Justices R.A Mehta and M.S Shah have ordered the Sanghi Cements to "stop all construction of the Captive Jetty, the approach to the Jetty and other facilities that were being raised on illegally acquired land".

The saga of Narayan Sarovar began in 1981 when the Gujarat State declared it a Wildlife Sanctuary covering an area of 765.79 sq. km.vide a notification .The operative part of the Notification specifically mentioned ..... "Where as it appears to the Government of Gujarat that the area is.... of adequate ecological, faunal, floral, geomorphological, natural, or zoological significance for the purpose of protecting, propagating and developing wild life and environment. Now therefore ,in exercise of the powers conferred by Section-18(1) of Wildlife (Protection)Act, 1972, the Government of Gujarat hereby declares the forest area in Lakhpat Taluka falling in Kachchh District specified in the schedule annexed hereto as a " Wildlife Sanctuary "

Narayan Sarovar which is about 110 kms from Bhuj with undulating desert like terrain and extreme temperatures is a unique ecological mosaic. A few people know that it is not only a desert ecosystem where the famous Chinkaras reside but the backwaters of the Arabian Sea near the Kharo Creek constitutes ***a unique saline wetland ecosystem*** which is home to various migratory species of birds such as Houbara Bustard , Dalmatian Pelican , flamingoes and several endangered and resident species of birds such as Great Indian Bustard ,Adjutant Stork ,Spoon Bill some of which are listed in the Red Data Book of the Zoological survey of India.

Depending on the geomorphology ,precipitation and the soil quality ,the general vegetation of the Narayan Sarovar , which represents the typical vegetation of Kutch , varies greatly . The edaphic factors do not allow trees to grow above six meters and the number of trees within an acre does not exceed more than 150. The biomass which does not exist in the form of tree species is compensated by the richness of grass species and the dependent grazer wild life biomass. This is the climax vegetation time of Narayan Sarovar.

This richness of the area is often ignored or more often not understood by the advocates of industrialisation and thus if one expects trees like the rain forest or moist deciduous forest in this region it only exhibits his or her ignorance.

In 1993, the Government of Gujarat ,started granting mining leases to various industrial groups to exploit the mineral reserves of the Kutch region, thus ignoring the ecological richness of Gujarat . Even the Protected Areas that had been declared by the State were victims of this mindless endeavour.

Narayan Sarovar was no exception. The already mutilated landscape, due to the functioning of the Thermal Power Plant at Panandhro at the northern part of the

sanctuary, was subject to renewed onslaught when the State Government granted mining leases to Sanghi Cements.

To overcome the legal obstacles and facilitate the construction of the Cement Plant, the Narayan Sarovar Sanctuary was quashed by a Notification No. GVN-16(93)-WLP/1092/2156/V2 on 27th July, 1993 and a simultaneous Notification (No. GVN-17(93)-WLP/1092/2156/V2) was issued on the same date reducing the area to a mere 94.87 sq. km.

In order to protect the fragile ecosystem from being subjected to abuse the World Wide Fund For Nature-India (WWF-India) ,through its Centre for Environmental Law petitioned the Gujarat High Court along with the Ahmedabad based Consumer Education and Research Centre.

Hon'ble Justice B.N Kripal of the Gujarat High Court heard the petition at length and passed an Order to quash these Notifications and consequently restore the original Sanctuary area of about 800 sq. km.

This historic judgment of 24th March , 1995 lay down two new guidelines that affect all the National Parks and Sanctuaries of the country .

a) It has taken away the State Government's general power to denotify any National Park or Sanctuary, under Section 21 of the General Clauses Act, 1887 and ;

b) It has upheld the 1991 amendment of the Wildlife (Protection) Act, 1972 and interpreted section 26-A Clause (3) [i.e., regarding alteration of boundaries of a sanctuary], as an independent section applicable to all National Parks and Sanctuaries.

The denotification of Sanctuaries and National Parks being resorted to by the State Governments is taking a dangerous turn through out the Protected Area network The Gujarat Government seems to be leading the way in this direction.

The richness of species, biomass, uniqueness were all forgotten when, to frustrate the judgment of the Gujarat High Court, the State Government passed a Resolution dated 24th July, 1995 delimiting the sanctuary to a mere 444.23 sq. km. It is alleged that the basis of this resolution was a meeting convened in Ahmedabad on 7th February 1995 in which 12 persons including the Secretary, Forest & Environment, Deputy Conservator of Forests, Additional Secretary and NGO representatives, agreed in principle to the delimitation of the sanctuary.

The State Government's priorities were clear. They were in favour of industry or should one say "mindless industrialisation" over protection of a fragile and rare eco-system. The onslaught on the delightful canvas of rugged wilderness of Narayan Sarovar Sanctuary was revived.

Also revived was the setting up of the Sanghi Cement Plant and the twenty one others which were to follow.

One prime requirement of setting up any mining plant is water. The scarcity of water is a prime concern for the whole of Kutch region. Narayan Sarovar is one of the worst drought prone areas.The already backward area has been further exposed to unbridled exploitation of ground water due to the setting up of these Cement Plant.

"Scientific sources ascertain that if there is further depletion of ground water then for every one litre of fresh water which is pumped out 35 litres of saline sea water gushes into the

The people of this region are being further impoverished by the industries in the name of development and monetary benefits. "At Rs. 35 per tanker, hundred of tankers ply every day which are used only for industrial consumption. To say the least, even private wells are not spared!" At this rate it is estimated that ground water resources will totally finish in a few years.
Water scarcity, degradation of pasture land, or reduction in wildlife, the NSS seems to be a perfect example of "mindless industrialisation".

In the first week of October ,1995 a fact finding team from CEL went to assess the situation and gather facts. The team traveled extensively and met the local inhabitants for this purpose.
To the team's surprise and contrary to the claims of the industries ,the villagers stated that "employment, which was the major plank of the industries, had not been provided to even 1% of the work force. Even the so called skilled labour came from other states such as Andhra Pradesh and not from Gujarat."

Consequently on 13th November 1995, another petition was filed challenging the resolution of the State Legislature. Since there were other petitions filed on similar issues the court postponed the matter for about two weeks.
This period given by the court helped to plan further strategies for renewed legal action. A team was sent again to Narayan Sarovar, which included the filming of locations and issues in controversy. The team found out that the captive jetty, the approach to the jetty and other facilities that were being constructed as a part of the "Sanghi (Cement) Project" was being done on illegally acquired land and in total violation of the Coastal Regulation Zone Notification of 1991 (CRZ).

On April 16th, 1996, a fresh petition, in light of the CRZ violations, was filed and was heard on priority by the Hon'ble Court. The Court issued notice to the respondents i.e. Sanghi Cements for 22nd April 1996 asking why they should not be prosecuted in the light of the new findings.
Meanwhile on April 18, 1996 the Hon'ble Supreme Court of India passed an Order in the case of Indian Council for Enviro-Legal Action Vs. Union of India & Ors.(W.P(C) No.664 of 1993) which quashed the CRZ Amendment Notification of 1994. This Amendment Notification had earlier reduced the permissible limit of construction of jetty, etc, from 100 metres to 50 metres from the High Tide Line of the sea. It also directed the Government of Gujarat among other states to submit the Coastal Management Plans to the Central Government as required by the earlier order of the Hon'ble Supreme Court. It also reiterated strict compliance to the original CRZ 1991 Notification.

In light of the new developments on 22, April 1996 an additional affidavit on behalf of WWF-India was filed. On 23rd April, 1996 the court heard the arguments by both the parties and admitted the petition and Hon'ble Acting Chief Justice R.A. Mehta and Justice M.S Shah, granted an ***interim order of injunction*** in favour of WWF-India.

This means that no activity could be carried out in this region unless clearance is obtained from the Central Government .

The Court also directed the Department of Forest & Environment to make an inspection of the status of the constructions at the project site. The team under the Chairmanship of Director (Environment) Government of Gujarat was to undertake an immediate inspection of the land in question and report by 8th May, 1996.

The Court will hear the matter for final disposal after 24th June onwards and give its judgment.

In a desperate move the Respondent No 3 i.e. Sanghi Cements filed a Civil Application for modification of the above order and alternatively for revocation of stay on 6th May, 1996. The Hon'ble court heard the application on 10th May, 1996 in light of the report submitted by the State Government on 8th May and dismissed the application.

The present legal status of the controversial site necessitates that Status Quo be maintained and no further constructions be done.
Now WWF-India has to wait and watch the next move of the Industries operating in the Kutch region. This case has assumed significance primarily because the fate of several other industries , who are waiting for the mineral haul of Kutch region would be decided after this case.

The denotification of the Narayan Sarovar Sanctuary for industrial development is not the first blow to the conservation movement. Marine National Park (G jarat), Mehru Sanctuary (Andhra Pradesh), Kudremukh (Karnataka), the threat to denotify Melghat ..... the list is endless.
Primarily it is the urban economic demands and the commercial pressures that is abetting these actions by the State Government .The short term revenue collection and royalties from leases in these ecologically sensitive areas, have proved to be the bane of the so called "development "

The environment can wait or so it seems for the industries.Time is running out . Its high time that the decision makers , the people of this country realise that it is not a question of Who Wins or Who Loses ? Ultimately we will all lose if this mindless industrialisation does not stop.

Indian Express 15 July '97

Chhatrapati Singh told court that Sanghi's project area was not ecologically sensitive

WWF sacks law director over high-profile case

DAMANDEEP SINGH
NEW DELHI, JULY 14

SPECIAL REPORT

THE World Wide Fund for Nature-India (WWF) today sacked the director of its Centre for Environmental Law (CEL) Chhatrapati Singh, following a controversy regarding its high-profile case against Sanghi Cements in the Gujarat High Court.

Official spokesperson of the WWF Shekhar Nambiar told *The Indian Express* that the management has decided to terminate the services of Singh with immediate effect. He did not ascribe any reason for the action.

However, investigations reveal that Singh was asked to go as he had filed an affidavit in the Gujarat High Court on June 6 effectively giving a clean chit to the Sanghi unit, thereby implying that the WWF case was invalid. Sources say his affidavit was filed by the advocate of Sanghi Cements.

The WWF has had a case in the Gujarat High Court against the Sanghis—a corporate house from Andhra Pradesh—since last year, alleging that they are constructing a jetty and a road on the Kutch coast which violates the Coastal Regulation Zone (CRZ) notification and Forest Conservation Act. The WWF claims that these are ecologically fragile areas with mangrove forests and are thus to be protected under these two laws.

A Central government report said that the area allotted to Sanghi Cements fell within the West Mangrove Reserve Forest and CRZ area and, thus, attracts the provisions of Forest Conservation Act and the Environment Protection Act.

However, the June 6 affidavit of Chhtrapati Singh, signed as director CEL, said that he had examined the area and found no mangrove forests in the area and the area is not ecologically sensitive. He also stated that he had no objection to Sanghi Cements being granted approval under the CRZ by the Environment Ministry.

Singh's action prompted the WWF lawyer Raj Panjwani to dash off another letter to the court stating that Singh's affidavit had been filed without the approval of the WWF Board of Trustees. Earlier, the WWF lawyer in Ahmedabad, Sonia Hurra, also wrote to the court saying that Singh's affidavit was filed by the advocate of Sanghi Cements without her consent and approval.

When contacted by *The Indian Express*, Singh denied that he had been asked to go and said that the matter was still being discussed with the WWF even as he was conducting his own investigations about the affidavit. He said he had not been provided a copy of the affidavit by the WWF and he suspected that something was amiss.

"I have not, at any point, changed my position concerning the petition," he said. When asked about the fact that his affidavit was submitted in court by the opposition counsel, he said he was investigating that too.

After giving the affidavit to a student

CONTINUED ON PAGE 9

WWF sacks law director

working with the WWF counsel in Gujarat, Singh claimed he left for Singapore for a month's assignment and learnt of the controversy on his return. "All I wanted to do was ensure that the interest of the local population is taken into consideration," he added.

P.V. Reddy of Sanghi Cements said that Singh had indeed filed an affidavit on his own accord and emphasised it was done through the WWF counsel. "Singh said that this not a ecologically sensitive area and in the interest of development the project should be allowed to go on," he added.

AIC 21.19

AK 21.19 Alk. Please see -give your comments and send Back by Fax. PP 28.12.97. (meeting is tomorrow)

CENTRE FOR SCIENCE AND ENVIRONMENT

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BY HAND

C-95
LS/971203/64

December 3, 1997

Prof. Saifuddin Soz,
Minister,
Ministry of Environment and Forests,
Room No. 424,
Paryavaran Bhawan,
CGO Complex,
Lodi Road,
New Delhi - 110 003.

Dear Prof. Soz,

I am writing to you in response to our discussions on the report that we have submitted on the Jetty Project of Sanghi Industries Limited. We have pointed out to you that the Jetty project should not lead to adverse environmental impacts if the firm takes certain precautionary measures. For this, a careful monitoring system would have to be set up so that the conditionalities that have been laid down by the government are observed.

My general conclusion is that the 'Bet' on which the project is going to come up does not have any ecological significance which should stop the project from coming up there. But the island is situated within a relatively ecologically sensitive region as this is an area in which most of the mangroves, remaining in the Gulf of Kutch, still exist. Therefore, it is important to ensure that any activity that is taken up on the Bet is not environmentally harmful and that any further activities that are taken up in region should not exceed the carrying capacity of the region. In other words, a coastal zone management plan is necessary for further expansion of activities in the area. As you well know, the area is extremely rich with limestone and lignite and, therefore, a large number of companies would be interested in setting up cement plants and other industries in that region. Therefore, both for export and for the Indian market, trade could take place through sea routes, thereby exerting a pressure on the coastal ecosystems. You should, therefore, insist with the Gujarat government prepare a coastal zone management plan which takes into account future activities and how they can be accomodated or restricted keeping in mind the carrying capacity of the region. Without such a plan no further projects in that region should be cleared.

...

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Monitoring

In order to undertake monitoring, I would strongly suggest that the cost of the monitoring should not be undertaken at the payers expense. It should be a charge that should be levied on the industry itself. The company should be asked to pay in advance the estimated monitoring cost for the next five years or so -- a period that you can fix. The monitoring could then be undertaken by the Ministry of Environment by involving consultants, NGOs, local communities and research institutions. The monitoring exercise should be such that it is based on scientific surveys and studies and takes into account perceptions of local communities and NGOs, to ensure that no harm is being caused to the ecosystem through the activities of the company. Since I understand that monitoring mechanisms do not exist within the Ministry of Environment, this will be a major step forward. In fact, its a principle that could be adopted for all companies whose projects are given environmental clearance. In this way you will also be able to involve a large number of people across the country in the scientific, academic and NGO sectors and environmental conservation and development can be reconciled.

Assessment

I would like to say that even the assessment work that the ministry does on environmental impact of development projects should not be conducted at the tax payer's expense. You are providing a service to industry which the industry should pay for. In this particular case itself, the Sanghis are setting up a Rs. 660 crore cement project. There is no reason why the Ministry of Environment should not charge them 0.1 per cent of the total project cost which is Rs. 66 lakh as the cost for environmental clearance. In this way you will be able to collect a substantial sum of money every year which you can then use to commission studies for impact assessment. For example, if you get a bad EIA report, which I understand is often the case, then you can always commission studies on behalf of the Ministry of Environment to check out specific facts and you could do this from the money that you obtain from the companies themselves. You could also set up committees to investigate these problems in depth and you would have funds to do that. In this way you will get a companies to internalise the cost of environmental protection which is regarded today as the best economic principle.

With the money you could also commission on studies on the ecological status of various regions under economic pressure, which will help you in environmental impact assessment. For instance, if you want to do a detailed study on the threats facing a particular coastal zone you would be able to commission, from the money that is so obtained, studies to gather the relevant information. You could also then develop good databases so that

...

anybody who is doing environmental impact assessment of a project in a particular area can immediately collect information on what is the ecological status of that area, what is the nature of its ecological sensitivity, and what kind of threats has the region faced in the past and is likely to face in the future. Good environmental impact assessments will contain a lot of data in themselves which could be used to compile the database and anybody doing assessments can have easy access to the background information which may be missing in a particular EIA.

Quality of EIA reports

Also, I would suggest that there should be a procedure to review the EIAs that are submitted by various consultants. My understanding is that a lot of the EIAs submitted are often very poor. Companies pay the consultants not to produce a good EIA but to somehow get the clearance from the Ministry of Environment. What you need is a procedure to rate the EIAs that are submitted by companies and, in case, a bad EIA is submitted by company then the appropriate consultant should be blacklisted by the Ministry of Environment and no future report from that consulting firm should be accepted. In this way you will have control over the quality of the EIAs that are submitted. The reviews could be done by eminent environmental scientists in the country who will be able to say whether the EIAs are good or bad and their reports should be taken as final by the Ministry of Environment.

I do hope you will find these comments constructive and will be able to put them into action. In this way you will be able to go a long way to protect the environment and promote economic development at the same time, a major challenge facing this country.

Yours cordially,

ANIL AGARWAL

J/-

Minutes of the Meeting held on 7.2.1995, 1500 hrs regarding NARAYAN SAROVAR SANCTUARY, in GIIC Committee Room, Ahmedabad

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An informal meeting was held to discuss the Narayan Sarovar Sanctuary and especially to inform the Government of Gujarat about important aspects which need to be considered when deciding the new notification to be issued for the sanctuary.

Following were present :

1 Shri K.V. Bhanujan, Addl. Chief Secretary (Industries)
2 Shri G.R. Virdi, Secretary (Forest & Environment)
3 Shri C.K. Joshi, Director Geology and Mining
4 Shri R.C. Mistry, DCF, Office of CCF (Wildlife)
5 Dr. Nanubhai Amin, President, WWF Gujarat
6 Shri Manubhai Shah, Managing Trustee, Consumer Education and Research Centre (CERC)
7 Shri Kartikeya V Sarabhai, Director, Centre for Environment Education (CEE)
8 Ms. Prithi Nambiar, CEE
9 Shri Vinod Babbar, Member-Secretary, Gujarat Ecology Commission
10 Dr. Somnath Bandyopadhyay, GEC
11 Shri S.K. Tembe, GEC
12 Dr. Rishaad Parvez, Dept of Zoology, Gujarat University, Ahmedabad.

1 Extent of Sanctuary : The NGOs' representatives stated that the sanctuary is a unique scrub forest ecosystem and should not be considered merely as a Chinkara Sanctuary. It was tentatively agreed that new area of the sanctuary be 480 sq.km. subject to following modifications and conditions.

The NGOs' representatives pointed out that in the middle of the sanctuary (near Subhaspar Village) a sizeable area has been carved out for bentonite mining. NGO representatives pointed out that this was an example of minor alterations which are necessary. Also minor changes may be necessary to include water bodies, take care of different ecological aspects and examine existing mining leases and availability of alternate mining sites for these, outside the sanctuary. They recommended that a team of experts (namely Shri Rishaad Parvez of Gujarat University, Prof. Murthy of Saurashtra University, Shri Jugal Kishore Tiwari of BNHS, Dr. Asad Rahmani of AMU, Dr. P.P. Patel of M.S. University and others) may visit and submit their report in six months to ensure that ecological issues are carefully examined and based on their report, alterations shall be made to increase the area but not reduce the area to less than 480 sq. km.

...2

The NGOs' representatives pointed out that areas reserved for wild-life constitute only 4% of the total geographical area of the country and this should be left untouched as far as possible. It was pointed out that there is no industrial zoning for the whole region at present. The NGO representatives requested the Government of Gujarat to consider adding about 71 sq. km. to the sanctuary area. This 71 sq.km. is at present reserve forest and is adjoining the sanctuary area. It was also part of the sanctuary as per the 1981 notification. It was stated that this area could be added to the sanctuary, even though it has limestone, bentonite or bauxite reserves, as these mineral deposits are also available, in sizeable quantities, outside the sanctuary.

2. NGOs representatives strongly recommended that a consultative machinery must be set up by Government to consult environmentalists and other experts as provided in the Wild Life (Protection) Act, 1992. The Wild Life (Protection) Act 1972, Section 6 provides for a Wild Life Advisory Board for this purpose. Also each State Government is compulsorily required to constitute such a Board. NGOs can be made members as per Section 6 (g) namely such other officers and non-officials, not exceeding fifteen who in the opinion of the State Government, are interested in the protection of wild life. The Government of Gujarat should reconstitute the Board to include persons genuinely interested in wild-life, such as by appointing representatives of (1) WWF Gujarat, (2) CEE, (3) CERC, (4) Gujarat Ecology Commission and (5) Gujarat Nature Conservation Society and give undertaking that before making any territorial changes in any Sanctuary, Protected Area, National Park, the concurrence of the Wild Life Advisory Board will be taken.

3. The NGO representatives strongly represented that a Public Trust called Kachchh Wildlife Foundation may be set up with a total initial contribution of atleast Rupees three crores from Sanghi Cement, GMDC, Excel, Thapar Industries and other industries in Kachchh to protect, preserve and take up eco development programmes in the 3 wildlife sanctuaries in the district. The Trust would also undertake research and monitoring activities (including monitoring of dust and noise pollution and other ecological disturbance) to preserve and protect wildlife and enrich and strengthen the protected areas. It was pointed out the area of the sanctuary was not the only key concern. Noise (due to

...3

vehicular traffic, explosives), Dust (from Cement Plant), and Biotic pressures (due to development of ancillary units, marine pollution) need to be examined and appropriate ameliorative steps planned and implemented. This could be done in a pro-active way by having a Trust, since Government steps are normally reactive. There should be 15 Trustees namely 2 from Universities of Gujarat, 2 from industrialists, 5 from NGOs involved in Wildlife such as WWF, CERC, CEE, GCNCS and 1 from Gujarat Ecology Commission, Government officers such as CCF (Wild Life) and other independent experts.

State Government and GEC should also examine the USA Superfunds Act and consider charging adequate recurring cess from the industries to ensure ecological restoration and that substantial cess shall be made available to the Kachchh Wildlife Foundation.

4. NGO representatives represented that the requirement of Sanghi Cement is unlikely to be for the entire leased area of 20 sq. kms. The requirement will be in phases say four phases. Therefore, initially 5 sq. kms. may be released for exploitation but the third phase requirement may be released only after the first phase mining site is restored by ensuring that the topsoil is not buried beneath layers of 'dead soil' and lost forever. There is no objection to reserving 20 sq. kms. for Sanghi Cement at this stage. But as mentioned above, its release to the party or the actually working of the lease may be phased out.

5 NGO representatives recommended that the State highway and MDR which pass through the new sanctuary area may be realigned to keep them out of the sanctuary. After discussing that such a step may be difficult as very few alternatives ---- and there is very little traffic, this issue was not insisted upon.

6 NGO representatives represented that as far as possible, the mangrove reserve forest adjoining the sanctury and port area, should not be adversely affected as fisheries is an important local industry. This is also important as the western part of the sanctuary is the point of entry for all migratory birds that visit the Indian subcontinent. In the event of mangroves being adversely affected, Sanghi Cement and other industrial units will provide adequate funds to Kachchh Wildlife Foundation to undertake mangrove plantation work in five times the affected area.

....4

7. State Government shall take appropriate legislative and administrative measures to give effect to this understanding.

8. In the event of any differences arising in future in the implementation of this understanding, the same shall be referred to the Gujarat High Court and the directions of the High Court shall be final and binding on all the parties.

9. The aforesaid understanding shall be a part of the settlement to be signed by and between the State Government and CERC, to be filed before the Gujarat High Court in the pending litigation with a request that High Court passes orders in terms of the settlement.

The State Government officials assured the NGOs' representatives that the above understanding will be put before the State Government and suitable orders obtained.

AK 17.5

~~Gujarat Ecology Commission~~

REPORT ON THE VISIT OF Dr.P.M.BHARGAVA AND MRS. CHANDANA CHAKRABARTI TO NARAYAN SAROVAR SANCTUARY ON 28TH AND 29TH JUNE 1995

1. BACKGROUND OF THE VISIT :

[This part of the report is written by Dr. Bhargava ; the remaining parts are written jointly by Dr. Bhargava and Mrs. Chakrabarti.]

1.1 PERSONAL BACKGROUND

Kindly see **Appendices 1 and 2**

1.2 BACKGROUND OF MY INTEREST IN NARAYAN SAROVAR SANCTUARY

My special interest in this area as of today is based on the following:

(a) I have had a long-standing interest in the problems of environment in fact from the beginning of environment awareness in the country and the setting up of the first commission on environment under the leadership Dr.Pitamber Pant. I was for many years, the Chairman of the AP State Committee on Environment and Ecology.

(b) I have had a similar long-term interest in sustainable all-round development in the country, specially of those areas which are particularly underdeveloped as of today.

(c) I have been privileged to have been associated with the State of Gujarat for several decades. I believe Gujarat has been one of our most progressive States in respect of several important sectors of our life. For example, the MS University of Baroda has been amongst our top universities, partly because of its policy of admitting students and recruiting faculty from all over the country that it followed for a long time. I had the pleasure of delivering one of the C.S. Patel lectures of the University, and spending some time at it as a UGC Visiting Professor many years ago. Gujarat is the home of Indian pharmaceutical industry. And it has nurtured highly successful pioneering organisations so diverse as Indian Institute of Management at Ahmedabad, and Gujarat State Fertiliser Corporation near Baroda, with both of which I have had pleasure of close association.

I have also had the pleasure of acting as the Scientific Advisor to Sun Pharmaceutical Industries Limited at Baroda and playing a role in their setting up the Sun Pharma Advanced Research Centre which is now well known; I was fortunate in being able to persuade the Vice President of India, Sri K R Narayanan to inagurate this Centre.

(d) I became aware of the Narayan Sarovar Sanctuary case purely by accident, when I realised that I have been acquainted - in many cases for many decades - with most of those who have been involved in this case, for example, Mr Ravi Sanghi of the Sanghi Group of Industries, Dr M.S. Swaminathan, Dr Chhatrapati Singh, Dr Manubhai Shah, Dr Hashmukh Shah (Chairman of the Ecology Commission of the Government of Gujarat), and many members of the Sarabhai family. I have held all the above persons in much respect and affection.

(e) I firmly believe that sustainable development and concern for the environment including our assets of flora and fauna are mutually compatible.

(f) I equally firmly believe that in the years to come, especially with the opening up of our economy when many new demands would be placed on all sectors of the society, it would be imperative that the interests of the Government, the people, the industry and the non-Governmental organisations overlap, specially in crucial areas such as conservation and development. Therefore,any effort by anyone that would help settle disputes that come in the way of this overlap should be welcome. It follows that whosoever is in a position to make such an effort by virtue of the special circumstances in which the individual may be placed, must feel morally obliged to work towards achieving the above objective and towards resolution of any conflict that might come in the way of doing so. I have felt myself to be under such a compulsion vis-a-vis the Narayan Sarovar Sanctuary case.

(g) I have been concerned that we in the country do not appear to have a well-defined set of criteria for declaring an area as a reserved area or a sanctuary, nor do we have a well-defined policy that would ensure appropriate maintenance of an area that has been declared as a sanctuary. This view is supported by the fact that in many areas which have been notified as reserved areas, unlawful activities keep on occurring, just as I have been dismayed to find that the Narayan Sarovar Sanctuary was notified as

sanctuary without proper investigation or study.

1.3 A BRIEF VISIT TO THE SITE JUST OUTSIDE NARAYAN SAROVAR SANCTUARY WHERE THE SANGHI GROUP OF INDUSTRIES IS SETTING UP A CEMENT PLANT AND A JETTY

On account of what I have mentioned above and the fact that I have had no direct familiarity with the celebrated Kutch area so far, I accepted the invitation of Mr Ravi Sanghi to accompany him and some of his colleagues for a visit to the above mentioned plant in Kutch on 20th and 21st May 1995. During this visit I also happened to drive through a part of the sanctuary, the factory site which is outside the Sanctuary and the area proposed to be leased out by the Government of Gujarat for mining of limestone to the Sanghi Industries Ltd. I also visited two villages - Jadava and Gunau - and talked to the residents of these villages including their elected leaders. During interaction with the various individuals in these two villages and with several others belonging to a few other villages, a deliberate attempt was made to avoid discussion on matters of politics.

During this brief visit it became clear to me that the following questions need to be answered on an objective basis:

a) Is the entire area that is at present marked out as Narayan Sarovar Sanctuary, really Sanctuary material as of now? If not, on what basis and to what extent should the boundaries of the present sanctuary be altered?

b) What are the perceptions and needs of the people living in the sanctuary area in the 56 villages within the area?

c) What would be the ideal management structure for the sanctuary, such that the people living in the sanctuary area are equal partners with the Government in managing and running the sanctuary ?

d) The present sanctuary area is known to be rich in mineral resources. Would it be advisable to set up industries, the objective of which would be to utilise these mineral resources?

e) What should be the new norms of industrialisation, if recommended in the region of the sanctuary or in an area continguous to it, that would be

symbiotic with the desirable traditional norms and values, non-exploitative, and eco-friendly, involve participation and cooperation of the people living in the area, and lead to the much-needed tangible and fair benefits to the people in the area.

To make the above possible, two steps seemed to be necessary:

i) A visit of all concerned, preferably together, to the sanctuary, made from the point of view of obtaining answers to the above questions in a systematic and planned manner. This visit should enable one to make broad recommendations to the Government in regard to the above questions. It should also lead to setting up of norms for cooperation between the Government, the NGOs, the people and the industries that are already permitted to operate in the region or that might come up in the future.

ii) To have a detailed professional survey carried out of the present sanctuary area and the area immediately adjacent to the sanctuary from the point of view of its flora, fauna and landscape. Such a survey would allow fine adjustments to be made in regard to the delineation of the sanctuary area and working out the details of its subsequent management, keeping what has been said above in view.

1.4 THE INDIVIDUAL VISITS

Recognising the need for immediate action, I contacted the following for a visit to the sanctuary on 27th & 28th June 95 , with a view to prepare a joint report on the factual situation in the sanctuary area.

- Dr Manubhai Shah
- Sri Kartikeya Sarabhai
- Ms Preeti Nambiar (colleague of Sri Sarabhai, who has written on Narayan Sarovar Sanctuary)
- Dr Chhatrapati Singh
- Dr Anil Agarwal of Centre for Science & Environment,who is widely and highly respected for his views in regard to both environment and development.
- Mrs Chandana Chakrabarti, one of my colleagues at Hyderabad whose analytical abilities and objectivity are of a high order.

All the above agreed in principle to visit the sanctuary on the above dates and also commended the idea of a professional survey. In addition Mrs Mrinalini Sarabhai whose concern about environmental issues are is well known, and Ms Mallika Sarabhai offered to accompany the above group on the 27th and 28th June 1995 to the sanctuary.

Ultimately, however the visit was made only by me and Mrs Chakrabarti. Dr Manubhai Shah, Sri Kartikeya Sarabhai and Ms Preeti Nambiar withdrew from the visit vide their enclosed message (**Appendix-3**).

Mrs Mrinalini Sarabhai and Ms Mallika Sarabhai had other appointments that had cropped up for that period. Dr Anil Agarwal with whom I had extended telephonic conversation on several occasions, felt that it would be much better for him, if need be, to make a separate visit. I give below excerpts from his letter of 20th June 1995 to me, which he wrote after he had seen all the papers that I had sent him after my initial dialogue with him when he had tentatively agreed to come with us.

Mr Anil Agarwal said in his letter, " I am really sorry you have had to ring me up so many times. I wish I had got the papers earlier. I have gone through them and fully understand and appreciate the argument that you have made to me on the phone. I myself have always held that the trade-off between environment and development should be decided keeping in mind the specifics of the local situation. No arbitrary rules and regulations set from far away can decide these trade-off in the best possible manner." He made several other important points that serious consideration in his letter and telephonic conversations.

Dr Chhatrapati Singh needed to have permission from his superiors in WWF. At his suggestion, I called Dr M S Swaminathan who was then in Tokyo. Dr Swaminathan liked the idea of Dr Chhatrapathi Singh's going on this visit with us. He however, suggested that I also let Sri Samar Singh, Secretary General of WWF(India) to know about this visit. However, when I spoke to Sri Samar Singh he wanted everything in writing before he could study the matter and take a decision in regard to Dr Chhatrapati Singh's visit. I did send him the letter that he had desired, but there was not enough time for him to respond. No response has been received from him till the time of signing this

report. Closer to the date of the visit, I also contacted Dr T N Khoshoo, the first Secretary of the Department of Environment of Government of India. He said he would have been very willing to come on the visit, if the visit were put off till the middle of July 95. He was also concerned that there have been no precise criteria for declaration of any area as a sanctuary so far.

13th July 1995

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2. OBSERVATIONS MADE JOINTLY BY DR. P M BHARGAVA AND MRS. CHANDANA CHAKRABARTI DURING THE VISIT TO NARAYAN SAROVAR SANCTUARY ON 28TH & 29TH JUNE, 1995.

2.1 GENERAL

a) We arrived in Bhuj from Bombay by the Indian Airlines flight on 27th June, 95. We drove in the very early morning of 28th June to the sanctuary, spent the night in the Guest House of GMDC and GEB and returned to Bhuj on the 29th June from where we drove to Kandla airport for the NEPC flight to Bombay. The total mileage covered from Bhuj to the sanctuary and back to Bhuj and then to Kandla was 622 km; the mileage driven within the sanctuary was 315 km. The route we followed is given in **Appendix-4.**

b) We drove on all the motorable, pukka roads in the sanctuary excepting the one between Hothiay and Narayan Sarovar in the Western part of the sanctuary that goes through Pipar, Kerwandh, Gujariana & Kunari. In addition, we travelled on many katchcha (unpaved) roads, often as far as the car would go.

We used walking, binoculars and a powerful telescope to study the sanctuary area. We could cover between 5 to 10 km all around through the telescope, the exact distance depending on the topography.If the land was flat, and there were not many trees in the line of vision the coverage was large. For example, from Point-A marked in the enclosed map (**Appendix-5**) we could see houses in Panandro which is just outside the northern part of the sanctuary,in addition to easily seeing Buddha and Godhatal. However, we could not see Chamro because the land after Buddha in that direction was elevated and Chamro was behind this land, at a lower level. Similarly, from a slightly elevated point which is at the junction of the Sanghi Cement Factory site and Ratipal forest within the sanctuary (Point-B, **Appendix-5**), we could see in the south-west direction all the way upto the sea using the telescope.

As the sanctuary area is about 30 km x 25 km and, as is mentioned later, virtually no area in the sanctuary could be called a dense forest that would obstruct vision, we believe that we covered visually, with a fairly high degree of resolution, most of the sanctuary area through either the naked eye or the binoculars or the telescope. We must, of course, immediately add that there is no question that there

must be areas in the sanctuary that were totally outside of our vision. Nevertheless, we feel confident that in the areas we scanned through the binoculars or the telescope, if there were any large animals such as the chinkaras or deers, we should have noticed them through their movement. In fact we did notice even through the binoculars, two large teetars which were about a kilometre away.

The route that we drove on, given in Appendix-4, is is marked in the map in Appendix-5.

2.2 WHAT WE SAW: THE LAND AND PLANT LIFE

Within the sanctuary area, we saw large tracts of land that had no trees and no scrub vegetation either. The soil in these areas was loose and dusty; we were often caught in dust storms.

Some areas had large cacti bushes(average height about 6-10 ft.; only of one kind that is common all over the country; probably more than 50 years old.)with few scattered shrubs not more than 2 ft. high (most of them were much smaller). In fact, many large areas outside the sanctuary, on the way from Bhuj to the sanctuary area, looked very similar.

The area between Ratipal and Jadava is an open barren land devoid of trees; we believe there are frequent dust storms in this area.The distance between Jadava and Baranda which we travelled, is a little over 7 km; half of it is within the sanctuary area and the other half outside, even though the landscape is similar in the two areas without any natural or artificial dividing line between the two. There was, in fact, nothing distinctive in character,in terms of plant life, that we saw anywhere in the sanctuary.

Baranda, which is itself outside the sanctuary, is surrounded on the west, north and east by the sanctuary. From a slightly elevated area (Point-C in the map in Appendix-5) within the campus of what is now the guest house of Sanghi Industries, we could see about 5 km towards the east, a watch-tower of the forest department. The only other kind of visible construction we saw in the sanctuary area besides the villages, was a water tank which was visible from the guest house through the binoculars. From Point-C only small scattered bushes were seen all around alongwith a few scattered ganda bawal trees.(The canopy coverage of which in the area visible from the point

cover not more than 2 to 3%)

From the spot marked "Point- A" in the enclosed map, we could clearly see Buddha, Godhathal and Panandro as the area in this line of vision had, again, at most scarce vegatation of the same kind as above. We carefully scanned an area of atleast 5 km on all sides of Point "A" and found virtually no trees or bushes not even grass. We were fascinated by innumerable oval-shaped pebbles lying scattered all over the area which, we were told, were fossilised limestone. On many of them imprints of shells were seen. We wonder if they could not be put to some decorative use provided they can stand good polishing.

Seven kilometres north-west of Nareda, on the right side of the road to Narayan Sarovar Sanctuary, for a stretch of about a kilometre near a causeway, there was a more than an average density of bawal trees which however,still looked scattered.

We observed the area within the sanctuary along side the road from Kanoj to Panandro very carefully. We observed only a small patch (much less than a kilometre in length) of dense trees which were all very dry, most of them without any leaves, with about 20-ft space between them on an average. In the rest of the region the vegetation was very sparse.

Between Panandro (Pandro) and Dayapar, a distance of about 19 km we saw vast stretches of wasteland with very little vegetation (most of this area is within the sanctuary).

Near Gunau, as we were driving to the coast, we were intrigued by the fact that the area on one side of the road (a katcha road) was within the sanctuary while the area on the outside was not within the sanctuary, even though there was no difference in the nature or the extent of vegetation in the two areas which had no natural boundary between them (the road was 'new').

Two major plants that we saw which probably accounted for more than 98 per cent of the trees(if they could be called trees at all as they were all less than 20 ft tall) in the sanctuary area, were one kind of cactus already referred to and the ganda bawal(babul).

We do not recall having seen any tree in the entire sanctuary area that we scanned which was more than 20 ft tall, most of the trees were probably not more than 15 ft tall. In fact, we did not see any large tree in the entire sanctuary area nor did we see anything which was unusual and not found in large tracts in the country outside of the sanctuary area, for example on the road from Bhuj to Baranda via Naliya.

We do not believe we saw any area in the sanctuary that could be termed a forest in the real sense of the word. The canopy area covered in the densest part could not be more than 33% but such areas (scattered as they were) did not seem to represent more than 1% of the total sanctuary area. The average canopy cover in the areas, marked both as reserved and unreserved forest areas, did not seem to be more than 15%; it was probably much lower. Even in the so-called dense forest areas, one could not find any shade as the trees were small and had at this time of the year very few leaves.

There seemed to be no consistency in labelling areas as forest. Many areas bordering the sanctuary that we travelled through, were denser from the point of view of vegetation than many areas within the sanctuary that were marked as dense forest.

It is particularly interesting that the vegetation on both sides of the road for miles across, from Naliya to Baranda which is a distance of over 40 km and is not in the sanctuary area, that we could easily see, was no different from most of the vegetation in the sanctuary area. We should also add that ganda bawal(babul), the prominent tree from Bhuj to Naliya to the sanctuary(for 5 to 10 km on either side of the road) and all over within the sanctuary, is regarded by the residents of the villages in the sanctuary area as a nuisance. This view is also supported by experts vide the enclosed article(Appendix - 6). Many people in the villages reported to us that a sting by this highly thorny tree was poisonous and led to wounds which are not easily cured. We saw one such case although we have no idea if this was not due to lack of medical attention. It would be worth investigating the nature of the toxic substance(s), if any, in these thorns.

We saw many babul trees that had dried up and fallen. This we learnt was because of the fact that the soil

was such that it was not able to carry fullgrown trees. In the area which is rich in limestone (as delineated in the mineral map of the region, and representing more than 20% of the sanctuary area). We did not see any vegetation at all. Whatever was there consisted of low and sparse scrub, apparently of little consequence.

A few more observations about the reserved forest area, follow. Large tracts of land, spreading over several sq. km shown on the map as reserved forest areas, were completely barren, with virtually no trees in the area of vision and only small and sparse bushes. For example, the reserved forest area from Maniard, 3-4 km from Maniard fort, had virtually no trees except a few widely-scattered cacti bushes.

From Point-B on the enclosed map (Appendix 5) which is on the border of Ratipal reserved forest, we could see, from a slightly elevated position, the sea-coast on one side and Ratipal and Bhujpar forests extending upto Laxirani, with the help of binoculars and telescope. The area had babul trees, mostly totally devoid of foliage, and the kind of cacti bushes(just one type) that are found in the entire sanctuary area. The inter-tree space (the distance between tree trunks) seemed to average about 30 ft where the forest was densest;this area did not seem to represent more than one-third of the above reserved forest area. There was only scattered dry scrub vegetation in the rest of these reserved forest areas.

The densest area in terms of density of trees and shrubs that we saw covered, approx. one kilometre, three kilometer short of Narayan Sarovar temple on the road from Nareda to Narayan Sarovar; this area is close to a dried-up stream. However, again the only kind of vegetation we saw there was ganda bawal trees and the by now common cacti shrubs.

In brief, to us there seemed to be nothing unusual about the flora in the sanctuary area that would make it distinctive enough, and justify a sanctuary on the basis of its flora. There does not seem to have been also any uniform rationale for declaring areas as forests (reserved or unreserved) within the sanctuary or its neighbourhood.

There are tracts almost as large, if not larger, than the sanctuary, adjoining the sanctuary, for example, around the road to Naliya, where the vegetation is

virtually identical to that found in the sanctuary. There is no real forest in the sanctuary area, for example of the kind one has in Kanha, Bandipur, Periyar, Kaziranga or Jim Corbett National Park, to give a few examples. Both of us have travelled extensively through many areas in the country which are much denser in terms of vegetation and where vegetation is much more varied and distinctive than in the Narayan Sarovar Sanctuary. We must add that we are not expert botanists but for saying what we have said above, one does not, perhaps, need that level of expertise.

2.3 WHAT WE SAW: ANIMAL LIFE AND WATER

From our discussions with villagers (see section 2.4), it seemed that the area may have had, once upon a time, a population of chinkaras, jackals, foxes, teetars(both small and large) and nilgais. No idea could be obtained from the discussions with the villagers about what might have been the numbers of these animals in the past. As of today, there was virtually universal agreement among those whom we spoke to, that chinkaras were a rare sight. Many young persons (for example, a young girl who had passed 8th class and was taking care of a balwadi in Bermoti) had never seen a chinkara. All that they had seen frequently were rabbits and, less frequently, foxes and jackals. Many villagers said that the chinkaras were such a rare sight that one may have to wait patiently for days near a stream to be able to spot one. Some persons - for example, a member of the taluk Samithi who had travelled through all the 90 villages of the Lakhpat taluk many times, said that he does not remember having seen any chinkara during his travels recently. We were very disappointed during our travel though the day (10 A.M. to 6 P.M. in the sanctuary area) at not seeing any wildlife excepting two large teetars which we had spotted through the binoculars in the reserved forest area around Maniard. However, we believe we were lucky to spot one chinkara in the evening towards the coast just outside of Panandro in an area which is outside the sanctuary. After that we sighted a second chinkara near Saranmoti, also outside the sanctuary. Later in the evening, we spotted another (third) chinkara near the south-west coast beyond Gunau, very close to the sea, many kilometres outside the sanctuary; this was just after sunset, in the light of the car. This was the only wild life that we spotted, besides, rabbits that crossed our path while we were driving or walking in

the sanctuary area.

When we asked the villagers about the number of chinkaras in the sanctuary, the upper limit given by the most optimistic ones was less than a 100.

Both animal life and plant life need water to survive. Specially, animal life cannot survive without a continuous source of water. We saw only two smaller streams as sources of water in this sanctuary. There must, of course, be other smaller water tracts such as ponds, scattered through the sanctuary area in which rain water may accumulate, but it was clear that water was scarce and not available from many villages within 10 km. The water holes must be located far from each other as we met several flocks of cattle which were being taken to these water-holes which were said to be some 10 km away from the village. We also learnt from the villagers that a great deal of time was spent in bringing water from far away distances. In the villages we stopped by, we saw no source of water close by. There were no wells in the region and deep drilling (upto 800 ft) did not yield any water. We were repeatedly told that even though there is an average of about 15 inches of rainfall in the year), all the water goes right through into the sea with nothing getting accumulated underground. One of the reasons for the slow reduction in wildlife, if that has occurred, may have been the lack of water in the region.

It is incredible that no one (excepting, we believe, the Sanghis this year) has thought of collecting the rain water in the monsoon season and preserving it in a way that it would last till the next season, with the help of modern technology. Such collection could help wild life, plant life as well as human life and would in no way affect adversely or disturb the environment.

2.4 WHAT WE DID NOT SEE

In spite of our fairly extensive travel through the sanctuary and making use of all points of entry through road into the sanctuary, we saw only two boards, one at Baranda and another at Nal Sarovar which referred to the Narayan Sarovar Sanctuary. Both the boards were almost unreadable.

We saw no evidence whatsoever of any management of any

kind in the sanctuary area. We noticed only two watch towers in the area, and no one who could be remotely connected with the management of the sanctuary. There was no place where one could get information about it; we learnt that there were no visitors whatsoever to the sanctuary. What a contrast to other sanctuaries in the country, such as Periyar, Kanha, Kaziranga, Jaldapara and so on. In fact, the very fact that there were absolutely no visitors to the sanctuary and no facilities for them,would imply that there was nothing very distinctive about the area. In the entire sanctuary area there were no directions of any kind and very few pucca roads. In fact, excepting one pucca road on the western side that we have mentioned above, we believe we travelled through almost all the other pucca roads in the sanctuary. Unfortunately, there are not even motorable katcha roads over which one could go reasonable distances inside the sanctuary. For this reason, we had to depend mostly on our binoculars and telescopes and the little walks that we could take.

There were no facilities such as tea stalls around the sanctuary area near the entrances, anywhere excepting in Panandro(no doubt on account of the lignite mining area and the power station), where one could have a cup of tea. There are also no places of stay for visitors to the sanctuary. We were surprised to learn that from the southern parts of the sanctuary the closest petrol station towards the south where public could buy petrol was more than a 100 km away.

2.5 INTERACTION WITH THE VILLAGERS

2.5.1. General Comments

During discussions with villagers, which included Sarpanches, Taluk Samithi members, village elders, religious leaders, young persons, shepherds, tribals and women from various villages such as Bermoti, Charopari, Jadava, Baranda, Nareda, Nalsarovar, Laxirani, Godhatal, Panandro, Pipar, Koriyani and Kanoj, both within the sanctuary and bordering the sanctuary, many points emerged which are summarised in the following paragraphs.

There are 56 villages within the sanctuary with a total population, today, according to villagers of around 6000. This population is much less than what it used to be a few decades ago. There has been much migration, especially of business class and of those who had any other special skills. Apparently, those who have been left behind, mostly represent those engaged in agriculture or labour. Many of these villages are centuries old. The very fact that these villagers have survived and kept their wits around (all of them talked intelligently,coherently and logically) indicates the dominance of the human spirit over the most adverse of circumstances that might be found prevailing anywhere in the Indian subcontinent. There is tremendous disappointment and anger among these villagers. The anger is largely on account of the fact that virtually nothing has been done for these villagers, and no note taken of their extreme deprivation. They seem to have received no help either from the government or outside of the government. They have been therefore, extremely appreciative of the coming in of the Sanghi Group of Industries, who have, exhibited, for the first time, concern for the residents of this area.

Farming by the villagers is totally dependent on rain. Therefore,they can raise at most one crop in a year which keeps them busy for not more than 4 months during the year. This is sufficient to last them for the year as they eat only Bajra(the crop they grow) and red chillies which they buy. If there are two consecutive droughts, those who can afford to go away and seek their fortunes elsewhere, do so. They leave their houses and farms in the custody of the other villagers who have no choice but to stay on; we met one such person who was visiting his home village from outside (Bombay). For those who stay on, labour, wherever they can find it through labour contractors, even at long distances away from their residence, is the only source of income during such periods, or during the eight months outside the monsoon season if they need to raise additional resources. Affording a vegetable for a meal is a luxury, since no vegetables grow in the region. The nearest place from where they come is Naliya. Tomatoes were costing Rs.40 per kg, when we visited. We do not know if any proper detailed nutritional study has been done of the villages within the sanctuary area and the adjoining villages. Such a study, if not already done, would be useful and may yield new information in view of the diet on which these villagers have survived.

In the opinion of the villagers, it was impossible to grow anything in the region, besides the one crop in the monsoon season, for two reasons. Firstly, the soil is not conducive to high productivity; secondly, there is severe scarcity of water. There is no underground water as already mentioned and shepherds have to walk as much as 10 km with their cattle for grazing and water. We met several such herds of cattle with their shepherd going out 10 km from their village to the nearest water hole and grazing ground.

The only purpose the ganda bawal trees seem to serve is that they provide the villagers with firewood; they also yield good charcoal on controlled burning. We did not find out as to how the charcoal was produced and sold.

Questioning the interest shown by various NGOs, specially those who had gone to the court recently in connection with the sanctuary, in the survival of chinkaras and birds in the Narayan Sarovar lake, the villagers asked repeatedly as to why was it that none, either in the government or outside of it - especially the above mentioned NGOs- have ever cared when their cattle have died during drought and when people in the area have starved. The universal refrain that we heard was; " Is it our policy to save a few chinkaras at the cost of much human life?" Apparently all of them have been aware of the court case in which Dr. Manubhai Shah, Sri Kartikeya Sarabhai, and the WWF(India) was involved. They were specially familiar with the names of Dr. Manubhai Shah and Sri Kartikeya Sarabhai whom several of them had met personally. Unfortunately, the villagers were extremely critical of the stand that they feel had been taken by Dr. Manubhai Shah and Sri Sarabhai, in regard to development activities in the region as exemplified by the recent court cases in this regard. In this respect there seemed virtual unanimity amongst the villagers of this region and that they were prepared to take every step possible to ensure that developmental activities take place in the region.

An interesting example would be the lignite mines and the power station near Panandro. While many of them complained of the dust generated following lignite mining, they said that the employment provided and the other facilities generated at least made it possible for them to survive.(We must add that, personally we hold no brief for the " dust "!)

We believe we would be dishonest in our reporting if we did not state what the villagers said to us, for whatsoever it is worth, in regard to the functioning of the administration that is responsible for the sanctuary. We give below the comments of the villagers using almost exactly the same language that they did (excepting for translation into English). We must add that we had no way of ascertaining the veracity of these statements but since they were made virtually unanimously, they need to be put on record. This must in no way be taken as our criticism of the administration excepting that we can vouch for the fact that we saw absolutely no evidence of any management of the sanctuary by any one who may be concerned with it. For example, inspite of our spending an uninterrupted whole day in the sanctuary and driving over 300 km within the sanctuary area from morning to late in the evening, with many stoppages, we did not see a single person connected with the management of the sanctuary, nor a single vehicle carrying any such persons.

We also have absolutely no doubt whatsoever that if the money that had been allocated by the Govt. of Gujarat for the management of the sanctuary, were given to the villages in the sanctuary through their panchayats or other responsible leaders, the condition of the villages, the villagers and the sanctuary itself today would have been very different from the pathetic state they are in as of now.

2.5.2 Administration of the Sanctuary Area

The villagers made the following points in regard to forest administration.

The villagers said that none of the benefits of water tankers, tractors for ploughing fields, motor vehicles for surveillance, and funds for setting up of nurseries and employing manual labour reach them. The nurseries grow only ganda bawal (babul) trees (already found in abundance and considered to be the bane of the region) ; water never reaches where it is needed; motors meant to draw water from the streams are either never to be seen or do not work; and tractors and vehicles are not used for purposes for which they are meant.

Although proper nurseries could help grow other trees and plantations much needed in this area, what was grown was ganda bawal which required no nurturing. The villagers reported the reasons to be that (a) ganda bawal does not need any major inputs for growth and maintenance, and (b) it is a good producer of charcoal which can bring easy cash.

According to the villagers we met, there is virtually no surveillance of the sanctuary area.

The villagers confessed that they themselves engaged in acts that made undesirable activities in the sanctuary area easier as that seemed to be the only way for them to make their existence possible, in the absence of any alternative way of earning their livelihood.

2.5.3 Education

The villagers were acutely aware of the importance of education and of exposure to the outside world. They all wanted their children to be educated. They said that although some villages had schools, they were more or less a farce. Teachers, more often than not, on account of the fact that the entire area was so deprived and primitive, did not stay in the villages and came to teach everyday from places faraway. Often, they showed up in the village only for a couple of hours in the day, or did not show up at all for days or even months at a stretch. Only in rare cases did the teachers live in the village, but had no accountability to the villagers. They, by and large, treated teaching in villages as an entry into a government job; as soon as they were appointed they worked towards planning a transfer to other districts. They had no loyalty to the village where they taught.

2.5.4 Medical facilities

There were neither doctors nor any health care centres anywhere close to the 56 villages in the sanctuary area. Panandro, was the only fortunate village outside the sanctuary, bordering it, which had some medical facilities available on account of the Gujarat Electricity Board and Gujarat Mineral Development Corporation. The nearest medical centre was otherwise at Naliya Air Force station. This was at a distance

of 55 to 70 km from the villages in the sanctuary. Therefore, people who could have otherwise been easily saved, often died for want of quick transportation and basic medical attention.

As regards transportation, the villagers said that most people in Lakhpat taluk had not gone beyond their neighbouring villages, leave aside seeing other parts of the country, at least partly on account of the lack of adequate transportation. In the most fortunate of villages in the sanctuary, there was only one bus a day. The labourers in far away places were transported by the transport of the labour contractors.

2.5.5 Women

The women in the villages of the sanctuary spent most of their time collecting fire wood and water. It had to be often brought from distances of 15-20 km. Many were talented embroiderers, producing some of the best embroidery seen anywhere (we have the name of at least one of them from Jadava), but there was apparently not enough time left for it, nor any internal organisation that would help market it.

2.5.6. Other comments of the villagers

The villagers pointed out that Lakhpat was once the headquarters of Lakhpat taluk. However, on account of the hostile natural environment in this taluk in which the sanctuary was located, the government was forced to shift the headquarters to Dayapar. Thus, while population of Lakhpat town in 1946 was according to them around 30,000, today there are less than a thousand persons in the town. Many instances of mass migration from the area of the sanctuary itself (Lakhpat is away from the sanctuary) and the areas immediately bordering it, were told to us. For example, Nareda village is virtually empty with only a few houses left intact and just a handful of Rabaris living in it in their newly built huts. In Baranda, the more affluent of the villages just outside of the sanctuary (it even had electricity), some 25 families belonging to the business community have abandoned their houses and gone away; today there are only four houses of this community left in the village. This account was given to us by a Sarpanch of the village. We happened to meet one person belonging to the business community from the region, whose entire family had thus migrated; he happened to be visiting the village.

The villagers said that they wanted bonafide activity in the region that would generate employment , increase their exposure to the outside world and lead directly or indirectly to creation of basic facilities like healthcare, transport, power, education and availability of water. Creation of these basic facilities would help women specially, as then they would not have to spend the time they do now on collecting firewood or drinking water. As already mentioned, there is considerable skill in terms of handicrafts in the women of many of the villages within the sanctuary. Some of the embroidery we saw, for example at Gunao and Jadava, was of a quality that one does not see even in the most exclusive of Indian markets. We are afraid that if these extraordinary abilities are not nurtured, they and the rich tradition they represent, may be lost for ever.

Many villagers said they depended a great deal on relief measures such as cattle camps.

3. THE SANGHIS AND THE EXPECTATIONS OF THE VILLAGERS

The Sanghi group of Industries plan to set up a cement plant outside of the Narayan Sarovar Sanctuary, to be serviced by a jetty near by. The plant would make use of the lignite that is already being mined in the northern parts of the sanctuary within the sanctuary area, under the auspices of the State Government, and limestone, which the Government has permitted the Sanghis to mine in an area bordering the south-west part of the present sanctuary, next to the area where the cement plant is intended to be set up. As they are a business house, it is quite obvious that the Sanghis are in this region to generate more financial resources. However, all available evidence suggests that the Sanghis are acutely aware of their social responsibility and of the fact that if wealth is to be generanted through business it must not be at the cost of the environment, and must bring concurrent and commensurate direct and indirect benefit to the people of the region.

The Sanghis are in the process of setting up a human resources development centre (for which a name has not yet been found) with the objectives given in **Appendix-7** The idea has attracted many, as a consequence of which it has been possible to constitute a Governing Board of the Centre consisting of the persons given in **Apendix-8** The Centre would function autonomously, even though financed by the Sanghis. It is a new concept; if it succeeds it would have been a pioneering effort. The Centre would cost approx. Rs. 5 crores to set up. The Finance Minister has agreed to lay its foundation stone. **Appendix-9** lists the commitments of the Sanghi Group in general.

The Sanghis could have set up their cement plant elsewhere with the possibility of making about the same profit, even though the fact is that the quality of limestone in the Kutch region is probably much better than that in most places in the country. However, they decided to set up the plant in the Kutch area not only because the quality of the limestone in the area is good but also because of the fact that it would be much more challenging to set up something in an area where no industry has so far come up. The problems that any pioneering industry in this region must face would be obvious to anyone who visits the site where they would be to setting up the factory, or the site where they plan to build their jetty. This

stupendous task is progressing at an amazingly quick pace in this highly hostile region.

The Sanghis have established excellent relationship with not only the nearby villages but virtually all the villages (and many villagers individually) in Lakhpat Taluk, including the sanctuary area The Sanghis seems to have won the hearts of the villagers by providing them whatever facilities they possibly could, for example of a Balwadi in Bermoti, of a school in Gunav, and of water and fodder for cattle when there was a drought last year. They also intend, we were told, setting up medical facilities for the villagers of the region. Perhaps, the experience of and with the Sanghis could help set up norms for other Industries that may (and, hopefully, will) come up in the future in the region.

On the basis of the dialogue with the villagers and interaction with the Sanghi group, one could perhaps state below, with some confidence, the expectations that the villagers would have from an industry set up in the region, which the government should take into account while laying down protocols for such industries;

- Employment with decent and fair wages

- Genuine concern for the welfare of the villagers in the region: this would include provision of electricity, water and education.

- Channels of receiving information, health and medical care, channels for exposure to the outside world, mechanism for attending to specific individual problems, transport in emergencies, and generation of a value system through example.

- Operation of the industry outside of political considerations, with basic humanism taking precedence over political interest.

-Sustainable partnership with people in the region: the workers must become a constituency of the industry.

- Genuine concern for the environment, including flora and fauna of the region, along with adequate steps to improve it.

4. CONCLUSIONS

4.1

The initial declaration of the sancutary seems to have been done without ~~have~~ proper investigation.

4.2

There does not seem any rationale whatsoever in favour of keeping the boundary of the sanctuary as it is. There is no special flora and not enough of special fauna to justify having such a large area with one of the richest mineral resources in the country,designated as a sanctuary. Chinkara seems to be the only animal that might be special to this area, although chinkaras seem to exist in other parts of India as well.

4.3

It would probably help whatever special wildlife the sanctuary has if the density of the wild life is increased, i.e. the sanctuary is confined to a smaller area. Assuming that there are one hundred chinkaras in the region, surely over 7 sq.km. per chinkara does not make sense. If the area for chinkaras is reduced, it may be possible to provide them with special facilities that would prevent their slow extinction that seems to have been occurring over the years even in the absence of any other encroachment of any kind over the sanctuary area in these years. For example, water resources for the animals could be provided in the reduced reserved area. A smaller area would also allow fencing, and could be made a tourist attraction for education and for generating revenue on the side. It could then be possible to ensure that a tourist would see at least one chinkara.

4.4

It may be worth investigating whether under appropriate conditions, an interface between human life and the chinkaras can be established that would be pleasant and educative for the former and beneficial to the latter.

4.5

At present, their is no evidence of any real or effective management of the sanctuary, or of genuine

concern for the villages in the sanctuary area. An administrative set up for the area must be worked out in which the villagers in the region are major participants, with the government providing primarily a supportive role, thus reducing its own burden.

Perhaps, by doing so in this faraway region, the Government of Gujarat may be setting up an important precedence not only for India but, may be, also for other parts of the world.

4.6

The mineral resources in the region that are vast, of a high quality and, in some ways, unique, must be exploited appropriately in a phased manner and in a way that it leads to a sustainable overall development of the region without compromising the environment.

4.7

To make the above possible, norms for industries that may come up in the region must be clearly, carefully and thoughtfully defined and rigorously implemented. The experience of the Sanghis who have brought the first industry to the area, could be made use of in this regard.

4.8

An industry that follows the above-mentioned norms that are laid down and is welcomed by the residents of the region, should be given appropriate facilities and encouraged by the Government.

5. RECOMMENDATIONS FOR CONSIDERATION OF THE GOVERNMENT OF GUJARAT FOR IMMEDIATE IMPLEMENTATION

The sanctuary may be limited to about 100 to 150 sq.km. of a contiguous area which is outside of the mineral resources comprising, perhaps, the eastern part of the present sanctuary. The area may be eventually fenced. It should also be ensured that there is enough food and water for the animals in the sanctuary.

Visitors to the new sanctuary should be encouraged and provision made for them. This will need setting up of places for their stay outside the new sanctuary and an appropriate management structure for the sanctuary involving the villagers ,as suggested earlier in this report. One or two motorable roads (one north-south, the other east-west, connecting the existing roads) and trekking paths could be laid through the smaller sanctuary.

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APPENDIX
1

DR P M BHARGAVA

Dr Bhargava had his university education at Lucknow, India, first in mathematics, then in physics and finally in chemistry in which he obtained his Ph.D. at the age of 21. He shifted to biology in 1953 in the laboratory of Charles Heidelberger in the USA where he played a small role in the discovery of 5-fluorouracil, the well-known anti-cancer drug.

His independent research career has been mostly at Hyderabad where he founded the Centre for Cellular & Molecular Biology - the CCMB - which was widely recognised as one of the finest institutions in these areas in the world, known not only for the quality of its science but also for its innovative and efficient management and for its value system. It was among the first institutions to be elected to the UNESCO's prestigeous network of institutes of the highest level of excellence in cellular and molecular biology in the world. He retired from the Directorship of the CCMB in 1990 to accept the newly created position of a CSIR Distinguished Fellow from which he retired in February 1993. Besides the CCMB, he conceived what is now known as the CSIR Centre for Biochemicals (at New Delhi) and Jonaki, a Department of Atomic Energy laboratory to make certain specialised radiochemicals (at Hyderabad). He also founded the prestigeous Guha Research Conferences, and played a major role in the setting up of the Department of Biotechnology of the Government of India. He was recently closely involved in the setting up of SPARC (Sun Pharma Advanced Research Centre) of Sun Pharmaceutical Industries Ltd. at Baroda.

He has worked at various times, in McArdle Laboratory for Cancer Research, Madison, Wisconsin, USA; National Institute of Medical Research, London; Institut du Radium, Orsay, France; and Max-Planck-Institut fur Biophysikalische Chemie, Goettingen, Germany.

Dr Bhargava has published over 120 major research papers in reputed international journals, and three books including a 500 page monograph on "Proteins of Seminal Plasma" brought out by John Wiley, and an integrated science national text book for 11-12 year-olds which sold several million copies in several languages and set a new trend in school science education in India. He has also been on the Editorial Board of a number of well-known Indian and foreign journals and magazines, such as Molecular Biology and Medicine (U.K.), Cellular and Molecular Biology (France), and Secular Democracy (India). Dr Bhargava's significant scientific contributions include the discovery of the well-known protein, seminalplasmin, the demonstration of the autonomy of mitochondrial transcription and translation, development of the technique for and propagation of the use of primary liver cell suspensions, discovery of the cell-density effect, and work in the area of origin of life and the role of permeability controls in the regulation of cell division and malignant transformation.

Dr Bhargava has also written, broadcast (on radio and television) and lectured extensively on a variety of subjects other than his professional scientific interests, such as history of biology in ancient and modern India, intellectual property rights, the language policy, futurology, biological warfare, environment, United Nations, secularism, audit and accountability, school education, relationship between art and science, family planning, scientific temper, the method of science, time, planning, constitutional amendments, international cooperation, brain drain, private vs. public sector, several aspects of science policy and social implications of science, and the Bhopal tragedy. His writings on subjects such as the above have appeared in more than forty major Indian and foreign newspapers, magazines and journals such as Nature, Bulletin of Atomic Scientists, Daedalus, New Humanist, Stern, and Impact of Science on Society (from abroad), and New Quest, Seminar, Science Today, Economic and Political Weekly, Mainstream, Link, India International Quarterly, The Illustrated Weekly of India, The Week, Yojana, Man and Development, Fusion Asia, Chemistry Education, Commerce, The Hindu, Times of India, Indian Express, Hindustan Times, and Patriot (from India), and in over 10 books published in India or abroad. Many of these writings have played a significant role in shaping current thought and policies in India.

Dr Bhargava is also one of the country's best-known popularisers of science and advocates of scientific temper. He conceived and put up the well-known multi-media exhibition on the Method of Science (now on permanent display at the Birla Science Centre, Hyderabad). The text of this exhibition was serialised in Science Today, and the Films Division of Govt. of India made a one-hour film on it with his assistance. Dr Bhargava may be one of the few Indian scientists with first-hand experience of the major media. He was also one of the architects of the well-known and highly publicised Statement on Scientific Temper signed by some of the country's leading intellectuals in the 1980s.

Dr Bhargava is one of the most highly cited and honoured Indian scientists and is considered to be the architect of modern biology and biotechnology in India; he is the author of the two most highly cited scientific research papers out of more than 20,000 published by the scientists of the CSIR (Council of Scientific and Industrial Research) since its inception more than 50 years ago. Widely travelled in some 50 countries, he has delivered over 250 invited lectures outside India and participated as an invitee in well over 50 major international meetings, at many of which he has given plenary lectures. In India, he has perhaps given over a thousand invited lectures across the country, on a variety of subjects.

He is a Fellow of the World Academy of Arts and Sciences, and of all the four national science and medical academies of India. He has a honorary D.Sc degree from the University of Burdwan, and is a Life Fellow of Clare Hall, Cambridge. He has been a Visiting Professor at College de France, Paris, and is a corresponding member of the American Association for Cancer Research. His scientific contributions and social concerns brought him the National Citizens Award in 1988, and the high civilian honour, the Padma Bhushan, from the President of India in 1986. His some 50 other major honours, awards and named lecturerships include the Wattumul Memorial Prize for Biochemistry in 1962, the FICCI Award for Life Sciences in 1977, the Ranbaxy Award for Medical Sciences in 1989, the SICO Award for Biotechnology in 1990, the 1993 Goyal Prize, and the 1994 RD Birla National Award.

Dr Bhargava is a past President of the Society of Biological Chemists of India, a former member of the Nominating Committee of International Union of Biochemistry, and of the Councils of International Cell Research Organisation (ICRO) and Federation of Asian and Oceanic Biochemists (FAOB), and President of the Indian Academy of Social Sciences, and of the Association for the Promotion of DNA Fingerprinting and Other DNA Technologies. He has also been a member of over 20 professional societies in India and abroad, and of over 50 major national committees such as the Science and Engineering Research Council, the Advisory Committee for Space Sciences, the Executive Council of Jawaharlal Nehru University, the Scientific Advisory Committee of the Department of Biotechnology,the Joint Working Group of the Indo-US Vaccine Action Programme, and the Scientific Council of the Indo-French Centre for the Promotion of Advanced Research. He has led, several Indian delegations abroad, and directed the first major international scientific training course in Vietnam in 1982. He is the Chairman - designate of the proposed Andhra Pradesh State Commission on AIDS.

Dr Bhargava has also been connected with a number of well-known social organisations, trusts and foundations. For example, he is a trustee of the Jagdish and Kamla Mittal Museum of Indian Art, L. V. Prasad Eye Institute and L. N. Gupta Memorial Charitable Trust, and a member of the Governing Board of the Khorakiwala Foundation.

His biographies appear in most of the world's well-known Who's Who.

Prepared by Chandana Chakrabarti

January 1994

APPENDIX
2

(May 1995)

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Educational Qualifications	B. Sc. (Osmania University) - I class with Chemistry, Botany & Zoology
Employment	1. Worked in the Centre for Cellular and Molecular Biology (CCMB) from 24th March, 1983, to 31st March 1993, in the later years as Communication Officer (Scientist B) of the Institute. 2. Running her own Consultancy Services (Appendix I) since 1st April, 1993.

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45. Symmetry, Asymmetry, beauty and science. P M Bhargava and **Chandana Chakrabarti**. In : Science in Society - Some Perspectives. Ed. Yash Pal, Ashok Jain and Subodh Mahanti, Gyan Publishing House, New Delhi, 1994. pp. 40-46.

46. A ray of hope. **Chandana Chakrabarti**. New India Digest. November-December 94, No. 43, 6-8.

47. Veda recitation by women. **Chandana Chakrabarti**, Indian Express, May 18, 1994 (Letter to the Editor).

48. Towards information century. P M Bhargava and **Chandana Chakrabarti**. The Tribune. November 27, 1994.

49. Education effective contraceptive. **Chandana Chakrabarti**. The Tribune, December 2, 1994.

50. Fall in CCMB Status. **Chandana Chakrabarti**. Indian Express, May 18, 1994 (Letter to the Editor).

51. Surya Prakash, CCMB and L.V. Prasad Eye Institute. **Chandana Chakrabarti**. In "Surya Prakash: Journey beyond colours", 1994.

52. On Dr P M Bhargava. **Chandana Chakrabarti**, Dainik Samachar (in Hindi) in two parts in December 1994.

B EDITING

1. **GRC booklet** (1985) brought out during the Silver Jubilee Celebrations of the Guha Research Conference at Pachmarhi in November 1985.

2. **CCMB Brochure** (1987) brought out during the dedication of the CCMB by the Prime Minister in November 1987.

3. **Scientific reports** of the CCMB for the years 1983-84, 1984-85 and 1985-86. Also, partly **Annual Reports** of the CCMB for the year 1986-87, 1988-89 and 1989-90.

4. The brochure titled **"The Spirit of Freedom Creative Rendezvous"** brought out in connection with the CCMB-VST Artists' camp at the CCMB in November 1989.

5. Proceedings of a seminar on **Wasteland Management**, Indian Institute of Management, Ahmedabad (for which job an honorarium at market rates was paid).

C. FILMS / RADIO / TALKS

1. In collaboration with Vaneeta Bhargava and Dr P M Bhargava, wrote the script and commentary for the one-hour film produced by the Films Division of the Government of India on the **Method of Science Exhibition**. Also helped edit the film and provide visual material where required.

2. Wrote, along with Dr P M Bhargava, first draft of the script for a film on **Science and Beauty** to be jointly produced by the noted film director, Shyam Benegal, Dr P M Bhargava and Chandana Chakrabarti.

3. Gave the following invited talks on AIR, Hyderabad:
   a) Need for Science Writing in India - 21st March 1989.
   b) Science and Aesthetics - 19th January 1990.

4. Gave an invited talk "Is woman a better communicator" organised by Public Relations Club, Secunderabad, on Saturday, 20th July 1991.

5. Gave an invited talk on "[illegible] India [illegible] and Science", with all expenses (including travel expenses) paid, at the All India Institute of Hygiene and Public Health, Calcutta, in November 1992.

6. Has given several other invited talks in Hyderabad.

D. SOME MAJOR ITEMS OF WORK IN PROGRESS

1. Script for a 26-part TV serial on modern biology in collaboration with Dr P M Bhargava, for G V Films Limited, Madras.

2. An invited book titled "Life in 2099", for the National Book Trust of India, to be co-authored by Dr P M Bhargava.

3. Research project with Infertility Institute and Research Centre, Hyderabad on Analysis of data collected by IIRC on over 6000 infertile cases.

E CONSULTANCY

1. Has been acting as a consultant in the team of Dr P M Bhargava, for Messrs Sun Pharmaceutical Industries, Baroda, since April 1991.

2. Running her own consultancy service with emphasis on media consultancy and institution building since April 1993.

F INSTITUTION BUILDING

1. Played a major role in the putting together of the CCMB between 1983 and 1987. The CCMB was dedicated to the nation by Prime Minister Rajiv Gandhi on 26th November, 1987.

2. Also played a significant role in the planning and building of SPARC, Sun Pharmaceutical Industries Limited's Advanced Research Centre at Baroda, that was inaugurated by Shri K R Narayanan, Vice President of India, on 18th April, 1993. Compered the inauguration ceremony.

3. Closely involved in setting up a Centre for human resource development for M/s Sanghi Industries Limited.

4. Helped build the Infertility Institute and Research Centre, Secunderabad.

G SOME MAJOR CONFERENCES ATTENDED (FOR DUE TO ATTEND) AS AN INVITED PARTICIPANT (all expenses for participation in all these conferences were paid by the organisers or other sources outside of the CCMB when employed there).

International

1. M N Roy Commemorative International Seminar on Crisis of Civilisation, Humanism and New Renaissance, Bombay, 1987, organised by Indian Renaissance Institute.

2. International Workshop on Symmetry & Asymmetry, Bombay, 1988, organised by Max Mueller Bhavan, Tata Institute of Fundamental Research, United States Information Service, Embassies of Italy and Switzerland.

3. International Conference on Time, New Delhi, 1991, organised by Indira Gandhi National Centre for the Arts (IGNCA).

4. Eighth Conference of the International Society for the Study of Time - Time and Life: Contribution from the Sciences, the Humanities and the Arts, Normandy, France, July 1992.

5. Indo-French Symposium on History of the Development of Science in India and in France, Madras, October 1992, organised by Indo-French Centre for the Promotion of Advanced Research.

6. Third International DNA Fingerprinting Conference, Hyderabad, December 1994, organised by CCMB, IICT, DBT & APDFDT.

7. International Symposium on Biomedical, Clinical & Social Research Issues in HIV Infection and Their Policy Implications, organised by National AIDS Research Institute and AIDS Harvard Institute, May 1995.

National

1. Indian Social Science Congress, Mysore, 1987 (Convener of a symposium).

2. Seminar on Secularism in India, Bombay, September 1989, organised by Indian Academy of Social Sciences.

3. Seminar on Quality of Life, Shimla, April 1990, organised by Indian Institute of Advanced Study.

4. Workshop on Biotechnology and the Future of Mankind, Bombay, August 1991, organised by Indian Chemical Manufacturers' Association.

5. Workshop on the Project of History of Indian Science, Philosophy and Culture, Delhi, November 1991, organised by Indian Council of Philosophical Research.

6. Workshop on Bhutas: The Nature of Matter, Pune, August 1992, organised jointly by Indira Gandhi National Centre for the Arts and Inter-University Centre for Astronomy and Astrophysics.

7. Workshop on Scientific Traditions in India, in connection with the Project of History of Indian science, Philosophy and Culture, organised by Indian Council of Philosophical Research, Nehru Memorial Museum and Library, New Delhi, March 1993.

8. Symposium on Science & Law, New Delhi, December 1993, organised by National Academy of Sciences.

9. XVIII Indian Social Science Congress, Baroda, November 1994, organised by Indian Academy of Social Sciences.

10. One-day public meeting on AIDS, Hyderabad, November 1994, organised by Max Mueller Bhavan, Hyderabad.

11. "What is wrong with Indian Science: Victimization and harassment", New Delhi, February 1995, organised by Indian Science Writers' Association.

(In addition to the above Conferences to which she was invited, she has also attended several other national conferences such as the 1992 Indian Science Congress and the 1993 Indian Social Science Congress on her own.)

H ORGANISATION OF MEETINGS, CONFERENCES AND OTHER EVENTS

Played a significant role in the organisation of the following:

1. Silver Jubilee Celebrations of Guha Research Conference at Pachmarhi, Madhya Pradesh, November 1984.

2. Symposium on Science Technology Policy Studies, in the XII Indian Social Science Congress, Mysore, July 1987.

3. Dedication ceremony of CCMB at Hyderabad in November 1987, over a period of nearly three weeks. The dedication ceremony of CCMB included the following five major events which brought together renowned scientists, painters, writers, diplomats, poets, musicians and dancers, including several Nobel Laureates from all over the world.

   (a) A one-week Symposium on "Frontiers of Tomorrow in Biology."

   (b) A one-week lecture series on "The State-of-Art in Modern Biology."

   (c) Formal dedication of the CCMB by Shri Rajiv Gandhi, the then Prime Minister of India.

   (d) A one-day Symposium on Art and Science.

   (e) "Contemporary Indian Art in 1980s", an exhibition of paintings, drawings and graphics by 26 leading artists of the country.

4. Guha Research Conference, Hampi, 1987.

5. Artists' Rendezvous: CCMB-VST All India Artists' Camp, November 1989.

6. Open-day functions of the CCMB in 1988 and 1989.

7. Indo-French Symposium on History of the Development of Science in India and in France, Fisherman's Cove, Madras, October 1992.

8. One-day Symposium on "Creativity and Facets of Knowledge", Hyderabad, February 1993.

9. Opening function of SPARC (Sun Pharma Advanced Research Centre), dedicated by Shri K R Narayanan, Vice President of India, April 1993.

10. Symposium on Science and Law, New Delhi, December 1993.

11. XVIII Indian Social Science Congress, Baroda, November 1994.

12. One-day public meeting on AIDS, Hyderabad, November 1994.

13. Third International Conference on DNA Fingerprinting, Hyderabad, December 1994.

14. Annual Popular Lectures of the P M Bhargava Foundation since 1988.

I OFFICES HELD

Joint Secretary, P M Bhargava Foundation, Hyderabad.

Joint Secretary, Indian Academy of Social Sciences, 1994.

Member, Board of Trustees, Urban Children Education Foundation.

J MEMBERSHIP OF ORGANISATIONS

Fellow, Indian Academy of Social Sciences.

Member, Access, Hyderabad.

Member, Society for Promotion of Art, Hyderabad

Member, Consumer Protection Society, Ahmedabad.

K CLUB MEMBERSHIP

Family World

APPENDIX 3

By Speed Post-

CONSUMER EDUCATION AND RESEARCH CENTRE

SURAKSHA SANKOOL, THALTEJ, AHMEDABAD-GANDHINAGAR HIGHWAY, AHMEDABAD-380054. (INDIA)
PHONE : ~~403945-46, 451097, 450528~~ 7489945-46, 7450528, 7481097 GRAM : CONSUMER Telex : 0121-6109 CERC IN FAX : ~~0272-83947~~ 079-7480947

FACSIMILE TRANSMISSION

To : Dr. P.M. Bhargava, Indian Institute of Chemicals Technology Hyderabad

From : Prof. Manubhai Shah, Managing Trustee, CERC, Ahmedabad

Date : 12-6-1995

FAX No. : 040-853387/853757

1

We are transmitting_____ Pages, including this cover Page, using a PANAFAX UF-121

I was indeed happy that we could spend time togetner and interact with each other on Thursday, tne 8th June, 1994.

Regarding your visit to Kutch in the 3rd and 4th week of June, Shri Kartikeya Sarabhai, Ms. Pritee Nambiar and I had a detailed discussion.

We feel that what is necessary at this point of time is the study by the Project Team consisting of experts rather than some of us visiting the site. We therefore are unable to join the Study Tour.

In anyy case I had spent 2 days during November, 1994.

With kind regards,

APPENDIX
4

Route followed(by car)

Bhuj (car milometer 84337 kms)

↓ via Deshalpar, Mothala and Naliya

Bermoti (84465)

↓

Attempted to go to the Sanghi Cement Project Site by taking the road to Hothiay and then turning right on the road being laid from the Project Site to the Port, but could not proceed beyond a few kilometers on the Port road.

↓ via Bermoti and Jadava

Sanghi Cement Project Site (Point B)

|

Baranda (84506)

↓

Point A near Nareda

↓ via Narayansarovar (84525), Kanoj (845329) & Koriyani

Pandro (84546)

|

Dayapar (84571)

↓

via Dolatpar (84575), Saranmoti (84579), Baranda, Vayur (84681) and Gunao (84684)

↓

Sanghidweep (84645)

|

After dark

Baranda (84685)

↓ 40 kms in another car

GMDC & GEB Guest House near Pandro

↓ 40 kms in another car

Baranda

↓

Bhuj via Naliya

↓

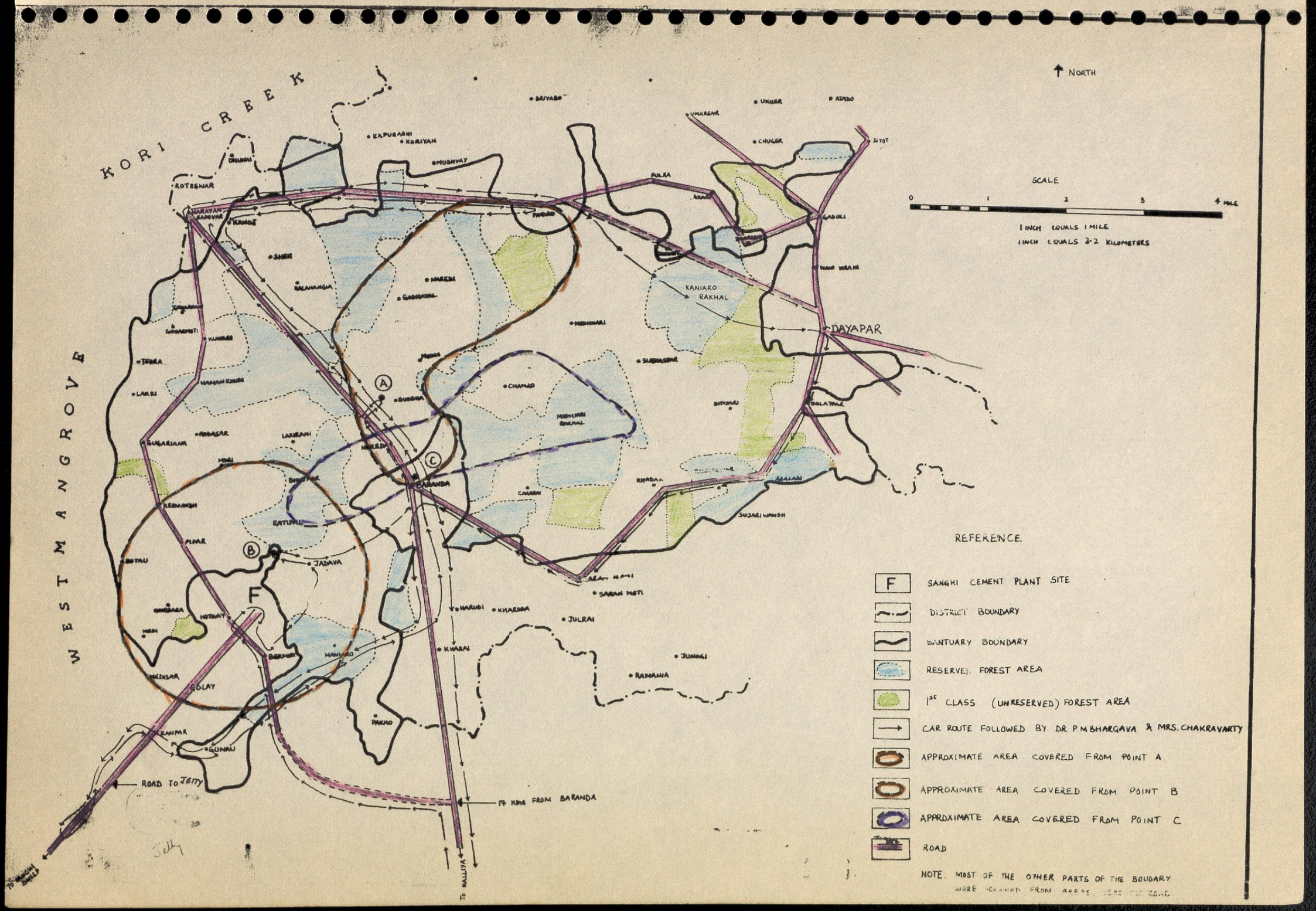
Kandla via Anjar (84879)

Total distance covered by car = 542 + 80 = 622 kms

Distance covered in and around the sanctuary = 315 kms

(No animals except rabbits were sighted while travelling in the dark.)

APPENDIX
5



KORI CREEK
WEST MANGROVE
NORTH
SCALE
0 1 2 3 4 MILE
1 INCH EQUALS 1 MILE
1 INCH EQUALS 2·2 KILOMETERS
KOTESWAR
KAPURASHI
KORIYAN
MUDHVAY
DHUNAI
BAIYABO
UMARSAR
UKHER
ATADO
CHUGER
SIYOT
PULRA
AKARI
GADULI
WANI VIRANI
KANIARO RAKHAL
DAYAPAR
DOLATPAR
ASALADI
SUJARI WANDH
KHADAK
SARAN METI
JULRAI
JUNAGI
RAMANIA
KHARAI
HARUDI
KHARODA
PAKHO
MANIARO
BERMAN
GOLAY
MEDISAR
KANPAR
GUNALI
ROAD TO JETTY
17 KMS FROM BARANDA
TO NALLIYA
TO SANGHI DAMLA
BARANDA
NAREDI
GADHATAL
SHEH
RALAHANGIA
KANOJ
NARAYAN SAROVAR
GUNARMOTI
KUNARI
TEHRA
LAKKI
HAMANKHUDI
GUGARIANA
RODASAR
LAKIRANI
MORI
BHUTPAR
RATIPALI
KERWANDH
PIPAR
BOTAU
JADAVA
HOTWAY
MEDI
KHARSARA
BUDHA
CHAMRO
MIDHIARI RAKHAL
MIDHIARI
SUBHASPAR
BITIYARI
CHAKRAI
A
B
C
F
REFERENCE
SANGHI CEMENT PLANT SITE
DISTRICT BOUNDARY
SANTUARY BOUNDARY
RESERVED FOREST AREA
1st CLASS (UNRESERVED) FOREST AREA
CAR ROUTE FOLLOWED BY DR P.M.BHARGAVA & MRS. CHAKRAVARTY
APPROXIMATE AREA COVERED FROM POINT A
APPROXIMATE AREA COVERED FROM POINT B
APPROXIMATE AREA COVERED FROM POINT C
ROAD
NOTE. MOST OF THE OTHER PARTS OF THE BOUDARY

APPENDIX
6

Concern over two-faced plant

By Pradeep Mallik

AHMEDABAD, April 6.

IT'S a familiar story: the best of intentions going awry because someone had not done his homework. When the forest department introduced *ganda bawal (prosopis juliflora)* in the arid areas of the state -mainly Kutch and Saurashtra - its desired effect was to provide the area with a green cover. Over the years, however, the plant's harmful qualities have come to the fore and the best of intentions remain mere intentions.

The debate over the wisdom of persisting with *ganda bawal* plantation has been joined by Thijs de la Court, a Dutch ecologist currently working with the Rajkot-based Hind Swaraj Mandal. While not questioning the intentions of the forest department, he wonders how much planning and thought that went into taking the decision.

The plant had been introduced with two related goals in mind: providing a green cover and checking soil erosion (which, because of the wind factor in the area, is widespread). An incidental attraction is the plant's high calorific value when converted into charcoal.

However, because it is extremely hardy, it does not allow other plants to grow, leading to monoculture in the area. In addition, the plant's pods, which contain sugar, are eaten in large quantities by grazing cattle, But the pods also contain a slow-acting poison which kills the animals in he long run.

Though the position might appear bleak, Mr De la Court seeks to assuage those who would believe that all is lost. The situation, he believes, can be salvaged through a sustained effort: by using the plant only for fencing purposes, by persuading shepherds to follow different grazing techniques and by planting shrubs.

Mr De la Court's optimism is not shared by Lavkumar Khacher, director of Sundarvan, a nature park in the city. Mr Khacher advocates an all-out war against the *ganda bawal*. Interestingly, the other protagonist, he feels, would be the bigger, stronger *desi bawal*. "Plant *ganda bawal* and *desi bawal* together and just watch how the *desi* variety triumphs", he says.

Mr De la Court feels the *ganda bawal* is being underestimated. He points out that it is genetically highly flexible and adapts itself quickly to new environs. Efforts are on in Latin America and South Africa to fight it but they have yielded little results, he says, adding, "by the time they develop something to counter *ganda bawal* it would have found new means of survival". The trick, he says, is to plot its downfall while collaborating with it.

Mr De la Court's high rating of the plant stems from its genetic qualities. It is a pioneer species which enters an area, conquers it under adverse circumstances and then withdraws.

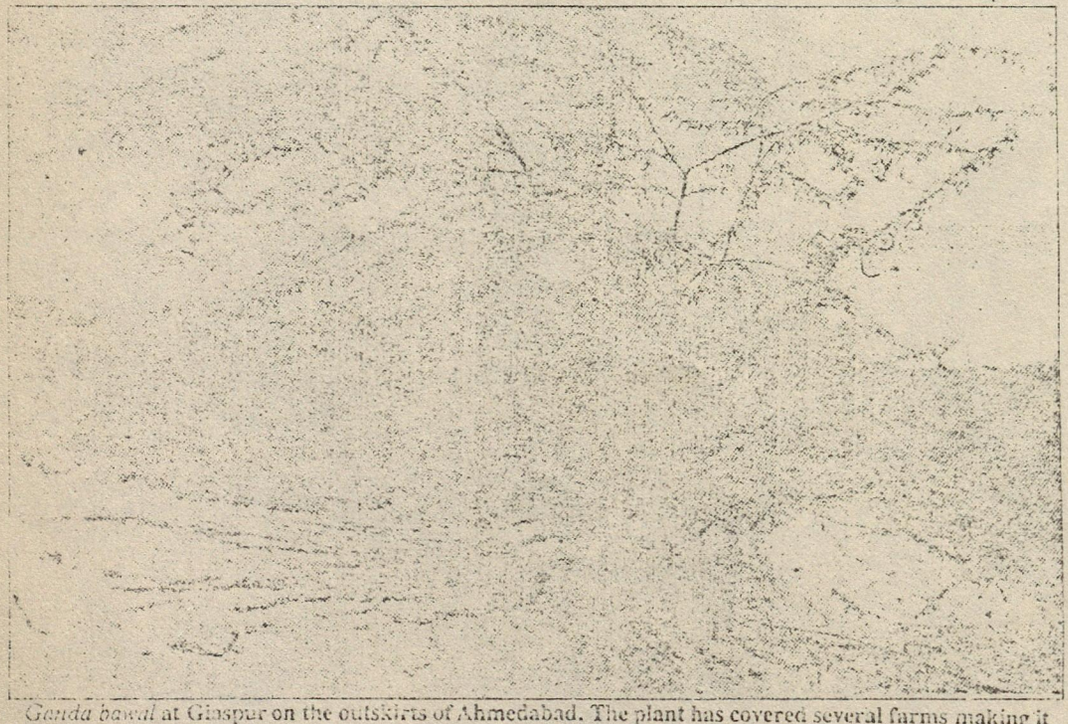
Though Mr De la Court suggests that Saurashtra could be lush green a couple of centuries hence, he is aware that this may not be much more than wishful thinking. The present grazing policy appears to be converting more and more land into wasteland. He refers to developments in the 1960s when farmers had access to additional agricultural inputs such as chemical fertilizers. They encroached upon *gauchars* in a bid to convert them into agriculture land. The increased pressure on the untouched gauchars led to their gradual degradation because of lack of nourishment.

Fighting *ganda bawal*, says Mr De la Court, is a lengthy process, during which circumstances have to be made easy for the shepherds and farmers. One requisite is the creation of a fodder bank to minimise the presence of *ganda bawal* pods in cattlefeed.

On the relative failure so far of the *desi bawal*, Mr Kachar says that there have been other pressures on the plant: animals feed on it and humans use it to clean their teeth. "We simply don't allow it to grow. If the two are planted together *desi bawal*, because of its sheer size, will not allow the smaller variety to come up."

He dismisses the view that *desi bawal* cannot grow on saline land. "Move along the western coast. I have seen *desi bawal* flourishing there, surviving even waterlogging", he says. "In fact, these are all rumours spread by a mafia which is exploiting *ganda bawal* to make charcoal."

With divergent opinions on how to tackle the problem, it remains to be seen which point of view will prevail. The only thing clear at this point of time is that any delay will prove costly to both man and beast.



Ganda bawal at Ginsper on the outskirts of Ahmedabad. The plant has covered several farms making it impossible for the farmers to carry out their agriculture activities. *Photo Gautam Mehta.*

APPENDIX
7

PROPOSED CENTRE

FOR

INTEGRATED HUMAN RESOURCE DEVELOPMENT

TO BE SET UP

BY

SANGHI GROUP OF INDUSTRIES

AT

SANGHINAGAR 501 511
(R R DISTRICT, A.P.)

1. OBJECTIVES

The objectives of the Centre would be the following:

1. To create and upgrade awareness in the staff at all levels (including managerial) on a continuing basis, of various fields and activities that impinge directly on one's daily life and that would help the individual to become a better citizen who would then be able to exercise his rights and fulfill his obligations as a citizen within a framework of knowledge, reason and objectivity.

2. To provide support for the development and sustenance of the value system to which the organisation subscribes which would include fairness, objectivity, transparency, integrity, culture of maintenance, commitment to excellence, and building of mutual confidence and trust.

3. To establish channels of communication between all levels of staff, both laterally and vertically, so that a culture of open discussion and interaction without barriers could be developed in the organisation.

4. To provide a platform for the sharing and discussion of, from time to time, the philosophy of the organisation, its plans, its successes and failures, its strong points and shortcomings.

5. To help the process of learning from individual and collective experiences within the organisation and from the experience of people outside the organisation that may be relevant to the organisation.

6. To acquaint newly recruited staff in accordance with the values and culture of the organisation before they start working in any of their units.

7. To help in the orientation of the organisation towards larger and worthwhile objectives that would be in the national interest and in the interest of humanity at large.

8. To assist the organisation in formulating and reviewing policies that relate to the growth and functioning of the organisation.

9. To provide facilities for healthy leisure-time activities.

10. To assist in the development and functioning of the recruitment system for staff of the organisation at all levels.

11. To provide a reference library for use of staff at all levels.

12. To help develop in all of the staff, reading habits and the minimum skills that would enable one to articulate one's thoughts and ideas with precision and clarity and that would help establish better communication channels between the individual and the rest of the society, including his colleagues at various levels in the organisation.

13. To provide counseling facilities.

14. To interact with those members of the staff that leave the organisation for any reason, at the time of their leaving, with a view to gain from their perception of the organisation.

15. To help establish liaison between the organisation and the academia in related fields.

16. To help the management analyse and evaluate appraisal systems against the background of the feedback received from the staff at all levels.

APPENDIX
8

GOVERNING BOARD

Mr.Rohinton D Aga
Chairman & Managing Director
Themax Limited
Thermax House
Bombay Pune Road
Shivajinagar
PUNE 411 005

Mr. Shyam Benegal
19A-20A, Everest
Tardeo Road
BOMBAY

Justice P N Bhagwati
S-296, Greater Kailash - II
New Delhi 110 048

Dr.P.M. Bhargava
Anveshna Consultancy Services,
12-13-414/4, Street No.1
Tarnaka
Hyderabad 500 017

Prof. Muchkund Dubey, IFS
Honorary Director
Council for Social Development
Sangha Rechana
53, Lodi Estate
New Delhi 110 003.

Dr P.N.Khandwalla
Director
Indian Institute of Management
Vastrapur
Ahemedabad 380 015

Mrs. Bakul Patel
P-1&2, Eden Hall
Dr Annie Besant Road
Worli
Bombay 400 018.

Dr Raja Ramanna
Director
National Institute of Advanced Studies
Indian Institute of Science Campus
Bangalore 560 012

Mr.Ravi Sanghi
Managing Director
Sanghi Polysters Ltd
Sanghi Nagar - 501 511
R.R.Dist. (Andhra Pradesh)

Shri Hasmukbhai Shah
15, Dhanushya Society
Sama Road
Near Chanakyapuri
Baroda 390 008

Mr. Manubhai Shah
Managing Trustee
Consumer Education & Research Centre
"Suraksha Sankool"
Thaltej
Ahemedabad - Gandhinagar Highway
Ahemedabad 380 054.

APPENDIX
9

THE COMMITMENT OF SANGHI INDUSTRIES

We at Sanghi Industries are committed to the following principles and strive to do our best to realise our organisational objectives within the framework of these principles.

1. Excellence all round

We believe that true sucess in today's scenario of liberalisation and globalisation, demands excellence all round and at all levels, as judged by stringent international criteria. We emphasise excellence everywhere, in everything we do; it is the backbone, the culture and the philosophy of our organisation. And we strive to create an environment which would be conducive to the pursuit and nurturing of excellence by all members of the larger Sanghi family in whatever work they may be engaged in.

2. Value orientation

We are committed to honesty, integrity, concern for others, self-respect, fairness, objectivity, cleanliness, efficiency, aesthetics, self-reliance and attention to detail. We believe that a value system and culture that incoprorates the above, is essential not only for optimising productivity but also for minimsing conflict and making work interesting and satisfying.

3. Transparency

We strive to operate within a framework of openness of thought and action that would inculcate a spirit of confidence and mutual trust that we consider essential in activities such as ours that involve team work.

4. Creation of an all-round awareness in the staff

We are committed to encourage self-development of every individual in the organisation, not only through work but also by creating awareness in him/her, on a continuing basis, of various fields and activities that would help the individual to become a better citizen. We believe that a well-informed citizen who knows how to exercise his rights and fulfill his obligations would be the greatest asset to an organisation such as ours.

Contd..

5. Staff welfare and care

The welfare and care of our staff is of prime importance in our organisation. We believe that an individual can be expected to give his best to the organisation he is working in, only when his health, happiness, family life and development become matters of prime concern to the organisation.

6. Career planning for the staff

We recognise that advancement in one'es career has a social relevance in terms of being a measure of one's success in the eyes of the society, besides being a source of personal and professional satisfaction. Keeping this in mind, we strive to develop, and keep updated in real time, an organisational structure that would:

(a) provide avenues for development of the knowledge and the skills of an employee;

(b) encourage maximum use of the new knowledge and experience gained by an employeer;

(c) provide for a raise in salary with time, based on the quality of performance of the employee during the period under consideration;

(d) provide avenues for promotion to a position of greater responsibility, based on the performance of the employee.

Every employee, at the time of joining the organisation, would be made aware of his career prospects in the organistion.

7. Institutionalisation of dissent

We take pride in nuturing a tradition of reasoned and constructive dissent. We respect people for their ability to differ as long as their commitment to the values mentioned earlier and their loyalty to the organisation is not in question.

Contd..

8. Professionalism

We wish to be thought of as a highly professional organisation run by high-class professionals who possess the necessary experience and knowledge to discharge their duties whatever they might be, with the utmost efficiency at the highest level of professionalism.

9. Cooperation with other organisations

It would be our constant endeavour to cooperate and collaborate with like-minded organisations and individuals to optimise the collective output in terms of both productivity and social relevance.

10. Commitment to the country and to the society

We believe that there must be an overlap between (a) our objectives as an industry; (b) objectives of the society; and (c) objectives of the Government. Such an overlap would open new channels for constructive interaction with the Government on the one hand, and for repaying our debt to the society from which we constantly draw, on the other. We shall, therefore, do nothing that would compromise the larger interests of the country or the society.

To be translated in all languages

AK 17-5

COMMENTS ON THE REPORT ON THE VISIT OF DR. P.M. BHARGAVA AND MS. C. CHAKRABORTI TO NARAYAN SAROVAR SANCTUARY IN KACHCHH DISTRICT OF GUJARAT STATE DURING 28TH AND 29TH JUNE, 1995

The denotification of Narayan Sarovar sanctuary is a matter that has critical implications for the future of protected areas in India. As a result of a press campaign by the Centre for Environment Education (CEE), which prompted public interest litigation by the Consumer Education Research Centre (CERC) and World-Wide Fund for Nature-India (WWF-India) as intervenors against the move, the denotification was quashed by the Gujarat High Court. It is in the context of the increasing commercial demand for the resources protected by national parks and sanctuaries, the last refuge of nature, that the WWF Gujarat State Committee, Centre for Environment Education, Consumer Education and Research Centre and the Gujarat Nature Conservation Society, take strong objection to the "Report on the visit of Dr. P.M. Bhargava and Mrs. Chandana Chakraborti to Narayan Sarovar Sanctuary on 28th and 29th June, 1995". The fact that Dr. Bhargava has authored a report seriously deficient in scientific quality advocating the cause of an industrial group that wants to locate in Narayan Sarovar sanctuary, raises a disturbing question as to why scientists are inclined to promote commercial interests with serious implications for the future of the protected area network in the country.

We wish to bring this matter to the notice of all academic and scientific organizations in the interest of both conservation and good science.

The WWF Gujarat State committee, Centre for Environment Education, Consumer Education and Research Centre and the Gujarat Nature Conservation society, unequivocally disapprove of Dr. Bhargava's report for the following reasons:

1. Inappropriate academic background of study team:

   A person can be termed a scientist either because he has specialised in a particular branch of science or because he adopts a scientific approach to the examination of complex issues. The report of Dr. Bhargava and his colleague raises a question as to whether it satisfies either criteria.

   Dr. P.M. Bhargava and his colleague have no background that qualifies them to undertake such a study. Bhargava's academic background is restricted to Mathematics, Physics, Chemistry and cellular biology and that of Ms. Chakrabarti to a graduate degree in science. Neither seems to have experience in any field relevant to the study such as plant ecology, ornithology, geology or zoology.

2. Inadequate duration of study:

The report of two scientists which makes several recommendations with far reaching implications is based on an eight hour rush visit of an area comprising 759.79 sq. kms.

3. Obscure terms of reference:

The report details the background of Bhargava's interest in Narayan Sarovar sanctuary, but fails to explain who or what organisation commissioned the study and for what purpose. The record note of discussion between senior bureaucrats of State Government and environmentalists on February 7, 1995 provided for a survey by a team of scientists drawn from all relevant disciplines regarding the sanctuary. Why Dr. Bhargava or his colleague who were not so far involved in discussions on the issue should take it upon themselves to undertake this task is not clear.

If Dr. Bhargava and his colleague were really interested in objective and extended scientific study, why did they not make any effort to persuade authorities to agree to a study of the entire matter by the team of experts named and for the period spelt out in the said record note? We have reasons to believe that Mr. Ravi Sanghi of Sanghi Cement, and, most likely, Dr. Bhargava were aware of the discussions during the said meeting dated 7th February, 1995. Instead, Dr. Bhargava and his colleague undertook a hurried trip for two days only as detailed in this note, without one or more of the persons that Dr. Bhargava claims had agreed to accompany him. Dr. Bhargava does not explain why a number of people whom he claims had earlier agreed to accompany him, chose not to do so. Does not such withdrawal from agreement by the persons mentioned in the report indicate an uneasiness on the part of the said persons about the actual intentions underlying Dr. Bhargava's visit?

4. Absence of background research:

The report makes no reference to a single publication. All the information appears based on the authors' perfunctory visit of the area and passing conversations with often unnamed villagers.

5. Unreliable Methodology:

The entire visit of a 759.79 sq. km sanctuary was made by car over a period of eight to ten hours "on all motorable, pukka roads in the sanctuary, in addition we travelled on many katchha roads often as far as the car would go. We used walking, binoculars and a powerful telescope... We feel confident that in the areas we scanned... if there were any large animals such as chinkaras or deers, we should have noticed them through their movement." Nothing further needs to be said as regards the reliability of such a study of wildlife and ecology of the region. Research methodology has been the prime casualty in this report.

6. Presence of clear bias:

The report which recommends that the Government of Gujarat immediately implement the drastic reduction of the sanctuary from 759.79 sq. kms to 100 to 150 sq. kms. based on this scientifically unacceptable study carries a clear bias in favour of Sanghi industries. Section 3 is devoted to praise for the good work of the Sanghis. Appendix 7 is all about the proposed centre for Human Resource Development to be set up by Sanghis near Hyderabad. Appendix 8 lists the members of the Governing Board of this Centre of which Bhargava is one and Appendix 9 details the commitment of Sanghi Industries to various principles. The relevance of this information to Narayan Sarovar Sanctuary in Lakhpat taluka of Kachchh District which is hundreds of miles away from the proposed HRD Centre for the Sanghis is Hyderabad. Incidentally Dr. Bhargava's consultancy centre is located here. Considering the fact that the denotification of the sanctuary would involve the entry of several industries into the area, the attention devoted to Sanghi Industries indicates that the "study" is a blatant promotional exercise for the company.

7. Inaccurate observations:

The report abounds in misleading and inaccurate statements such as the following:

"We in the country do not appear to have a well-defined set of criteria for declaring an area as a reserved area or a sanctuary". There is no reference to the gazette declaration of a sanctuary by Dr. Bhargava anywhere in the report which clearly states the reasons for the declaration of any area as "protected", a decision that is entrusted to

the discretion of the Forest Department. He claims that the Narayan Sarovar Sanctuary was declared such without proper investigation or study.

Bhargava has not consulted a single forest officer during the course of this study or even made an attempt to contact the Forest office at Bhuj before he jumps to this conclusion.

Bhargava's complete ignorance of the flora and fauna of this semi-arid ecosystem has prompted several absurd comments: He reports the presence of few rabbits when in fact rabbits do not occur in wilderness in India and what they saw is likely to be "Hares". He further notes that there "seemed to be nothing unusual about the flora in the sanctuary area that would make it distinctive enough and justify a sanctuary on the basis of its flora. There is no special flora and not enough of special fauna to justify having such a large area with one of the richest mineral resources in the country designated as a sanctuary. Chinkara seems to be the only animal that might be special to this area, although Chinkaras seem to exist in other parts of India as well." Had Bhargava made an attempt to acquaint himself with existing scientific surveys of the area, he would have known that there are about 695 plant species in the Kachchh region of which about 500 species are found in Western Kachchh alone. Most of these plant species, which include many of medicinal importance, are also found in the sanctuary.

8. Dr. Bhargava claims to have made a thorough study of the sanctuary with the help of his telescope and binoculars. He, however, spotted only three Chinkara during the drive through, all of which he found were outside the limits of the sanctuary. The Forest Department census puts the number of Chinkara at 1200 while Bhargava would seem to have spotted none and from hearsay during his meetings with villagers puts the number of Chinkara at around a hundred.

9. Dr. Bhargava seems to be entirely unaware of the rationale for the country's protected areas network which seeks to shelter unique, representative and varied ecosystems. The expectation that the semi arid ecosystems of Kachchh should bear lush forests as in Kaziranga, Kanha or Periyar is embarrassing evidence of his utter ignorance of the country's rich biodiversity. Moreover, protected areas are designated as centres of in-situ conservation in order to preserve nature in its pristine wilderness and not primarily, as Bhargava claims, to entertain tourists.

10. Dr. Bhargava also misses the point that the issue is not only of the survival of Chinkara, it is basically the larger issue of preserving the scrub forests in the area.

11. The scant respect for facts and the principles and methodology of science that Bhargava displays in this study raises serious doubts about the motives that prompted the writing of this report.

The undersigned four organisations of Gujarat hereby to send out an appeal to the intellectual and scientific community of India to assess whether this report which purports to be a scientific study of Narayan Sarovar sanctuary can be accepted as such.

	Name	Signature
1.	Nanubhai Amin Chairman, Gujarat State Committee of WWF-India	
2.	Hasmukh Shah Member, Gujarat State Committee of WWF-India	
3.	I.C. Patel Chairman, Gujarat Nature Conservation Society	
4.	Prof. Manubhai Shah Managing Trustee Consumer Education & Research Centre	
5.	Kartikeya Sarabhai Director Centre for Environment Education	
6.	Dr. M.N. Naik Hon. Secretary, Gujarat State Committee of WWF-India	
7.	Ms. Prithi Nambiar Programme Coordinator Centre for Environment Education	

WWF World Wide Fund For Nature-India

Secretariat:
172-B Max Mueller Marg
Lodi Estate
New Delhi 110 003
Tel: 91-11-4616532; 4693744

FACSIMILE LEADER

To : DR CHHATRAPATI SINGH From : Ms. RAMINDER GILL

Fax No.: 0755 – 541606 Fax No. 91-11-462 6837
541607

Date : 28.7.95 No. of pages to follow :

DR. SINGH
I am sending herewith a news paper item re: NSS where it is mentioned that the Govt. of Gujarat has denotified 50% of the area (.)

PLEASE HAND OVER THIS ITEM TO
DR CHHATRAPATI SINGH IMMEDIATELY

THE PIONEER - FRIDAY July 28th, 1995.

MOST URGENT

Prime land goes to mega-projects worth Rs 20,000 cr

50% of Kutch sanctuary de-notified

State Correspondent

Gandhinagar

WITH THE Congress Opposition being suspended for a day, the ruling BJP brushed aside the objections of a handful of Independent legislators to push through a Bill in the Assembly de-notifying almost 50 per cent of the Narayan Sarovar Chinkara sanctuary in Kutch to pave way for mega-projects worth Rs 20,000 crore.

The Bill would neutralise the High Court verdict, striking down the Government notification truncating the 765.79 sq km sanctuary to 94.87 sq km.

The ruckus over the Civil Supplies Minister Jaswant Singh's earlier announcement on the projected rise in groundnut oil prices led to a pandemonium with the Congress members staging a dharna in the well of the House and their subsequent suspension. This paved the way for the Government to pass the Bill on de-notification of the sanctuary.

The de-notification process was initiated by the Chimanbhai Patel Government to pave the way for a multi-crore cement plant by the Sanghi industrial house.

However, their efforts were stymied by the High Court which termed the order illegal. The BJP, which had then strongly opposed the denotification, successfully piloted the Bill through the Assembly on the last day of the session on Thursday.

Independent legislator Mahendra Mashru's pleas to the Government to desist from running the Bill, through a House bereft of Opposition members failed to restrain the ruling party. Faced with an insistent BJP, Mr Mashru insisted on a divison and the Bill was passed with 69 in favour and five against the latter being the Independent legislators.

In his opening remarks on the Bill, Forest Minister Indravijaysinh Jadeja said it was necessary to redraw boundaries of the sanctuary since massive mineral reserves lay embedded within, which were needed for industrial development of the area.

As a consequence of the Bill, the area of the sanctuary will be slashed from 765.79 sq km to 444.23 sq km.

Mr Jadeja said huge mineral reserves, including limestone, bauxite and bentonite existed in 435.53 sq km of the reserve area. This, he said, could be used to fuel industries and thus give a facelift to Kutch region.

State Industries Minister Suresh Mehta, who hails from Kutch, said the Government had received nine applications for mega-projects worth Rs 20,000 crore in Kutch, which would provide the Government with a royalty of Rs 4,000 crore per annum from mineral ore alone.

Dr. Chhatrapati Singh, CEL, WWF-I.
For your information.

AK 17.5

THE NARAYAN SAROVAR SANCTUARY, FOR YEARS AND YEARS, THIS SANCTUARY HAD ONLY ONE VISITOR:



DROUGHT.

Some people are extremely concerned about a sanctuary they have never seen.

The Narayan Sarovar Sanctuary.

They say, "The sanctuary is shrinking. Environmental degradation will take place without benefiting the people. A sin is being committed against nature. The poor Chinkara will be disturbed."

The facts: Narayan Sarovar (as per 1981 boundaries) is a vast tract of barren land. The soil is loose and dusty. Dust storms make life inhospitable even for animals, leave alone human beings. Water is scarce. One has to walk up to 10 kms. even to graze sheep. There are 56 villages, with an estimated human population of 24,000. Limited rains. There are no secondary schools, miserable primary medical facilities and high starvation at times of drought.

Earlier in 1981, the area earmarked for the sanctuary was 765 sq. kms. This was done without realising that the area contained a bounty of mineral wealth. The area has been reduced to 442 sq. kms. by the Government of Gujarat, through a process of proper law, to enable industrial development.

Today, there is a hue and cry about the "shrinking sanctuary". The sanctuary is in fact intact. The sanctuary today houses about 150 Chinkaras * (a type of Antelope found in 80 sanctuaries in 9 states in India). Only the wastelands around the sanctuary have been removed and denotified, still leaving each Chinkara with over 3 sq. kms. of land - far in excess of the 0.03 sq. km. available to them elsewhere.

Two successive governments, the Congress and the BJP, endorsed the move wholeheartedly. Their concern for the development of the region was pronounced.

This area, which has a variety of minerals in abundance attracted both the government and a host of private industrial houses to build Power, Cement, Aluminium, Lignite and Bentonite projects.

Sanghi Industries is not just setting up a world-class cement plant to harness the natural resources in Kutch - it is pioneering an economic activity that will progressively alter the outlook of the region. From decay to all round dynamic development.

Sanghi Industries invites public spirited citizens to visit Narayan Sarovar Sanctuary and perceive for themselves how the guise of misplaced eco-care could prove detrimental to development.

If you want to know more about the Narayan Sarovar Sanctuary, mail this coupon today, to Sanghi Industries Ltd., Cement Division.

Please send me a copy of your Informative Brochure on Narayan Sarovar Sanctuary

Name .....

Address .....

.....

.....

Sanghi
INDUSTRIES LTD.

Sanghi Nagar, R.R. District, Andhra Pradesh - 501511.

* Source : Bombay Natural History Society.

IMAGEADS

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This is an ad we refused for Sterling
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A NOTE ON KUTCHH LIMESTONE DEPOSIT VIS-A-VIS NARAYAN SAROVAR SANCTURY AREA

KUTCHCH LIMESTONE DEPOSIT

The mineral deposits of limestone are located in the western part of the district.The limestone belt extends from Ramania to Lakhpat forming a crescent shaped configuration over an area of 407 sq.kms covering the villages of Ramania, Waghapadar, Sanosara, Kharoda, Khari, Harudi, Fulra, Kuriyani and Lakhpat.The area is covered by toposheet numbers 41A/9,A/10,A/11 and 41A/13.The deposit was investigated during field seasons 1963-66 by DGM,Gujarat and a part of belt was mapped on 1:10000 scale.

The area represents gentle sloping topography towards coast.The major part of the area is dissected by a number of dry nalas.The area is devoid of any perennial streams and vegetation except acacia trees and thorny bushes.

The limestone is fossiliferous and contains numulitic foraminiferas.Geologically it belongs to Kirthar to Lower Nari Series of Middle to Upper Eocene ages.The deposit overlies the gypseous shales and clays of Laki Series and is overlain by arenaceous beds of Oligocene to Miocene ages.It is of marine sedimentary origin and occurs as a thick,bedded and massive deposit.The limestone is chalky white to yellowish white in colour and occasionally of brown and grey colours.It is devoid of any sizable overburden and thickness of limestone varies from 2 to 14 metres with an average thickness of 10 metres.About 7000 Million tonnes of Inferred category of Reserves are reported from this belt.The average chemical analysis of limestone is reported to be as under :

CaO % - 48.50 MgO % - 3.00 SiO2 % - 4.21 R2O3 % - 3.75

NARAYAN SAROVER SANCTURY AREA

The Gujarat government has notified an area of 1037.20 Sq.kms as Narayan Sarover Wildlife Sanctury area.About 430.53 Sq.kms of the area is mineralized and 606.67 sq.kms of area does not contain significant minerals of importance.The mineralized belt includes limestone ,laterite,bauxite ,clays etc.About 115.72 sq.kms of sanctuary area comes under the purview of Section 20 of Forest act.This includes both Mineralized and barren areas.The parts of the areas applied by ACC,Sanghi Cements and GACL for Prospecting licences come into the jurisdiction

of this notified sanctury area.Likewise parts of the areas of ACC and Sanghi Cements come under Section 20 of Forest act. ACC, Sanghi Cements & GACL have applied for about 10,20 and 25 sq.kms area for PL in Kutchch distt. Majority of the area of other two companies form a part of Sanctury area.An area of 8.67 sq.kms i.e. 35 % of applied PL area of GACL forms the boundary of the notified Sanctury.

PL application of GACL

GACL has applied for prospecting licence over an area of 24.77 sq.kms for limestone mineral in villages Kharai & Kharoda of Lakhpat tq. and village Waghapadar of Abdasa tq. in Kutchch distt.The area comprises of private,goucher and government waste lands.A few dry streams,nalas,non perennial water tanks and roads dissect the area.It is devoid of any dense vegetation or forest cover.Thereby,it does not come under section 20 of forest act.The 8.67 sq.kms area of Kharai village falls under the notified sanctury area.The PL area is located at a distance of 40 kms from Naliya and 140 kms from Bhuj towns.The distances of Mandva and Kandla ports are 115 and 210 kms respectively.The nearest metre gauge Railway station is at Naliya and broad gauge station is Gandhidham,Kandla.

GACL has extensively reconnaitored the area during July-August 1991 and a total of 36 samples were collected from outcrops and nala cuttings etc.The samples had yielded encouraging results and good quality cement grade limestone was reported from the area.

The DGM,Gujarat have reported an inferred category of limestone reserves of about 937 million tonnes in Kharai,kharoda,Waghapadar and Sanosara villages in the distt having under mentioned quality:

CaO % - 49.58 MgO % - 1.92 SiO2 % - 1.13 R2O3 % - 3.67

The GACL area is a part of this belt.

AK 17.5 Rs 2/-

THE BANE OF `CHINKARA'

Na-ra-ya-n Na-ra-ya-n

NARAYAN SAROVAR SANCTUARY

In 1981, a large tract of land was earmarked as a sanctuary for propagating and developing various protected animals, in particular the most endangered of them all, the Indian gazelle called `Chinkara'. The Government of Gujarat notified a consolidated area of 765.70 sq. km. as a sanctuary, because this area was of "adequate ecological, faunal, floral, geomorphological, natural or zoological significance". The Sanctuary was named after one of the Hindu gods `Narayan'. And `Sarovar' means `Abode'. Thus, the Sanctuary was named as the `Abode of Lord Narayan'. Such was the status conferred on this unique sanctuary.

This Sanctuary is located in the Kutch District of Gujarat about 110 km. from Bhuj. The altitude varies from 3 metres to 140 metres above sea level and is subject to a variation from 48 degree C in the height of summer to 6 degree C in winter. It is a long stretch of dry land and at places it is marshy. Its unique forest ecosystem comprises of dry Savannah, desert thorn, tropical Euphorbia scrub and other scarce water plants. A kind of habitat ideal for animals such as the caracal, the desert cat, the Indian wolf, the pangolin and the great Indian bustard. It is for them and their protection that this habitat was set-aside.

This abode of Lord Narayan, the least known of all the major sanctuaries remained by and large an undisturbed area. One of the factors could be its undulating desert like terrain with such extreme temperatures that possibly only Lord Narayan could find solace in it.

Man, who sits on the pinacle of all the species, who firmly believes that the entire earth is meant for its exclusive use and consumption, did not spare even this abode of Lord Narayan.

The misfortune of the `Chinkaras' became the fortune of the mining industry. A whole industry swarmed over and near the Sanctuary to mine `lignite'. A mineral which is an inferior quality of coal. With the availability of lignite, industries consuming large amounts of coal for their production started moving nearer to the Sanctuary, in order to cut down the cost of transportation. To further confound the situation, a 140 MW power plant has been set up in or near the Sanctuary. It consumes 2500 tonnes of lignite a day and emits large amounts of pollutants as it lacks a desulphurisation plant. It also devours large amounts of scarce ground water for cooling, which lowers the ground water table and makes it saline, rendering it unfit for humans, animals and vegetation. As if the location of one power plant in the Sanctuary is not enough for its destruction there is a proposal to set up yet another power plant of 250 MW in the Akri Block of the Sanctuary.

This Sanctuary, besides lignite, has substantial deposits of limestone, one of the ingredients which go in the manufacture of cement. With power from lignite, easy accessibility to limestone, availability of cheap land and labour, attracts the cement industrialists to this area. Currently, at least four major cement factories are in the pipeline, which would be relying on the efficiency of the miners within the Sanctuary to meet their requirement of limestone. The Government in order to attract the miners has further reduced the amount of royalty payable by them for extraction of these minerals.

The stage is set for the final act of this drama. Both the Government and the industrialists are keen to bring down the curtain on this unique thorn desert forest sanctuary, the only one of its kind in India. The authorities in whose hand rests the fate of this Sanctuary, opt for an easy way out to offer this last sacrifice to Lord Narayan. They use the pen for a sword to make this sacrifice.

The pen on July 27, 1993 with one single clean stroke guillotined the entire Sanctuary. The Sanctuary is sacked. The executioners have no remorse, as they have been blindfolded by the deceitful mirage of economic development. It is not as if the Sanctuary is the exclusive possessor of these twin minerals. These minerals are found in abundance in other areas. The only difference is that in the case of other areas the process of declaration and acquisition would have to be undertaken, while in the case of the Sanctuary, all that was required was the change of user. It is quicker and easier to change the user of the land which has already been declared and acquired for a laudable effort of preservation of wildlife. It is this factor, which has been the bane of many a sanctuary.

The authorities anticipating a backlash from the conservationists for sacking the Sanctuary and that too for as spurious a reason as that "this area is substantially in excess of the requirements of the sanctuary", plucked from their hat a concept of a new sanctuary touted as the "Chinkara Wildlife Sanctuary". In their enthusiasm for economic development forgotten was the fact that the earlier Sanctuary was created not just for protection of thorn desert wildlife but also for its propagation. It is this lack of adequate attention to propagation by the authorities, which was converted by them into a ingenious legitimate excuse to abolish the Sanctuary.

Narayan Sarovar Sanctuary is replaced by the new *Chinkara Wildlife Sanctuary*. A Sanctuary doomed from its birth. *The habitat for the propagation and protection of the Chinkara's shrinks from 765.79 sq. km. to a mere 94.87 sq. km.* does not consist of one consolidated stretch. The new Sanctuary has 16 blocks, each ten kilometres apart from the other. Out of the 16 blocks, 10 have an area less than 5 sq. km., 3 blocks of less than 7 sq. km. each and 3 blocks of about 15 sq. km. It did not require much effort to unveil the secret of the creation of such an unimaginative sanctuary. Areas which were poor in their mineral wealth were earmarked for a sanctuary. What is baffling is the minuscule size of the various blocks and that too unconnected with corridors for the Chinkaras to travel from one block to another. Not to mention the large scale mining which would occur around each of these pockets. This new sanctuary was nothing but a tattered veil behind which the executioners of the Narayan Sarovar Sanctuary could not even conceal their oblique motives. A shriveled up small flower with its petals scattered all

over, was being offered to the critics for their silence. Silence, the anti-thesis of any self respecting conservationist.

The first to approach a court of law was the Consumer Education and Research Society challenging the denotification of the Narayan Sarovar Sanctuary. It filed a public interest petition in September, 1993, before the Ahmedabad High Court. In the meantime, the Centre for Environmental Law of the WWF-India was also contemplating taking appropriate legal action against the said denotification. As a petition had already been filed prior in time, WWF-India filed an application for Intervention in the said petition. WWF-India subsequently also filed an independent petition challenging the legality of the said notification.

The act of denotification of the Sanctuary by the State Government was a product of blatant procedural illegality. The Wildlife (Protection) Act categorically specifies that "no alteration of the boundaries of a Sanctuary shall be made except on a resolution passed by the Legislature of the State." In other words, the State Government had no power to make any alteration to the boundaries of a sanctuary without prior approval of the state legislature. The State Government was prohibited from either increasing or decreasing or tampering in any manner whatsoever without the consent of the state legislature. The State Government, presumably in order to avoid any adverse publicity or confrontation within the state legislature, opted to circumvent these statutory provisions which necessitate prior approval of the state legislature. The State Government, instead of altering the boundary of the Narayan Sarovar Sanctuary, chose to denotify, i.e., to abolish the entire Sanctuary, and in its place in the same area, created another fragmented Sanctuary called the 'Chinkara Wildlife Sanctuary'. This exercise was undertaken primarily to by-pass the legislature, apparently on the premise that the Wildlife (Protection) Act which prohibits, without prior resolution of the legislature, any alteration of the boundaries of a sanctuary. It does not prohibit the State Government from abolishing the entire sanctuary. This is indeed an unusual and an ingenious convoluted view of these prohibitory provisions. Parliament, while enacting these provisions, consciously stipulated legislative control over subordinate executive actions. Parliament was well aware that the State Government may, due to compulsions, political or otherwise, tamper with the area declared as a sanctuary. Hence, the recipient of this confidence of Parliament, that sanctuaries should not be ordinarily disturbed, was the State Legislature and not the State Government. In law what we call 'Legislative control by affirmative action over delegated subordinate legislation."

In fact, on August 28, 1991, the day when Parliament was considering the proposed Bill which contained this prohibitory provision, one of the Members of Parliament referred to the threat posed to a sanctuary and stated "the other point which is important, whether it is a sanctuary for wildlife in the form of large animals or whether it is for Biodiversity-diversity purposes, is long term term security. In the absence of that, what happens is that what is today defined as sanctuary, defined as reserve can be changed due to other pressures and it has been repeatedly happening. I know of a very particular controversy, and the Hon'ble Minister is familiar with it, of a cement plant planned to be located in one of the states of the country which would damage a sanctuary".

It is after such a debate, that the Parliament prohibited the State Governments from altering the boundaries of a sanctuary.

The State Government, by changing the hat, cannot change the sanctuary. The location is the same, but the area has been reduced and a new name has been given to it. It is a clear blatant case of alteration of boundary. It is illegal because the State Government has altered the boundary without the prior resolution of the state legislature.

The State Government, by denotifying the Narayan Sarovar Sanctuary, has created a situation by which the genetic diversity, the preservation of which has to be on a long term basis, is jeopardised by a short term decision. Once, on the basis of scientific analysis, it has been decided to keep a certain area for a certain purpose, then changes in it should be allowed, if at all, on the basis of an equally elaborate analysis.

The petitions filed challenging the de-notification of the Narayan Sarovar Sanctuary were listed for several days before the court in March, 1995. The court after hearing the arguments of both the parties extensively pronounced its judgment on 24th March, 1995.

A judgment which analysed the provisions of Section 26-A (3) and set at rest the controversy about the applicability of the provisions of 26-A (3) of P.C.A. to the sanctuaries which were notified prior to the incorporation of Section 26-A (3) in 1991. This judgment further declared that a State Government has no authority to exercise its residual power as contained in Section 21 of the General Clauses Act to cancel a notification declaring a sanctuary in view of the special law as enshrined in Section 26-A (3) of Wildlife (Protection) Act. The relevant extracts of the said judgment are reproduced hereunder: -

- The ground, which has been agitated before us for challenging this notification is that the State Government has no jurisdiction to issue such a Notification and the boundary of a Sanctuary could only be altered by a Resolution of the Vidhan Sabha.

- On behalf of the respondents, it has been contended that the Government had the power and the jurisdiction to cancel the Notification which has been issued in 1981. The source of this power of cancellation is traced to Section 21 of the General Clauses Act. On behalf of the respondent No. 3, which is the Company in whose favour a mining lease for quarrying limestone and for setting up a cement factory is sought to be granted, it has been contended that there was, in fact, no valid declaration of Narayan Sarovar Sanctuary under Section 18 of the said Act and further, this could not be regarded as a public interest litigation and the petitioners have no locus standi to file the present writ petitions.

- A contention has been raised by the said learned counsels for some of the respondents that sub-section (3) of Section 26A will not apply to a sanctuary which was declared as such under Section 18. The court expelled this contention of the respondent and held the provisions of sub-section (3) of Section 26A were applicable to all the

sanctuaries, which had been declared as such under Section 18 or under Section 26A or were deemed sanctuaries by virtue of Section 66 (3).

- It was sought to be contended that repealing a Notification in exercise of the powers under Section 21 of the General Clauses Act would not amount to altering the boundaries of the sanctuary. We are unable to agree to this contention. When the notification of 1981 was sought to be repealed, the effect undoubtedly was that the boundary of the Narayan Sarovar Sanctuary was completely altered. It is difficult to accept the contention that sub-section (3) of Section 26A would apply and a Resolution of the State Legislature would be required only if, for example, the area of the sanctuary was to be reduced, thereby resulting in the alteration of its boundaries but that such a Resolution would not be necessary when the existence of a sanctuary is being brought to an end.

We are also of the opinion that the Government did not have jurisdiction or power to invoke Section 21 of the General Clauses Act in the present case. The Wildlife (Protection) Act is a special Act, and whereas power is given to the State Legislature under sub-section (3) of Section 26A. Once a sanctuary has been notified as such, then the State Government, for the purposes of altering its boundary, would become functus officio and the only authority or body, which would have a right to amend the boundaries is the State Legislature.

- Mr. V. B. Patel, appearing for M/s. Sanghi Cement Limited, a company, in whose favour mining lease was proposed to be granted, had submitted that, in fact, there was no notification in law declaring any area as Sanctuary. It was submitted in this connection that the Notification of 1981 was not final as it stated that the area, which was "intended to be declared" as Sanctuary had been specified, but this intention had never became final. The learned counsel is seeking to base his argument because of the use of the word `intended' in the Schedule to the Notification of 1981. This notification, under the tenets of construction, has to be read as a whole. It has also to be read in the light of the statutory provisions. The statutory provisions which existed in 1981, were that an area could be read as a whole. It has also to be read in the light of the statutory provisions. The statutory provisions which existed in 1981, were that an area could be declared as a sanctuary under Section 18. That area could be modified, on rights being established by an order passed under Section 24(2). If no order under Section 24(2) was passed, determination of the area as a sanctuary remained. In the operative portion of the notification dated 14th April, 1991, there is a categorical declaration of the area specified in the schedule as being a "Wildlife Sanctuary". The use of the word `intended', in the Schedule, only meant that the area described therein could be changed or altered in accordance with law, viz., if an order under Section 24(2) was passed. If no order under Section 24(2) was passed, the area as mentioned in the Schedule remained a part of the Sanctuary. Unamended Section 18 did not contemplate any preliminary notification being issued prior to the final declaration of an area as a sanctuary.

- It was vehemently contended that this could not be regarded as a public interest litigation and secondly, the petitioners had no locus standi to file the present petitions. We are unable to agree with this submission. Environment, more that anything else, is and should

be a concern for all. it is one thing which is available free to all the inhabitants of an area and it is essential that this environment is maintained for the purposes of ensuring a healthy life. This issue, in fact, is no longer res integra.

- It would, therefore, follow that a public interest litigation at the behest of an organisation or a group of individuals, who have no personal gain or private motive or any other oblique consideration except to see that public injury does not take place and to prevent or annul executive acts and omissions which are violative of the Constitution or the law, would be maintainable. In the present case, this is precisely so.

- For the aforesaid reasons, we come to the conclusion that the impugned Notification No. GVN-16(93)-WLP/1092/2156/V2. dated 27th of July, 1993, purporting to cancel the earlier Notification dated 14th April, 1981 is illegal and is quashed. As a consequence thereof, the second Notification also dated 27th of July, 1993, whereby a new Sanctuary, of a much smaller area, was sought to be set up in the same taluka, is also quashed. As a result of the quashing of the Notification dated 27th of July, 1993, the earlier Notification dated 14.4.1981, establishing Narayan Sarovar Sanctuary is revived.

Thus ended the legal controversy of Narayan Sarovar Sanctuary, but the fate of the Sanctuary yet continues to hang between the scales of development and conservation.

Jan/2000

10.15

The Narayan Sarovar Judgement

The court declined to quash the denotification of the Narayan Sarovar Sanctuary and hence abstained from striking down the resolution of the Gujarat Legislative Assembly. It however has recognized the ecological significance of the area and has prevented any further mining or industrialization.

1. The interim order passed by this Court shall continue for a period of one year. If a need arises to carry out mining operation in a larger area that may be permitted only after obtaining an order to that effect from this Court. (Pankaj, this interim order refers to the limited mining. While the case was going on Sanghis had mentioned to the court that they were suffering heavy losses. The court permitted them to mine in a compact block of 250 ha. This is to continue).
2. The State Government shall constitute a Committee headed by a retired Judge of the Gujarat High Court and consisting of experts in the fields of hydrology, soil erosion and other related disciplines to make a comprehensive study of the relevant environmental aspects and also to study the effects of the present limited mining operation permitted by this Court. It shall also study the effect of running of the cement plant set up outside the old sanctuary area. The Committee shall, for this purpose, visit the area twice in a year, once before the monsoon and thereafter sometime after the monsoon, and submits its report to the State Government and to this Court.
3. The State Government is restrained from giving permission to others to carry on any mining operation or to put up a cement plant within the area of 10 kms, from the periphery of the old sanctuary area without obtaining an order from this Court. The State Government shall also take steps to monitor air and water pollution in this area every three months through its orders and submit its report in that behalf. After considering the reports the State Government shall take appropriate steps for controlling and improving the same. The State Government shall also submit a yearly report to this Court as regards the action taken by it. This SLP is ordered to be listed after one year for further orders. It will be open to the parties to approach this Court earlier if any clarification or modification of this order is required.

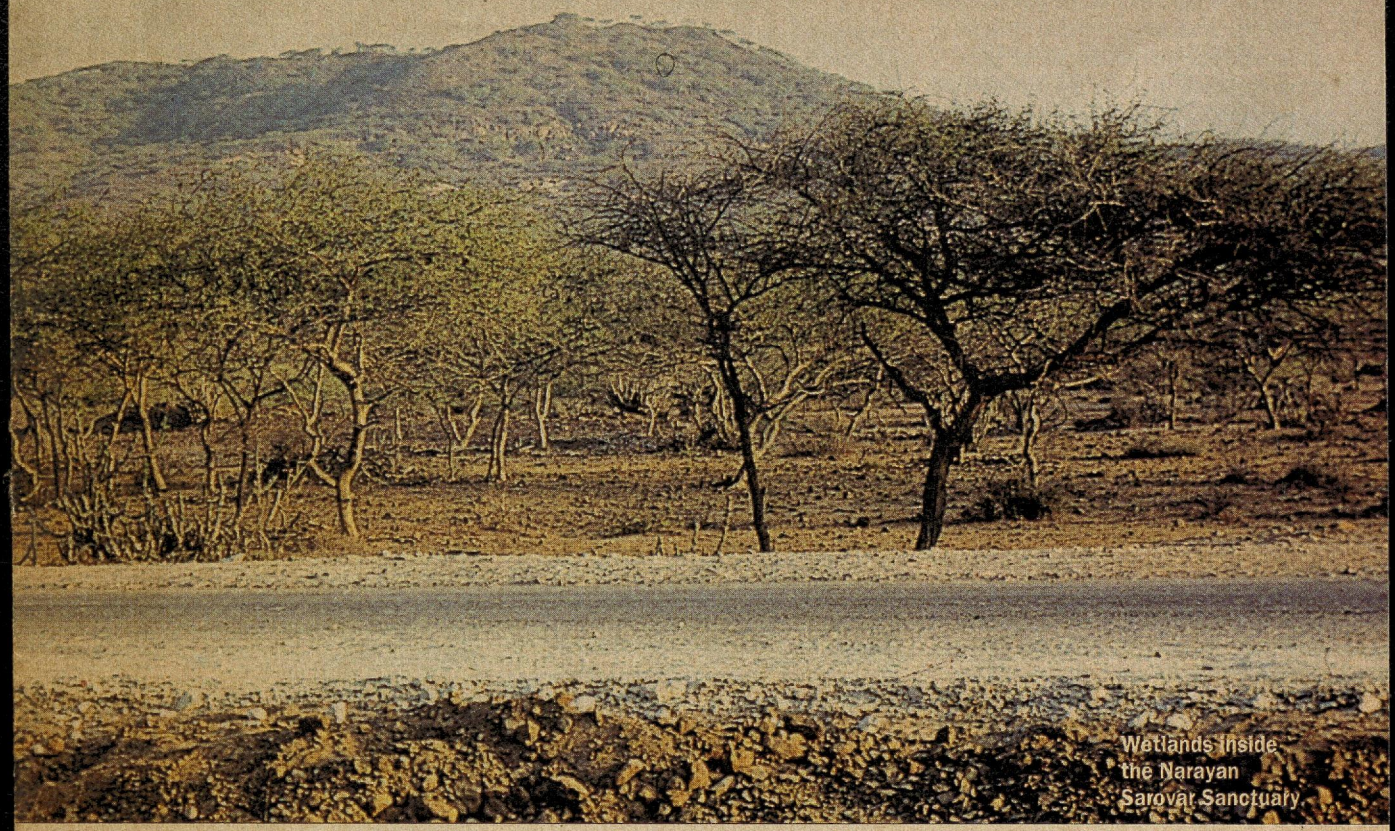
SC permits limited mining in sanctuary

PRESS TRUST OF INDIA
NEW DELHI, FEB 19 IE 20/2/2000

THE Supreme Court has asked the Gujarat Government to set up a high-level committee to study the impact on environment due to limited mining in the reserve forest of Narayan Sarovar Sanctuary, home to about 1200 endangered chinkaras.

A division bench headed by Justice G.T. Nanavati, since retired, also restrained the Government from permitting others to carry out mining operation or to put up cement plant within the area of 10 km from the periphery of the old sanctuary without obtaining orders from the court.

"The State Government shall constitute a committee headed by a retired judge of the Gujarat High Court and consisting of experts in the fields of hydrology, soil erosion and other related disciplines to make a comprehensive study of the relevant environmental aspects and also to study the effects of the present limited mining operations permitted by this court," the bench consisting of Justice Nanavati and Justice S.N. Phukan directed in their recent order.



Wetlands inside the Narayan Sarovar Sanctuary

Striking a balance

A Supreme court order asserts the ecosystem values of the Narayan Sarovar sanctuary in the Kutch region of Gujarat.

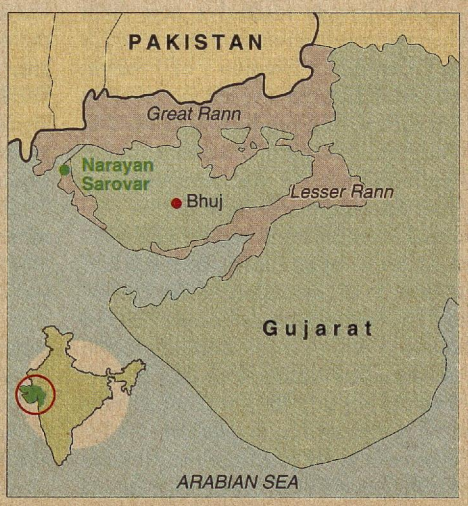
PRITHI NAMBIAR

THE Supreme Court's judgment in February restricting mining in the vicinity of the Narayan Sarovar sanctuary has opened a new chapter in the saga of the sanctuary. The order has significant implications for the nascent and much misunderstood movement for the conservation of natural ecosystems in India.

This arid thorn-forest habitat of the chinkara (Indian gazelle), appearing a gleaming dull white-gold and stretching across vast areas of limestone-embedded soil, had been designated a sanctuary. Narayan Sarovar was the preserve of the last remaining stretches of the thorn forest habitat, although this was not deemed a critical issue. Denotified in July 1993 to allow the mining of limestone, lignite and bauxite and other industrial additives, the Narayan Sarovar area had seemed an ideal location for a cement factory. Accordingly, the country's, arguably even Asia's, largest cement manufacturing unit was planned there.

A notification, which circumvented the legal process prescribed in Section 26 A of the Wildlife Protection Act, was issued by the Gujarat Government at the initiative of Congress(I) Chief Minister Chimanbhai Patel in order to release for industrial use land that was protected by law. Work on the cement plant began, but even as the mineral exploitation of Narayan Sarovar was in progress, the denotification was challenged through a public interest petition. In July 1995, the Gujarat High Court declared the denotification *ultra vires*. Consequently, the State Government was forced to go through the process all over again. Although the Bharatiya Janata Party was now in power in the State, the agenda had not changed. The government led by the party pushed the denotification process through the Assembly, though for the first time there was dissent on the floor of the House as independent members protested against the disregard for conservation that this move reflected.

There were major differences over not only the process of denotification but



in what it actually accomplished. A refixing of the boundaries of the sanctuary in 1993 was evidently intended to leave it in tatters. The total extent of the ribbons of land, which were not even connected to one another, was no more than 94 sq km (the original area was 765.79 sq km). Owing to a long-drawn-out battle between environmentalists and the industry-government combine, which also saw the beginning of a process of discussion on issues that were until then considered non-negotiable, the sanctuary finally came to retain an area of 444 sq km (*Frontline*, September 8, 1995).

Work on the cement factory continued and mining operations began. Dredging of the mangrove areas was carried out in the vicinity of a new port, provoking fresh protests from development organisations based in Bhuj. The Cements Division of Sanghi Industries Limited defended the moves. The local population wavered between acceptance and protest, trying to tread the fine line between two difficult options.

The destruction caused by existing mines in the vicinity of the sanctuary is today clearly visible. Open-cast mining by the state-owned Gujarat Mineral Development Corporation (GMDC) at Panandro has devastated the land and scattered the wildlife. People in favour of mining and industrial development felt that the survival of a "few chinkara" was not significant when seen against human livelihood issues. As opposed to this trivialisation of real concerns, conservationists talked for the first time about the value of the wilderness and the need to conserve the integrity of ecosystems in which the chinkara was a key element. Emphasis was laid both on the non-living elements in the original landscape and the biota it housed.

The struggle reached a new pitch when the construction of a jetty – which the Cements Division of Sanghi Industries Limited needed in order to ship the finished product to markets in West Asia – was given the go-ahead after a petition against it was dismissed by a court. An interim order in May 1997 permitted the company to prospect for limestone in a compact block which will also be close to the boundary of the sanctuary. The company was allowed to extract limestone within a 250-hectare area on condition that the limestone thus extracted would not be sold. The company was asked to furnish a bank guarantee for Rs. 50 lakhs in order to ensure the payment of compensation for any damage caused in the area.

(A spokesperson for Sanghi Industries Ltd from the headquarters of the company in Ranga Reddy district of Andhra Pradesh said in answer to a query that the company is in the process of setting up an export-oriented cement project at Bennoti village and that the project is in an advanced stage of implementation. The cement project, he said, is outside the sanctuary. For its raw material requirements, the company has been allotted a mining lease in Jadwa village, which is in the periphery of the original limits of the Narayan Sarovar sanctuary but outside the present limits, according to the spokesperson.

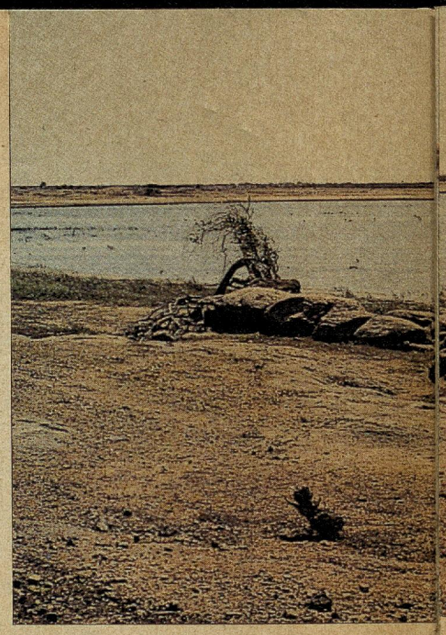
(The company claimed that it would be mining the limestone through the eco-friendly method of ripping. The company said it would implement all environmental safeguards while mining so that the impact of the operations on the surroundings would be negligible. The company plans to undertake extensive plantations in the area which it hopes would help improve the environment. The company said it has planned for efficient air pollution control equipment for the cement plant in order to keep emission levels to the minimum.)

Various expert committees set up by the Gujarat government pronounced their opinion that the movement for the preservation of the environment of the area was a case of much ado about nothing. Some wildlife experts are known to have recorded their dissent on the matter, but the argument that gained ground was that there was not much vegetation or wildlife to protect in Narayan Sarovar. The Supreme Court found that the committees had not considered all the relevant aspects of the issue and a new committee of the Central government was asked to undertake another survey of the original sanctuary area to see if the area had sufficient "ecological, faunal, floral, geomorphological, natural or zoological significance for the purpose of protecting, propagating or developing wildlife and its environment".

The baton was thus passed from committee to committee, all of which relied on the same pool of information, which was admittedly shallow and inadequate. The Central government-appointed committee, chaired by P.K. Sen, visited the area in June 1999 and submitted its report in August 1999. Meanwhile counsel for the Public Interest Legal Support and Research Centre (PILSARC) raised the issue of the need to protect an ecosystem in its entirety, thus broadening the scope of the case filed by the Consumer Education and Research Centre (CERC) in the Supreme Court. "It was a long and strenuous fight," says Rajiv Dhawan of PILSARC. "I used the Environment Protection Act of 1986 to get the court to declare this a protection-worthy eco-zone. The judgment shows that even where there is a regime of permissions and prohibitions established by the government, we – no less the courts – need to look at the ecosystem as a whole."

While the court pointed out that the process of denotification followed the letter of the law and was not contestible in itself, its decision to appoint yet another committee to go into the ecological impact of mining showed that it was interested in doing justice to the spirit of the law. There is very little in terms of scientific documentation of the ecological values of the sanctuary although there are some studies of individual species such as the Houbara bustard carried out by organisations such as the Bombay Natural History Society (BHNS) and the Wildlife Institute of India (WII), which do document the ecological values of the area. In fact, one study of the area by the WII revealed that even parts of the old sanctuary that were excluded from the new notification had high ecological values that merited a reappraisal of the manner and pattern of the denotification.

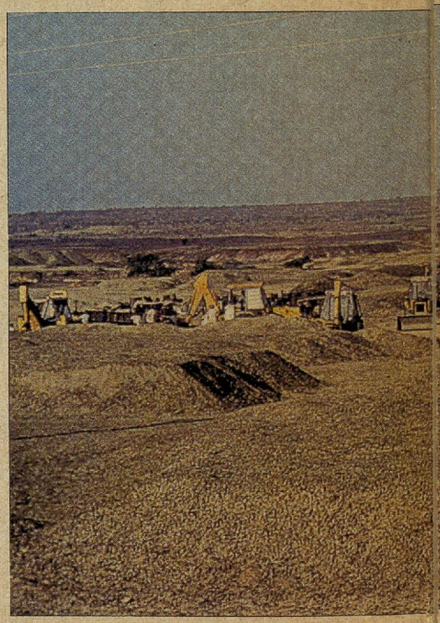
Dr. R.N. Athavale, a senior hydrologist and Director of the National Geophysical Research Institute (NGRI), Hyderabad, which functions under the Council of Scientific and Industrial Research (CSIR), has expressed grave misgivings about the ecological impact of mining in this fragile and arid area. The new monitoring committee is expected to be set up soon with experts including Athavale being nominated by public interest organisations such as the CERC, which have continued to fight the battle for Narayan Sarovar since it was first denotified. K.K. Chhabra, legal adviser to the CERC, in a letter dated March 7, 2000, urged the Chief Secretary of Gujarat to take steps in accordance with the Supreme Court judgment.

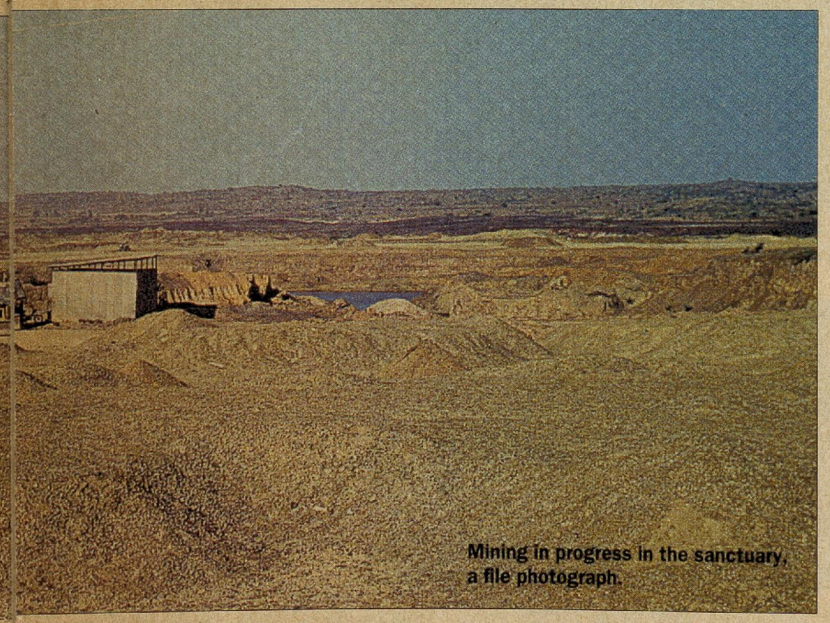




The critical role played by water bodies in the region seem to have been consistently ignored.

MUKESH ACHARYA





Mining in progress in the sanctuary, a file photograph.

The Supreme Court states that the proper course to be adopted in this case is to permit restricted and controlled exploitation of the mineral wealth, watch its effects for about five years and conduct a comprehensive study of the notified and denotified areas from the environmental point of view.

Accordingly, the directives of the court are that mining in the area be restricted to one year while the studies are in progress. Any expansion of the area under mining would require an intervention by the Supreme Court. The court has asked the Government of Gujarat to constitute a committee headed by a retired Judge of the Gujarat High Court and consisting of experts in hydrology, soil erosion and related disciplines to study the relevant environmental issues. The committee is also expected to study the effect of running the cement plant set up outside the old sanctuary area. The court has specified that the committee shall, for this purpose, visit the area twice a year, before and after the monsoon, and submit its report to the State government and to the court.

This is a departure from the general practice of such committees visiting the area in the peak of summer when even rainforests are wont to appear wan – a common ploy used to downgrade the ecological value of the area. The idea of nature being represented only in greenery is hard to understand for people who are aware of the methods and management priorities of conservation attempts at an international level. The Yellowstone National Park in the United States, for instance, protects a largely desert ecosystem. Yet it is protected and has a higher annual conservation budget (close to $100 million) than the sprawling Great Barrier Reef of Australia (under $40 million).

The Government of Gujarat is restrained by the court from allowing other groups to carry on any mining operation or put up a cement plant within 10 km of the periphery of the old sanctuary area without prior clearance from the court. The court has also ordered the State government to monitor the air and water quality in the area every three months and submit a report. After considering the reports the government shall take steps to control and improve the situation. The State government will also submit an annual report to the court on action taken by it. The Gujarat State Pollution Control Board (GPCB) has also been instructed to monitor pollution



MINU SESHSHAYEE





P.C. CADAVI

The arid thorn-forest habitat, home to the Indian gazelle or chinkara. (Inset) A road being built inside the thorn forest, a 1998 picture.

levels in the area every three months.

Understandably, the State government is not too thrilled about the judgment. G.L. Mehta of the CERC says: "The judgment has not been appreciated by the State government. But they will have to act." As monitoring the sanctuary will be a major task, he says that appropriate solutions must be sought.

The current concern centres on the composition of the new committee. An informed source in the State government, who did not want to be identified, said: "The Supreme Court was not satisfied with the previous committees and does not trust the State government to set up competent committees in the future. It therefore insisted that the new committee be headed by a retired Judge of the High Court."

The impact of the judgment on industrial activity in the area is hard to gauge. The CERC, when asked what the implications were for the mining industry, responded with some ambivalence. Mehta said: "Industrialists are not worried about sanctuaries. They are professionals... there are valuable minerals in the sanctuary and nothing can prevent other industries from coming in. The judgment only affects the people of Kutch as people would have expected certain public services when major industries are set up." He added: "While everywhere, industrialists think about the environment, in India industrialists think that environment (protection) is an extra cost. This is wrong. They should also think of preserving the environment."

At the GMDC, the response was understandably mixed. The top management has read the court order as a vindication of the State government's stand. General manager S.V. Vora said: "The judgment is good as it has upheld the decision taken by the State government. It has confirmed the earlier decision to reduce the size of the sanctuary. It is not necessary that mining will be banned. But it will take some extra effort to get permission (from the Supreme Court) for mining." He denied that the Sanghis have abandoned their mining plans. "There is some sort of development near their site," he said.

However, another senior official, who requested anonymity, disapproved of the court order. "The old sanctuary area is full of minerals. Development will be finished. People will be affected. Actually the GMDC is strongly opposed to this judgment. This is green terrorism by environmentalists. The people of Gujarat need to be more aware and raise their voices against these so-called environmentalists. This (order) can affect ceramic, brick, textile and other industries which are lignite-based. As lignite is the cheapest fuel, its use controls production costs. The development of Gujarat will surely suffer. The GMDC is investing Rs. 1,300 crores for the power project which is going to be based on lignite production from the Narayan Sarovar area. The entire lignite area is reserved for the GMDC and this judgment will close down mining. Mining of all other minerals will also be stopped."

Indeed, statistics on the extent of mineral reserves and their location in northwestern Kutch show that a significant part of it will become out of bounds as a consequence of the judgment. Interestingly, the production of lignite peaked at 51 lakh tonnes in 1996-97, the year of the denotification of the sanctuary, and dropped to 49 lakh tonnes the next year. The latest estimate of lignite production is 50 lakh tonnes in 1998-99.

Kanjibhai Patel, Minister for Environment and Forests, and G.A. Patel, Chief Conservator of Forests, Wildlife, Gujarat, both felt that the order was an interim one. They denied that any company was interested in mining in the Narayan Sarovar area and that the Sanghis were mining here. However, the Minister and the official said that there should be a balance between considerations of environment protection and development, as Kutch was a very backward area. The CCF mentioned that in the last few years most protected areas in Gujarat actually registered an increase in the population of many wildlife species as a direct result of the Forest Department's conservation efforts.

A group of gypsies in the sanctuary area.

The emphasis laid on the significance of the sanctuary's old boundaries by the judgment conveys the impression that the court has all but dismantled the denotification of the sanctuary by the State Assembly in 1995 although the court has been careful to point out that the process was legally correct and acceptable.

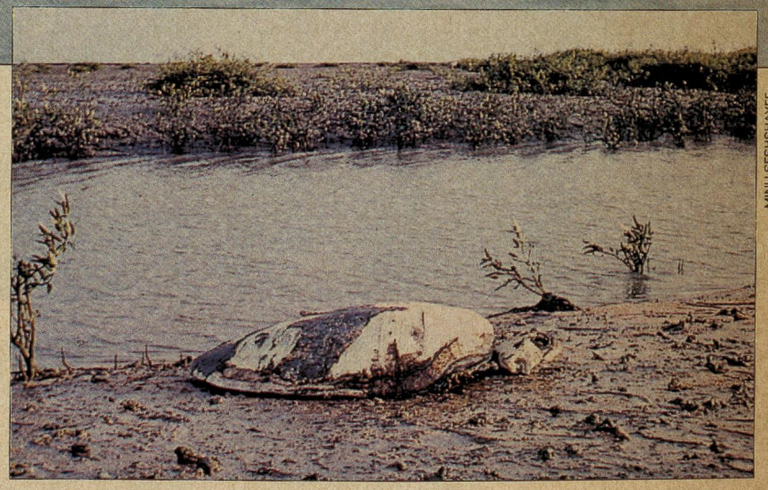
Prof. Manubhai Shah of the CERC says wryly: "Frankly speaking, I am not sure how many people understand the implications of this kind of a judgment where on the face of it it may appear that the CERC has lost the appeal and that the courts are reluctant to interfere in the resolutions passed by the Assembly. The very fact that the committee has to be constituted, that it will supervise the operations and also that the Supreme Court has extended the interim order passed by it on May 8, 1997 under which the Sanghis were required to furnish a bank guarantee for Rs.50 lakhs for the purpose of compensating for the damage caused to the disputed area and meeting the obligations flowing from any order that may be passed later on shows that the judgment is not what it appears to be."

He does not believe that the Sanghis would withdraw from the area, although he agreed that they had incurred heavy losses and may need to reorganise their strategy. On the whole he feels that the efforts of the CERC and other non-governmental organisations have served to establish the tenacity of conservation organisations to carry on their struggle in the courts over long periods and that this will deter industries that wish to disregard the need to ensure that development projects are also ecologically sustainable.

H.S. Singh of the Gujarat Environmental Education and Research (GEER) Foundation says that the judgment "recognises the facts raised by the petition while respecting the decision of the Legislative Assembly. The judgment, he says, mainly seeks to assess the impact of mining and other development works in the area over a period of time so as to develop guidelines on the extent of mining that can be permitted in other areas.



MUKESH ACHARYA



MINU SESHSHAYEE

A bevy of birds inside the Marine National Park. (Inset) The remains of a turtle in the marine park area.

He feels that this has been a step in the right direction. "Although local people, especially tribal communities, will be adversely affected (by the restrictions that conservation programmes bring), in the long term they will also benefit, once conservation programmes are implemented," he said.

H.S. Singh also pointed out that many decisions, however harsh they may be, needed to be made in the interests of sustainable development. He cited the case of the Marine National Park. "Unlike the forest ecosystem, the marine environment is quite different, making many of the provisions of the Indian Forest Act (which was developed with a terrestrial ecosystem in mind) difficult to implement. Special provisions need to be made specifically for such areas." He ruled out the advisability of large-scale industrial development in the Marine Park area, while asserting his belief that "there is a need to provide total protection to Protected Areas as in the prevailing situation, if any scope is provided, it can distort the provision of the court at the cost of the degradation of the sanctuaries and national parks, which is happening in most places in the country." The fact that Protected Areas are too fragile and too few to survive commercial threats is something that decision-makers find difficult to understand in a situation where development needs clamour for attention and resources are limited and increasingly scarce.

Sandeep Virmani of the Bhuj-based Forum for Planned Industrialisation of Kutch (FPIK) said: "We have been of the view that the sanctuary's boundaries should have been altered to include in it all good grasslands, as these are so important for animal breeding and wildlife in the region." He cites a recent survey by Sahjeevan, which revealed that just the bullock trade (excluding buffaloes, each of which commands a sale price of Rs.20,000) of 38 small villages in Kutch this year was worth Rs.1.5 crores. Looking at the obvious economic value and income-generating potential of these animals that are bred in the endangered grasslands of Kutch, Virmani added that the judgment would have done better if it devolved more powers to local institutions and civic society rather than merely added to the executive responsibilities of the judiciary. He pointed out that the new judgment did not examine the critical role played by the rivers in the region – a factor ignored by both the old and new sanctuary limits. Virmani said that the river-bank ecosystems and the West Mangrove Reserve Forest, into which the rivers drain, needed to be considered as they would be affected by mining in the area.

The FPIK voices the concerns of the people of Bhuj regarding the ultimate impact of the Supreme Court order. "It almost seems that the court agreed that the Assembly took the decision to reduce the size of the sanctuary without a proper assessment of its consequences but decided not to overrule it... giving the old boundary a somewhat quasi-reserved status. But, in our opinion, this was a wrong decision as the court has no mechanism of following up such a judgment efficiently. It was a wrong decision because the courts are again wanting to play an executive function, thereby not placing faith in the Environment Ministry."

A stronger governing role for the Environment Ministry would provoke a reaction from the bureaucracy, which must contend with the conflict of interest between the conservation concerns promoted by the Ministry and the commercial interests that operate at the State level. The failure of the higher-ups to protect and reward courageous and dedicated officers has further affected the efforts to conserve Protected Areas and their resources. Informed sources, who do not wish to be named, are unequivocal about the plight of some dedicated officers who have worked for conservation in the State. One such source said: "Everyone knows that some bureaucrats and politicians adopt unprofessional and unethical approaches to facilitate the use of resources within protected areas. Owing to the erosion of ethical values in society, upright, sincere and hardworking officers are sidelined..."

However, Virmani, who argued for the empowerment of the Environment Ministry, points out that the Ministry needs to change its tactics in order to become more effective. "The Ministry needs to be far more democratic and involve civic society in decision-making and play only a governing role itself. The court could have bound the Ministry to the decisions of a committee – that must have local people on it besides experts – by which the companies need to get their Environment Impact Assessments (EIA) approved. By merely adding a new mechanism for approval they will only succeed in increasing red tape and corruption and not in safeguarding the sanctuary and its environment."

Kartikeya Sarabhai, Director of the Centre for Environment Education (CEE) Ahmedabad, says: "The real need of the hour is for a local initiative that will amalgamate stakeholder interests through a multisectoral approach that looks at conservation in the context of sustainable development. We are currently working at an ecosystem-based approach to integrating development and conservation concerns in the fragile area of Kutch where natural and cultural parameters must govern the choice of development patterns." This initiative will bring together experts from all related sectors and from a variety of organisations to pool their expertise and present a set of development approaches for the region. "It should ideally set the stage for a process of informed debate on what kind of development solutions would be appropriate for Kutch," says Sarabhai.

REGARDLESS of the degree to which the latest Supreme Court order has satisfied conservationists, there is no denying the fact that the process of general enlightenment has begun. The order says: "The Forest in the notified and denotified areas is an edaphic thorn forest. It has been designated as a potential site for a biosphere reserve by an expert committee constituted by the Ministry of Environment and Forests. It has been put in the 'Rich Area category' from the biodiversity point of view by the Gujarat Ecology Commission. Even the Union of India in its affidavit has stated that the denotified area includes many areas of high and very high floral and faunal value..." It further spelt out the need to "balance the environment with the need of economic development and forgo prohibition for the safer principles of 'protection' and 'polluter pays' while keeping in mind the principle of sustainable development and the principle of intergeneration equity." Clearly, by taking this principled stand the court hopes to serve conservation interests in a more informed way although the manner in which it seeks to accomplish this objective is considered questionable in certain quarters.



MUKESH ACHARYA

The marine park represents a fragile ecosystem that needs special protection.

This development, by and large, should come as a relief to environmental educators, who have been trying to explain the concept of ecosystem health to a seemingly uncomprehending set of movers and shakers who include policy-makers and, as events have revealed, even the occasional high-profile environmentalist. The Supreme Court has issued a series of directives/interim orders that interpret rightly the spirit of the laws that uphold the conservation of biodiversity. It is now incumbent on the government machinery to carry out the orders and directives. An earlier judgment prevents the removal of dead, dying and diseased trees, grass and other forest produce from Protected Areas, which was recommended for years by environmental educators such as Lavkumar Khacchar of Gujarat.

The implications of this judgment could spell trouble for industry prospecting in the vicinity of Protected Areas anywhere in the country. The Marine National Park is one such area. Somehow the unthinkable is happening. The court is laying down the beginnings of a tougher interpretation of the law on conservation of natural ecosystems, one that is as controversial and unpopular as it is progressive. The process is expected to throw up some guidelines on the difficult task of maintaining an apparent balance between conservation and development and will also hopefully generate a much-needed database of information for future decision-making. Despite the sugar-coating on the apparent acceptance of the validity of the denotification of 1995, the Supreme Court would appear to have actually reinstated the old boundaries of the sanctuary, thereby administering a pill that will be rather bitter for the government of Gujarat to swallow. The fact remains that those in search of the mineral riches of Narayan Sarovar will now need to contend with the watchful eye of the Supreme Court – rather like that of the mythical serpent that sits alert, the shadow of its raised hood protecting ancient treasures that belong to the earth. ■

Prithi Nambiar, a development economist by training, is Programme Coordinator, Media Initiatives for Sustainable Development, at the Centre for Environment Education, Ahmedabad.

Census 2000: Counting the mistakes in the form

WILLIAM SAFIRE

TEN years ago this week, I received in the mail a census form that began, "Please use a black lead pencil only." Naturally, I objected to the loose placement of the *only*, preferring "use only a black lead pencil" or the even more direct and simple "use a black lead pencil."

This year, reflecting the leap forward in technology, the U.S. Census 2000 says, "Please use a black or blue pen." I have a blue pen that writes with black ink; I suppose that's OK. But I also have a black pen that writes with red ink; is that impermissible?

The clear intent is "use black or blue ink." But if the Bureau of the Census, conscious of literal correctness, wrote those words, millions of people unfamiliar with the details of writing instruments would respond: "I don't use ink; I use a ballpoint pen. Does this mean I have to fill this out with a fountain pen? There'll be big inkblots all over the form. What do they want from my life?"

Therefore, I give the census-form-writers a little leeway. In return, they try not to make the same mistakes twice. The 1990 form concluded with the admonition "Make sure you have... filled this form completely," and I complained that it was possible to fill *in* or fill *out* a form, but not to simply fill a form, because a form is not a bucket.

In the 2000 form, the error is averted by the adoption of the "Thank you for not smoking" trick: "Thank you for completing your official U.S. Census form." It seems friendlier and is not subject to attack by nit-pickers in this space.

However, our intrepid people-counters cannot be counted on for the correct use of commas. Turning to the first question in the long form, and aided by my fellow nit-picker Jeff McQuain, we read "people staying here on April 1, 2000 who have no other permanent place to stay..." If a date in mid-sentence uses a comma, then another comma must follow the year: "on April 1, 2000, who..."

Our intrepid people-counters cannot be counted on for the correct use of commas.

Later, the form directs, "Start with the person, or one of the people living here who owns..." This cries out for a balancing comma: "person, or one of the people living here, who owns..." Better still, forget the commas in that sentence entirely: "Start with the person or one of the people living here who owns..." Use two commas to separate the phrase or no commas if it does not need separation.

This comedy of commas continues with "What is this person's age and what is this person's date of birth?" The two independent clauses call for separation by a comma after "age." (An even better fix is to obviate the need for a comma by shortening it to "What are this person's age and date of birth?")

And the form-writers are tensed up. Right at the start, the past tense is used in "How many people *were* living or staying in this house... on April 1, 2000?" Then the tense is switched to the present with instruction to include them "even if they *have* another place to live." Gotta be this or that: *are* and *have* or *were* and *had*.

THE Parallel Construction Workers Union should file a grievance about the way a question about occupation is phrased: "patient care, directing hiring policies, supervising order clerks, repairing automobiles, reconciling financial records" are the examples given. The last four of those listed begin with gerunds; why, then, does "patient care" have no "ing"? To be in proper parallel, it should be "caring for patients."

At least that was a series of examples not masquerading as a sentence; correctly, with no verb, no period was placed at the end. However, in what is called the ancestry question (more precisely the lineage question), we read "Italian, Jamaican, African Am., Cambodian,... Taiwanese, Ukrainian, and so on." The "and so on" tries to make it all-inclusive, but there is no verb to make it a sentence – and yet in this instance a period is put at the end. No style is followed. And why, when no other group is followed by "Am.," is "African" so designated – and without a hyphen to boot?

Hats off to the writers for sticking to past practice in identifying aboriginal Americans as "American Indians" and not the confusing "Native Americans." That last could mean anyone born in America, in contrast to "Naturalized Americans," citizens born elsewhere. Past designations as Eskimo and Aleut are now lumped together as "Alaska Native."

Thus, the sensitive question of "What is this person's race?" has three main categories: the above "American Indian or Alaska Native," which follows "white," and three choices of names for the other – "Black, African Am., or Negro."

The Census Bureau explains that the terminology changes with each generation and that "Negro" was put in so that older members of the group would not feel outdated. What about whites from South Africa? I presume the form presumes that they will choose to describe themselves as white. In a triumph of inclusive self-differentiation, 11 other racial groups are listed, from "Asian Indian" to "Samoan," with blank space left for anyone to write in "Some other race."

LANGUAGE has its limitations. In the question about relationships, the form includes, among others, "Husband/wife, Natural-born son/daughter, Adopted son/daughter." That "Natural-born" seems awkward; obviously it is there to distinguish between what the Bible colourfully called "the fruit of one's loins" and an adopted child. But with artificial insemination and test-tube babies in the mix, what is natural and what is not?

The delicious bureaucratic euphemism "POSSLQ" is gone. "Persons of the Opposite Sex Sharing Living Quarters," which appeared in the 1990 census, has been replaced by two categories: "Housemate/Roommate," who shares living quarters "primarily to share expenses," and the new "Unmarried Partner."

Says the bureau: "Mark the 'Unmarried Partner' box if the person is not related to Person 1, shares living quarters, and who (*who* should be dropped) has a close personal relationship with Person 1."

Prediction: In the 2010 census, this last category will be listed as "Lovers." Also, the form-writers will be warier about their use and abuse of commas. ■

New York Times Service

Bombay Natural History Society

Founded 1883

PATRON
SHRI K. R. NARAYANAN
PRESIDENT OF INDIA

PRESIDENT
B. G. DESHMUKH
I. A. S. (Retd.)

PS/NV/NP
Pl. see
Why are Court judgements so unreadable? Any ideas?

SPEED POST

Ref:3004/2000

Mr. Ashish Kothari
Apartment No. 5, Sri Dutta Kripa
908, Deccan Gymkhana
Pune – 411 004
Maharashtra

July 14, 2000

Dear Ashish,

Please find enclosed the judgement of the Hon'ble Gujarat High Court regarding the Narayansarovar Chinkara Sanctuary. I have also enclosed the e-mail correspondence regarding the Ghatigaon sanctuary which you had left with me. My apologies I could not hand them over to you on Saturday.

Thanking you,

Yours sincerely,

Asad Akhtar

S. Asad Akhtar
Conservation Officer

Encl: a\a.

Hornbill House, Dr. Sálim Ali Chowk, Shaheed Bhagat Singh Road, Mumbai - 400 023
Tel.: 282 1811 • Fax: (91 - 22) 283 7615 • Gram: HORNBILL
E-mail Numbers - Office: bnhs@bom4.vsnl.net.in
Director: bnhs@bom3.vsnl.net.in

In the High Court of Gujarat
Ahmedabad

Special ~~Misc.~~ Civil Application (313) 1993

1. Consumer Education and Research Society
"Suraksha Sankool"
Thaltej
Ahmedabad Gandhinagar Highway
Ahmedabad - 380054 ... Petitioner

vs.

1. Union of India
Through Secretary
Ministry of Environment & Forests
Govt. of India
7 Tgo. Road
New Delhi 110011 ... Respondent No. 1

2. The State of Gujarat
Further notice to be served
through the Secretary Department of Forests
Gujarat Government, Sachivalaya
Gandhinagar ... Respondent No. 2
[illegible]
[illegible]

In the matter of articles 48 A read with article 51 A (g) of the Constitution of India

and

In the matter of Wild Life (Protection Act 1972 and 1991)

and

In the matter of writ petition under Article 226 of the Constitution of India

To the Hon'ble Chief Justice and his Hon'ble Companion Judges in the High Court of Gujarat

This humble petition of the above named petitioners

Most Respectfully Sheweth :

1. Consumer Education and Research Society (CERS), is a registered Society under the Societies Registration Act (XXI) of 1860. It is also a public charitable trust under the Bombay Public Trusts Act. The Society was registered on 15th

(Gr. Shri Ram Sanghi Managing Director M/s. Sanghi Cement Ltd. Sanghi Nagar 50511 (Respondent No. 3 & 4) are joined as per order dt 25/11/94 Passed in CA/10 [illegible]

IN THE HIGH COURT OF GUJARAT

AT AHMEDABAD

SPECIAL CIVIL APPLICATION _____ 1994

(UNDER ART. 226 OF THE CONSTITUTION OF INDIA)

IN THE MATTER OF:

1. Centre for Environmental Law,
World Wide Fund for Nature-India
172-B, Lodi Estate,
NEW DELHI 110003. Petitioner

VERSUS

1. Union of India
Through Secretary
Ministry of Environment and Forests
Government of India
Paryavaran Bhavan, Lodi Road,
New Delhi - 110 003 Respondent No.1

2. The State of Gujarat
Further notice to be served
through the Secretary Department of Forests
Gujarat Government, Sachivalaya
Gandhinagar Respondent No. 2

In the matter of articles 48A read with article 51 A(g) of the Constitution of India.

and

In the matter of Wild Life (Protection) Act, 1972 and 1991

and

In the matter of writ petition under Article 226 of the Constitution of India.

(3) M/s Sanghi Cement Ltd.
having their registered office at
Sanghi Nagar - 501 151 R & R District (A.P.)

(4) Shri Ravi Sanghi.
Managing Director, M/s. Sanghi Cement Ltd,
Sanghi Nagar - 501511, R & R DISTRICT,
Andhra Pradesh, India.
(Joint R.Nos. 3 & 4 as per Court's order dtd. 25-11-94 in CA 2463/94)

16/1/95

IN THE HIGH COURT OF GUJARAT, AHMEDABAD

Dist: Ahmedabad

Letters Patent Appeal No. 197 /1994

IN THE MATTER OF

Special Civil Application No.1339/1993

Consumer Education and Research Society
Suraksha Sankool
Ahmedabad-Gandhinagar Highway
Thaltej
Ahmedabad - 380 054

... Appellant
(Orig. Petitioner)

Vs.

1. Union of India
Through Secretary
Ministry of Environment & Forests
Govt of India
7, Thumlak Road
New Delhi 110 011.

2. The State of Gujarat
Further notice to be served
through, The Secretary Department of Forests
Gujarat Government
Sachivalaya
Gandhinagar

... Opponents
(Orig. Respondents)

22nd/24th March, 1995

Special Civil Applications Nos. 13139 of 1993
and 6061 of 1994 and
Letters Patent Appeal No. 197 of 1994.
//////////////
.....

The Honourable the Chief Justice Mr.B.N. Kirpal.

AND

The Honourable Mr.Justice H.L. Gokhale.

1
2
3
4
5

Consumer Education and Research Society. :: Petitioner

Versus

The Union of India and others. :: Respondents.

Special Civil Application No.13139 of 1993 :-

Mr.K.H. Baxi, Advocate, for the Petitioner.

Mr.H.M. Mehta, Senior Central Government Standing Counsel, for respondent No.1.

Mr.J.M. Thakore, Advocate General, with Mr.A.M. Panchal, AGP, for respondent No.2.

Mr.V.B. Patel, Advocate, for respondent No.3.

.....2/-

Special Civil Application NO.6051 of 1994 :-

Mr.Raj Panchwani, Advocate, with Mr.Pramal D. Shah, Advocate, for the petitioner.

Mr.H.M. Mehta, Senior Central Government Standing Counsel, for respondent No.1.

Mr.A.M. Panchal, A.G.P., for respondent No.2.

Mr.V.B. Patel, Advocate, with Mr.D.G. Chauhan, Advocate, for respondents Nos. 3 and 4.

Letters Patent Appeal No.197 of 1994 :-

Mr.K.H. Bari, Advocate, for the appellant.

Mr.H.M. Mehta, Senior Central Government Standing Counsel, for respondent No.1.

Mr.J.M. Thakore, Advocate General, with Mr.A.M. Panchal, A.G.P., for respondent No.2.

Mr.V.D. Patel, Advocate, with Mr.D.G. Chauhan, Advocate, and Mr.Deepak Patel, Advocate, for respondents Nos. 3 and 4.

.....2/-

Coram : B.N. Kirpal, C.J. & M.L. Gokhale, J.

(22nd-24th March, 2995)

Oral Judgment : (Per B.N. Kirpal, C.J.)

The challenge in these three petitions is to the validity of the Notification issued by the State of Gujarat, which had the effect of cancelling the earlier Notification, under which a Wildlife Sanctuary had been established under the Wildlife (Protection) Act, 1972.

The facts of the case lie in a narrow compass. The aforesaid Wildlife (Protection) Act, 1972 (hereinafter referred to as "The Said Act") was enacted by the Parliament and it came into operation on 9th of September, 1972. The said Act was extended to the State of Gujarat on 1st of February, 1973. On 14th of April, 1981, a Notification was issued by the State of Gujarat, whereby 765.79 sq. kilometers of land in Lakhpat Taluka of Kutch District was declared as a Wildlife Sanctuary under Section 18(1) of the said Act. The sanctuary is more commonly known as the "Narayan Sarovar Sanctuary". The declaration of the sanctuary was to be by a Notification and Section 21 of the Act required the Notification to be published in the regional language in every town and village in or in the neighbourhood of the area comprised therein, and by virtue of the provisions of Section 20, no person could acquire any right in any of the lands which form part of the sanctuary. The operative part of the aforesaid Notification is as follows :-

> "... Whereas it appears to the Government of Gujarat that the area limits of which are defined in the Schedule annexed hereto, is of adequate ecological, faunal, floral, geomorphological, natural, or zoological significance for the purpose of protecting, propagating and developing wild life and environment;
>
> Now, therefore, in exercise of the powers conferred by section 18(1) of the Wild Life (Protection) Act, 1972 (53 of 1972), the Governor of Gujarat hereby declares the entire area in Lakhpat taluka falling in Kachchh District specified in the schedule annexed hereto as a "Wild Life Sanctuary!..."

The Notification also includes a Schedule and mentions to mark as "the limits of the area intended to be declared as Wild Life Sanctuary." There is then a list containing the names of villages and boundaries thereof, which are included in the proposed Sanctuary in the said Taluka of Lakhpat.

The Parliament passed The Wild Life (Protection) Amendment Act, 1991 on 20th of September, 1991 and it came into force on 2nd of October, 1991. Some important provisions of the Act were amended, to which we shall revert to presently. Thereafter, on 27th of July, 1993, two Notifications were issued by the State of Gujarat. By the first Notification No.GVH-10(08)-WLP/1092/2156/V2, it was provided as follows :-

> " ... The Government had declared a Wildlife Sanctuary in the Lakhpat Taluka of Kutch District, vide Agriculture, Forests and Co-operation Department's Notification No.AKH/62/01/WLP/1080/[illegible]072/P2, dated 24th April, 1981. The area of this Sanctuary is 765.70 sq. Kilometers. Since this area is substantially in excess of the requirements of the Sanctuary, in exercise of powers conferred by Section 38 of the Wildlife (Protection) Act, 1972 read with Section 21 of the General Clauses Act, the Government of Gujarat hereby cancels the Agriculture, Forests and Co-operation Department's Notification No.AKH/62/01/WLP/1080/[illegible]072/P2, dated 24th April, 1981...."

Simultaneously, another Notification of the same date was issued which is as follows :-

> " No.GVH-17(08)-WLP/1092-2156-V2.- Whereas it appears to the Government of Gujarat that the area, the limits of which are defined in the Schedule annexed hereto is of adequate ecological, faunal, floral, geomorphological, natural or zoological significance for the purpose of protecting, propagating and developing wildlife and environment.
>
> Now, therefore, in exercise of powers conferred by Section 26-A(1)(b) of the Wildlife (Protection) Act, 1972, Government of Gujarat hereby declares the Reserve forest area specified in Schedule I annexed hereto, as the Chinkara Wild Life Sanctuary from the date of this [illegible]

The schedule to the second Notification listed the villages which are now included in the new Chinkara Wildlife Sanctuary in Lakhpat Taluka.

The effect of the said Notifications, viz., the Notification of 1981, and two Notifications of 27th July, 1993, was that by the first Notification, a wildlife sanctuary was established, having a total area of 725.72 sq. kilometers. By the second Notification, the earlier Notification of 1981 was cancelled and, as a result, the said sanctuary ceased to exist with effect from that date. A new sanctuary came into existence in the Reserve forest area, which is specified in the last Notification and the area of this new Chinkara Wildlife Sanctuary was only 94.37 sq. kilometers.

Two petitions have been filed by separate organisations, viz., the Consumer Education and Research Society (Petitioner in Special Civil Application No.13139 of 1993) and the Centre for Environmental Law (Petitioner in Special Civil Application No.6031 of 1994). Letters Patent Appeal No.197 of 1994 is filed by the Consumer Education and Research Society from the order of a learned single Judge declining interim relief in Special Civil Application No.13139 of 1993. These petitioners have sought to challenge the Notification of 27th July, 1993, purportedly issued under Section 13 of the Act, read with Section 21 of the General Clauses Act, which had the effect of cancelling the first Notification, whereby the Narayan Sarovar Sanctuary was established. The only ground, which has been agitated before us for challenging this Notification is that the State Government has no jurisdiction to issue such a Notification and the boundary of a Sanctuary could only be altered by a Resolution of the Vidhan Sabha. It is further alleged by the petitioners that they have the locus standi to file the present writ petitions and the action of the respondents in issuing the impugned Notification is not only violative of Section 25-A(3) of the said Act, but the same also infringes Articles 14 and 21 of the Constitution.

On behalf of the respondents, it has been contended that the Government had the power and the jurisdiction to cancel the Notification which has been issued in 1981. The source of this power of cancellation is traced to Section 21 of the General Clauses Act. On behalf of the respondent No.3, which is the Company in whose favour a mining lease for quarrying limestone and for setting up a cement factory is sought to be granted, it has been contended that there was, in fact, no valid declaration of Narayan Sarovar Sanctuary under Section 13 of [illegible] not be regarded as a public [illegible] locus standi to file the present writ [illegible]

In order to appreciate the rival contentions, it is first necessary to refer to the relevent provisions of law.

The Wildlife (Protection) Act, 1972 was enacted with the object to provide for the protection of wild animals and birds and for matters connected therewith. Chapter IV of the said Act deals with Sanctuaries, National Parks, Game Reserves, and Closed Areas. 'Sanctuary' was defined in Section 2(26), before it was amended in 1991, as follows :-

> "2. ... In this Act, unless the context otherwise requires
> ...
> (26) "Sanctuary" means an area declared, whether under Sec.18 or Sec. 38, or deemed, under sub-section (3) of Sec. 66, to be declared, as a wildlife sanctuary;"

Section 18 provided for declaration of a sanctuary and the said Section, before it was amended in 1991, was as follows :-

> " 10.Declaration of Sanctuary
>
> (1) The State Government may, by notification, declare any area to be a sanctuary if it considers that such area is of adequate ecological, faunal, floral, geomorphological, natural, or zoological significance, for the purpose of protecting, propagating wildlife or its environment.
>
> (2) The notification referred to in sub-section (1) shall specify, as nearly as possible, the situation and limits of such area.
>
> Explanation.-For the purposes of this Section, it shall be sufficient to describe the area by roads, rivers, ridges, or other well-known or readily intelligible boundaries."

The effect of the declaration under Section 10 was that the sanctuary came into existence the moment the Notification was issued. Being conscious of the fact that some persons may be having rights over the areas which have now been declared to be sanctuary, Section 19 required the Collector to inquire into and determine the existence, nature, and extent of the "rights of any person in or over the land comprised within the limits of the sanctuary". In order to enable him to do so, the claims could be filed within the specified period before him under Section 21(b) and after the inquiry was made, the Collector could pass orders under Section 24, which reads as follows :-

"24. Acquisition of rights

(1) In the case of a claim to a right in or over any land referred to in Sec. 19, the Collector shall pass an order admitting or rejecting the same in whole or in part.

(2) If such claim is admitted in whole or in part, the Collector may either

(a) exclude such land from the limits of the proposed sanctuary, or

(b) proceed to acquire such land or rights, except where by an agreement between the owner of such land or the holder of rights and the Government the owner or holder of such rights has agreed to surrender his rights to the Government, in or over such land, and on payment of such compensation, as is provided in the Land Acquisition Act, 1894 (1 of 1894)."

Section 25 gave the power to the Collector to acquire land, but we are not concerned with that provision in this case.

The combined effect of all these provisions was that the Notification declaring the Sanctuary was final unless and until it was altered by an order of the Collector under Section 24(2) of the Act. Before the declaration was issued, no opportunity of making any claim was required to be given to any person and Section 18 was so worded that any area, whether it be land or a mass of water, forest area or non-forest area, could be declared to be a sanctuary.

The declaration of a sanctuary led to certain restrictions, with which we are not concerned.

Some important changes were made in the Act with its amendment in 1991. Possibly, these amendments were incorporated in consequence of the incorporation of Article 48A and Article 51A in the Constitution and also keeping in view the fact that no hearing was being given to any affected party before any area was included in a sanctuary.

Two important amendments which were made in the Act were the substitution of sub-section (1) of Section 18 and the enactment of a new section, being Section 26A. The amended Section 18 and the said Section 26A read as follows :-

" 18. Declaration of Sanctuary

(1) The State Government may, by notification declare its intention to constitute any area other than area comprised with any reserve forest or territorial waters as a sanctuary if it considers that such area is of adequate ecological, faunal, floral, geomorphological, natural or zoological significance, for the purpose of protecting, propagating or developing wildlife or its environment.

(2) The Notification referred to in sub-section (1) shall specify, as nearly as possible, the situation and limits of such area.

Explanation

For the purposes of this Section, it shall be sufficient to describe the area by roads, rivers, ridges, or other well-known or readily intelligible boundaries."

" 26-A Declaration of area as Sanctuary

(1) When-

(a) a notification has been issued under Sec.18 and the period for preferring claim has elapsed, and all claims, if any, made in relation to any land in an area intended to be declared as a sanctuary, have been disposed of by the State Government, or

(b) any area comprised within any reserve forest or any part of the territorial waters, which is considered by the State Government to be of adequate ecological, faunal, floral, geomorphological, natural or zoological significance for the purpose of protecting, propagating or developing wildlife or its environment, is to be included in a sanctuary,

the State Government shall [illegible] a notification specifying the limits of the area which shall [illegible] the sanctuary and declare that the said area shall be a sanctuary on and from such date as may be specified in the notification.

Provided that where any part of the territorial waters is

to be so included, prior concurrence of the Central Government shall be obtained by the State Government.

Provided further that the limits of the area of the territorial waters to be included in the sanctuary shall be determined in consultation with the Chief Naval Hydrographer of the Central Government and after taking adequate measures to protect the occupational interests of the local fishermen.

(2) Notwithstanding anything contained in sub-section (1), the right of innocent passage of any vessel or boat through the territorial water shall not be affected by the notification issued under sub-section (1).

(3) No alteration of the boundaries of a sanctuary shall be made except on a resolution passed by the Legislature of the State."

It is only with the incorporation of the amending Act that there is a reference to forest area, including a reserve forest in the Wildlife (Protection) Act. Along with this, Section 2(26) was also amended and the new definition of the word 'Sanctuary" is as follows :-

" 2. ...

In this Act, unless the context otherwise requires

... ...

(26) "sanctuary" means an area declared whether under Sec. 26(A) or Sec.38, or deemed, under sub section (3) of Sec. 66, to be declared, as a wildlife sanctuary;"

The effect of this new definition is that there is no reference to Section 18, but there is a reference to Section 26(A).

With the insertion of new sub-section (1) of Section 18 as well as Section 26-A, the scheme of Chapter IV has undergone a major change. Whereas under the unamended Section 18, the declaration of a sanctuary was final, unless modification takes place by an order under Section 24(2), under the new sub-section (1) of Section 18, the Notification of the State Government is merely a declaration of its intent to constitute any area as a sanctuary. This area, with respect to which the Notification is to be issued, is to be an area which is other than any reserve forest or territorial water. To put it differently, sub-section (1) of Section [illegible]

not apply to reserve forest areas or territorial waters and the State Government could issue a Notification under Section 18(1) with regard to other areas. This Notification under Section 18(1) can be regarded as being similar or akin to a Notification under Section 4 of the Land Acquisition Act. After the Notification is published or proclaimed in the manner specified in Section 21, the Collector is required to go into any claim which may be made with regard to the rights of any person for the land, which is proposed to be incorporated in the limits of the sanctuary. In determining the said claims, the Collector, by virtue of Section 23, has the same powers as are vested in a civil court in trial of a suit and after the claims are decided, a declaration of an area as a sanctuary is made under Section 26A(1). It is because the declaration of an area as sanctuary is made under Section 26A(1) that the Legislature amended Section 2(26), which defines the word 'sanctuary', and in place of Section 18, reference is made in Section 2(26) to Section 26A.

Taking advantage of the deletion of the words 'Section 18' and the incorporation of the words 'Section 26(A)' in the definition of the word 'sanctuary' in Section 2(26) of the said Act, it has been contended by the Advocate General and Mr.V.B. Patel that the provisions of the newly added sub-section (3) of Section 26A would not apply to a sanctuary, which is declared as one under the unamended Section 18.

Section 26A, apart from providing for declaration of a sanctuary under sub-section (1), makes a provision, under sub-section (3), to the effect that there shall be no alteration of the boundaries of a sanctuary except under Resolution passed under the Legislature of the State. It may here be noticed that in the original bill, which was drafted for amending the Wildlife (Protection) Act, there was no clause in the Bill corresponding to sub-section (3) of Section 26A. It was only during the course of the debate in the Rajya Sabha that, at the instance of one Member of Parliament Shri Pachhori, an amendment was moved and sub-section (3) of Section 26A was incorporated. It has been contended 10/-

by the learned counsels for the petitioners that this sub-section has an independent existence and it cannot be restricted to a sanctuary, which is declared as such under Section 26A(1).

Sub-section (3) of Section 26A uses the words 'a sanctuary'. This sub-section does not state that it will apply to a sanctuary, which is declared as such only under Section 26A. There are no words limiting the operation of the words 'a sanctuary'. The said sub-section is clear and unambiguous, which provides that it is only the State Legislature which can alter the boundaries of a Sanctuary. This provision is similar to Section 35(5), which provides that there can be no alteration of the boundaries of a National Park except by a resolution passed by the State Legislature and Section 38, which makes the provisions of Sections 18 to 35 applicable to Sanctuaries or National Parks, which are declared by the Central Government and which provides that reference to the State Legislature should be construed as reference to Parliament. The effect of this Section 38 is that with relation to Sanctuaries or National Parks declared by the Central Government by virtue of Section 26A(3) and Section 35(5), it is only the Parliament which can alter the boundaries of a sanctuary declared as such by the Central Government.

Prior to its amendment in 1991, Section 2(28) defined a 'sanctuary' as meaning an area which was declared as such whether under Section 18 or Section 38 or deemed, under sub-section (3) of Section 66. Section 66(3) provided that an area, which is deemed to have been declared as a Sanctuary or a National Park under any Act, which was repealed by the Wildlife (Protection) Act, 1972 shall be deemed to be a Sanctuary or a National Park under this Act. While amending Section 2(28), instead of incorporating the words "Section 26(A)", what has been done is that the words "Section 18" have been substituted by the words "Section 26(A)". It is because of this substitution that a contention has been raised by the said learned counsels for some of the respondents that sub-section (3) of Section 26A will not apply to a sanctuary which was declared as such under Section 18.

When Section 26A will apply to even a deemed Sanctuary, viz., a sanctuary which had been declared as such under an Act which was repealed by the 1972 Act, in addition to the sanctuary declared under Section 26A or Section 30A, it would not be logical or would not stand to reason that the said sub-section (3) of Section 26A would not apply to a sanctuary declared as such under the unamended Section 18 of the present Act. The said Section 2 begins with the words "... In this Act, unless the context otherwise requires...." and then, inter alia, defines the word 'sanctuary'. The Wildlife (Protection) Act, 1972 contains various provisions applicable to sanctuaries, like Section 23, dealing with restriction on entry in sanctuary, Section 29 which provides for prohibition of destroying wildlife etc. in the sanctuary and it cannot be that because of the amendment to Section 2(25), the restrictions contained in the Wildlife (Protection) Act, 1972, will apply to deemed sanctuaries under Section 66(3), as well as sanctuaries declared as such under Section 26A or Section 30A, but will not apply to sanctuaries declared as such under this Act under unamended Section 18. In our opinion, the context in which the word 'sanctuary' appears, the restricted definition of Section 2(25) will not apply and the word 'sanctuary', occurring in sub-section (3) of Section 26A, must be given its normal meaning which is that it is a sanctuary declared as such under any law.

The said provision Section 26A may be viewed from another angle. In 1993, when the impugned Notification was issued, the pre-amended Section 18 was not in existence. Section 26A had been incorporated into the Act. What is the effect of this amendment? The rule in this behalf, as observed by Vivian Bose, J. in Shamrao V. Parulekar and others v. District Magistrate, Thana and others, AIR 1952 SC 324, at page 326, is as follows :-

> " ... the rule is that an unamended Act must be read as if the words of amendment had been written into the Act 'except where that would lead to an inconsistency',...."

These observations have been reaffirmed recently by the Supreme Court in Yadlapati Venkateswarlu v. The State of Andhra Pradesh, AIR 1991 SC [illegible], at page [illegible]. [illegible], the provisions of sub-section (3) of Section 26A were applicable to all the sanctuaries, which had been declared as such under Section 18 or under Section 26A or were deemed sanctuaries by virtue of Section 66(3).

It was sought to be contended that [illegible] a Notification in exercise of the powers under Section 21 of the General Clauses Act would not amount to altering the boundaries of the Sanctuary. We are unable to agree to this contention. When the notification of 1981 was sought to be repealed, the effect undoubtedly was that the boundary of the Narayan Sarovar Sanctuary was completely altered. It is difficult to accept the contention that sub-section (3) of Section 26A would apply and a Resolution of the State Legislature would be required only if, for example, the area of the sanctuary was to be reduced, thereby resulting in the alteration of its boundaries but that such a Resolution would not be necessary when the existence of a sanctuary is being brought to an end.

We are also of the opinion that the Government did not have jurisdiction or power to invoke Section 21 of the General Clauses Act in the present case. The Wildlife (Protection) Act is a special Act, and whereas power is given to the State Government to notify an area as a sanctuary, the power to alter the boundary has been expressly reserved with the State Legislature under sub-section (3) of Section 26A. Once a sanctuary has been notified as such, then the State Government, for the purposes of altering its boundary, would become functus officio and the only authority or body, which would have a right to amend the boundaries is the State Legislature. A question with regard to invoking Section 21 of the General Clauses Act arose in the case of State of Bihar v. D.N. Ganguly, AIR 1958 SC 1018, where Reference has been made under Section 10(1) of the Industrial Disputes Act and that Reference was sought to be cancelled or superseded, in purported exercise of the powers of Section 21 of the General Clauses Act. The Supreme Court held that once a reference had been made under Section 10(1), the rule of construction enunciated by Section 21 of the General Clauses Act in so far as it refers to the power of rescinding or cancelling the original order could not be invoked in respect of the provisions of Section 10(1) of the Industrial Disputes Act. The same principle would, in our opinion, apply in the present case as well. Once the power to declare a sanctuary has been exercised, then the State Government is left with no power to alter its boundaries, whether by [illegible] by cancelling the earlier [illegible] declared as a sanctuary. [illegible] the Supreme Court in [illegible] Pradesh v. Avinash Sharma. [illegible]

under the Land Acquisition Act had been completed and possession taken, the question arose whether the Government could cancel the notification under Section 21 of the General Clauses Act. It was held by the Supreme Court that by Notification under Section 21 of the General Clauses Act, the Government could cancel or rescind the notifications issued under Section 4 and 6 of the Land Acquisition Act, but the power under Section 21 of the General Clauses Act could not be exercised after the land had statutorily vested in the State Government. Same is the position in the present case. Once, statutorily, an area has been declared to be a sanctuary, then the said area can be varied only in accordance with the Act and with Section 26A(3), in particular. The State Government could not, in law, seek to invoke Section 21 of the General Clauses Act and rescind the Notification declaring the Narayan Sarovar Sanctuary.

Mr.V.B. Patel, appearing for M/s.Sanghi Cement Limited, a company, in whose favour mining lease was proposed to be granted, has submitted that, in fact, there was no notification in law declaring any area as a Sanctuary. It was submitted in this connection that the Notification of 1981 was not final as it stated that the area, which was "intended to be declared" as Sanctuary had been specified, but this intention had never become final. The learned counsel is seeking to base his argument because of the use of the word 'intended' in the Schedule to the Notification of 1981. This Notification, under the tenets of construction, has to be read as a whole. It has also to be read in the light of the statutory provisions. The statutory provisions which existed in 1981, were that an area could be declared as a sanctuary under Section 18. That area could be modified, on rights being established by an order passed under Section 24(2). If no order under Section 24(2) was passed, determination of the area as a sanctuary remained. In the operative portion of the notification dated 19th April, 1981, there is a categorical declaration of the area specified in the schedule as being a "Wild Life Sanctuary". The use of the word 'intended', in the Schedule, only meant that the area described therein could be changed or altered in accordance with law, viz., if an order under Section 24(2) was passed. If no order under Section 24(2) was passed, the area as mentioned in the Schedule remained a part of the Sanctuary. Unamended Section 18 did not contemplate any preliminary Notification being issued prior to the final declaration of an area as a sanctuary.

It was submitted that the principle of natural justice would have required that the affected portion should be given a hearing before an area was declared as a Sanctuary. It is no doubt true that declaration of an area as a sanctuary may result in some civil consequences. But, the principles of natural justice can be complied with if an ex post facto hearing is given. That is what was contemplated under the scheme of the Act prior to its amendment in 1991. After the notification under Section 18 was issued, persons who had any right in that area could make a representation and their claims had to be adjudicated upon and an order passed and thereupon, under Section 24(2), portions of land could be excluded from the proposed Sanctuary. This ex post facto hearing has now been replaced and with the amendment in 1991, a Notification under Section 18 merely signifies the intention of the Government to declare an area as a sanctuary. Principles of natural justice are now complied with prior to the declaration of an area as a sanctuary under Section 26A(1). This would not make sub-section (3) in any way inapplicable to a sanctuary, which was declared as such under the unamended Section 18 of the Wildlife (Protection) Act.

It was vehemently contended that this could not be regarded as a public interest litigation and secondly, the petitioners had no locus standi to file the present petitions. We are unable to agree with this submission. Environment, [illegible] more than anything else, is and should be a concern for all. It is one thing which is available free to all the inhabitants of an area and it is essential that this environment is maintained for the purposes of ensuring a healthy life. This issue, in fact, is no longer res integra. The Supreme Court, in Subhash Kumar v. State of Bihar, (1991) 1 SCC 598, at page 604 observed that :-

> "... Right to live is a fundamental right under Article 21 of the Constitution and it includes the right of enjoyment of pollution-free water and air for full enjoyment of life. If anything endangers or impairs that quality of life in derogation of laws, a citizen has right to have recourse to Article 32 of the Constitution for removing the pollution of water or air which may be detrimental to the quality of life...."

With regard to locus standi, the answer is squarely given by the

judgment of the Supreme Court in the case of The Janata Dal v. H.S. Chowdhary, AIR 1993 SC 892. Dealing with the question of locus standi, vis-a-vis public interest litigation, it was observed by the Court, at page 909, as follows :-

> " ... In contrast, the strict rule of locus standi applicable to private litigation is relaxed and a broad rule is evolved which gives the right of locus standi to any member of the public acting bona fide and having sufficient interest in instituting an action for redressal of public wrong or public injury, but who is not a mere busy body or a meddlesome interloper; since the dominant object of PIL is to ensure observance of the provisions of the Constitution or the law which can be best achieved to advance the cause of community or disadvantaged groups and individuals or public interest by permitting any person, having no personal gain or private motivation or any other oblique consideration but acting bona fide and having sufficient interest in maintaining an action for judicial redress for public injury to put the judicial machinery in motion like actio popularis of Roman Law whereby any citizen could bring such an action in respect of a public delict...."

At page 910, the Supreme Court took note of the contention of the counsel, which was as follows :-

> " ... Mr.Jethmalani expostulating the objectives of PIL urged with vehemence and persistence that H.S. Chowdhary does not have any locus standi to initiate this litigation and as such his petition is liable to be rejected even at the threshold. According to him, the Public Interest Litigation is one in which a selfless citizen having no personal motive of any kind except either compassion for the weak and disabled or deep concern for stopping serious public injury approaches the Court either for (1) Enforcement of fundamental rights of those who genuinely do not have adequate means of access to the judicial system or denied benefit of the statutory provisions incorporating the directive principles of State Policy for amelioration of their condition, and (2) preventing or annulling executive acts and omissions violative of Constitution or law resulting in substantial injury to public interest...."

The said contention was approved by the Supreme Court at para 020 in paragraph 117 in the following words :-

> " ... After deeply and carefully considering the submissions of all the parties, we see much force in the submissions made by the learned Solicitor General, Mr.A.D. Giri and Mr.Jethmalani, Senior Counsel...."

It would, therefore, follow that a public interest litigation on the behest of an organisation or a group of individuals, who have no personal gain or private motive or any other oblique consideration except to see that public injury does not take place and to prevent or curtail executive acts and omissions which are violative of the Constitution or the law, would be maintainable. In the present case, this is precisely so. The two petitioners are voluntary organisations deeply concerned and involved in the maintenance of a clean environment. The only point which has been raised by them is that there has been a violation of the law in as much as the impugned Notification which has been issued by the Government is in conflict with Section 26A(3) of the Wildlife (Protection) Act, 1972 and is, therefore, ultra vires. None of the petitioners has any personal gain or any other oblique motive in filing the present petitions and we are satisfied that they have the locus standi to file the present petition.

For the aforesaid reasons, we come to the conclusion that the impugned Notification No.GVII-10(93)-WLP/1092/2153/V8, dated 27th of July, 1993, purporting to cancel the earlier Notification dated 14th April, 1991 is illegal and is quashed. As a consequence thereof, the second Notification also dated 27th of July, 1993, whereby a new Sanctuary, of a much smaller area, was sought to be set up in the same taluka, is also quashed. As a result of the quashing of the Notification dated 27th of July, 1993, the earlier Notification dated 14.4.1991, establishing Narayan Sarovar Sanctuary is revived. We express no opinion with respect to the desirability or otherwise of the reduction in sanctuary area. This judgment should not be construed as expressing any opinion on this aspect one way or the other.

The petitions are allowed to the aforesaid extent. Rule is made absolute accordingly. The petitioners shall also be entitled to costs. Counsels' fee determined at Rs.[illegible]/-.

Letters Patent Appeal No.197 of 1993 is filed against the refusal of interim relief in Special Civil Application No. 18180 of 1993. The Appeal has been admitted and during the pendency of the appeal, there was stay of the Notification dated 27th July, 1993, which notification is now quashed by the present judgment. In view of the fact that Special Civil Applications Nos. 18180 of 1993 and 0001 of 1994 are allowed, quashing the impugned Notification, Letters Patent Appeal No.197 of 1994, arising from Special Civil Application No.18189 of 1993, is also allowed.

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True Copy

By order of Sd/- Com

Deputy Registrar

NP/WV/RS Pl. see & return. AHC

(Settlement status inMaharashtra, From Shree Bhagwan, 1.9.2000)

NAME	DISTRICT	AREA Sq. Km.	Status of Enquiry
NATIONAL PARKS			
1. Gugamal	Amravati	361.80	Completed
2. Navegaon	Gondia	133.88	**Enqury part only completed**
3. Pench	Nagpur	257.25	**Enqury part only completed**
4. S.G.N.P.	Thane/ Mumbai	86.96	Completed
5. Tadoba	Chandrapur	116.55	Completed
Total N.P. area		**956.44**	
SANCTUARIES			
1. Ambabarwa	Buldhana	127.11	E. R. Received
2. Andhari	Chandrapur	509.27	E. R. Received
3. Aner Dam	Dhule	82.94	**E. R. Not Received**
4. Bhamragarh	Gadchiroli	104.38	Not needed
5. Bhimashankar	Pune/Thane	130.78	**E. R. Not Received**
6. Bor	Wardha/Nagpur	61.1	E.R Received
7. Chandoli	Sangli,Satara Kolhapur, Ratnagiri	08.97	E.R. Received
8. Chaprala	Gadchiroli	134.78	E.R. Received
9. Deulgaon Rehekuri	Ahmednagar	2.17	E.R. Received
10. Dnyanganga	Buldhana	205.21	E.R. Received
11. G.I.B.	Ahmednagar	8496.44	**E.R. Not Received (RF 482.3 sq. km.)**
12. Gautala Autramghat	Aurangabad	260.61	E. R. Received
13. Jayakwadi	Aurangabad	341.05	E. R. Received
14. Kalsubai Harishchandragad	Ahmednagar	361.71	E. R. Received
15. Karnala	Raigad	4.48	E. R. Received
16. Katepurna	Akola	73.69	E. R. Received
17. Koyana	Satara	423.55	E. R. Received
18. Lonar	Buldhana	3.83	**E.R. Not Received**
19. Malvan	Sindhudurg	29.122	E. R. Received
20. Mayureshwar supe	Osmanabad	22.00	Not needed
21. Melghat	Amravati	1150.03	E. R. Received
22. Nagzira	Gondia	152.81	Not needed
23. Naigaon Mayur	Beed	29.88	E. R. Received
24. Nandur Madhmeshwar	Nashik	100.12	E. R. Received
25. Narnala	Akola	12.35	Not needed
26. Painganga	Yavatmal/ Nanded	324.62	E. R. Received
27. Phansad	Raigad	69.79	E. R. Received
28. Radhanagari	Kolhapur	351.16	E. R. Received
29. Sagreshwar	Sangli	10.87	E. R. Received

30.	Tansa	Thane	304.81	E. R. Received
31.	Tipeshwar	Yavatmal	148.63	E. R. Received
32.	Wan	Amravati	211.00	E. R. Received
33.	Yaval	Jalgaon	177.52	E. R. Received
34.	Yedshi Ramlingaghat	Osmanabad	22.37	E. R. Received
	Total WLS area		**14732.297**	
	Total N. P. area		**956.450**	
	Total WLS + NP area		**15688.747**	

NATIONAL PARKS

Total No. of N.P.	Report Not Needed	Report Received	Report not Received
5	3	--	2

SANCTUARIES

Total No. of WLS	Report Not Needed	Report Received	Report not Received
34	4	26	4

Observations

1. **Only upto Section 24 (a)**
2. **24 (c) least utilized**
3. **Slow progress on 24 (b) and 25**
4. **Least statistical figures in contents of reports.**

Reasons for Pendency

1. **E. O. not clear about provisions**
2. **Low priority by E. O. and F. D.**
3. **No backing from political leadership**
4. **Least awareness among local people**