

FAILURE AT THE HAGUE

IT IS A measure of the inability of the international community to look beyond the immediate future that Governments of the world — those in the industrial world in particular — are still unable to decide how to reduce the emission of the greenhouse gases (GHGs), which at current levels of discharge are expected to raise the world's temperature by 1.5 to 6 degrees Celsius by the end of the 21st century. The most recent example of this attitude is the failure of the United Nations climate conference in The Hague to agree on something as basic as the mechanisms for achieving a very modest reduction in emissions over the next decade.

Where until a few years ago there was some scientific ambiguity about whether or not the world was really becoming warmer, there is now almost a consensus that global warming is taking place and that the cause is the human-induced emission of GHGs such as carbon dioxide. The increasingly common occurrence of climatic events of great severity may or may not be the result of global warming, but what is certain is that higher temperatures will lead to a rise in sea-levels which by the end of the 21st century will have flooded low-level coastal areas and completely submerged many oceanic islands around the world. The pace and spread of this human-induced alteration of climate will be far greater than any nature-induced change that has taken place in the history of the Earth. There is also an urgency because the momentum of global warming is such that action now will have an impact only years later. Yet, the fact that the disasters that are going to visit the Earth will take place decades from now has occasioned a somnolence on the part of Governments that can only be described as a callous indifference. The main responsibility for reducing emissions has been placed on the very countries that have contributed most to the

build up of GHGs in the atmosphere — the industrialised countries. However, a decade after the U.N. Framework Convention on Climate Change was adopted, global emissions continue to increase. The Kyoto Protocol of 1997 set a reduction target by 2008-2012 of an average of 5.2-per cent over 1990 levels for 38 industrialised countries. But none of these countries has ratified the Protocol because they have not decided on what mechanisms to use to reduce emissions.

The Hague conference collapsed because the E.U. was unwilling to accept the U.S. insistence on an indirect reduction of emissions. Instead of taking measures to lower domestic industrial and automobile emissions, the U.S. insisted on meeting a larger part of its target by giving credit to the absorption of carbon dioxide by its forests, by trading "emission credits" with countries that have met their commitments and by financing pollution control projects in developing countries. These are clearly all backdoor emission reduction strategies, whose positive contribution is also uncertain. It is, for instance, still not clear how much carbon is absorbed by vegetation. Since no agreement was reached on the mechanisms there was no question of any progress on the measures for monitoring of compliance and penalties for failure, the other items on the agenda. In spite of the fact that time is running out to meet the commitments for 2012, Governments chose to give up on the issue at The Hague rather than take any hard decisions. The delegates decided to "suspend" the conference in the hope that an agreement can be reached when the meeting is re-convened in the middle of 2001. If measurable progress has not been made over the past decade, it is difficult to see Governments being able to lay the ground for a deal over the next six months.

EMISSION IMPOSSIBLE

hcb 11/17 Clean air versus America wdfm

THAT the Hague summit on climate change failed is not surprising. One way or another, all five previous conferences failed as well. The new twist came from the raucous fight between the US and the EU. Till the Kyoto conference, the two had presented a more or less united front, cajoling and threatening developing countries, and usually getting their way. At the Hague, the Europeans came armed with a new understanding — that the Americans were getting a better deal not only vis a vis the third world but also the EU. Realisation had dawned some time after the Kyoto conference in which the US had managed to get away with a modest emission reduction target, despite the incontrovertible fact that it punches the biggest hole in the ozone layer. Once the EU got wise to its unequal friendship with the US, the Kyoto agreement was put into cold storage, and at the Hague, the fight spilled out into the open, shoving out an American plan to reduce pollution via emission trading between nations.

Needless to say when the big two fight, the rest of the world can do precious little for the cause of clean air. Effectively, all deliberations on cleaning the air we breathe will be postponed till the middle of next year, when the next climate conference will hopefully be held. And even the prospects for that round of talks are bleak unless the biggest polluters acknowledge that theirs is the biggest responsibility. The Hague conference has shown that even Europeans, normally so willing to play yes men to the Americans in global meets, are not prepared to allow the US to dictate the agenda. Until US politicians recognise that their huge industrial economy has to make serious sacrifices for the global climate to get better, no real change is likely. But can you see a US president telling Americans they must consume less? And if the environmentally-unconscious George Bush — his state, Texas, has one of the worst green records in the US — becomes the next man in the White House, one might as well write off the next climate conference right now.

THE STATESMAN

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Resolving the Narmada conflict

By Mihir Shah

10-12 2/12

FOLLOWING THE Supreme Court judgment on Narmada, there has been outrage at what is seen as a regressive verdict. The learned lordships have grossly overstated the case for big dams, ignoring a huge amount of relevant research and data. Even the strongest votaries of big dams admit that the history of resettlement of Project Affected Persons (PAPs) in India does not inspire confidence. Without an iota of evidence, however, the judges take a contrary view. Completely overlooking the Government's own statistics that 75 per cent of those displaced have not been properly rehabilitated in the last 50 years.

Because most responses have attacked the judgment, the impression is that the verdict completely ignores the concerns of the Narmada Bachao Andolan (NBA). Unfortunately, the NBA itself by aggressively attacking the Court has given credence to such a view. What needs to be highlighted is the remarkable fact that even a judgment so unreasonably favourable to big dams, is unable to ignore the concerns of the NBA.

I quote from the directions of the "majority" judgment: "...further raising of the height will be only *pari passu* with the implementation of the relief and rehabilitation and on clearance by the Relief and Rehabilitation Sub-Group. The R&R Sub-Group will give clearance of further construction after consulting the Grievances Redressal Authorities (GRAs)." "The Environment Sub-Group will consider and give, at each stage of the construction of the dam, environment clearance before further construction beyond 90 metres can be undertaken." "The reports of the GRAs and of Madhya Pradesh in particular, shows that there is considerable slackness in the work of identification of land, acquisition of suitable land and the consequent steps necessary to be taken to rehabilitate the project oustees." "The NCA will within 4 weeks from today draw up an Action Plan in relation to further construction and the relief and rehabilitation work to be undertaken." "The Review Committee shall meet at least once in three months so as to oversee the progress of construction of the dam and implementation of the R&R programmes."

It is now for some of those who can express concern for issues in a manner that brings people together to rise to the occasion. Who better than Baba Amte or the President?

Never in the history of independent India has any development project been subject to the kind of continuous review proposed for Sardar Sarovar by the Supreme Court. Clearly the implementers of the project cannot be trusted for more than a height of five metres or even a period of three months! The Supreme Court has laid down that "resettlement and rehabilitation has to be done at least six months in advance of submersion, complete in all respects". This *pari passu* condition is most unlikely to be complied with. In his first recorded response to the Supreme Court verdict, the Chief Minister of Madhya Pradesh said: "One of the main clauses of the award of the Narmada Tribunal is that all project affected people should get land in lieu of land. The main problem is that we do not have any arable land to give to the oustees".

This stark statement of the Government of Madhya Pradesh makes it impossible now for anyone to assert that rehabilitation of PAPs is possible in accordance with the law. The Sardar Sarovar Project (SSP) must, therefore, be reconsidered on this ground, if not any other. The dam as presently designed is unimplementable. Does this mean, though, that the people of Gujarat are not entitled to Narmada water? With due respect to the NBA, the answer to the question is a simple "no". For one thing, the dam already stands at a height of over 250 feet. The challenge is to redesign the dam. The Supreme Court rules out the possibility of redesign by accepting the argument of "non-reviewability" of the Narmada Water Disputes Tribunal award. This makes no sense. All kinds of modifications have already been made and always have to be made in projects of this kind. It is 20 years since the Tribunal award and crucial parameters with a bearing on design such as water availability in the river, have changed in the intervening period.

So a redesign must be attempted. Especially because a technically-sound blueprint of such a redesign already exists. This alternative blueprint not only meets the urgent water requirements of the people of Gujarat, it also drastically reduces the burden of submergence for the PAPs, who mainly live in Madhya Pradesh. The redesign is particularly important in view of the fact that the present Sardar Sarovar is not meant to take irrigation water to most of the drought-prone areas of Saurashtra and Kutch. Their claim is only to drinking water. But do we need such a huge dam just for drinking water? No, there are ways of bringing this water here, which do not involve the building of such a destructive dam.

If, after the judgment, the project implementers take the view that they have no reason to compromise because it will be all smooth sailing from now on, they are gravely mistaken. There are real people being devastated by the dam. And today, thanks to the NBA, they have found a voice. They exist; they are not a fiction. The land required for legally resettling them, however, is a fiction; it does not exist. So it would be no surprise to see them moving the Supreme Court to hold it accountable to its own verdict, asking it to stop work on the dam which threatens their right to life.

At the same time the NBA must recognise that local water harvesting is a necessary but not a sufficient condition for overcoming drought in the excessively low rainfall areas of Saurashtra and Kutch. It must also affirm the right of the people of Gujarat to the water of the Narmada, especially those of its people who need it most, who are being excluded by the current Sardar Sarovar.

It is probably best to freeze the dam at its present height, at which the R&R of PAPs is already proving difficult. The NBA must now pay greater attention to ensur-

ing that the rights of already displaced PAPs are not trampled over. It is no longer meaningful to say *koi nahin hatega, baandh nahin banega* (no one will move, the dam will not be built). The dam has been built, the PAPs are being illegally thrown out. Some one has to ensure this does not carry on. At the same time, a new water policy for Gujarat needs to be formulated that includes massive watershed development and micro-irrigation programmes, along with a redesigned Sardar Sarovar.

The fact is that we have never involved the people of this country in making policies that affect their lives. Movements such as the NBA are forcing Governments to advance in this direction. And there is a real urgency to these issues. We have all seen the terrible consequences for millions of working people of a Master Plan for Delhi that was devised and is sought to be implemented without the involvement of the people of the city. Even more dangerous is the move to amend the Land Acquisition Act, as also the Vth Schedule of the Constitution, to denotify tribal lands so that these can be transferred to non-tribals (read MNCs), all in the name of "second (or is it third) generation reforms".

It is now for some of those who can express concern for issues in a manner that brings people together to rise to the occasion. Who better than Baba Amte, the spearhead of the Khat India movement? Who better than the President of the Republic, as committed as any other Indian to the plight of the tribal people, to create the necessary political will, to move the warring parties on to a path of reconciliation?

The western liberal tradition of conflict resolution, based on the framework of rights, can only go some of the way. The history of humankind has witnessed other more "needs and consensus" based modes of decision making, such as those of tribal communities. May be we need to follow them to find a way out of the impasse, which remains where it was, even after the verdict of the Supreme Court.

(The writer is an activist working among the tribals of the Narmada Valley in Madhya Pradesh.)

THE HINDU

- 2 DEC, 2000

POLLUTED PLANET

A Serious Challenge To Life

By YP GUPTA

THE Supreme Court had taken a serious view of the alarming vehicular air pollution in Delhi. In a bid to improve air quality, the court had directed that Euro II norms be followed to phase out the old vehicles, upgrade fuel quality and run vehicles with compressed natural gas kits. It has also fined the Delhi government for not checking Yamuna pollution. Several industrial units have been polluting the river.

After the ban on older vehicles, the Delhi government and the Central Pollution Control Board claimed that Delhi's air is cleaner and its quality has improved. But the survey conducted by the Tata Energy Research Institute shows that Delhi's air is dirtier now than what it was in March. The concentration of fine particles finer than 10 micrometres has gone up by as much as 50 per cent. Besides, the Air Quality Index, that takes into account three major pollutants, namely, particulate matter, nitrogen oxides

and sulphur dioxide, has not changed, despite the ban on older vehicles, and continues to range between 85 and 100 indicating a dangerous air quality.

A UN report on environment and health has earlier said that nearly four million children die annually of acute respiratory infections from air pollution, and that cases of asthma have risen in the industrial world by 50 per cent in the last two decades.

AIR AND WATER

The World Health Organisation has estimated that air pollution in India has been killing around one lakh people every year, of which 10,000 die in Delhi. Air pollution, insanitary conditions and deteriorating public health due to the rapid pace of urbanisation are considered to be major contributing factors in the developing world. The World Bank has reported that nearly 88 per cent of the world's total population would be located in the urban areas by 2025.

In Delhi the levels of suspended particulate matter have increased to 410.5 micrograms per cubic metre of air from 367.9 micrograms, which is nearly seven times the average critical limit of 60 micrograms prescribed by the WHO. Kanpur tops in the level of SPM having 470.9 micrograms. The other major Indian cities also have critical SPM levels (more than 210 micrograms).

A World Bank report says that Indian cities have been choking with industrial and vehicular pollution. The number of deaths due to air pollution has increased by over 28 per cent from about 40,000 earlier. Vehicles, thermal power plants and industrial units in Delhi are the major toxic air pollutants. Delhi is ranked fourth among the 41 polluted cities of the world monitored for air pollution. Its vehicles number-

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ing over 30 lakh account for 65 per cent of the air pollution, while their contribution in Mumbai is 52 per cent. Nearly 3,000 metric tonnes of pollutants are belched out in the Delhi atmosphere every day, of which more than three-fifths is from vehicles.

Water pollution and sewage disposal have polluted Delhi's environment as much. Nearly 18,000 million litres of domestic and industrial waste enter the Yamuna river, polluting the river water with toxic chemicals, which has poisoned



or killed thousands of fish. The Supreme Court had directed the industrial units discharging effluents into the river to instal treatment plants to prevent further degradation of the Yamuna river.

Air pollution is common throughout the world, choking many of its cities and thereby posing a serious challenge to life on this planet. The Kargil war in Kashmir polluted vast areas. During the Gulf war, vast areas surrounding Kuwait were highly polluted with suspended particulate matter, poisonous gases and toxic substances from burning Kuwaiti oil wells, petroleum refineries and the resultant oil slick. The thick black smoke covered most of Asia and caused climatic changes. Iraq became a "poisoned desert" with widespread epidemics, in which thousands of its children died.

The Washington-based World Watch Institute had earlier warned of an unprecedented biological collapse worldwide because three-fourths of the world's bird species are threatened with extinction. The National Institute of Oceanography has reported that shrimp, prawn and fish yield off the Kerala coast in India has declined by 25 per cent due to coastal pollution.

DISEASES

In India, a relatively under-developed country, the damaging pollutants in the form of hydrocarbons, suspended particulate matter, nitrogen oxides, carbon monoxide, sulphur dioxide, lead oxide, etc, belched out into the atmosphere by industry and by petrol-driven vehicles amount to a few million tonnes per year. These pollutants have been poisoning the atmosphere, causing a number of diseases like lung cancer, asthma and bronchitis. The Institute for Research on Reproduction (Mumbai) has reported that the sperm count of the Indian male has declined from 60 million per millilitre earlier to just 20 million due to environmental causes. The result is infertility and abnor-

mal babies.

Delhi is at the top in respect of lung diseases with 30 per cent of its pollution suffering from respiratory diseases due to pollution. Many people in affluent residential areas of Mumbai have been suffering from bronchitis, asthma and lung cancer.

Asthma is a major pollution-related problem in Delhi. Every tenth schoolgoing child suffers from asthma caused by air pollution. The incidence of bronchitis in Delhi has been rising by 25 to 60 per cent each year. In some localities of Delhi, like Daryaganj, where you have railway stations, the amount of SPM in the air has been as high as 945 micrograms per cubic metre of air, which is about 20 times the safe limit prescribed by WHO. The other badly affected cities are Mumbai, Calcutta, Kanpur and Ahmedabad.

Delhi also tops in lead emissions mainly from automobiles. A Delhi citizen has been accumulating a higher quantity of lead in the body than the limit prescribed by WHO. Increasing lead pollution from industry and automobiles poses a serious environmental hazard. Lead from exhaust fumes accumulates in the form of dust. Organic lead emitted from cars gets easily absorbed in the brain, liver, kidney and blood and becomes cumulative poison leading to brain damage, muscular paralysis and even death. The level of lead has increased alarmingly in Calcutta, Mumbai and Delhi's atmosphere. Fifty per cent of Mumbai's population has a proportion of 30 micrograms of lead in 100 ml of blood; 50 micrograms is enough to cause brain damage.

SOLUTIONS

Developing countries account for 70 per cent of the atmospheric pollution in the world. Mexico City has been described as the most polluted. The concentration of the carcinogenic substance benzol in Mexico City's atmosphere is reported to be 150 micrograms per cubic metre of air, which is 10 times higher than that in Berlin. The concentration of carbon monoxide in some localities of Delhi and Mumbai is as high as 35 parts per million, where 25 ppm is enough to cause poisoning while the safe prescribed limit is nine ppm.

The increased level of consumption of renewable and non-renewable resources particularly in Asia has caused a faster degradation of the environment due to an increase in demand for water and arable land for food and energy. To meet the challenge for survival, world bodies have proposed to impose taxes and levies on industrial units causing pollution. The Supreme Court had ordered suitable action against those polluting the environment and disturbing the ecological balance. The neem tree is reported to help in checking pollution caused by vehicular and industrial emission, and, therefore, planting of its saplings in cities should be encouraged.

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Delhi govt seals 700 polluting units

STATESMAN NEWS SERVICE

NEW DELHI, Dec. 4. — About 700 polluting units have been sealed by the Delhi government after being pulled up by the Supreme Court last month. The number, however, is far lower than what the Delhi government expected.

All 27 sub-divisional magistrates have been busy sealing polluting units in their respective areas after the Supreme Court order. The government had sent a list of about 2,200 polluting units prepared by the Delhi Pollution Control Committee to all the SDMs just prior to the Supreme Court order.

According to recent figures prepared by the government, the number of polluting units which have been sealed is far lower than senior officers had expected. In the North-East district only about 100 units were sealed of the over 500 polluting units which the DPCC list recorded in the area.

An official said: "Because of the law and order problem many units couldn't be sealed. But we are trying to seal as many as possible".

Following the Supreme Court order, SDMs admit they started off very enthusiastically but this spirit fizzled out following the riots in East Delhi.

THE STATESMAN

5 DEC 2000

'Ozone hole will heal in 50 years'

MARK HENDERSON
THE TIMES, LONDON

LONDON, Dec. 4. — The hole in the Southern Hemisphere's ozone layer will start shrinking within a decade and should close completely in the next 50 years, an international panel said.

Data unveiled at a conference in Argentina suggests that the global effort to reduce the use of chlorofluorocarbons (CFCs), the main menace to the ozone layer is succeeding, just three months after Nasa revealed that the size of the ozone hole in the Southern Hemisphere had grown to 11 million square miles and had reached the tip of South America.

The recovery should result in a reduction in levels of ultra-violet radiation around the globe which causes skin cancer and harms plant and marine life.

Data from the Cape Grimm monitoring station in Tasmania showed that CFCs levels in

LONDON, Dec. 4. — Life on the land may be more than a billion years older than previously thought, say scientists after discovering organic matter from the ancient rocks of South Africa. Researchers found evidence that primitive life spread from sea to land between 2.6 billion to 2.7 billion years ago. Scientists believe that these rocks may be the remnants of micro-organisms which colonized the land as long ago as 2.7 billion years, the magazine Nature reported. — DPA

the lower atmosphere are starting to decline for the first time since scientists from the British Antarctic Survey discovered the ozone hole in 1985.

A new mathematical model suggests there will be a similar decline in the stratosphere over the next decade, leading to a recovery in ozone levels.

The dramatic recovery could, however, be slowed by as much as 30 years by global warming or by severe volcanic eruptions, according to the meeting in Argentina of the Stratospheric Processes and their Role in Climate panel, which is a project

of the World Climate Programme. It will also depend on continued efforts of the global community to keep ozone emissions low. The hole could also grow slightly over the next five years before recovery begins.

Professor Alan O'Neill, director of the Centre for Global Atmospheric Modelling, University of Reading, and chairman of the panel, said, the news was a 'triumph' for global co-operation. The success could be attributed to the 1987 Montreal Protocol, in which most governments pledged to reduce their use of CFCs, he said.

The USA has trickled down its annual ozone output from 306,000 ozone depletion potential ton to 2,500 ODP ton. The 12 nations that were then members of the European Union have reduced their use from 301,000 ODP tonnes to 4,300 ODP ton while Japan from 118,000 ODP ton to zero.

The global effort represents a triumph for the British scientists, Dr Brian Gardiner, Dr Jonathan Shanklin and Dr Joseph Farman, who alerted the world to the hole in 1985. Their work convinced governments to act.

Prof O'Neill said, "We have now got the science of the ozone layer buttoned down, and can predict ... that it is on the road to recovery. What is happening is that levels of CFCs has been reduced by concerted action. What this shows is that by understanding the science of global environmental problems, we can convince governments to take action to turn things around."

THE STATESMAN

5 DEC 2000

SC orders closure of polluting units in Delhi

By Our Legal Correspondent

NEW DELHI, DEC. 7. The Supreme Court, while reserving orders on the issue of contempt against the Chief Secretary, Delhi Government and the Commissioner, Municipal Corporation of Delhi, ordered the closure of all polluting industrial units operating in the residential and non-conforming areas of Delhi within four weeks.

A three-Judge Bench comprising Mr. Justice B.N. Kirpal, Mr. Justice Doraiswamy Raju and Mr. Justice Brijesh Kumar asked the Ministry of Urban Development, which has been appointed as the nodal agency, to implement the order.

The Bench directed the Delhi Government, MCD and the Delhi Development Authority (DDA) to cooperate with the nodal agency in implementing the order. The Commissioner of Police, Delhi, was asked to render all assistance in this regard.

The Bench made it clear that

while doing so, the nodal agency would not be affected by any stay or injunction granted by any court. The Bench said "no orders passed by any court for stay or injunction, which is in conflict with the action of any authority taken pursuant to today's orders and previous orders will operate."

In respect of other industries in operation with or without a licence, the Bench said "though for the present it is not making any orders on other industries functioning in the non-conforming and residential areas, it does not mean that the authorities will sit back and relax."

To facilitate the closure, the Bench directed the MCD to identify the polluting units within 10 days and furnish to the nodal agency a list of those functioning in the non-conforming and residential areas and the list "shall indicate their nature of activity, and if possible whether polluting or not."

THE HINDU

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Global warming talks fail yet again

REUTERS

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THE United States and Europe failed on Thursday to bridge major differences after two days of talks aimed at salvaging a pact to curb global warming.

Officials from both sides stressed they had made some progress in closing the gap between the European Union and the so-called "umbrella group" of the United States, Canada, Japan, Australia and New Zealand.

But they also made it clear that significant differences still remain over how best to cut emissions of "greenhouse gases," believed by many scientists to be responsible for the global warming trend, and how to meet promises of emission

US, Canada sign clean air treaty

WASHINGTON: THE US and Canada signed an agreement on Thursday to sharply reduce smog-causing pollution emitted mainly by power plants, with the aim of bringing healthier air to millions of people living in both countries by 2010. In a signing ceremony at the Canadian Embassy, officials said the deal, which was finalized in October, would reduce both nitrogen oxide and volatile organic compounds caused by power plants and commercial and consumer products. "Canada and the United States broke new ground with the acid rain agreement of the 1980s and today's agreement takes us further in protecting our citizens from the health effects of dirty air," said David Anderson, Canada's Minister for the environment, who represented Ottawa at the signing ceremony.

cuts hatched at a 1997 meeting in Kyoto, Japan. "Much remains to be done," U.S. Assistant Secretary of State David Sandalow said as he left the Ottawa meeting. His comments were echoed by the EU side.

"There is certainly a big gap to be bridged between us and the umbrella group of countries," said James Currie, the

European Union's director-general for the environment.

The meeting was the first time the two sides had made contact since last month's dramatic collapse of U.N.-sponsored talks in The Hague to set a global strategy on cutting greenhouse gas emissions.

It is now up to member governments to decide what to do

next. EU officials had said before the Ottawa talks that if the two sides could be brought close enough together, it might well pave the way for a meeting of ministers in Oslo next week.

But Canadian Environment Minister David Anderson, when asked whether he thought there would be a meeting in Oslo, replied: "That would be unlikely." Canadian delegation head Alan Nymark was slightly more upbeat than Anderson, saying the two sides had narrowed the number of issues that separated them.

"Whether (ministers) feel the circumstances are right for a meeting before Christmas depends on several different continents coming to that conclusion in a relatively short period of time. That's quite a large task," he said.

INDIAN EXPRESS

9 DEC 2000

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The right to differ

By P. V. Indiresan

LOKO BHINNA Ruchihi — people have different tastes. For that reason, where there is freedom of expression, there is no unanimity of opinion. That is fairly well understood. The converse, that any demand for unanimity of opinion is a denial of freedom of expression for the dissenters is not always appreciated equally well. Few people realise that while dictatorship can be absolute, freedom cannot be; the freedom any individual can exercise is limited by the freedom that others too are entitled to have. Hence, unanimity of opinion is a luxury to be found only in fascist dictatorships.

Unfortunately, intolerant culture, where everyone is expected to "fall in line", or stand condemned as "sinful", has become fashionable in our country. The current debate on the Narmada Dam is one such instance where intolerance permeates. Undoubtedly, the issue is controversial. For that very reason, there should be respect for divergence of opinion. One may question the wisdom of the others but it would not be appropriate to condemn divergence of opinion as immoral. That bound of free discussion is being transgressed by anti-dam activists. They are free to call engineers a bunch of fools but they transgress the limits of free debate when they abuse engineers as immoral.

It has been well said that while opinions are free, facts are sacred. That the rehabilitation of persons displaced by the Narmada Dam is unsatisfactory is a fact. It is equally true that the same dam confers many benefits on hundreds of times more people. Anti-dam activists hold the view that those who are displaced are poor; those who benefit are rich. So, the construction of any dam is iniquitous and should be banned, at any rate large ones must be. In their opinion, smaller systems will displace less number of people and will serve equally well if not better. In support of that argument, they cite several rainwater harvesting schemes in Gujarat and elsewhere.

They have now come up with a new calculation that large dams have contributed barely ten per cent of the increase in food production in our country. Therefore,

they conclude that large dams are of marginal utility and can be dispensed with. Let us assume that this contention (that is all what it is) is correct. For that reason, and because we are currently growing more food than we can consume, why should we not decommission existing dams such as Bhakra and Mettur? (In fact, proposals for decommissioning dams are already being aired in conference circles). That will be an interesting move at least for the reason it will eliminate all inter-State water disputes, such as those be-

Thanjavur, wheat in Bhakra and sugar everywhere? Will they stop using electricity polluted as it is by generation from large dams? How many among those who deride engineers day in, and day out, give up these products which they proclaim are "born in sin"?

There are two ways of looking at these rhetorical questions. One is to describe them as logical conclusions and the other as extreme (and hence, untenable) extrapolations of the anti-dam argument. With

Anti-dam activists are entitled to have their opinions. By the same token, they should let engineers too have their own opinions. They should also learn to accept responsibility.

tween Tamil Nadu and Karnataka! That is also logical — if large dams are harmful, existing large dams must go!

Incidentally, in international usage, a dam is considered to be large if its height exceeds no more than 15 metres. Anti-dam activists use this definition and argue that India has thousands of large dams. If both this definition and the contention that large dams should be decommissioned are accepted, we will have practically no storage systems left. Is it truly the case that if all dams above 15 metres height are decommissioned, the loss in food production will be no more than 10 per cent? Can we safely assume that rainwater harvesting and other "eco-friendly" techniques will make up this loss? In such a case, there should be no harm in decommissioning at least the Mettur, the Bhakra and all such very large dams.

How many opponents of the Narmada Dam will take the anti-dam argument to its logical conclusion and accept that at least very large dams should be decommissioned? Liberal intellectuals are fond of making dramatic gestures. They boycott manufactures by child labour, products that result from cruelty to animals. Anti-dam activists aver that large dams are cruel to tribals. On that score, will they boycott the goods produced by large dams? Will they boycott rice grown in

the utmost respect, anti-dam activists themselves initiated this form of extremist logic. It is they who started the controversy by extrapolating the rehabilitation problem to conclude that the dams themselves are harmful. Demanding that dams be scrapped because rehabilitation is bad is like throwing out the baby along with the bathwater.

A lot of fuss has been made about the height of the dam. That too is not logical. Once, it is accepted that a dam may be raised to a certain height displacing X number of people, the argument against displacing people ceases to be a matter of principle. If X number of people can be displaced, why not displace a number Y? At this stage, the issue is quality of rehabilitation and the benefit to cost ratio, not displacement itself.

What should be the nature of such rehabilitation? According to the Human Development Report, progress is measured by three factors — income, education and longevity. It would be just and fair to insist that displaced tribals should command no less income, no less education and no less longevity than the rest of the population. Have anti-dam activists any notion of how they will induce such a transformation? Before Independence, infant mortality was nearly 30 per cent and expectancy life was less than 30 years. Now infant mortal-

ity has come down by a factor of four and life expectancy has more than doubled. At the operational level, all this progress has been due to the efforts made by scientists, technologists and engineers. However, such benefits have accrued mainly to those in the mainstream, not to those who have opted out. That is true all over the world, the most dramatic example being the case of Red Indian tribes in the U.S. In order to preserve their identity, liberal intellectuals confined Red Indians to Reservations. The intentions were good but the result is perennial backwardness.

In a like manner, the economic progress of our country has been retarded by self-appointed do-gooders who claim moral superiority over all others. At the present time, millions are too poor to buy food even though we have had a bumper crop even in a year of less than normal rainfall — thanks to the efforts of engineers and scientists. Social activists, and the economic policies they have imposed on our Governments, cannot escape blame for this sad state of affairs. Anti-dam activists come from that sad lineage. Both are basically negative. They can point out what is wrong but cannot do what is right.

Anti-dam activists are entitled to have their opinions. By the same token, they should let engineers too have their own opinions. They should also learn to accept responsibility. Let them show how to produce without irrigation as large a crop as engineers produce with irrigation — and persuade farmers to accept their techniques. Let them demonstrate how tribals can be made to prosper as well as the rest of the population by remaining where they are and as they are. Even if they perform that miracle, they can at the most describe engineers as foolish but not as immoral. All of us, including anti-dam activists and their "liberal" supporters, and not excluding engineers, have a democratic right to err.

True democrats tolerate dissent, yield to the opinion of the electorate and submit to the judgment of the courts. Those who deny the freedom of differ, refuse to accept the opinion of the electorate and defy the judgment of the courts may call themselves moralists. They run the risk of becoming fascists.

THE HINDU
12 DEC 2000

CHERNOBYL / UKRAINE SHUTS DOWN NUCLEAR PLANT

Russia warns of economic hardships

By Vladimir Radyuhin 11.10.16 16/12

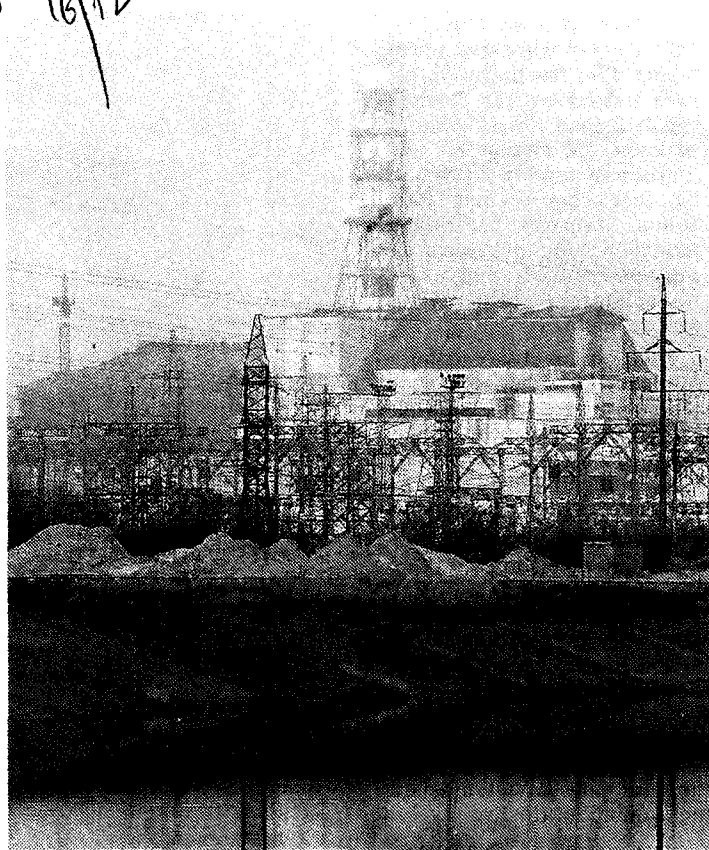
MOSCOW, DEC. 15. As the infamous Chernobyl nuclear power station in Ukraine was shut down on Friday to loud cheers from the West, Russian officials denounced the decision as unwarranted and politically motivated and predicted it would bring more economic hardships to their Slav neighbour.

The Ukrainian President, Mr. Leonid Kuchma, issued the command to halt the last operating reactor at the Chernobyl station through a television link from Ukraine Palace in Kiev, 136 km away from the plant. The station had not produced any electricity since Dec. 6, when it was halted after the discovery of a leak in a radioactive steam pipe. However, the actual closure procedure will take eight years and will end with the removal of fuel from the reactor.

The Russian Atomic Energy Minister, Mr. Yevgeny Adamov, made it clear he did not support the closure of the Soviet-built plant, which was the site of the world's worst nuclear disaster in 1986.

There were no technical grounds for shutting down the station, the Minister said in a television interview. He insisted that reactor number 3 was safe and could operate for more than 10 years. It was a purely political decision, Mr. Adamov said. The closure of the Chernobyl station turns Ukraine from an exporter of electricity into importer.

An estimated 15,000 to 30,000 people have died and some 500,000 received high radiation doses as a result of the April 26, 1986, explosion at Chernobyl's



A general view of the Chernobyl nuclear power plant. — Reuters

now defunct reactor number four. In terms of radiation, the blast was equivalent to 500 atomic bombs dropped on Hiroshima in 1945. Reactor number two was shut down after a fire in 1991, while number one was halted in 1996.

Russia has taken steps to improve the safety of its RBMK reactors of the type installed at Chernobyl and refused to bow to

Western pressure to shut them down, but Ukraine succumbed.

"We don't have \$ 450 millions to upgrade the Chernobyl reactor", Mr. Kuchma said in an interview to the Russian weekly *Moscow News*. "If we get the money, we will use it to complete two nuclear power stations under construction".

Under a 1995 protocol, the West promised \$ 2.3 billions,

comprising \$ 500 millions in grants and \$ 1.8 billions in loans, to help provide substitute power for Ukraine, make the Chernobyl site safe, and help soften the social impact of the closure. The closure of the Chernobyl station will deprive Ukraine of 5 per cent of its electricity generation and leave 9,000 workers jobless and their families without means of livelihood.

However, Western aid money is yet to come. It was only this week that the European Bank for Reconstruction and Development (EBRD) approved a \$ 215-million loan for completing construction of the two new nuclear plants. Ukraine needs \$ 1.5 billions for the job, but Russian experts doubt it will get the money.

EBRD will not issue any more loans before the International Monetary Fund certifies that Ukraine has reformed its energy sector and has repaid earlier credits from the U.S. ExIm Bank, says Mr. Vladimir Gubarev, a Russian science writer.

Ukrainian deputies on Thursday demanded that the international community guarantee in writing that its financial commitment to fund the country's post-Chernobyl energy plans would be honoured. They also called on the Ukrainian Government to postpone the Chernobyl closure for four months, till the end of the winter heating season in Ukraine.

However, the Ukrainian presidential spokesman, Mr. Oleksandr Martynenko, said it was very symbolic that the world will enter the next millennium without the Chernobyl plant.

THE HINDU

16 DEC 2000

Narmada work resumes after four years

By Vinay Kumar

KEVADIYA (Narmada District), OCT. 31. As hordes of people on the banks of the Narmada raised slogans of "Jai Narmada Ma", construction work resumed at the site of the Sardar Sarovar project today after a gap of four years. At exactly 12.39 p.m., the Union Home Minister, Mr. L.K. Advani, pressed the button to operate the ropeway trolley which deposited concrete on the unfinished dam.

People cheered and rejoiced as the construction machinery logged onto its rhythm. Almost the entire Gujarat Cabinet, headed by the Chief Minister, Mr. Keshubhai Patel, the Opposition Leader, Mr. Amar Singh Chaudhary and a number of Central Ministers participated in 75-minute ceremony. The recommencement of the work coincided with the 126th birth anniversary of Sardar Vallabhbhai Patel, who dreamt of harnessing the Narmada basin as early as in 1946 for irrigation and power generation. Mr. Advani also unveiled a bronze statue of Sardar Patel at the site.

The Rs. 18,000-crore project often dubbed as drought-hit Gujarat's "lifeline", was given a fresh lease of life by the Supreme Court on October 18. It was bogged down by inter-State disputes and legal challenges, including relief and rehabilitation packages. Describing the Supreme Court judgment as victory of "developmental nationalism", Mr. Advani lauded the patience of

the people of Gujarat who waited for four long years. Without naming anyone, Mr. Advani trained his guns on anti-dam lobbyists saying opposition to developmental projects only added to the delay and spiralled its cost. He minced no words in saying that same people who had opposed nuclear tests at Pokhran in May 1998 were behind creating hurdles in implementation of the Narmada project as well.

"I sometimes wonder whether these people are working at the

behest of our own people or outsiders. I want to be proved wrong, but it surprises me. Why there is so much opposition to developmental projects? This attitude clearly suits those who do not wish to see India becoming strong in security and socio-economic development" he said.

Mr. Advani listed resumption of work on Narmada project as the third significant achievement of the Vajpayee Government after the Pokhran nuclear tests and the Kargil victory. Hitting out at the

West, Mr. Advani said Western nations wanted to stall development in developing countries like India. "Development and protection of environment are not opposed to each other. In fact, they go hand in hand and this is the essence of our civilisation," he said.

He said the most important lesson of the much-delayed and cost-over-run Sardar Sarovar Project was that India should learn to reduce the time gap between inception and implementation of mega projects.

THE HINDU

1 NOV 2000

The Narmada decision

By Rajeev Dhavan

The Supreme Court should review its refusal to strictly examine the public interest, social justice and environment issues.

THE NARMADA is not just a river. It is a living heritage that defies comparison. In and around the Narmada rests a veritable civilisation of cultures, wedded to the soil with a simplicity that has hitherto brooked no opposition from history. From time to time, modern projects such as dams have been conceived to displace people and the environment, to drown composite cultures into oblivion. Legal regimes have been created to facilitate such annihilation — more often than not with insensitive cruelty. The people who suffer displacement are usually poor, and — but for their own courageous struggles — easily forgotten. Once neglected, they suffer continuous and multiple displacement.

India inherited the imperial regime of land acquisition whereby Governments declared a 'public purpose' to acquire land and offered compensation only to land owners at market rates, with a solatium of 15, now 30 per cent. Over the years, successive Governments have used this imperial model of 1894 ruthlessly. Confronted with these imperial and post-imperial acquisitions, judges have tended to submissively accept what the Government has declared to be a public purpose in the public interest; and, interfered within narrow limits on the quantum of compensation. This is the colonial doctrine of eminent domain which remains a mindset with the judges of 21st century India, even when dealing with projects that subsume social and natural topography.

Neither the Constitution nor humanitarian law applicable to India permits this imperial model of 'land acquisition' or its executive variations to apply to huge projects which are designed to irreversibly mal-affect the environment, displace lakhs of people and then offer them Government largesse instead of a genuine rehabilitation. Even the World Bank which funds many such projects has underlined the need for (i) a viable public purpose in the public interest, (ii) insistence on strict scrutiny of the environment impact and (iii) total social justice to oustees. These three are now regarded as essential condition precedents to every large project even

if repeatedly ignored by the Indian Government.

The crucial issue in the Narmada case was whether the Union and State Governments can be allowed to get away with violating these universal and human rights considerations which are enshrined in, and by, law? The Supreme Court has virtually decided that in dealing with such projects, the Governments concerned can be a law unto themselves and seriously violate the legal conditions circumscribing such projects.

First, the issue of 'public policy' and the 'public interest'. After the composite substantive due process created by the Supreme Court in the Bank Nationalisation Case

(1978) and the Maneka Gandhi Case (1978), it has a constitutional duty to examine whether any infringement of fundamental rights is a reasonable restriction in the public interest. There is no dispute that the rights to environment and to settlement are fundamental rights. Equally, the public interest demands that far-reaching policies which irreversibly alter not just the lives of people but nature and history itself must be properly arrived at. It may well be that the original decision on Narmada was taken in 1949; and, there was an Inter-State Water Award on this in 1979. But, that cannot foreclose a constitutional examination of the issue. The period 1950-2000 has witnessed the most fantastic technological reassessments of all time. In 1980, a Government department may have been committed to buy a million typewriters. In 2000 AD, such a commitment would be laughable. In 1993, the World Bank's Morse Report indicated that the proposed Narmada dam was not in the public interest. Mr. Justice Kripal's judgment that the Government of India did not accept the World Bank Report can hardly conclude the issue. The question is

why and on what basis? Peremptory rejections cannot obviate examinations in the public interest. The foundation of Mr. Justice Kripal's judgment is the Tribunal Award of 1979 between various State Governments is binding. But, against whom? How can a Water Tribunal prevent the Supreme Court from examining a public policy issue which affects millions in the public interest? While courts do not normally interfere in policy matters, in cases of such magnitude, the Chief Justice, Mr. A. S. Anand and Mr. Justice Kripal (who form the majority in the Narmada case) have never hesitated to force policy changes in the Vehicular Pollution and Forest cases even at the cost of ensuing social and economic havoc.

LAW AND SOCIETY

The Supreme Court has a duty to invoke the doctrine of proportionality against unreasonable Government decisions which are against the public interest. Mr. Justice Kripal's judgment that the Water Tribunal's judgment is 1979 prevents the Supreme Court from examining the public interest in a fundamental rights case abdicates the Court's jurisdiction to a lesser fora.

Second, is the issue of environment. Mr. Justice Bharucha is surely right in his dissent when he refers to Article 21 and the irreversibility of environmental damage. He rightly points out that the Supreme Court "cannot place its seal of approval on so vast an undertaking without first ascertaining that those best fitted to do so have had the opportunity of gathering all the data on the environmental impact of the Project and of assessing it". All the relevant data has never been available. In 1986-87 and later, there was a mighty conflict between the Ministry of Environment and Forests (MOEF) and that of Water Resources, on environmental clearance. In recent years, out of some 330-odd projects some 70 to 90 per cent have escaped envi-

ronmental scrutiny. If the right to environment requires strict constitutional scrutiny, why was such scrutiny abandoned by the Court? It is difficult to accept Mr. Justice Kripal casual distinguishing of the Tennessee Valley Tellico Dam Project and the Wallisville Project cases where American courts stopped the projects on environment grounds even though considerable costs were incurred. If the Supreme Court is serious about the environment, it cannot abandon the jurisdiction it has built over the years just for the Narmada case.

The third issue is that of oustees. There is little dispute that the rehabilitation process is grossly incomplete. Some 41,000 families are affected. It is splitting hairs to distinguish between 'submergence' and 'canal' affected people or non-cultivators. Government surveys do not include amongst beneficiaries all those whose right to livelihood is affected. The Chief Minister of Madhya Pradesh openly states he cannot find land for land.

In the meanwhile, what are the poor to do? Would such a policy have been acceptable if the affected area were Lutyens' Delhi? Or any urban area where the rich and well-off were suddenly pushed into a nomadic existence? The policy has to be clear: no risk of ouster until rehabilitation. The Court seems to assume that it is constitutionally permissible for a few lakh people to live in limbo for sometime in the name of progress and inter-generational equity. In 1970, the Supreme Court punished E.M.S. Namboodripad because he claimed the courts were class biased. Here is reason to doubt whether that judgment was correct.

The Narmada cases confronted the Supreme Court with the issue of constitutional courage. After agriculture, building is always the second largest economic activity in India. Contractors and middlemen are the driving force of large projects. The Supreme Court should review its refusal to strictly examine the public interest, social justice and environment issues. Not to do so would shortchange the Court's own enviable public interest and social justice jurisprudence.

Techno-economic nobels

It is a fight to the finish, says Medha Patkar

By Gargi Parsai

NEW DELHI, NOV. 3. It is now a fight to the finish, the Narmada Bachao Andolan leader, Ms. Medha Patkar, told *The Hindu* here today of her struggle against the Sardar Sarovar dam and the resultant displacement of about 4 lakh people in the four States of Gujarat, Madhya Pradesh, Maharashtra and Rajasthan. She was here to participate in a seminar to analyse the recent Supreme Court judgment allowing reconstruction of the dam. This is her first visit to Delhi after the verdict.

Asked about the mood in the Narmada valley, Ms. Patkar said the valley was much stronger than one expected it to be. The people were ready to fight it out. There was no option and no one to go to. It was easy for people to advise the Andolan that it should stick to its position and fight back. But half of the affected persons were not recognised by the State.

"I shudder to think of their fate in a State (Gujarat) with fascist tendencies which attacks minorities. It is going to be a horrifying punishment by the State of its own people. In Gujarat, 14 per cent of the tribal area is left out of consideration. It is time for tribals, Dalits, the bahujan samaj and drought-affected people to unite. The Government would like to flush people out as was done in Nagarjuna Sagar and Ukai dams. The repression and intimidation of the State would be more and we will see the uncivilised face of the State. It will be the worst human tragedy. I won't be able to stand it. It would be interesting to see how the civil society responds to the situation."

On the Union Home Minister, Mr. Advani's speech during the commencement of the dam's reconstruction, Ms. Patkar said, "People had no place in it. It was a BJP-managed show with the pri-



ority on the party, not people. At least they have understood us well when he said we were against Kargil and Pokhran. They have understood that we are against violence."

The fact that the three Chief Ministers of Congress-ruled States did not turn up for the occasion showed that politicians were bogged down in their own conflicts and people had no place in them. They did not take a political position because of the politics in States ruled by them.

The Madhya Pradesh Government said in the court that there should be a review but the dam's height could be taken to 436 ft. It said it had no land to rehabilitate people and then talked of cash compensation. The displaced people did not know who to expect protection from. The State's stand had been not surprising but very telling.

What did she make of the court saying the Prime Minister would be the final authority to decide any dispute on Narmada? "Politics is clearly reflected in the judgment."

Asked why the Andolan went to the Supreme Court, Ms. Patkar said it wanted to approach every single forum from the executive to legislature to judiciary. "We went from the lowest court to the highest. There had been cases in

the Sessions Courts, District Courts and High Courts. There had been two comprehensive committees too without any results. Going to the Supreme Court was a natural process."

What was her minimum expectation from the apex court? "Certainly that the violations by various agencies would be understood and accepted (by the court)... The understanding that the limitations of the State machinery were the major barriers in the implementation of the Narmada Water Disputes Tribunal (NWDT) award. That the non-implementation of the award, the human issue, the environmental issue and the flawed decision-making process and the questionable basis of the public purpose be upheld and a review would be ordered. There were expectations that the Narmada dam would be taken as a basis to question the development planning and paradigm that is being followed."

On the allegation that the Andolan was getting foreign funds, she said there were foreign funds all around us. Why didn't the Gujarat Government file cases against the Andolan and take the activists to court? "Whenever we have filed a defamation case against them they apologise. Such allegations are only meant to take our time. We have not even taken the foreign money that comes with awards."

Asked about the accusation that NBA activists had attacked a Minister's car during the function marking the reconstruction of the Narmada dam last week, she flared back, "This is absolutely baseless. *Wahan NBA ka ek pan-
chi bhi nahi tha. Hota bhi to use
shoot kar dete.* (There was not even an NBA bird there. Had there been one, it would have been shot down.)"

THE HINDU

4 NOV 2000

The S.C. & the Narmada case — I

By Jai Sen

4D-12
6/11

GIVEN THAT the petitioner was a popular movement, the Supreme Court's order to the Gujarat Government to proceed with the construction of the Sardar Sarovar dam is predictably being strongly protested in the public realm. Not only have many crucial issues been overlooked but the order has some extremely serious consequences for civil society, in particular for the space available for the practice of civil politics.

Unfortunately, the judgment tells us nothing new about what were supposedly the main and overt concerns, resettlement and rehabilitation of oustees and concern for environment. Nor does it say anything about how the project should have handled the special requirements and entitlements of the large proportion of oustees, Adivasis, whose special position under the Constitution is something that the Supreme Court might have been expected to concern itself with.

It has, in effect, dismissed even the need for community rehabilitation, thus undermining a key concept that project planners and Governments in India and abroad accepted only after decades of struggle and debate. This is one among several unfortunate outcomes. The displacement is all the more intense given the sheer scale of the Narmada project, but equally important because — being a judgment of the Supreme Court — of the ramifications for all such situations in India and for public interest litigation itself. And, at a different level, because the contestation over the Narmada project has become a symbol of the struggle over meaning itself. On the other hand, the court's order makes clear that this struggle must continue, with even greater seriousness.

The case was decided by a 2:1 majority judgment. Perhaps the most dominant character of the majority judgment is its strong concern with form — in particular, with governmental procedure — and with using the case to establish certain ideological positions it has on the role of the Government, courts and litigants. It goes to extraordinary lengths to establish what

the Government and the project authorities were doing, what structures they set up, what meetings were held, and what letters and notes were exchanged. By itself, this is useful; but the judgment has made very little reference to the dozens of other reports, affidavits and documents the court received in the course of the four years and more that the case was heard, especially from non-government entities. In short, the judgment seems to have been highly selective in its consideration and in its presentation.

Most prominently, it has openly said it did not consider the exhaustive report on the Sardar Sarovar Project prepared by the Independent Review Commissioned in 1991 by the World Bank (the so-called "Morse Commission"), which looked in-

The somewhat selective manner in

The apex court's order has some extremely serious consequences for civil society, in particular for the space available for the practice of civil politics.

which it refers to the role of institutions involved in the processes is also surprising. For instance, it says that "In Maharashtra the monitoring and evaluation was earlier done by the Tata Institute of Social Sciences, Mumbai," and goes on to cite the positive things this institution said about the resettlement and rehabilitation experience. What it has overlooked, however, is that the TISS had also several severely negative things to say about what was happening, and that it was ultimately "relieved" of its position as the official monitoring agency for that state because of its reports.

This approach manifests most powerfully in sections of the judgment where the court goes into detail why large dams are good for the country, how those resettled in projects across the country have "invariably" ended up enjoying better conditions than before and how such projects do not "necessarily" lead to environmental destruction (a point repeated by the Home Minister, Mr. L. K. Advani, at the recent restart of construc-

tion). For instance, it says, "India has an experience of over 40 years in the construction of dams. The experience does not show that construction of a large dam is not cost-effective or leads to ecological or environmental degradation. On the contrary, there has been ecological upgradation with the construction of large dams."

Why is this approach so troubling? First, because the court has offered no justification at all in support of its sweeping generalisations — thus leaving these as mere opinion — but then has gone on to base its judgment on precisely this ground.

Second, as Mr. Prashant Bhushan, counsel for the petitioner, has also pointed out, "these pronouncements have been made in a case where the viability or desirability of large dams was not an issue." This is extraordinary.

Moreover, even if — for the sake of argument — we assume that the other large dams have been beneficial, this does not lead to the conclusion that the Sardar Sarovar Project will necessarily be so. Again, can this be the basis for a Supreme Court judgment? Third, all this, more so given that the recently-published World Commission of Dams' Country Report for India lays out in detail the massive failure that large dams represent. This has been prepared by a panel of Indian experts, coming from a wide range of persuasions on the subject and none of them is "anti-dam." Surely the court should have consulted this exhaustive study before pronouncing its judgment.

The court not taking all this into account is surely troubling in itself; also, as Mr. Bhushan's further pointed out, it specifically proscribed the lawyers during the hearings from citing the record of other such cases in support of their arguments. Then, extraordinarily, the judgment declares that "The petitioner has not been able to point out a single instance where the construction of a dam has, on the whole, had an adverse environmental impact. On the contrary, the environment has improved. ..." What should one make of all this?

UNDP initiates stricter laws on ballast water disposal

By Ashley D'Mello

MUMBAI: Shipping lines in India will have to contend with stricter laws about ballast water disposal with the United National Development Programme (UNDP) initiating measures against offenders.

According to Sanjoy Chakraborty, the deputy chief surveyor of the Director General of Shipping, the UNDP has initiated a Global Ballast Water Management Programme with an outlay of \$7.3 million with pilot projects in six countries India, China, South Africa, Brazil and Ukraine.

Mr Chakraborty said that a meetings to discuss the issue have been held with representatives of the ports and shipping lines and the removal of barriers to the effective implementation of ballast water have been discussed and thrashed out. Highlighting the dangers posed by ballast water disposal, Mr Chakraborty explained that ballast water is sea water which is carried in ships without cargo to give them stability. However the ballast water contains marine life which is transferred into an alien environment. Ninety five per cent of the species die out while five per cent mix with the local eco-system sometimes causing great damage. Mr

Chakraborty pointed out that in the USA and Canada there was the problems of zebra mussels which have invaded the great lakes and are causing havoc with the eco-system. A sum running over \$ one billion is spent by the governments of both countries to contain this menace every year. Another example is the comb jelly in the Black Sea which has affected the local fishing industry drastically seriously affecting fishermen.

However the Marine Environment Protection Committee of the UNDP is now taking action and awareness generation programmes are being undertaken in the developing countries.

The introduction of invasive marine species into new environments has been identified as one of the four greatest threats to the world's oceans. The other three are land based sources of marine pollution, over exploitation of living marine resources and physical alteration or destruction of marine habitat.

Shipping moves over 80 per cent of the world's commodities and transfers around 10 billion tonnes of ballast water across the globe each year. Ballast water is absolutely essential to the safe and efficient

operation of modern shipping, providing balance and stability to unladen ships. It also poses a serious ecological, economic and health threat. How the net result can affect health can be seen from the fact that in several countries, introduced microscopic, "red-tide" algae (toxic dinoflagellates) which came through ballast water have been absorbed by filter-feeding shellfish, such as oysters. When eaten by humans, these contaminated shellfish can cause paralysis and even death.

According to UNDP reports the list of dangers runs into several hundred. The authorities now even fear that diseases such as cholera might be able to be transported in ballast water.

According to Mr Chakraborty the International Maritime Organisation (IMO) has established an information and communications network at London. This will provide a central reference point, clearing house and communication facility for all global information and invasive marine species in general and ballast water in particular.

According to Mr Chakraborty the member countries of IMO have developed voluntary guidelines for the control and management of ships' ballast water, to minimise the

transfer of harmful aquatic organism and pathogens. They include measures to minimise the uptake of organism during ballasting, by avoiding areas in ports where populations of harmful organisation are known to occur, in shallow water and in darkness, when bottom dwelling organisms may rise in the water column.

Other measures include the cleaning of ballast tanks and removing muds and sediments that accumulate in these tanks on a regular basis, which may harbour harmful organisations. Mr Chakraborty said there is significant research being done in a number of scientific and engineering research establishments round the world aimed at a solution to the problem these include physical treatment of the water such as filtration, separation and sterilisation using ozone, ultraviolet light, electric currents and heat treatments. Chemical treatments methods such as adding biocides to ballast water to kill organisms. Biological treatment methods such as adding a predatory parasitic organism to ballast water to kill any other organism. The international community is obviously taking the threat seriously.

THE TIMES OF INDIA

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5 NOV 2000

Revised water policy not working

Hemendra Singh Bartwal
New Delhi, November 5

THE CENTRE'S attempt to evolve a consensus among states on the contentious issues relating to the revised National Water Policy and guidelines for water sharing is expected to begin soon with a working Group of Ministers (GoM) having been constituted recently. However, the initiative is not expected to yield any early results in view of the adamant attitude of some states which fear a loss of control over their river water resources.

Any move to thrash out the complicated issues involved may also be hampered by the large and unwieldy nature of the GoM which would make it all the more difficult to achieve unanimity.

Headed by Union Water Resources Minister Arjun Sethi, the group consists of irrigation and water resources ministers from all states and union territories. Senior officials at the Water Ministry are of the view that the GoM's attempt may just prove to be another prolonged exercise in futility causing more delay in finalising the new water policy that is long overdue.

The National Water Policy was framed in 1987 and has remained unchanged ever since. But the water resources situation in the country and its needs have undergone significant changes during this period which calls for necessary amendments in the policy.

At the last National Water Resources Council (NWRC) meeting in July, the Vajpayee

Government had conveniently put off taking any concrete decision on the contentious water policy issues under pressure from some state governments headed by partners in the ruling alliance at the Centre. Prominent among these was Andhra Pradesh chief minister Chandrababu Naidu who staunchly opposed the setting up of statutory river basin organisations and fixed policy guidelines for water allocation among states.

Tamil Nadu and Punjab, were the other states run by allies which opposed certain provisions of the revised water policy, besides others like Maharashtra and Karnataka. On the advice of Prime Minister Atal Bihari Vajpayee, who chaired the crucial NWRC meet, it decided to set up a GoM to "examine" the issues of disagreement and attempt consensus on them.

The matter of finalising the crucial amendments to the water policy was thus effectively put on the shelf by the Centre till the next meeting of NWRC, which will consider the recommendations of the GoM.

Prominent among the provisions of the revised National Water Policy that have met with stiff opposition is that of setting up of river basin organisations with statutory powers.

The other important issue of contention is the draft guidelines for water allocation among states.

These have been drawn up with a view to avoid settlement of all river water disputes in law courts which is a time-consuming process.

THE HINDUSTAN TIMES

6 NOV 2000

Troubled Waters

No Justice for Narmada Displaced

By RAMASWAMY R IYER

THE judgment of the Supreme Court in the Narmada case (the majority judgment) is an unfortunate one in many ways.

The judgment allows the dam to go up to 90 metres, and stipulates that further construction would be conditional on clearances from the environmental and rehabilitation points of view. However, rehabilitation has not been completed fully even in relation to a height of 85 m. This must have been clear enough from the material before the Court. It has also been stated that land is not available in Maharashtra and Madhya Pradesh. The judgment should surely have made further progress from 85 m to 90 m conditional on the existing deficiencies being remedied and compliance completed.

It might be argued that the rehabilitation sub-group of the Narmada Control Authority (NCA) had found that the conditions had been fulfilled for a height of 90 m. It said nothing of the kind; it merely noted that arrangements were in place, not that rehabilitation had been completed. Nothing that it said can be construed as warranting further construction up to 90 m.

The judgment argues the case for judicial restraint and chastises the petitioners for bringing before it matters that belong to the executive sphere. Why then does it proceed to make statements about the virtues of dams? The judgment puts forward the familiar arguments for dams; goes to the extent of saying that dams are actually good for the environment; and observes that no instance of a dam having done any harm has been brought to notice. These are highly debatable statements. There is a major unresolved controversy and vast literature on this subject. Against that background, one wishes that the judgment had not rushed headlong into this dangerous terrain. In any case, the opinions expressed on this subject can carry no legal authority merely because they have been set forth by judges in a judgment.

Two forces drive this judgment: one is an ardent belief in the virtues of dams; and the other is a strong disapproval of the NBA. The NBA managed to persuade at least one judge (who wrote the minority judgment) that there was something in what it was saying; this was, therefore, hardly a case of a frivolous PIL. The evident impatience with NBA in this case is very

similar to the anger that marred the judgment in the famous Seshan case some years ago. The disapproval of the petitioner clearly manifests itself in the strictures that have been passed on it for the delay in bringing the case to court. The NBA started by trying to improve the rehabilitation policies and packages and their implementation. Over a period of time, it gradually came to the conclusion that the project was badly flawed and needed a major review. It was at that stage that the NBA began to think of going to the Supreme Court, partly encouraged by the new receptivity of the Court.

Meanwhile, it was carrying on a campaign, and review groups were being appointed. However, the response from the executive machinery was found to be largely negative, and NBA decided to move the Supreme Court. That is a perfectly understandable development and one fails to see any occasion for a

have established some kind of a prima facie case, because the Court itself suspended construction for several years, and even now at least one judge finds enough ground for ordering a fresh scrutiny and clearance. What then is the point in recapitulating the existing arrangements as if new orders were being passed? Even the prescription of a reference to the prime minister is not a new contribution. The review committee is a minister-level committee. A disagreement at that level is bound to lead to a reference to the cabinet or to the PM; this has happened before. The judgment offers nothing new by way of remedy or redress to the project-affected people.

It is common knowledge that the Court has not in the past presumed that the existing machinery was working. It has passed strictures on, given directions to, and called for reports from various executive authorities on diverse matters. There has been some concern at judicial activism, but there has also been widespread approval for the judiciary's efforts to rescue the people from the egregious failures of the executive and the legislature. The presumption in the present judgment that existing arrangements can be trusted to work is a departure from that tradition. In future, if the existing machinery fails and if the state uses the police as an instrument of enforcement of its policies for what it considers development, what recourse does the citizen have?

In effect, the present judgment throws the affected people to the tender mercies of the governmental machinery. The people who approached the Supreme Court for justice have been given a dusty answer. This is a severe setback not merely to NBA but to all movements for the empowerment of the people vis-a-vis the state and the cause of environmental protection.

In conclusion, it must be acknowledged that the majority judgment in this case, being the judgment of the highest court in the land, represents finality from a legal point of view. The petitioners have no legal recourse against it, other than a review petition to the Supreme Court itself. It follows that criticisms of the judgment may have no practical consequences. Nevertheless, they may still serve a useful purpose.

(The author is a former secretary for water resources)

IN BRIEF

- Rehabilitation has not been completed even in relation to a height of 85m for the Narmada dam
- The judgment suggests an ardent belief in the virtues of dams
- The fact that at least one judge finds grounds for ordering a fresh scrutiny is significant
- The verdict is a severe setback for all movements for people's empowerment

reprimand. Incidentally, the NBA filed its petition in 1994 and the SC has delivered judgment in October 2000.

The judgment refers to the NCA, its environment and rehabilitation sub-groups, and the minister-level review committee. All this exists already. The pari passu clause implied a continuous check to see that construction did not proceed ahead of measures on the environmental and rehabilitation front, but it broke down, and there were failures of compliance. The doctrine advanced in the judgment that the existing institutions must be presumed to be working is not corroborated by actual experience. It was, in fact, the failure of the existing machinery that led to the PIL.

The NBA must be presumed to

NARMADA BULLDOZEK

Let's not go into the details! 10/91

It is clear that the Sardar Sarovar Project raises a number of questions. The general impression is that the project will transform agriculture in Gujarat, but that will happen only when the height of the dam reaches the projected 138.6 metres. Before this can happen, proper clearances for environment and rehabilitation have to be given by the relevant sub-groups in conformity with the verdict of the Supreme Court. No significant environmental studies were done before construction began and it is not possible to undertake such an exercise when the height of the dam has already touched 88 metres. It is on this very ground that the World Bank pulled out of the project in 1993, while a review committee appointed by the government of India seemed to confirm what the Bank thought about the project. Nothing much can be expected now because the word "development" is bogging everyone's mind in Gujarat, a constituency for the dam has been created, especially among the political class.

As for rehabilitation, things are even worse. According to the figures given by the NBA, about 41,000 families, roughly 200,000 people, had been displaced by 1994 when it filed its petition in the Supreme Court. Since then, the Supreme Court withdrew its stay on construction in February last year, which means that more land has been submerged and more people displaced. Some of the displaced have been rehabilitated to their satisfaction, but the large majority has either not been given any land or rehabilitated on land acquired hastily and which is quite unsuitable for agriculture. The majority ruling of the Supreme Court does not say that rehabilitation has to be carried out before every increase in the height of the dam. Obviously, if the priority is to complete the project in time, rehabilitation, a long and arduous process, is not going to be uppermost on anyone's mind. Most of the displaced are in Madhya Pradesh and Maharashtra states which have already filed affidavits proclaiming their inability to provide any land for resettlement.

This is not the place to take up the Big Dams issue but Arundhati Roy says that 56 million people have been uprooted by big dams in the last 50 years. What this whole sorry episode suggests is that, in future, we should look more closely at the details before being carried away in our enthusiasm for the big. Meanwhile more respect to the minority judgment of Mr Justice Bharucha would be appropriate.

THE STATESMAN

10 NOV 2000

Green bench directs WBPCB to deal with polluting units

Our Correspondent

CALCUTTA 10 NOVEMBER

THE GREEN bench of the Calcutta High Court has directed the West Bengal Pollution Control Board (WBPCB) to take necessary steps against the polluting industries and industrial units in West Bengal by giving them an opportunity to erect anti-pollution devices by December 31, 2000.

The direction was issued by the division bench comprising chief justice Ashok Kumar Mathur and justice Ranojit Kumar Mitra on Friday, when the WBPCB submitted its third report on the industrial pollution scenario in the state. In its report, the state pollution board has identified several industries and industrial units for non-compliance of earlier direction of the Supreme Court delivered in August, 1996.

While passing Friday's order, the division bench observed that PCB was either "ignorant" of the relevant provisions of the pollution Act or it did not take any action "deliberately" against the erring industries violating the pollution norms.

Irrked by the passive role of PCB in the matter, the bench was very much critical on the "miserable failure" of the board in taking appropriate action, including prosecution of those industries.

What's more, there was a directive from the apex court and the court wondered what else PCB requires to take action against the industries violating the statutory norms of environment and pollution in the state.

The case will come up for hearing again before the court in the second week of February next year.

In another case of Ganga pollution filed by Subhas Datta, an environment activist and general secretary of Howrah Ganatantrik Nagarik Samity, the division bench directed the petitioner to again serve a notice on an earlier

court order for a report on Ganga pollution to the Directorate of National River Conservative. He was also directed to serve similar notices to all municipal authorities and local bodies polluting the Ganga water.

It may be mentioned that as directed by the court earlier, the petitioner took extensive photographs of various types of pollution activities on the east and west banks of the river Hooghly. Before filing his affidavit in continuation of M.C. Mehta vs the Union government at the Supreme Court, Mr Datta cruised in a chartered launch covering part of south and North 24 Parganas.

In his petition, he classified three major types of pollutants fouling the river water — domestic sewerage water, industrial wastes, both liquid as well as solid, and dumping of solid garbage at the river bank. He mentioned that the West Bengal Control Board had already submitted a report of Ganga pollution matter before the court.

From the list of untreated effluent-discharging industrial units complied by the board, it was found that even the city based five star hotels were committing such crimes.

The court's attention was also drawn to truckloads of waste being dumped on the river banks, part of which was being carried away into the river by tides. The court was also apprised of all kinds of illegal and unauthorised commercial and domestic operations, including makeshift latrine near Baghbazar/Cossipore point.

The Calcutta Port Trust (CPT), which happens to be the custodian of part of the river Hooghly running from Konnagar/Panihati in the north to Saugar Light House in the south, was found to be allowing or indulging in such illegal and unwarranted activities in its waterways area.

This part of the Ganga pollution case will come up for hearing within the next 15 days.

The Economic Times

11 NOV 2000

Staying on Course

The Case for Large Storage Dams

By A D MOHILE *Commissioner*

11-10 14/11
THE recent Supreme Court judgment which permits raising the height of the Sardar Sarovar dam came as a relief to those who look to the water sector to bring about a sustained and improved environment.

This Narmada episode brought two important issues related to water projects into focus. Dam and reservoirs require resettlement which is painful. Can this be avoided? And second, are large water projects the vehicles of development as they were considered?

The case for large storage is simple. Much of the run-off in any basin occurs in a wet season. Since there are demands throughout the year, storage of water is essential for meeting the demands, which exceed supplies in the low flows. In India, domestic water demands are increasing due to population growth and urbanisation. Even after projecting increases in productivity, the growing food demands require larger double cropping through irrigation. Much larger hydropower is required both for allowing a desirable hydro thermal mix in the grid as also for containing thermal pollution and greenhouse gas emissions. And all these demands cannot be met through watershed development, run-of-the-river schemes and groundwater alone. Most futuristic projections suggest that the present live storage capacity in Indian reservoirs, at about 200 billion cubic metres, will have to double in the next 50 years.

The Narmada basin has an average water resource of about 45 billion cubic meters. The favourable topography indicates a good possibility of development through storages.

The environmental clearance for the project was issued in 1987 after much deliberation. This was subject to planning and implementation of the environmental safeguards *pari passu* with the progress of the work. These included the catchment area treatment programmes and the rehabilitation plans to be so drawn as to be completed ahead of reservoir filling.

The Sardar Sarovar will require the rehabilitation of about 41,000 families. The residential areas in 39 villages will be fully submerged while that in 116 villages will be partially submerged. In the area near the dam, in about 105 villages the population is tribal and in 140 villages in the upper areas in Nimad, the population is mixed. These upper villages have a well-developed economy while the tribal villages are poor. Of the 41,000 or so families

requiring resettlement, 33,000 are in Madhya Pradesh. Most of these would lose their houses, but not much of their agricultural land would be submerged.

The Narmada water disputes tribunal laid down a rehabilitation and resettlement package. Over time, the states have improved on the package. The persons to be resettled and rehabilitated will naturally have some grievances about the package. These are being addressed through not only the official processes but also through the grievance redressal authorities in the three states. The Supreme Court has reviewed the progress of resettlement and noted that all families in the Gujarat area displaced by the dam height up to 110 m have been resettled, for families in Maharashtra and MP, up to 90 m can be accommodated in Gujarat as per their choice, and for the families from these states up to 95 m, action plans have been prepared. They

IN BRIEF

- Storage capacity in India's reservoirs will have to double in the next 50 years
- Over time, the states have improved on the Narmada R&R package
- The SC judgment comes as a relief to those who realise the importance of water development through reservoirs

have also noted that enough land is available for resettlement of all affected families at full height, who wish to settle in Gujarat.

The environmental impacts of the projects have been studied in much detail. The report of the British consultants states that any significant impact on the downstream is unlikely, except for a likely impact on hilsa migration. Although there were no protected monuments, two important temples have been shifted. Extensive studies about flora and fauna in the reservoir area have also been done. Those opposing the project wanted re-examination of the cost effectiveness. It was also pleaded that families affected by the canal need the same relief as the reservoir-affected families. These pleas have not found favour.

The majority judgment has studied the adverse report of the Morse Commission appointed by the World Bank, as also the work of the five-member group. It

notes that the environmental sub-group of NCA has the power to insist on a political level review. It did not agree that the group is not functioning satisfactorily.

Considering these, the majority judgment allowed resumption of the project with a number of safeguards.

The judgment comes as a relief to those who realise the inevitability of water development through reservoirs. However, one needs to realise that decisions about clearances and construction of large projects affect the lives of many citizens and they have a right to be heard and a right to question the decision. While the whole NBA-Sardar Sarovar episode led to a considerable delay, it also provides important feedback to improve the process.

First, the project studies in future need to go in much larger details and include action plans for rehabilitation, resettlement and environmental impacts. If there are strong possibilities of impacts leading to possible extinction of a species, the project may have to be reconsidered. In other matters, mitigative measures need to be worked out. The large number of studies done, saved the situation of Sardar Sarovar. In regard to R & R, improving the quality of life of all involved in the project needs to be the basis of policies and strategies. This is even more important where a project significantly affects a local tribal culture. But, these involuntary resettlements need to be seen in the light of a much stronger process of voluntary resettlement due to economic and other compulsions.

A firm implementation of a very considerate policy package is necessary. At the field level, both the independent monitoring of R & R and a quasi-judicial system of grievance redressal could become a norm for larger reservoir projects. The sensitisation of both the line department staff and of the NGOs working with the people is essential. Openness, and information sharing should be recognised as basic needs. This would lead to a realisation that a flexible and cooperative approach among them can lead to a 'win win' situation.

India's development will require the implementation of many water projects, and it would be inappropriate for each of these to take the tortuous path of the Sardar Sarovar.

(The author is a former chairman, Central Water Commission and currently president, Indian Association of Hydrologists)

THE TIMES OF INDIA

14 NOV 2000

6th round of talks on global climate begins

Anil Agarwal
The Hague, November 15

Environment
HR 12

18/12

THE NATIONS of the world opened their sixth round of negotiations yesterday in the Dutch capital to save the world's climate from the depredations of humankind — possibly the biggest environmental and economic threat that they will face during the 21st century.

The negotiations will revolve around the loose ends in the Kyoto Protocol agreed in late 1997, which the US government has said must be tied up before it will send the protocol to the US Senate for ratification. The uncertainties in the US election leave the Hague negotiations in a lurch as it is not clear who will preside over the US government and what will be acceptable to him.

The Clinton administration has participated in the discussions leading up to the Hague conference and has raised a series of contentious issues that will have to be sorted out here.

In Kyoto, the US government had agreed to cut its 1990 emissions of 'greenhouse gases' -- gases that lead to global warming and climate change -- by 7 per cent on average during the five year "commitment period" from 2008 to 2012. The US agreed to do this on the condition that it could buy "emissions reductions" from developing countries as well as other industrialised countries and credit them as its own "emissions reduction" effort.

This is because countries like India, China and those of Eastern Europe are extremely energy-inef-

icient and cutting a tonne of carbon dioxide, a major greenhouse gas, will be a fraction of the cost of doing the same in an energy-efficient country like the US. The US oil and auto industry has campaigned against the Clinton administration arguing that meeting the Kyoto targets would make eggs and driving cars very expensive for Americans and it has found support in the US senate.

The Clinton administration has assured the Senate that the emissions trading mechanisms agreed in the Kyoto Protocol would make the total cost of meeting the Kyoto Protocol commitments manageable.

The Hague conference now has to decide whether the US or other countries can buy their way out completely through the stipulated trading mechanisms without any "domestic action" or should there be a limit on the total amount of emissions that an industrialised nation can buy from abroad.

The European Union has expressed unhappiness over the US position and is demanding a minimum emissions reduction of 50 per cent from domestic action. The US opposes any limits on emissions trading.

The second contentious issue is the participation of developing countries, which have no emissions reduction commitments under the Kyoto Protocol.

However, as the US is keen to buy its emissions reductions from abroad. It wants developing countries to take measures to reduce their emissions for which it will pay the "incremental cost".

THE HINDUSTAN TIMES

18 NOV 2000

The trickle-down effect

Will the water from the Narmada Dam help the people of Saurashtra and Kutch? This is one of the more important questions raised in the wake of recent Supreme Court ruling.

HIMANSHU KAUSHIK investigates

LOOK at the map of the Sardar Sarovar Project's command area and you may suggest that it isn't really the much-touted "Lifeline of Gujarat". Ninety per cent of Saurashtra and Kutch, where water scarcity and droughts are a recurring phenomena, fall outside the command area. The canals taking off from the Saurashtra branch cover only the northern and eastern fringes of the region, while the Kutch branch skirts past the major landmass of the border district on its way to the terminal point at Mandvi in south.

But the map shows only the canal network and the areas this network will irrigate; it does not show the extensive network of pipelines which the authorities are planning to lay to supply drinking water to scores of towns and thousands of villages of these parched regions which have no perennial source of water and where rain is scarce.

Gujarat is entitled to get 9.0 million acre feet water from the Sardar Sarovar Project. Drinking water supply is an important component of the project, which is expected to quench the thirst of 8,215 villages and 135 towns and cities.

Water will start flowing into the Narmada Main Canal once the dam height reaches 110 metres. The canal passes through Surendranagar district, Maliya, Miyana, Ahmedabad district, Kadi, Harij and Radhanpur — a belt which is known for recurring water scarcity. Naturally, all these areas will get water for drinking as well as irrigation.

The Saurashtra branch takes off from the main canal near Kadi in Mehsana district. In Surendranagar, it will split into six sub-branches, going to Maliya, Dhrangadhara and Morbi in north and Vallbhipur, Limbdi and Botad in south. The Saurashtra branch, along with its sub-branches, will take care of the irrigation and drinking water needs of Surendranagar, and northern parts of Rajkot and Bhavanagar districts. The Kutch branch will similarly benefit the areas along it right up to Mandvi.

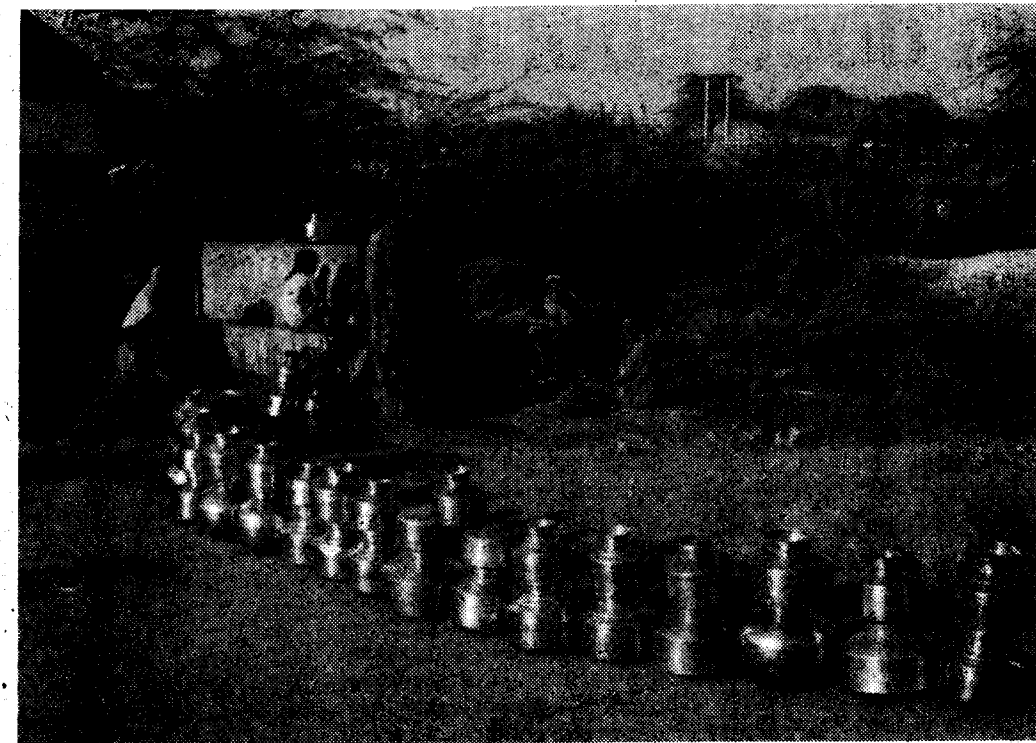
That leaves out 90 per cent of Saurashtra and Kutch — areas like Amreli, Jamnagar, Porbandar, Junagadh and Rajkot where drinking water has always been a problem. Bhupendrasinh Chudasma, chairperson of the Sardar Sarovar Narmada Nigam, which is executing the project, admits that "large parts of Saurashtra and Kutch", which aren't part of the project's command area, won't get water for irrigation. But since drinking water is the first priority in the national water policy, the government is planning a network of pipelines to carry water to problem areas. "If there is no further disruption of

work, Narmada waters should reach all corners of Saurashtra by June 2002," says Chudasma. Next month, tenders will be floated for an extensive network of pipelines, called the Bhaskarpura project, which is expected to be completed in one and a half years and will cost around Rs. 1,400 crore. It will supply drinking water to 31 urban centres and 1,345 villages in Rajkot, Surendranagar, Jamnagar and Kutch districts. As much as 500 million litres will be lifted daily from Saurashtra branch at Bhaskarpura in Surendranagar district and fed into a pipeline which will carry it 131 kilometre to Wankaner in Rajkot district. From Wankaner, a 70 kilometre pipeline will carry 152.76 MLD to Rajkot, taking care of seven urban centres and 422 vil-

ages. Another 27 kilometre-long pipeline will carry water from Wankaner to Morbi.

Here, it would be further split into three smaller pipelines: a 97-km one to Jamnagar which will carry 115 MLD and meet the needs of seven urban centres and 293 villages, a second to Halwad in northern Surendranagar which will carry 100 MLD water for 564 villages and nine urban centres, and a third to Bhuj in Kutch, which will take care of eight urban centres and 455 villages.

Another project, called Saurashtra pipeline, costing Rs 252 crore, is nearing completion and is expected to be commis-



Gujarat is waiting for the 9.0 million acre feet water it's supposed to get from the dam project

sioned in January. Since the height of the Narmada Dam has not yet reached the point where water can start flowing by gravity, water will be lifted by pumps from the Sardar Sarovar reservoir and brought to the pipeline by an existing network of canals.

The pipeline will meet the drinking water needs of Amreli, Bhavnagar, Rajkot and Junagadh districts. Chief Minister Keshubhai Patel says a firm time table has been drawn and he was personally monitoring the progress of the pipeline project. If the project is executed as per schedule, Narmada water for drinking purposes should reach

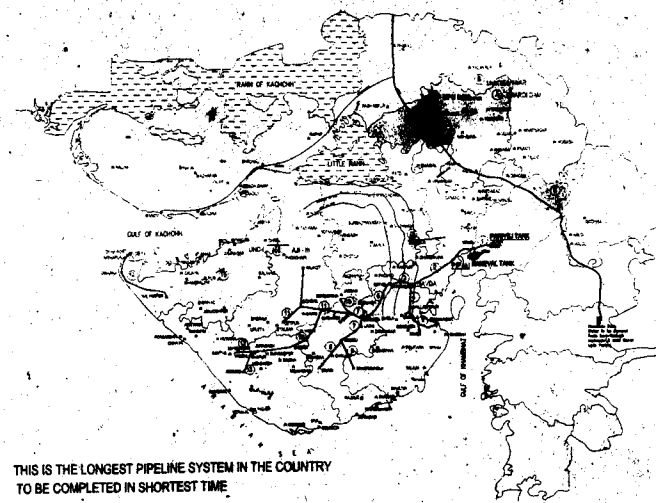
Several smaller pipelines branch off from this pipeline to supply water to other places. But the main beneficiaries will be Amreli town, 613 villages in Amreli district and 795 villages in Bhavanagar district, said B.J. Shah, director of Canals in the Sardar Sarovar Narmada Nigam. While these pipelines will considerably ease the drinking water crisis, these are also expected to help agriculture and industry indirectly.

Says Shah, "Once the Narmada water starts flowing into the taps, the water in the local dams

and reservoirs, which is now supplied to drinking water schemes, can be used for irrigation and other purposes." It may not be sufficient, but it would definitely help, according to him. Adds Dhirubhai Vithalani, president of Rajkot Chamber of Commerce and Industry, "We know the Narmada water is only meant for drinking. But its arrival will definitely give a boost to industry and agriculture."

Chudasma is confident that the canals and pipelines will be completed by the deadline and funds will not be a constraint. However, the delivery cost of water is going to be high. As Mahesh Pandya, president of the Samajik Nyay Kendra, who is also an environment engineer, points out, the topography of Saurashtra is such that water will reach by gravity only till Surendranagar. From there, it will have to be lifted by pumps to send it to different parts of Saurashtra. Both Saurashtra pipeline and Bhaskarpura project will, therefore, have a number of pumping stations.

What difference will it make to the thirsty people? Well, just to get an idea, Rajkot city now gets water for 20 minutes on alternate days and, in summer, the situation is bound to get worse. After the Bhaskarpura project is ready, city authorities say they will be able to ensure a 40 minute supply daily. There are places where the situation is worse than Rajkot. There are places where people have to make do with water which is just not fit for drinking. It is therefore natural that local residents have come to regard the SSP as their lifeline.



EXPRESS
EQ-VIGIL

The NBA, the court and the SSP

By A. Vaidyanathan

The Supreme Court missed a good opportunity to give an impetus to the much-needed reform for ensuring transparency and accountability in the way large public projects are handled.

THE SUPREME Court verdict in the Sardar Sarovar case has understandably disappointed the Narmada Bachao Andolan (NBA) and those who support its stand. Many (like myself) who do not subscribe entirely to the NBA viewpoint also feel disappointed at the court's rejection of the plea for an impartial review of the project as currently conceived, allowing resumption of construction to raise the dam height to 90 metres and granting contingent permission for increasing it even further as per the Governments' plan, subject to weak and fuzzy conditions on rehabilitation of displaced persons.

The NBA and Ms. Medha Patkar have made a truly praiseworthy contribution, focusing attention on several important issues relating to the Sardar Sarovar Project (SSP), and by extension, to all largescale development schemes. However, the NBA's stance and strategy in respect of some key aspects call for comment.

The early phases of the movement, pre-dating the NBA, saw a well-documented and wide-ranging critique of several features of the SSP. The consequences of submergence of vast areas especially for the number of people likely to be displaced, the adequacy and fairness of measures to rehabilitate them and serious doubts about their implementation figured prominently in the debates. At the same time, they also raised questions about the rationale of the project, the assumptions about water availability, economic viability and problems of financing the huge investment.

However, over time, the NBA narrowed the focus of its protests to the issues of environment and displacement. It took the position that large dams were unnecessary and that their adverse consequences for environment, displaced people and sustainability far outweighed their benefits.

The NBA's media campaigns and public protests evoked sympathy and support both within and outside the country. But the Governments of India and of Gujarat refused to even discuss, much less set up a credible forum to examine independently and on merit, the issues raised by the NBA and several other critics. The issue was then taken to the Supreme Court. The petition challenged the basis on which the project was given technical, economic and environmental clearances, pointed to serious lacunae (in terms of transparency and

objectivity) in the mechanisms and procedures for making these decisions, and documented the defects and inadequacy of the proposed rehabilitation measures and the lack of any credible mechanism for remedying these defects and ensuring effective implementation.

However, the NBA's argument that large dams are not necessary to increase production and that their contribution (indeed the contribution of irrigation generally) to increased production is meagre is questionable. In fact, on an average, a hectare of irrigated land produces three to four times as much as a hectare of rainfed land. And practically the entire increase in production in recent decades has come from an expansion of irrigated area and rising yield from irrigated lands; there is hardly any increase in the yield from rainfed lands.

Given our climate, the possibility of substantially increasing crop yields and more intensive cropping depends crucially on augmenting water supply from local rainfall and making it available for a longer period and with greater assurance. This cannot be done unless surplus rainfall in the rainy season, and in areas with high rainfall, is stored for use in the dry seasons and regions. One can readily agree that much more attention should be given to a more effective use of local rainfall through integrated watershed development; and that more should be done to improve and extend tanks, "bhandaras," diversion of local streams and such smallscale, so-called minor irrigation works. But these can go only a limited way. The total capacity of all minor surface works in the early 1950s is estimated at 15 billion cubic metres (BCM) and that of large storages, about 18 BCM. Since then we have added more than 200 BCM, all from large storages. While certainly there is scope for extending and improving small works, they cannot provide a storage of this magnitude. Sizeable surface and underground storages cannot be avoided. They should not be seen as alternatives; we should instead look at ways

in which large and small storages, surface water and ground water could be combined so that the requirement of large storage is minimised and water is used more carefully and effectively.

Many things are wrong, and seriously wrong, with the way irrigation works have been designed, constructed and managed: poor project preparation, excessive preoccupation with large new projects, inordinate delays and high costs, corruption, poor management and inequitable distribution of costs and benefits. The NBA had an excellent opportunity to focus on these issues in the context of the SSP. Important questions on costs, patterns of water use, productivity impact and regional distribution of benefits were in fact raised early on. This stimulated interest not only among the public at large but also professionals outside the Government. At least one group which included engineers and social scientists with extensive experience in irrigation management produced a well-researched and reasoned alternative to the official plan.

This proposal argued that lowering the maximum height of the dam would drastically reduce the extent of submergence and the number of people displaced. The storage of the Sardar Sarovar would be smaller, but the total water utilisation as envisaged in the official plan could be ensured by using the existing tanks in Saurashtra to store part of the water and operating them in an integrated way. Moreover, this group argued for different patterns of water allocation among regions and crops to ensure a more productive and sustainable use of water and more equitable sharing of benefits. It is regrettable that the NBA did not consider this alternative seriously. At any rate it chose not to use it to press the Government and later the court for reviewing the project and instead argued for its outright rejection. However, this alternative was brought to the court's notice in other submissions.

Nevertheless, the court evidently was not persuaded of the justification for ruling in favour of a review of alternative designs.

This prima facie is somewhat surprising. One would have thought that a solution which could drastically reduce displacement and ensure a more effective use of available supplies deserved serious consideration. Given the complexity of the problem, the court may not be in a position to assess the merits of alternatives. But it could have recommended an independent expert review of the proposed options. That would have helped to create a much-needed and credible mechanism for addressing the legitimate concerns of the affected parties and finding a reasonable and fair compromise between conflicting interests.

The other issue which the judgment has not resolved is the question of compensation. There are several aspects: (a) the basis for determining those eligible, (b) the criteria for deciding the magnitude and form of compensation and (c) mechanisms to ensure that the claims are in fact settled fully and speedily. Without these no package can be complete. The verdict leaves the criteria by which to judge whether or not the rehabilitation package is satisfactory ill-defined; and the mechanisms to ensure implementation even more so.

There is also the question who should bear the cost of compensating the displaced. Placing the responsibility entirely on the State is neither prudent nor fair. The current policy of the State bearing the full responsibility for financing investment costs and of pricing water far below the costs of providing it has resulted in a huge and mounting burden on budgets. In this context, making the beneficiaries of the project liable to compensate those who are displaced by it merits serious consideration. The judgment, however, does not go into the substantial issues relating to compensation and lay down at least the principles on which they should be settled.

Altogether one is left feeling that the court missed a good opportunity to give an impetus to the much-needed reform for ensuring transparency and accountability in the way large public projects are handled and credible mechanisms to address and accommodate the concerns of those adversely affected in a fair, humane and equitable manner.

(The writer is Professor Emeritus, Madras Institute for Development Studies.)

THE HINDU

22 NOV 2000

South news
HD-15

SC will not yield on polluting units

By Our Legal Correspondent

NEW DELHI, NOV. 21. The Supreme Court today made it clear that it would not withdraw or allow go slow in respect of its earlier orders of closure of the polluting units in the capital "if hooligans take to the streets".

A three-judge Bench comprising Mr. Justice B.N. Kirpal, Mr. Justice N. Santosh Hegde and Mr. Justice Brijesh Kumar made this observation during the course of hearing of an application by the Delhi Government seeking court's permission to go slow on implementing the earlier orders.

On November 14, the Bench issued contempt notice to the Delhi Chief Secretary for not complying with repeated orders for closure of industries in residential and non-conforming areas since 1996 and asked him to show cause personally before the court on November 28 as to why he should not be punished for not obeying the orders. Confronted with the contempt notice, the Delhi Government ordered closure of the polluting units.

In a swift reaction there was widespread violence and chaos in the capital on Monday when

thousands of people protesting against the closure blocked the roads and burnt buses and other government vehicles.

To find a solution to this agitation, the Delhi Government filed an application which quoted intelligence reports and said the situation was likely to escalate.

It said the rioters were planning to rush to the Supreme Court and Parliament and if it happened the situation might get worse.

Senior counsel for the Delhi Government, Mr. K.K. Venugopal, submitted that the administration might be in the wrong to bring the situation to such a state but in the given circumstances it should be allowed to go slow on the closure of the industry as more loss of lives were feared.

Responding to this, the Bench observed: "You have hooligans holding the city to ransom. The situation in the city is such that anybody can take to the street and hold the city to ransom."

When Mr. Venugopal requested the court to allow the administration to go slow on the issue, the Bench said, "Do whatever you like. We will hear the matter on November 28. We have only asked

the Chief Secretary to show cause for contempt for not obeying orders of the court since 1996. Let cause be shown, we will see," the Bench said.

The counsel submitted that there were two million people, who fearing loss of livelihood from closure of the industries, had taken to the streets and pleaded that it was a matter falling under Article 21 of the Constitution which guaranteed right to life.

The court observed "we had passed the orders on the basis that health of people is more important than the livelihood" and wanted to know how many licences were issued to the industries in the residential or non-conforming areas in violation of the court orders.

Mr. Venugopal replied that around 15,000 licences were issued. But when the counsel did not commit on it, the court asked him to file an affidavit. The Bench said "you created the situation as you deliberately disobeyed court orders and issued licences. All that we tell you to do is to implement the law", and adjourned the proceedings to November 28.

THE HINDU

22 NOV 2000

UN climate meet for serious pollution cuts

BY ROBIN POMEROY AND
MATT DAILY

The Hague, Nov. 20: As political leaders arrived for United Nations climate talks, the meeting's chairman warned them against using tricks to avoid cutting the pollution blamed for global warming.

Senior politicians from 185 countries have one week to reach a deal on how to achieve the emissions reductions they accepted under a UN pact forged in Kyoto, Japan, in 1997. Jan Pronk, the Dutch environ-

ment minister who is chairing the meeting, said the main aim of the talks was to agree on rules that would mean genuine pollution reductions.

"The targets will have to be met. If we don't reach the targets then there's no possibility for more ambitious targets (in the future). This is a warning against tricks," Mr Pronk said.

Meanwhile the European Union has accused the United States of seeking to avoid making any cuts in its emissions, relying instead on using forests to soak up carbon dioxide and

buying credits for emissions reduced in other countries.

The United States, and allies which include Canada, Japan and Australia, are vehemently opposed to the EU plan to cap the use of such so-called "flexibility mechanisms" which, they claim, will achieve the same reductions at a cheaper price.

Under the Kyoto Protocol industrialised nations agreed to cut their greenhouse gas emissions, mainly carbon dioxide, by an average of five percent from 1990 levels by 2008-2012.

Scientists say a much greater

cut is needed to halt a trend which, if unchecked, will mean an increase in the Earth's temperature of 1.5-6.0 degrees Centigrade by 2100 and sea levels rising by up to one metre.

Even before the real political sparring was due to start on Monday, the United States and Europe were trading jabs.

"It would be absurd if the biggest emitter of greenhouse gases (the United States) would not ratify the Kyoto Protocol," EU environment commissioner Margot Wallstrom said.

(Reuters)

THE ASIAN AGE

21 NOV 2000

Watered down

BY VIJAY KUMAR NAGARAJ

THE 1978 Narmada Water Disputes Tribunal (NWDI) decided basic features of the Sardar Sarovar Project and apportioning of costs and benefits among the concerned states. The Interstate Water Disputes Act states clearly that the decision of such a tribunal is final and binding on the parties.

How can the Supreme Court choose not to examine the merits of the arguments relating to hydrology, height of the dam and extent of submergence that were put forward by the petitioner but simply reject them saying "We, therefore (referring to the sanctity of the award), do not propose to deal with any contention which, in fact, seems to challenge the correctness of an issue decided by the tribunal?"

One such issue that has been 'decided' by the tribunal is the amount of water available in the Narmada. The NWDI arrived at a figure of 28 million acre feet of water in the river. However, two members of the five-member group appointed by the SC in 1994 were of the opinion that fresh data available indicates availability to be only 23 million acre feet. The Apex Court, however, simply rules that there is 28 million acre feet of water because the tribunal has 'decided' that! Any evidence to the contrary is not even examined.

The award under the Water Disputes Act is final and binding. But is the law a dead letter, beyond judicial interpretation or has the SC simply chosen to refrain from any interpretation? If it indeed has chosen so, then what are the reasons and why are they not evident in the judgment?

Is there no merit at all in the arguments that given the significant expansion in our knowledge and understanding of the scale and complexity of socio-environmental impacts, there is a case for reviewing decisions taken 22 years ago?

The petitioner had relied on several reports and reviews in pleas related to environmental and resettlement issues. One such report that was substantially referred to was that of the Morse Committee — an independent committee of international experts set up by the World Bank to review various aspects including environmental and resettlement of the SSP. The SC has completely refused to accept the Morse Committee report as reliable on the grounds that the

World Bank and the Government of India had rejected the report. The Morse Committee report was critical of the World Bank due to which the final version was not cleared by it, something that is not rare or uncommon. How can the SC refuse to accept a report as untenable evidence merely because one of the respondents — which happens to be the Government — rejects it

On issues such as catchment area treatment, downstream impacts, compensatory afforestation, impacts on fishing etc. after outlining the arguments of the petitioner, the SC judgment says: "Again all these contentions were based on the Morse Committee report which the World Bank and the Union of India has already rejected". The judgment then goes on to refer to submissions by the respondents that all these impacts are well taken care of.

It is important to note that the SC then goes on to quote extensively from the report on downstream impacts given by M/s H.R. Wallingford to demonstrate that the dam would on the whole have beneficial impacts both downstream and upstream. Why does the SC give no specific reasons as to why it favours the Wallingford report over the Morse report? Is it because the former is accepted by the Government while the latter is not?

The petitioner contends that a large number of people within the submergence area not dependent on land are adversely affected due to loss of (livelihood) the river and/or the community they serviced. The SC simply says: "In our opinion, it is neither possible nor necessary to decide regarding the number of people likely to be so affected because all those who are entitled to be rehabilitated as per the award will be provided with benefits of the package offered and chosen." Why has the SC not thought it fit to spell out why it holds this 'opinion'?

Regarding resettlement and rehabilitation, the SC says, "If one compares the living conditions of the

PAFs (project affected families) in their submerging villages with the rehabilitation packages first provided by the Tribunal's Award and then liberalised by the states, it is obvious that the PAFs had gained substantially after their resettlement." Why doesn't the judgment spell how exactly this is 'obvious'? Why is there no discussion at all on the evidence that was placed before the SC, supporting or disputing this?

How can a comparison be made between the living conditions in original villages (harsh realities) and the rehabilitation packages (good intentions)? Isn't the acid test of effective rehabilitation to compare living conditions in the original villages with living conditions in the resettlement sites, and not with what is merely on paper?

Why is the basis on which this comparison is made and indicators used showing that PAFs have gained substantially after resettlement not spelt out by the SC? In fact, the only evidence the SC refers to in this regard is an affidavit by an Additional Director of the Narmada Valley Development Authority (NVDA) reporting on a two-day visit to resettlement sites in Gujarat!

On the question of effectiveness of the mechanism set up to execute the project and the resettlement issue, the SC maintains that "there is no reason to assume that these authorities will not function properly. In our opinion the Court should have no role to play". Is this 'assumption' sufficient grounds for the SC to summarily reject all pleas regarding ineffective functioning of the concerned authorities? Why was a Grievance Redressal Authority constituted only last year by the Gujarat Government?

"It is now well-settled that the courts, in the exercise of their jurisdiction, will not transgress into the field of policy decision". Have not courts in recent years 'transgressed' into many policy areas ranging from the issue of mining leases and profit sharing in scheduled areas to location of polluting industries to running of polluting vehicles to censorship etc.

"Even then any challenge to such a policy decision must be before the execution of the project is undertaken." The petitioner is even held guilty of not approaching the court earlier. Is this realistic given the prevailing scenario of severe inequity in society and the lack of transparency in governance?

The second paragraph of page 177 reads as follows: "The availability of drinking water will benefit about 1.9 lakh people residing in 124 villages in arid and drought-prone border areas of Rajasthan who have no other source of water and are suffering grave hardship". The third sentence of the very next paragraph reads, "The only benefit from the project which Rajasthan get is its share of hydel power from the project". Will the SC please tell us what is the truth?

"India has an experience of 40 years in the construction of dams. The experience does not show that construction of a large dam is not cost-effective or leads to ecological or environmental degradation. On the contrary, there has been ecological upgradation with construction of large dams." Why is the SC silent on the nature and extent of such 'ecological upgradation'?

"The large scale river valley projects *per se* all over the country have made India more than self-sufficient in food." Why doesn't the judgment explain how this is true?

For example, residents of villages around Bhakra Nangal Dam, Nagarjun Sagar Dam, Tehri, Bhilai Steel Plant, Bokaro and Bala Iron and Steel Plant and numerous other developmental sites are better off than people living in villages in whose vicinity no development project came in." What specific evidence did the SC consider regarding each of the projects and how was this verified? Is the SC unaware that the Tehri dam is incomplete and only a fraction of the total number of 'oustees' have been resettled? Which are these 'numerous other developmental sites where people are better off'?

The SC cautions that "Public Interest Litigation should not be allowed to degenerate to becoming Publicity Interest Litigation or Private Inquisitiveness Litigation." But the question is whether this judgment is in public interest. And who will decide that?



UN blasts nuclear option to curb global warming

THE HAGUE: The head of the United Nations Environment Programme has blasted proposals to include nuclear energy options as a means to slow down global warming. "I'm utterly convinced that it should not be included in any type of (agreement)," the UN's Klaus Toepfer said during the UN-sponsored talks in The Hague to slow global warming.

The nuclear power industry has painted itself as the good guy at international talks, arguing that nuclear reactors are clean and produce no carbon dioxide. The U.S. and Japan have said they would back plans allowing them to fund nuclear projects in developing countries as part of a global effort to reduce emissions of carbon dioxide, one of the gases widely blamed for global warming. But environmentalists have attacked that stance and point to the longer-term problems of nuclear waste and safety. The two-

week conference is trying to hammer out a deal to put flesh on the bones of an agreement on emissions reductions reached in the Japanese city of Kyoto three years ago.

The U.S. and Japan favour the nuclear option as this would earn them credits towards meeting their own emissions reduction targets set at Kyoto. Although the United Nations Environment Programme, based in Nairobi, Kenya, is not an official participant in the talks, it could play an important role in how projects are carried out. The body funds clean energy projects in developing lands and operates educational programmes designed to protect the environment. Scientists estimate that the earth's temperature could rise by as much as six degrees centigrade over the next 100 years, raising sea levels and causing extreme storms, such as those that have ravaged parts of Europe, Asia, Africa and Latin America in recent months. (Reuters)

THE TIMES OF INDIA

23 NOV 2000

Two out of every ten persons in the State are being slow-poisoned to death, says a survey on arsenic contamination

There's poison in your drinking water

Jaldeep Mazumdar
Calcutta, November 22

THE FOUL-SMELLING, reddish water flowing out of tubewells is ready to kill. Nearly two out of every ten persons in the State are being slow-poisoned to death and more than a third of the State's population would be carrying heavy doses of arsenic in their bodies in five years' time.

Citing the situation as 'alarming', Prof Dipankar Chakraborti, director, School of Environmental Studies (SoES), Jadavpur University, said the latest survey shows that arsenic contamination of groundwater is on the increase.

Groundwater in 1,287 villages

in 70 block of nine of the 18 districts of the State contains arsenic much above the permissible limit of 50 micrograms per litre, affecting a 17.4-million population.

"One of the findings of our survey is far more alarming. In a test case involving five families whose members were suffering from arsenic poisoning, we supplied them safe and purified drinking water every day for five years. We monitored their arsenical skin lesions and tested their urine, hair and nail samples regularly for signs of recovery. But we found that the arsenic levels in

their urine, hair or nails was not decreasing," said Dr Bhajan Das, a senior researcher.

The reason, the researchers say, is that the five families "could not avoid arsenic intake from other sources like vegetables and food-grains grown in land irrigated by

the contaminated groundwater". The finding has set the alarm bells clanging. "We had been recommending that purified or surface water be supplied to people living in arsenic-contaminated areas for their drinking and cooking purposes. But this alone

would not help. Dependence of groundwater for washing clothes and utensils, bathing and even for irrigating croplands has to stop. But that is not possible. So what is to be done?" wondered Chakraborti.

"As per our estimates in light of this finding, if low-cost solutions to purify groundwater at the individual tubewell level are not found immediately, more than 22 million people of the State would be affected by arsenic poisoning by 2005," said another senior researcher.

"Moreover, we suspect that with the exploitation of groundwater

increasing in the remaining nine districts, it is only a matter of time before they're added to the 'affected' list. And there's another aspect—people of other districts who consume vegetables or foodgrains grown in those areas of the nine affected districts will also be affected slowly," he added.

After analysing 90,000 water samples and thousands of hair, nail, skin scale, blood and breast milk samples from people, as well as cow milk, cow urine and cow hair samples from the nine districts, the SoES has found that 55 per cent of the tubewells were unsafe and 83 per cent of the people have arsenic above normal levels in their hair, nails, skin scales or blood.

DISTRICT	TOTAL BLOCKS	BLOCKS SURVIVED	AFFECTED BLOCKS
North 24-Parganas	22	22	19
South 24-Parganas	27	11	16
Nadia	17	15	15
Medinipur	14	05	05
Murshidabad	26	18	17
Burdwan	31	02	02
Hooghly	17	03	01
Howrah	14	01	01



Masterplan change only to help non-polluting industries

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By Our Special Correspondent

NEW DELHI, NOV. 22. The Centre today ruled out amending Delhi's masterplan providing concession to polluting industries operating in non-conforming areas. The only ground the Union Urban Development Minister, Mr. Jagmohan, conceded was the offer to redefine household industries benefiting the non-polluting units. He sought time from the Supreme Court for relocation of the rest.

A dissatisfied Opposition, whose insistence led to a short-duration discussion on the subject in the Rajya Sabha, reacted by staging a walkout stating that the concerns of the affected workforce were not addressed.

The protest came at the end of nearly day-long discussion that followed the statement of Mr. Jagmohan on the issue of closure of industries in residential areas resulting in its owners and workers staging violent demonstrations in the Capital since Sunday.

Disagreeing with the statistics of a survey of such industries in Delhi, Mr. Jagmohan also ruled out any amendment to declare a residential area as industrial one even if it has 70 per cent factories. The Government was prepared to look into the hardships of relocation and the workforce would benefit on account of better working conditions.

Pleading for amending the masterplan, the Opposition led by the Congress charged the Centre with not acting in the interests of the poor and sought to apportion the blame on it for the current misery of people due to its inaction despite warnings from the city government. Most members suggested that a balance should be struck between practical requirement and environmental concerns.

Mr. Jagmohan said he was firm on implementing the rules under the masterplan approved by Parliament. If the Government amended the plan to accommodate those who had violated the rules, then the city could end

up looking like a junkyard. The Centre agreed in principle to redefine household industries, subject to the observance of safeguards in respect of pollution norms and on terms of the recommendations of the Jagdish Sagar Committee. The norms pertain to the number of persons who can work in household industries, the power that can be sanctioned and the area that can be used.

BJP joins chorus in LS

If in the Rajya Sabha it was the Opposition which demanded amendment of the masterplan, in the Lok Sabha the BJP MPs too joined the chorus led by the former Delhi Chief Minister, Mr. Madan Lal Khurana.

Sympathising with the agitated workers, Mr. Khurana in an indirect reference to the court's observation said the workers were not hooligans but had come to the city for employment.

'Not hooligans': Page 15

THE HINDU

23 NOV 2003

False dichotomy

By C. Rammanohar Reddy

Whenever it suits the Government, it is quick to conjure up the false dichotomy between employment security and environment protection.

WHILE THE planned closure of industrial units in Delhi because they have been guilty of pollution brought thousands of the owners and their employees on to the streets, half-way across the world at a United Nations conference in The Hague, Netherlands, billed as "the make or break summit to save the planet's climate", the Governments of the industrialised countries were showing their unwillingness to make the effort necessary to halt global warming.

Yet, the tensions involved in setting off economic growth against environment protection in the two cases are more imaginary than real. In dealing with both pollution in Delhi and climate change the obstacles have been more an inability to look beyond the short-term, administrative incompetence and a social and Government desire to pass the responsibility for action to others.

If steps are taken to halt the build up of atmospheric greenhouse gases (GHGs), which contribute to global warming, what will be at threat is not so much thousands of jobs in the West but a certain lifestyle that is unwilling to acknowledge the consequences of abusing the environment. It is now more than two decades since the first warnings were made about climate change and a decade since the U.N. Framework Convention on Climate Change (UNFCCC) was drawn up. As each year goes by there is more scientific evidence — if needed — that human action is contributing to climate change, that the world's temperature is rising and that the consequences will be disastrous 50 years to a century later for people in small island and coastal areas, for agriculture in different parts of the world and therefore for the world economy as a whole.

Such enormous changes that are likely have not provoked Governments into action. In the 1990s, almost all the industrialised countries were pumping more and not less of the GHGs into the atmosphere. These countries gave themselves some more time in 1997 when they drew up the Kyoto Protocol of the UNFCCC committing themselves to a five per cent reduction of emissions over 1990 levels by 2008-2012. However, to date not one of them has ratified the Kyoto Protocol.

Instead of ratifying the treaty and going

on to lowering discharges, the developed countries at The Hague conference have been more occupied with squabbling about which instruments are best suited for a reduction of emissions. Can they plant forests in developing countries and set off the atmospheric carbon dioxide these "sinks" will absorb against their emission of GHGs? Can they finance projects in the transition economies and earn credits? Can they trade "emission credits" so that countries discharging excess GHGs can buy permits from those which have stayed within limits?

It is apparent that all these mechanisms seek to transfer the location of emission reduction strategies from the domestic economy to the outside world. More than 60 per cent of GHG emissions takes the form of carbon dioxide, more than 60 per cent of these discharges comes from transport and oil-fired power stations and a full three-quarters of such emissions takes place in the developed countries.

Clearly, if any substantial reduction of GHG emissions is to take place it must come first and foremost in transport. Efficiency improvements have gone a long way towards reducing individual emissions but in the aggregate nothing of significance will happen without a radical lowering of the dependence on the automobile. But it is not just that so many sectors of the economy in the West directly and indirectly depend on the car. An individual's personality is seen to be defined by the kind of car she/he owns and the entire lifestyle in the West revolves around the car. No wonder then that there is so much resistance to taking any substantive action on rolling back global warming, an opposition which is otherwise couched in terms of high costs of reducing emissions, a loss of jobs and slower economic growth.

The Government of India is always quick to blame the West, and rightly so, for global environmental degradation. It

claims that in comparison India leaves no stone unturned in protecting the environment. But few Indians will go along with this holier-than-thou position. Whenever it suits the Government, it is quick to conjure up the false dichotomy between employment security and environment protection. This is what the Central Government has now fallen back on to justify its planned regularisation of most of the illegal small industries situated in Delhi. The issue exploded on the streets of Delhi earlier this week not so much because of the Supreme Court's four-year-old order to have polluting factories and units functioning in residential areas closed but because the Government of Delhi, whose senior-most official was slapped with a contempt notice, after doing little for four years to resettle the industries, suddenly woke up and started shutting down enterprises all over the Capital.

MACROSCOPE

The history of the Delhi pollution case is not of an insensitive Court aiming to reduce pollution by judicial fiat but of an administration that has consistently turned a blind eye to illegality and one that is guilty of procrastination only to find the issue blowing up in its face. As Mr. M.C. Mehta, the lawyer who has been fighting Delhi's pollution in the courts since 1985, says the problems have been crying out for attention for close to four decades.

When the first Master Plan for Delhi was prepared in 1962, there were an estimated 20,000 household/small-scale units functioning in the Capital. The development of an industrial area to facilitate the shifting of these units could have taken care of the problem at that time. It did not happen then, nor in 1990 when the Master Plan (1981-2000) demarcated afresh the residential areas in the city. Although it is now made out that neither permitted the functioning of industrial establishments in the Capital, the fact is that both permitted non-polluting and household industrial units involved in manufacture of products such as agar-

bathis and weaving/stitching of garments. However, the availability and inexpensive pricing of inputs and low taxes in the pampered Capital as well as the lax regulations encouraged for decades a proliferation of all kinds of small industries, including many polluting units, in violation of zoning regulations. So much so that there are now more than 100,000 units of whom at least 40,000 directly contribute to the pollution of the air, soil and water resources of the Capital. The irony is that even after the Supreme Court in 1992 ordered the relocation of the "non-conforming" units, the Government moved slowly. Until recently it was even extending the licences of the existing units. And while it is made out that not enough land is available for relocation, Government officials had informed the court that there was enough land in the National Capital Region.

No large-scale industrial relocation is easy and with most workers usually living in the vicinity of the industrial establishments, the burden of resettlement falls more on them. It does appear that rather than take the issue seriously the State Government was hoping that the Centre would circumvent the 1996 judicial order by having the Master Plan modified. It has succeeded, in a manner of speaking, to have the regulations changed so that most units will continue as before. The final argument made on the streets and in Parliament was of course that the jobs of hundreds of thousands of workers had to be protected. But it is a false dichotomy to compare the jobs of these workers with the health of the 12 million residents of the Capital. The Government of Delhi first by turning a blind eye to zoning and pollution violations and then with its procrastination allowed the situation to develop to the present pass.

Without an urban planning regime that identifies and enforces zoning regulations, enforces pollution control norms, makes provision for an excellent public transport system and facilitates housing for all sections of a city's population what has happened in Delhi will happen (and is happening) elsewhere. No Indian city can now claim to have such an urban planning system that can give its residents economic opportunities as well as a liveable environment.

Police enforce peace during Delhi bandh

By Our Staff Reporter

NEW DELHI, NOV. 27. The "Delhi bandh" — called by industrialists and workers to protest the closure of polluting units — passed off peacefully today as police

clamped down on the protesters, preventing any major outbreak of violence.

Though there were some angry protests, no incident of looting, arson or firing was reported. The

city police — with 40 companies of outside force at their disposal — prevented the protesters from gathering and coming on to streets. To prevent large gatherings and restrict the movement of industrial workers, police personnel blocked the exit points in various industrial areas.

Jagmohan on the mat

By Our Special Correspondent

NEW DELHI, NOV. 27. The Union Urban Development Minister, Mr. Jagmohan's run-ins with politicians, both within his party and outside, continues unabated. In the eye of the storm over the Delhi masterplan, he found himself pilloried once again in both Houses of Parliament.

To make matters worse, in the Lok Sabha it was members of his party, the BJP, who took the lead in expressing dissatisfaction. During zero hour, BJP MPs from Delhi led, by Mr. Madan Lal Khurana, were on their feet protesting the Minister's failure to put an end to moves to seal industrial units in the city. Urging the Prime Minister, Mr. A.B. Vajpayee, to convene a meeting instead of one by the Urban Development Minister, Mr. Khurana said three days had passed since the Minister's statement in the House, but the situation continued to escalate.

Even after the House was adjourned, Mr. Khurana persisted with the issue. He told journalists that he and his colleagues felt that since the operation to seal the polluting industrial units was under way,

despite Mr. Jagmohan's assurance to summon a meeting, "the Prime Minister alone can find a solution by calling a meeting".

Mr. Khurana also appeared agitated over the fact that the Delhi Chief Minister, Ms. Sheila Dixit, was leading a march to Parliament, when it was her Government which was sealing the units. "How can she speak on behalf of the people when officials of her Government are responsible for closing down the industrial units?"

However, Mr. Jagmohan showed no signs of relenting. In the Rajya Sabha, he defended the decision to relocate polluting units. "This is a Supreme Court decision and we are bound to follow it." At the same time, he expressed willingness to meet the Delhi Chief Minister and the MPs to find a solution.

The issue was raised in the Raja Sabha by Ms. Ambika Soni (Congress), who demanded that the Minister come out with a "mixed land use" policy. He was also attacked by Ms. Jayanthi Natarajan (TMC) for not having a rehabilitation policy for Delhi.

The police also launched a major drive and detained 217 anti-social and mischievous elements

across the capital. Though unity was lacking among workers and the arrests of some workers last week forced many to stay at home, there were still some unruly scenes. Police detained 116 persons in the Bawana area when they tried to disrupt traffic. This constituted the bulk of the 136 arrests in the central, north and northwest areas. Attempts to block traffic were also made at the Shalimar Bagh crossing, the Azadpur crossing, the Azadpur Subzi Mandi and Shahbad Daultapur village in northwest Delhi.

In the southern range too, there were incidents of minor violence. The police lobbed about 30 tear-gas shells to disperse a 600-strong crowd which blocked traffic, hurled stones at the police and smashed the panes of a private bus at Basai Darapur in the Moti Nagar area of west Delhi. A case of rioting was registered and 16 persons were arrested. Eight policemen and some civilians were injured.

The police action encouraged the bus owners to ply vehicles on the roads by noon. And with markets also open in many parts, the bandh did not affect many.

THE HINDU

28 NOV 2000

A message for the judges

By Kalpana Sharma

Sumitran HD-12

PERHAPS OUR Supreme Court Justices should have waited a couple of weeks before passing their final orders in the Narmada case. For if they had, they would have been privy to the important perspectives contained in the report of the World Commission on Dams, released in London on November 16. The WCD report might not be the last word on dams. But it is important for a number of reasons. It is the first comprehensive survey of large dams. It presents a balance-sheet of the benefits and adverse impacts of these capital-intensive infrastructure projects. And it sets out criteria that could govern future decisions on large dams.

Even if one were to dismiss some of the suggestions of the WCD as being unworkable within the political context that governs so many developmental decisions in many countries, including India, as a document that assesses the record of large dams it is invaluable. This is particularly so because of the composition of the WCD. This is not a bunch of anti-dam NGOs who are picking faults with existing dams and those still under construction. This is a Commission made up of people in Government, such as the Chair, Prof. Kader Asmal, South Africa's Education Minister, Mr. Goran Lindahl, President and CEO of Asea Brown Boveri (ABB), one of the largest private sector infrastructure developers, and Mr. Jan Veltrop, a former president of the pro-large dam body, the International Commission on Large Dams (ICOLD). The Commission also had its share of critics of large dams, pre-eminently Ms. Medha Patkar of the Narmada Bachao Andolan but also Ms. Joji Corino representing the issues concerning indigenous peoples and Ms. Deborah Moore, until recently senior scientist with the U.S.-based NGO, Environment Defense Fund (EDF).

In balance, what emerges from the report is not a happy picture. The 45,000 large dams worldwide have displaced 40 million to 80 million people, affected 60 per cent of all rivers, have fallen short of their irrigation targets, have failed to recover costs, have had extensive negative impacts on rivers, watersheds and aquatic systems, many of them irreversible. Fur-

WU

The report of the World Commission on Dams makes a compelling case for a different approach to decision-making about large dams.

ther, mitigation measures, where they have been taken, have usually proved ineffective. In other words, even if one argues that large dams are necessary and that the damage that they do can be minimised by taking adequate measures, the record suggests that this is not always possible. At the same time, large dams have contributed to the spread of irrigation, generated hydro power, have been useful for flood management and have been very useful for urban water supply. The question that always arises then is: is the cost worth the ostensible benefits?

The WCD has argued that a cost-benefit calculation is insufficient in the context of large dams because of the nature of the costs. It suggests instead a rights and risks approach that accommodates the rights of those who will be adversely affected and takes into account the risks to the environment and to future generations. Such an approach necessarily requires an open and transparent decision-making system, a process that is based on full consultation with the affected groups.

This, of course, does not mean that countries should not build large capital-intensive infrastructure such as large dams. What it does mean is that the process should allow the voiceless to have a voice, that there should be fairness and justice in the way the affected communities are treated, and that if giving them the best possible compensation is not possible, the project is reviewed. In other words, the cost to the people who get no benefits from projects should not be so high that a project cannot pay it.

If one were to apply these criteria to existing projects, including those such as the Sardar Sarovar which are still under construction, they would fail miserably. There is too much evidence to suggest that in the initial design of the project, these human and environmental costs were not accommodated. And today, it is more than evident that the project cannot mitigate them in its present design. The

tragedy is that despite innumerable committees — and Madhya Pradesh's recorded admission that it has no land to accommodate all those who will be affected by the SSP — there has been no serious attempt to rework the project to minimise the damage. Instead, the Supreme Court has virtually closed the door on any further discussion.

In fact, a section in the WCD report makes a point of acknowledging that "dams in the pipeline" constitute a special case. It suggests that evidence from its survey, which covered almost 1,000 large dams worldwide, demonstrates that "it is never too late to improve outcomes. On this basis, the Commission proposes an open and participatory review of ongoing and planned projects to ascertain the extent to which project formulation can be adapted to accommodate the principles outlined in this report". The SSP authorities should take note of this.

Further, it suggests to Governments that they use the opportunity of reviewing such dams that are already under way to assess the plans they have for water and energy options. "This can serve to launch a process of internal review and modification of existing policies and legislation, and reinforcement of appropriate capacity that will facilitate implementation of the Commission's recommendations in the future." Is that too tall an order? Considering the enormous cost over-runs of projects such as the SSP because there was resistance to any suggestion that environmental and social costs had not been covered, and given that now few projects can hope to get international finance without accounting for these costs, it makes eminent sense to stop and think before proceeding further.

Unfortunately, neither common sense nor openness and transparency are the hallmarks of Governments in this country, at the Centre or in the States. Large dams involve a \$ 2 trillion investment worldwide. Everyday, somewhere in the world,

a new dam is being commissioned. Most of these are in developing countries. Yet despite conventions on the environment, on human rights, and the international movement for the rights of people affected by large infrastructure projects, most Governments proceed with an outdated set of values and criteria that try and sneak past any need to listen to the voices of those who will be affected. The result, repeatedly, has been resistance from people, and delay in an already costly project. This alone should make Governments such as ours consider alternative approaches. It would be cost-effective, apart from being the only decent and humane way of conducting business.

The real stumbling block, however, is not just absence of logic and a refusal to face the evidence, but the benefits that accrue to a few from such large projects. As the WCD aptly points out in its report, "As a development choice, the selection of large dams often served as a focal point for the interests and aspirations of politicians, centralised Government agencies, international aid donors and the dam-building industry and did not provide a comprehensive evaluation of available alternatives". This statement comes from people who know how the system works.

So, to come back to the beginning, would our Supreme Court judges have paused if they had read the WCD report before they ruled in the Narmada case? The report makes a compelling case for a different approach to decision-making about large dams, and about developmental infrastructure as a whole. Its arguments are reasonable, placed within the context of internationally-endorsed environmental and human rights conventions. It argues not that no dams should be built, but that such a step should only be taken if the criteria that include social and environmental costs are fully met. If we accept even some of the criteria set out in the report, the SSP would need to be drastically modified even if it cannot be abandoned altogether. At the very least, our apex court could have thrown the project back on the drawing board. However, even if it thinks the case is over, in fact it remains wide open. The controversy over large dams will not die that easily.

Dam-displaced find a foothold

THE Grievances Redressal Authority for Sardar Sarovar Project Affected Persons is trying to institutionalise the resettlement and rehabilitation package for those who decided to settle down in Gujarat.

The Gujarat government set up the authority after a notification on 17 February 1999, in the light of Supreme Court proceedings. An autonomous body for monitoring the government's resettlement and rehabilitation work was required to be created.

The authority's task was to check whether there has been substantial compliance with the package up to the 85-metre elevation level, against the full elevation level of 138.68 metres. And whether the government is prepared to accept more displaced persons at the 90-metre elevation level.

The authority has submitted four reports to the Supreme Court and after the success of the Gujarat experiment it was decided to set up two more authorities for Madhya Pradesh and Maharashtra.

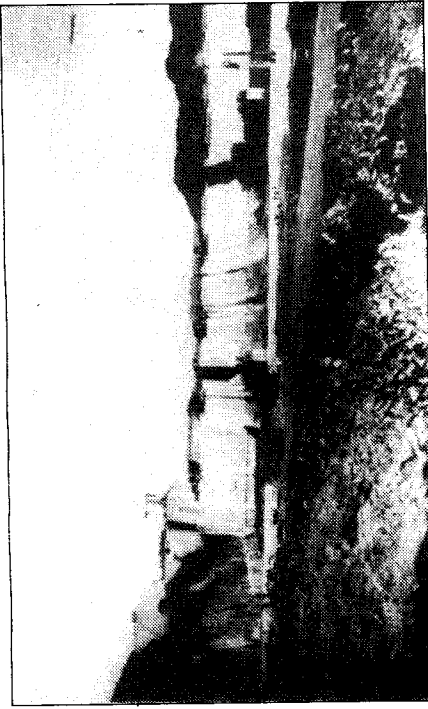
The Sardar Sarovar Punjab Development Agency implements the resettlement and rehabilitation package. The authority has set up a Grievances Redressal Authority which is under the authority's direct control.

The authority's decisions and directions in all matters relating to grievances and complaints of project-affected persons are final and binding on the state government.

The task of monitoring effective resettlement and rehabilitation of ousted families was opted to live in Gujarat by any standards. The 40,727 such families set in 245 villages — 19 in Gujarat, 33 in Maharashtra and 19,700 in Madhya Pradesh — at 18,000 will lose only their houses and not agricultural land. They are to be resettled in Madhya Pradesh.

Of the remaining 22,727 families in all three states, about 19,700 families are likely to settle in Gujarat, about 2,100 in Maharashtra and 900 in Madhya Pradesh. In Gujarat, about 8,554 project-affected families have been resettled at 183 sites. About 13,000 grievances have been received. About 10,000 have been sorted out by the authority.

The majority of the complaints relate to land awards and scarcity of civic amenities.



File photographs of the Sardar Sarovar Dam and left; Narmada Bachao Andolan leader Madha Patkar on a dharna with displaced villagers. The NBA, in a petition to the Supreme Court, has said the Grievances Redressal Authority is a boon for the project-affected families settled in Gujarat. — PTI.

will be constructed for them at the cost of Rs 45,000. Some allowances are also being paid.

Mr Justice Desai says that an expert committee has reported that those resettled have been given the most fertile land in Gujarat. Talking about an "exit policy", he said: "It is desirable that the government should slowly withdraw. Otherwise they (these families) will always be on crutches".

The chairman said most of those resettled now converse in Gujarati, adding that health cards have been given to almost all of them. At the Collectors in the seven districts where the 183 sites are have updated revenue records. This will ensure that legal documents can be provided for land allotted to the project-affected families.

Mr Justice Desai said that at all the sites, barring four or five, work was progressing well. The authority has suddenly been flooded with applications from people claiming to be adult sons from the resettled families. To tackle such applications and complaints, "we have constituted a medical board to look into this problem and it

will be settled once and for all", said Mr Justice Desai.

A movement has been started for village-wise and community-wise resettlement. The Narmada project, it is felt, is crucial for ensuring the sustainable development of the economy and of the people of Gujarat, said an authority official, adding that it was also essential to have appropriate and effective resettlement, rehabilitation and reconstruction policies for the displaced.

A compliment from an unexpected source, the Narmada Bachao Andolan, sums up the work done by the authority. The NBA, in a petition to the Supreme Court, states that after the setting up of the Grievances Redressal Authority, the project-affected families have been given a chance to air their difficulties. The petition says the Grievances Redressal Authority has made the project authorities address many serious and long-pending grievances of the affected families.

(The author is The Statesman's Gandhinagar-based correspondent)

The task of monitoring effective resettlement and rehabilitation of the Sardar Sarovar Project-affected families which opted to live in Gujarat is daunting. But the Grievances Redressal Authority under its visionary chairman is doing commendable work, says ANIL RANA



could even prepare a scheme to tackle issues like second-generation problems of rehabilitation.

Mr Justice Desai feels that the resettlement and rehabilitation programme has now been given a direction. "We are trying to institutionalise this, it must run on a particular line." He says the Gujarat government is spending between Rs 3 and Rs 5 lakh on every family resettled in the state.

An authority official says the package offered is amongst the best in the world. Each family is being given a minimum of two hectares of agricultural land. Even landless agricultural labourers, encroachers on government and forest land are eligible for two hectares of agricultural land. Every adult son is eligible to two hectares, every family is to be provided with a residential plot of 500 sqm. Core houses measuring 45 sqm

Medha Patkar disappointed

By Kalpana Sharma

MUMBAI, OCT. 18. Fighting back tears of disappointment, the Narmada Bachao Andolan leader, Ms. Medha Patkar, declared today's Supreme Court judgment on the case filed by her organisation in April 1994 against the Sardar Sarovar Project as symbolic of the fact that "the State and justice stand for those who have monetary capital and not natural resource capital."

Ms. Patkar said she had only heard a gist of what the 150-page majority judgment delivered by Chief Justice A.S. Anand, and Mr. Justice B. N. Kirpal, as well as the minority dissenting note by Mr. Justice S.P. Bharucha contained.

But already people in the Narmada valley, who faced certain submergence in face of the final ruling of the Supreme Court in a case that has dragged on for six years, indicated that they were ready to fight the battle beyond the judgment. "The court is bound by laws but people are bound by the laws of earning their livelihood," Ms. Patkar said.

The apex court ruling permits the height of the SSP to be raised from its present 88 metres to 90 metres immediately. Thereafter, the environmental sub-group of the Ministry of Environment and Forests is expected to look at all aspects before clearing further construction. Ms. Patkar pointed out that even at 90 metres, there would be substantial submergence of areas where no resettlement had taken place.

The Madhya Pradesh Chief Minister, Mr. Digvijay Singh had made a statement before the media admitting that the State did not have enough land to resettle all the project-affected persons and would have to give cash compensation. This, Ms. Patkar said

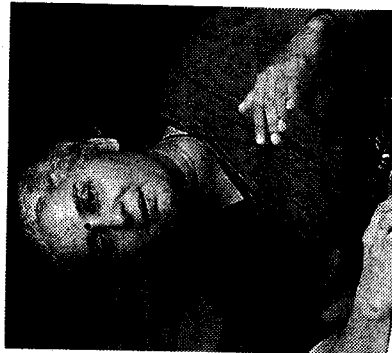
favoured continued construction.

The NBA leader also expressed surprise that despite the proof presented to the Grievance Redressal Committees of Maharashtra and Madhya Pradesh (set-up at the instance of the apex court) about the paucity of land for resettlement, the court had found the efforts of the Gujarat, Maharashtra and M.P. Governments satisfactory. "This judgment reposes unjustified faith and confidence in the State machinery when we have proved that these authorities have violated the tribunal award," she said.

Two of the affected persons from villages in Maharashtra were present at the press conference. Mr. Kewal Singh of Khemgaon village in Nandurbar district said they had approached the court for

justice but instead had to face an 'unjust judgment.' In Maharashtra, 33 villages occupying 20,000 hectares would be affected by the dam, and the 4,200 hectares given for resettlement would be barely enough for homesteads for all the affected families and would leave nothing to compensate for the loss of rich agricultural land, he said.

Ms. Patkar said she was proceeding immediately to the Narmada Valley where in the last weeks many activists had to face police repression. In the light of the judgment, she wondered how much more repression NBA supporters would have to face. Asked what she would do next, she said: "People can fight by staying on their land, by remaining in their homes. This is the best form of non-violent struggle."



was contrary to the provisions of the Narmada Waters Dispute Tribunal Award which the Supreme Court had upheld. Despite the substantial evidence of incomplete resettlement presented before the court, the ruling had

BJP hails decision

By Our Special Correspondent

NEW DELHI, OCT. 18. The Bharatiya Janata Party today welcomed the Supreme Court verdict on the Sardar Sarovar project as a "Divine gift" to the "thirsty people of Gujarat."

Party general secretary, Mr. Narendra Modi, said the Gujarat Government had invested thousands of crores in the project that had become victim to all kinds of protests.

He was hopeful that the clear verdict would serve as a green signal for the speedy completion of the project and give relief to the people living in regions afflicted by acute water scarcity.

Four new members join CBDT

By Our Special Correspondent

NEW DELHI, OCT. 18. Our new members have joined the Central Board of Direct Taxes, bringing the strength of the board to seven, including the chairman.

The four new members are Mr. R.K. Pathania, Mr. P.K. Sharma, Mr. T.K. Das and Mr. Raj Narain.

While Mr. Pathania, who was chief commissioner-III at Mumbai, belongs to the 1964 batch of the Indian Revenue Service, the three others belong to the 1965 batch. Prior to their joining the board, Mr P.K. Sharma was director-general (investigation), Mumbai, Mr. T.K. Das was chief commissioner, income tax, Calcutta and Mr. Raj Narain chief commissioner, income tax, Delhi.

Celebration in Gujarat

By Our Special Correspondent

GANDHINAGAR, OCT. 18. The Supreme Court verdict has cleared the decks for the Gujarat Government to proceed with the Sardar Sarovar Project.

Talking to reporters after an impromptu celebration in the State secretariat, the Chief Minister, Mr. Keshubhai Patel, said, "It is also the time to dedicate ourselves to the cause and complete the dam project without further loss of a moment." Earlier, addressing Government employees summoned under the statue of Sardar Vallabhbhai Patel (after whom the dam was named) in the secretariat complex, Mr. Patel said, "The people of Gujarat have been anxiously waiting for this day for over 40 years and now no power in the world will be able to stop us from going ahead with the project in full swing. "For the people of Gujarat, Deepavali celebrations has started from today," he added.

He said work on the construction of the additional five metres as cleared by the court would be taken up within a week after reducing the water level at the dam to 85 metres by opening the sluice gates and would be completed in just about 45 to 50 days.

He expressed confidence that construction would

now be taken up on a continuous basis. Even as the work on the first metre was on, the application for the next five metres would be submitted before the Narmada Control Authority for necessary clearance, he said. He could not say the likely increase in the project cost due to the delay in the construction but admitted that planning for funds would be a major factor the State administration would have to cope up. The paucity of funds would not affect the progress of the project, he asserted. As per the Narmada Tribunal's award, which was approved by the Supreme Court, Gujarat would have a share of nine-million-acre feet of Narmada water to irrigate about 18 million hectares of land besides supply of drinking water to 8,000 odd villages and about 60 towns in the arid Kutch-Saurashtra region.

Mr. Patel said the construction of the Irrigation By-Pass Tunnel would be taken up immediately and completed in about 100 days to help supply drinking water through the Mahi canal and pipeline to Ahmedabad, Baroda, Rajkot and some other cities and the villages in the Kutch-Saurashtra region experiencing acute shortage of water this year due to the failure of monsoon. "Water shortage will now become a thing of the past for the people of Gujarat," he claimed.

'ENVIRONMENTAL SANCTION MUST AT ALL PHASES'

SC clears Narmada dam height up to 138 metres in stages

By Our Legal Correspondent

NEW DELHI, OCT. 18. In a significant decision, the Supreme Court today gave the nod for the construction of the controversial Sardar Sarovar dam on the Narmada river immediately up to a height of 90 metres and thereafter up to 138 metres in stages on getting proper sanction from the authorities concerned.

The green signal was given by a majority judgment by a three-judge Bench headed by the Chief Justice of India, Dr. A.S. Anand, and the dissenting judgment was delivered by Mr. Justice S.P. Bharucha, who ordered immediate stoppage of construction activities at the dam site.

The Bench, including Mr. Justice B.N. Kirpal (who wrote the majority judgment with which the CJI has concurred), was disposing of writ petitions by the Narmada Bachao Andolan (NBA) and other non-governmental organisations.

The order, to be implemented as per the tribunal's award according to which the height could reach 138 metres, is expected to

benefit Maharashtra, Madhya Pradesh and Gujarat.

As per the award, Madhya Pradesh will receive 18.25 million acre feet (maft) of the river waters, Gujarat 9 maft and Maharashtra 0.25 maft. Of the total share of 1,450 MW of power generated, Madhya Pradesh will get 57 per cent, Maharashtra 27 per cent and Gujarat 16 per cent.

The Rs. 18,000 crore-project had to be stopped for four years

from 1995 as the petitioners had challenged it on various grounds.

The majority judgment made it clear that construction of the dam, at present at a level of 88 metres, could be carried to a height of 90 metres immediately as the relief and rehabilitation of the affected people had been undertaken satisfactorily by the three State Governments.

The court said that construction of the dam in stages beyond

90 metres would depend on the clearances given by environmental and rehabilitation authorities. It said, "the environmental subgroup in the Ministry of Environment and Forest will consider all aspects before giving clearance for the construction at each stage beyond 90 metres."

The Bench referred to the report of the Grievance Redressal Authority which had pointed out that in Madhya Pradesh there was slackness in identifying and acquiring land for the oustees. It directed the three States to implement the tribunal's award expeditiously for proper relief and rehabilitation of the oustees.

The court asked the Narmada Control Authority to draw up a plan within four weeks on the relief and rehabilitation work.

The court was of the view that any dispute on this aspect could only be decided by the Review Committee and if the dispute remained, it would be referred to the Prime Minister, whose decision would be final and binding.

People's victory: Patel

By Manas Dasgupta

GANDHINAGAR, OCT. 18. The Supreme Court's verdict today favouring construction of the Sardar Sarovar project triggered celebrations here. Crackers were burst and sweets distributed in the State Secretariat and a happy Chief Minister, Mr. Keshubhai Patel, declared a half-day special holiday for Government employees and schools in the capital.

to celebrate the "people's victory".

The apex court's judgment was communicated to the Chief Minister by the Major Irrigation and Narmada Affairs Minister, Mr. Jaynarayan Vyas, from New Delhi, during the Cabinet meeting this morning. The Cabinet immediately adopted a resolution hailing the verdict.

Celebrations: Page 15

Medha disappointed: Page 15

THE HINDU

19 OCT 2000

Medha breaks down, says verdict anti-people

HT Correspondent
Mumbai, October 18

MEDHA PATKAR broke down on Wednesday and wept openly at a Press conference called to give her reaction to the Supreme Court judgement.

"Personally I feel that this movement should not die. We can die but not the movement or let other people end (this movement)," said Medha Patkar as she wept openly.

Medha Patkar further said: "I don't know how we can do this (fight the judgement). I will go back to the people. I have heard people say that they will continue with the movement. It is an anti-people verdict. The project is flawed and won't resolve water crisis. There is no land for families and lakhs of people especially belonging to the tribal and down-trodden communities will not be rehabilitated because there is no land as accepted by various state governments.

"Only if the court had heard the people and come down to the valley they would have realised what the situation is," she said.

Medha called for immediate intervention by the President of India. She said it was the constitutional obligation of the President

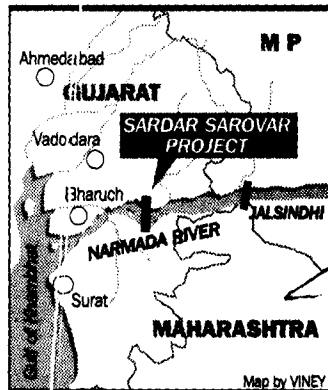


Medha Patkar

to protect the rights of the tribals and downtrodden who have been struggling for the last twelve years for their just demands to save their fertile and flowering land in the Narmada valley in Madhya Pradesh, Maharashtra, Gujarat and Rajasthan.

She said the President should stay the construction and the consequent displacement of the dam, any further, till the basic issues pertaining to the Sardar Sarovar Project have been resolved.

The verdict has marred any prospects of rational and natural displacement and resettlement process, she said.



At a statement released at the Press conference, the Narmada Bachao Andolan (NBA) said that the judgement was illogical, dangerous and anti-people. It further said that "the court seemed to have done a disservice to the Indian Constitution, Indian democracy and the Indian people". It further called the judgement unjustifiable, reactionary and hence unacceptable. The NBA said that it would fight against the "injustice of the judiciary tooth and nail".

"We call upon the people of India who value democracy and the Constitution to challenge this decision and asked the court to restore peoples right in the Narmada Valley".

THE HINDUSTAN TIMES

19 OCT 2000

Court opens gates for Narmada dam

FROM OUR SPECIAL CORRESPONDENT

New Delhi, Oct. 18: The Supreme Court today gave the go-ahead to the controversial Sardar Sarovar dam on the Narmada river, stunning a grassroots movement that changed the face of environmental evangelism and charged the development debate in the country.

The court has allowed the dam to be constructed up to a height of 138 metres, but added that necessary clearances should be secured from environment and rehabilitation agencies. However, the height can be raised immediately from 85 to 90 metres.

The verdict was not unanimous — one of the three judges on the bench, Justice S.P. Bharucha, wrote a note of dissent. The bench was headed by Chief Justice A.S. Anand.

The order landed a crushing blow on the Narmada Bachao Andolan, led by Medha Patkar, which has been waging a protracted war against the dam. Patkar had built her case on the project's "human and ecological costs" which com-

peted with notions that dams are temples of modern India.

The project, covering 800 miles spread over three states, proposes to build 30 major, 135 medium and 3,000 small dams along the Narmada. At the centre of the constellation of dams will stand Sardar Sarovar, tall as a 45-storey building.

But beneath the grandeur lies the high human cost — 35,000 families of subsistence farmers and herders face displacement as the dam will devour 193 villages in Madhya Pradesh, 33 in Maharashtra and 19 in Gujarat.

However, the Centre has been arguing the fruits of development outweigh the human cost. The project will benefit water-starved areas of Maharashtra, Gujarat and Madhya Pradesh and bring drinking water to 30 million.

The state governments, especially that in Gujarat, erupted in jubilation after the judgment. Gujarat, which suffered the most during this year's drought, declared a public holiday and lined up a series of programmes to celebrate tomorrow as "Vijay Diwas".

Though much of the dam had been constructed, the flow of water from the barrage could not

be ensured because of the manner in which the channels had been planned. If the structure did not reach beyond 90 metres, water will stagnate in the dam and evaporate during the dry months.

The court ruled that the "construction of the dam will continue as per the award of the Narmada water tribunal". The tribunal, in its award given in the early eighties, had said that the dam needs a height of 138 metres to function to its full capacity.

The judges said the rehabilitation of those evicted had been carried out satisfactorily. Rehabilitation was a big bone of contention between the state governments and opponents of the dam.

Justice Bharucha, who put in the dissenting note, wanted construction to stop immediately. He said the work could be resumed only after the environmental impact group of the ministry of environment conducts a survey and gives its clearance.

Water resources ministry sources said that the project cost has crossed Rs 20,000 crore. A fresh assessment of the total expenditure would be made soon.

It was in 1994 that the Narma-

da Bachao Andolan had challenged the construction of the project in court, stressing that the tribals losing their land and hearth were not being rehabilitated.

In today's order, the Supreme Court did lay down a few conditions. The judgment made it clear that the environmental sub-group of the ministry of environment and forests would have to consider all aspects before clearing construction at each stage beyond 90 metres. The court observed that in Madhya Pradesh identification and acquisition of land for the displaced had been tardy.

The Narmada Control Authority will have to draw up a plan within four weeks on rehabilitation yet to be done. The review committee will look into all disputes. Those that are not settled would be referred to the Prime Minister, whose decision would be final and binding.

The ranks of both pro and anti-dam enthusiasts had been swelling. While Patkar had drawn Arundhati Roy to her fold, Shetkari Sangathan leader Sharad Joshi had thrown his weight behind the dam supporters.

■ Dam Diwali in Gujarat, P 6

TOWER OF TUSSLE

The verdict

The dam can be built up to 138 metres, subject to clearance from environment and rehabilitation authorities. The height can be immediately raised to 90 metres.

Dissent

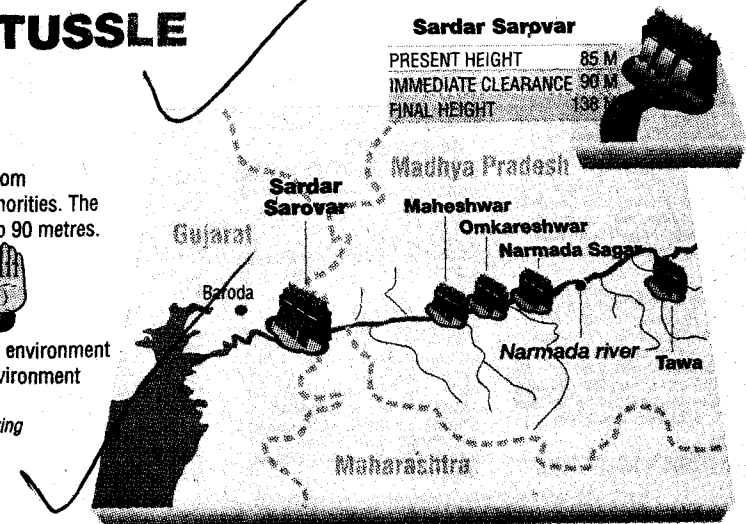
Stop construction immediately. Work should be resumed only after a survey and clearance by the environment impact group of the ministry of environment and forest.

Justice S.P. Bharucha, the lone dissenting judge on the three-member bench.

This was a peaceful, democratic movement. By rejecting it, the court is telling the people to follow in the footsteps of Veerappan. Arundhati Roy on rediff.com

We have been vindicated. We will celebrate Vijay Diwas on Thursday. All temples and houses will hold maha-aartis. Keshubhai Patel, Gujarat CM

Sardar Sarovar
PRESENT HEIGHT 85 M
IMMEDIATE CLEARANCE 90 M
FINAL HEIGHT 138 M



FOR

- The government argues the dam can irrigate 1.87 million hectares
- It can provide drinking water to 8,346 villages and 136 towns
- It can generate 1,450 mw of electricity

AGAINST

- The dam will displace 3,20,000 people. It will submerge 40,000 hectares
- Resettlement policy in disarray. Governments unable to find land to rehabilitate over 35,000 families
- Benefits exaggerated

Graphic: F

FRIDAY, OCTOBER 20, 2000

PROCEEDING WITH CAUTION

Law: Narm
NOW THAT THE Supreme Court has finally cleared the Sardar Sarovar dam Project (SSP) on the Narmada, both sides must accept the verdict of the apex court and get on with the work with caution and sensitivity. It should not be considered a victory for any side, but merely a legal clearance for a much-delayed mega project, which is also touted as the 'Lifeline of Gujarat'. While the Centre and the three State Governments — of Madhya Pradesh, Gujarat and Maharashtra — should carefully plan for the full execution of the SSP in its entirety, the Narmada Bachao Andolan (NBA) must now shift its focus to monitoring the implementation of the environmental and rehabilitation aspects of the project. For six years, the NBA and other anti-big dam NGOs have taken to the streets and courts, questioning the viability of the dam and highlighting its impact both on the environment and on the lives of the oustees (displaced). The World Bank had come under fire for funding the project and subsequently pulled out. All that must now be put aside and the States must work in close cooperation with the Authority, monitoring committees and the NGOs, to ensure that the rehabilitation measures satisfy the people who are being displaced from their villages and livelihood.

Time and again, the viability of the SSP has been debated. Apart from the 1450 MW power that it will generate, the mega dam promises to bring relief to some of the drought-prone areas of Madhya Pradesh, Maharashtra and more so Gujarat. Though estimated to cost Rs. 18,000 crores it could end up costing much more because of the time lag and the escalation factor. The Gujarat Government, while hailing the judgment, has promised to complete the dam and the canal constructions in two years. Without wasting more time and adding to the costs, the three States must coordinate their efforts to avoid further delays and raise the resources to complete the SSP within the next two to three years. The Madhya Pradesh Chief Minister, Mr. Digvijay

10
Singh, has voiced doubts about the prospects for early resettlement. Since the project has been on the table for a long time, there can be no excuses for not finding suitable, alternative sites for resettling and compensating the displaced families satisfactorily. The NGOs in the project areas must work with the monitoring committees to ensure that the resettlers get the best bargain possible and are able to restart their lives with some hope.

HD-12
For the NBA, the verdict may be a setback, even a disappointment. Instead of losing heart or now insisting on launching another 'andolan' against the project, it must now shift its attention to the resettlement package. The Supreme Court has not granted an 'unconditional, unfettered' ruling in favour of the dam builders. The majority decision has insisted on a step-by-step environmental clearance for raising the dam level beyond 90 metres to the full 138m height. The judges have also called for full compliance with the Tribunal's award, resettlement requirements, directing the Grievance Redressal Authority and the Narmada Control Authority to not only monitor the project but also submit a plan for rehabilitation and relief within four weeks. It may be difficult for the NBA activists to accept the big-dam reality, but they must heed the apex court's ruling, give up their agitation and concentrate on the environmental and rehabilitation aspects of the SSP. They need to turn their sensitivity and considerable organising and mobilising skills to the task of ensuring that the Government agencies play fair by the displaced persons. Madhya Pradesh has some way to go on both construction of the Maheshwar and Indira Sagar hydroelectric projects and on finalising its resettlement programme. The project which had over the years become a major focal point for the international environment movement will ultimately be judged not on its legality or economic viability but by the care and sensitivity with which the issues of environment and rehabilitation are addressed.

THE HINDU

20 OCT 2000

The Statesman

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21 OCTOBER 2000

Vol. CXXXIV 249

SAVING THE DAM

5/10 Victory for reason over 'radicals'

THERE'S plenty that can still go wrong with the Sardar Sarovar dam. But the Supreme Court (coram. Anand, CJ; Kripal, Bharucha; JJ) has given all the pointers necessary for parties concerned not to botch up their job. Much is being of the fact that the verdict was split; Justice Bharucha dissenting. What is frightening is the statement by Medha Patkar that the President should intervene. To ask for the head of the state's intervention after the highest judicial authority has pronounced its verdict may go down well with loonie greens but it violates all canons of responsible public behaviour and deserves to be strongly condemned. Medha Patkar should carefully look at the court's verdict, she will find there's plenty for her to do other than feed media with radical soundbytes. The court has made it clear that its clearance for the Sardar Sarovar dam is predicated on proper relief and rehabilitation measures. Knowing our political and bureaucratic compatriots, they will need severe outside scrutiny to fulfil this judicial directive. That is where the lady and celebrities like prize-winning novelist can help. If they mobilise the Narmada Bachao Andolan to act as the referee for official rehabilitation efforts, she will contribute far more to general welfare than would be possible under her stop-the-dam dramatics.

The concerned state governments, especially the currently jubilant Gujarat government, should remember that the court has given them anything but a free run. The verdict has allowed the height of the dam to go up to 138 metres only under the condition that post-90 metres construction must be punctuated by periodic environmental and rehabilitation evaluations. The implication? If the Gujarat government thinks callous officials can simply go ahead and build the dam and to hell with those whose homes are washed away, it will invite judicial wrath. The other concern about the possible behaviour of the Gujarat government is that it may not, contrary to what it says for public consumption, do enough to ensure that the dam's water reaches the drought-prone areas of Saurashtra and Kutch. The rich farmers of south Gujarat will be easier to reach and their political clout may ensure that Sardar Sarovar fails to realise its transformatory potential.

In the larger context, it is the court's verdict that has the transformatory potential vis a vis public debates on big dams. It is fashionable to condemn big dams now, a fashion we have learnt from the West. Indeed, the World Bank appointed Morse Commission had advocated the lender pull out of the project, and the Bank is now a leading green enthusiast. The court's verdict helps crystallise the argument, held consistently by some, including this newspaper, that there's a place for big dams in countries like India, where irrigation is a critical economic and social input for millions of people's lives. We need checks. And we need balances. With respect, the court has pointed out. What we don't need is monomaniacal green radicals hijacking public policy. Now, let the dam begin.

THE STATESMAN

21 OCT 2000

The verdict on the Sardar Sarovar Project brings no hope for those ousted from their land

People be damned

BY PRASHANT BHUSHAN

AT LAST we have it on excellent authority. The Chief Justice A.S. Anand and Justice B.N. Kripal of the Supreme Court have decreed that large dams do not cause environmental damage, they lead to improvement in the conditions of the oustees and are in fact essential for the economic prosperity of the country.

In the words of their lordships contained in the majority judgment on the Sardar Sarovar project, "The experience does not show that the construction of a large dam is not cost effective or leads to ecological or environmental degradation. On the contrary there has been ecological upgradation with the construction of large dams." They say: "The petitioner has not been able to point out a single instance where the construction of a dam has, on the whole, had an adverse environmental impact."

They go on to say that in most cases of involuntary displacement, the oustees have in fact been left better off after their displacement. "A properly drafted R&R plan would improve living standards of displaced persons after displacement. For example, residents of villages around Bhakra Nangal Dam, Nagarjun Sagar Dam, Tehri, Bhilai Steel Plant, Bokaro and Bala Iron and Steel Plant and numerous other developmental sites are better off than people living in villages in whose vicinity no development project came in." So now we have a resounding endorsement of the virtues of large dams from the highest judicial authority in the country.

Every person in the country including judges are entitled to have views on these matters. What is disturbing is when such personal views are delivered as judgments of a court. This is because a judge is required to decide issues on the basis of evidence before him, not on the basis of his personal biases. In this case, these pronouncements have been made in a case where the viability or desirability of large dams was not an issue and where the court had repeatedly told the petitioners that they must not make any submissions on this issue. Equally distressing is the fact that such pronouncements have been made without any evidence of these facts before the judges.

The issue of large dams has become controversial with increased understanding of the problems of those who are involuntarily displaced and long-term damage to the ecology of the area. Most developed

countries have stopped building large dams and have even begun to dismantle some of them. Recently, the World Bank has sponsored an international commission to review the performance of large dams. This World Commission on Dams (WCD) has representatives from all major stake holders including the dam industry. The recently released *India Study* of the WCD presents a dismal picture.

The report concludes that major and medium irrigation projects are largely unviable. On hydropower the report concludes that, "Given the high capital cost, long-term gestation period and environmental and social costs, hydro power development is not the preferred option for power generation compared to other options". Contrast this with the sweeping statement of the judges (without any evidence): "The cost of generation of electricity in hydel projects is significantly less".

The WCD *India study* goes on to estimate that 56 million persons, of whom 62 per cent are SC and ST, have been involuntarily displaced due to large dams, and over 5 million hectares of forests have been submerged. The dams have consumed Rs 1,56,000 crore which represents more than two-third of the water resource budget in the country for the last 50 years, while contributing less than 10 per cent to the agricultural production. The report says that even the electricity and irrigation benefits routinely bypass the affected and poor communities and are consumed by landed farmers, urban consumers and well to do people. "The distribution of most of the costs and benefits of large dam seem to accentuate social-economic inequities."

On the Sardar Sarovar project, the World Bank had commissioned a high powered review (the Morse Committee) which submitted its report in June 1992. The report concluded that, "Environmental and social trade-off have been made, and continue to be made, without a full understanding of the consequences. As a result, benefits tend to be overstated, while social and environmental costs are frequently

understated...

"We think that the Sardar Sarovar Projects as they stand are flawed, that resettlement and rehabilitation of all those displaced by the projects is not possible under the prevailing circumstances, and that the environmental impacts of the projects have not been properly considered or adequately addressed."

This high powered committee's report has been rubbished in the judgment of Justice Kripal by saying that it was not accepted by the World Bank or the Government of India. The court routinely appoints experts committees on its own when it is dissatisfied with Government committees, and acts on the reports of such committees. But curiously, the court refuses to even look at a report which is not endorsed by the World Bank or the Government. Virtually the same short shrift has been given to the two reports of the high powered Five Member Group (FMG) constituted by the Centre to look at certain aspects of the projects.

The FMG, virtually all official agencies and the Narmada Tribunal Award have emphasised the need for community rehabilitation of the oustees. Thus oustees from one village were entitled to be resettled 'together' if they so desired. Yet the court goes on to hold that community rehabilitation of these mostly tribal oustees was not required.

Justice Bharucha in his minority judgment has pointed out that all the official notes prepared prior to clearance and even the order of conditional clearance brought out the fact that the basic environmental impact studies had not been done by that time. It was noted by the Ministry of Environment. "Indeed, it is the view of the Ministry of Environment, Forests and Wild Life that what has been done so far whether by way of action or by way of studies does not amount to much and that many matters are yet in the early and preliminary stages."

The Ministry of Water Resources in its note put up to the Prime Minister has stated that "considering the magnitude of rehabilitation, involving a large percentage of tribals, loss of extensive forest area rich in

biodiversity, enormous cost of the project and considering the fact the basic data on vital aspects was still not available, there could be but one conclusion that the projects are not ready for approval".

However, despite this, conditional environmental clearance was given to the project in June 1987. As pointed out by Justice Bharucha, though those conditions were also violated and no comprehensive environmental impact assessment of the project has been done, the project is still being allowed to go ahead. That is why he has directed a comprehensive environmental impact assessment of the project and has restrained further construction till such assessment is done and clearance given.

The majority judgment of Justice Kirpal holds that "the pleas relating to height of the dam and the extent of submergence environmental studies and clearance, hydrology, seismisity and other issues except implementation of relief and rehabilitation cannot be permitted to be raised at this belated stage." It is surprising that this comes from judges who have acquired the reputation of 'Green judges', having issued tough directions in matters relating to deforestation and pollution.

Distressingly, the court has also allowed immediate construction of the dam till 90 meters on the basis of a clearance given by the NCA in early 1999. This is despite the admission of Madhya Pradesh that it had not been able to provide agricultural land to at least 156 families. The court notes that in six villages of MP affected at 90 meters, even land acquisition awards had not been passed. This means that this construction up to 90 metres would violate the Narmada Tribunal Award itself which mandates that under no circumstances can the land of an oustee be submerged till he has been rehabilitated.

The Narmada Bachao Andolan had been reluctant to approach the court since many in the NBA viewed the court as an instrument of the haves, the powerful and the influential. I persuaded them to come to court since I had more faith. I must admit that I have been proved wrong. This judgment is bound to shake the confidence of the people in the ability of the judiciary to protect the rights of the weak from onslaughts by the State and powerful vested interests.

(Prashant Bhushan is a public interest lawyer in the Supreme Court of India and advocate for the NBA)



THE HINDUSTAN TIMES

21 OCT 2000

Decision to reserve dam waters angers farmers

By Manas Dasgupta
GANDHINAGAR, OCT. 20. After the power tariff hike for the farm sector, the latest now is a ban on the use of dam waters for irrigation purposes giving the farmers in Gujarat enough reasons to turn hostile against the BJP Government in the State.

Unfortunately for the Chief Minister, Mr. Keshubhai Patel, both the "uncalled for burden" on the farm sector are beyond his control. The 400 per cent power tariff hike is the mandatory recommendation of the Electricity Regulatory Commission and the ban on dam waters is the decision of a high-level committee of bureaucrats forced by shortage of rainfall.

The Bharatiya Kisan Sangh, the farmers' wing of the Sangh Parivar, is already up in arms against the BJP Government on the power tariff issue and has reacted sharply to the decision to reserve dam waters for supplying to the urban centres for drinking purposes. The farm leaders argue that the Government should arrange alternate sources for drinking water to the urban centres in the drought-hit areas and whatever little water available in the dams should be allowed for irrigation and rural drinking water supply.

The drought situation this year in the Kutch-Saurashtra and the north Gujarat

regions is feared to be even more serious than the last year, which the Chief Minister had described as the "worst in the century." With the rainfall this year being less than 50 per cent of the average receipt in a year, the stock of water in the 113 small and medium dams in the Kutch-Saurashtra region has been estimated at just about 10 per cent of the total capacity, about 260 million cubic metre against the total capacity of over 2,270 MCM. This was against the last year's stock of about 13 to 15 per cent in these dams. The situation in the north and the central Gujarat regions will be no better.

The *rasta roko* agitation by the farmers of 13 villages around the Demi dam earlier this week to prevent the Government from using the water for supplying to Rajkot city was an indication of the situation developing in the Kutch-Saurashtra region. The farmers wanted the water to be kept reserved exclusively for use by the villagers, both for irrigation and drinking purposes. It was grim reminder of the violent agitation in Falla village on the Rajkot-Jamnagar highway last year when the *rasta roko* move resulted in the killing of three farmers in police firing.

Security has been tightened around the dams to prevent farmers from lifting water for irrigation and the police had been in-

structed to impound the pumps used for the purpose. The situation is volatile in the entire Kutch-Saurashtra and the north Gujarat regions where the village women even in October are forced to trek for miles to collect a few pitchers of water for drinking purposes and the hapless farmers helplessly watch the standing crops withering away in the fields.

Even the urban centres, including Ahmedabad city, has already started filling the pinch of water shortage. In Ahmedabad municipal corporation areas, the evening supply of water has been discontinued. Rajkot, the nerve centre of the Saurashtra region, gets water supply on alternate days.

All sources of water for Jamnagar city has started drying up and the Chief Minister recently had to rush to Mumbai to request the Reliance Industries Limited to come to its rescue with supply of water from its desalination plant at the oil refinery near Jamnagar.

The supply of water to Surendranagar, Wadhwan, Junagadh, Morbi and most other towns in the Saurashtra region has been reduced to once in two to three days.

While bureaucrats feel that every drop of available water should be preserved for use for drinking purposes in the summer months, the farm leaders argue that the more vocal urban population could always

manage to force the Government to make alternate arrangements to meet the potable water requirements.

The Government's emergency plan to lift water from the Narmada dam downstream to supply through pipelines to Ahmedabad, Rajkot and other centres in the Kutch-Saurashtra region is sited as an example of the urban power to force the Government to think instead of going for the obvious.

The Chief Minister is in constant touch with the BKS leaders to postpone its threatened agitation from October 22. His sympathy with the farm sector on the power tariff hike may influence the Sangh leaders to delay the agitation but they will find it difficult to hold back the farmers for long.

Considering the seriousness of the situation, the Centre has approved the State Government's request for an advance of Rs. 300 crores against ways and means loans and is processing the demand for an advance of another Rs. 200 crores against the royalty due on crude oil and gas produced in the State.

But the State Government will have to garner all possible resources to meet the drought situation threatening to become of the worst in the recent years.

THE HINDU

21 OCT 2000

Reservoirs for the future

The dharma of dams

9B-8
23/10

IT is gratifying to read the Supreme Court's verdict permitting further construction of the Sardar Sarovar Dam project. It is a landmark judgement for India's water resource development because it recognises some cardinal truths. To quote from the judgement: "...construction of big dams cannot be equated with setting up of polluting industries as far as their effect on the environment is concerned. What is being constructed is a large dam. It is neither a nuclear establishment nor a polluting industry. The construction of a dam would undoubtedly result in the change of environment but it will not be correct to presume that it will result in ecological disasters."

Nature is a huge desalination plant that transforms sea water — which comprises nearly 97 per cent of the total available water on earth — into the precious substance upon which human life depends. Unfortunately, nature does not make water available in the places where we want it to be, when we want it and in the quantities we require it to be. Take that classic example from Gujarat, where water had to be transported to the region by trains, even when elsewhere, vast stretches of the country were reeling under floods.

It is this that necessitates technological intervention for purposes of harnessing, conserving and properly managing water resources. And it is this which underlines the absolute necessity for dams — although they will, of course, have to be carefully planned. Some 45,000 dams exist in the world today and about 30,000 are required by the end of the century.

The human use of water has increased more than 35-fold over the past three centuries, totalling an annual consumption of 3,400 cubic kilometres. Out of this, 69 per cent is used for agriculture, 23 per cent for industry and eight per cent for domestic use. However, developing countries, especially those in Asia, use 86 per cent of its water for agricultural purposes.

Together with this, there is another dynamic at work: Population growth. The world's population is expected to increase to 8.9 billion by 2050, and again 59 per cent of the people will be in Asia. While every effort must be made to check this phenomenon, there is no denying that growing numbers will put a great pressure on food stocks. Foodgrain demand, globally, is estimated to increase by 37 per cent, from 1,937 million tonnes at present to 2,655 million tonnes by 2050. This makes it imperative that we manage our water resources wisely.

Added to this are energy requirements, for both food production as well as improving the general quality

big, have to store water for regulated release in the lean months, as well as to moderate floods and facilitate hydropower generation.

There is another powerful argument for dams, and that is the environmental one. To preserve our forests and guard against their further depletion, it is essential to provide regulated water supply and, more importantly, energy. It's the high demand for fuel that is one of the important reasons for our forest cover coming under threat and you can't save forests without providing alternate sources of energy and food. Ironically, then, to preserve the very culture of indigenous communities, it be-



C.V.J. VARMA

While traditional methods like water harvesting are necessary, they are not sufficient to ensure the country's food security and drinking water requirements

of life. Economic growth will inevitably lead to higher power consumption, the present average global growth rate being about 2.3 per cent per annum. Indeed, energy consumption in the developing world is expected to more than double by 2020. With fossil fuels and hydrocarbons being a limited resource, the world will have to source its power consumption from non-hydrocarbon resources. By 2050, at least 50 per cent of the world's total energy requirement would have to come from solar, wind, wave, geothermal, and hydro sources. Of all these renewable energy resources, hydro power is the cheapest.

In most countries, specially in developing ones like ours, rivers carry the bulk of their water during the four monsoon months, followed by the relatively dry non-monsoon months. Dams, small or

comes vital to reduce the pressure on their habitats. Those who say they are fighting for these communities would serve the cause better by propagating the need for the controlled development of water resources.

Finally, there is the lifestyle argument. Quality of life is today defined by access to electricity, whether we like it or not. And the country has to plan for the insatiable thirst for electricity that is manifesting itself everywhere.

So how far has India gone in meeting some of these challenges? Certainly, an immense effort has been made over the past 50 years in the field of water resources development. The irrigated land area in the country has increased from 23 to 92 million hectares and consequently agricultural production has multiplied

some four-fold, from 51 million tonnes to 198 million tonnes. By 2050, foodgrain production will have to increase to 500 million tonnes and for this to happen the irrigated area will have to increase by 160 million hectares — 75 per cent more than what India has today.

As for energy production, just one simple statistic should suffice: per capita consumption in this country is just 360 kilowatt hours (Kwh) — that is 1 Kwh per day. Compare this with China's 720 Kwh, Brazil's 1,783 Kwh and Australia's 6,600 Kwh, and the picture gets clearer. With the increase in economic development and standards of living, per capita energy consumption in India should rise to at least to 1,000 Kwh. The present position is in spite of the fact that, during the last 50 years after independence, electricity production has increased by 1,500 megawatts.

Thus far our energy/electricity production is dependent on coal, with the thermal to hydro mix being 75 per cent to 23 per cent. Unfortunately, our coal has 40 per cent ash content. Apart from this, for just load management, it is necessary to have a 60:40 mix of thermal and hydro. We have, therefore, to develop our estimated hydro potential of 84,000 MW available.

India, before 1947, had only 300 dams as against some 4,300 today. Given its requirements, it would need another 10,000 over the next 50 years. There is, of course, the argument that proper watershed management can serve as an alternative to storage reservoirs. While traditional methods like water harvesting, and so on, are necessary and must be encouraged, they are just not sufficient to ensure the country's sustainable food security and drinking water requirements. Besides, they do not address its energy demands. In short, there is just no alternative to dams, big and small, if the country's future has to be secured.

The writer is president, International Commission on Large Dams

INDIAN EXPRESS

23 AUG 2000

23 OCT 2000

Reservoirs of sorrow

The karma of dams

9B-6
25/10

IN his article titled 'Reservoirs for the future: The dharmas of dams' (IE, October 23), C.V.J. Varma eloquently describes the growing need for water and power in India and concludes that it is the duty (or dharma) of dams to meet these growing needs. Though I have no quarrel with his facts, I would like to question his conclusions on the basis of the actual performance (karma) of large dams in India.

In a recent report written by some of us for the World Commission on Dams (WCD), 'Large Dams: India's Experience', an exhaustive look at the facts and figures available establishes that until 1978, most dams were not assessed for their environmental and social impacts. Even when they began to be assessed, alternatives to the dam were never assessed and mostly not even considered. Also, that the current system of granting environmental clearances is subject to all sorts of political and administrative pressures, resulting in clearances being granted to projects without assessing their impacts or even when they are non-viable. What is worse, the concerned ministry has little ability to ensure that the parameters and conditions of clearance are adhered to. In fact, they are disregarded and flouted, as a rule.

Perhaps the best indicator of how lightly the nation has taken the environmental and social damage that large dams cause is the absence of data on these aspects. We do not know what the environmental impacts of most dams were. In most cases we do not know whether any of the safeguards prescribed actually worked. We do not even know the total number of people displaced or the area of forests submerged by large dams.

In the WCD report an attempt is made to gather together all available information and, by extrapolation, get some understanding of the magnitude of the impacts. Accordingly, the amount of forests submerged by large dams, between 1980 and 2000, works out to be between 9.1 million hectares (our calculation)

and 4.5 million hectares (based on the Central Water Commission data). And this, when we are already well below the stipulated 33 per cent forest cover.

Similarly, the data provided by the Central Power and Irrigation Board of the Government of India for 19 dams shows that in all but one of these dams (Machkund), the rate of siltation of the reservoir is higher than anticipated. This has serious repercussions on the life, the safety and the economic viability of the dam. The excess rate of siltation ranges from 115 per cent in Kangsabati to 309 per cent in Maithon, with 10 of the 19 having an actual rate that is over 200 per cent of the anticipated rate. In an alternate data set, of the CWC, for 13 of

well known: Dr Y.K. Murthy, a former chairman of the Central Water and Power Commission, has concluded that, of the 131 dams studied by him, 36 manifested distress, in 20 the spillways were inadequate and in 25 the freeboards were inadequate, all compromising the safety of the dam. In 90 of the dams studied there was no emergency reservoir operations plan.



SHEKHAR SINGH

Perhaps the most heart-rending aspect of large dams is the displacement of human populations. Again, no comprehensive data are available. A study by the CWC, of 54 projects, showed a per-dam submergence of 24,555 ha. The same study showed a per-hectare displacement of 1.1 person. If one were

We have a situation today where thousands of dams have been built, with little or no environmental assessments and safeguards, and huge adverse social impacts

these projects, the variation is between 649 per cent (Beas unit II) to 88 per cent (Panchet). Eight of these 13 show observed rates of over 200 per cent.

Even this level of data is not available for the numerous other well known adverse environmental impacts of large dams, including impacts upstream and on the catchment; on biodiversity, species and ecosystems; on human health; on water quality; on reservoir induced seismicity; on micro climate; on water availability downstream; on salt water ingress, and on water logging and salinity.

Dam failure and emergency releases of water pose a threat to downstream populations. Again, though no comprehensive data are available, the havoc wreaked downstream by, for example, the Bhakra Dam (in late 1970s and again in 1988) and the Rihand Dam in 1997, is

to extrapolate these figures to the 4291 large dams built in India, the total displacement figure would be 11,59,02055 or 11.5 crore in the last 100 years or so. Our own calculations, based on a study of 213 dams, show that the average submergence per dam was 8748 ha and the average displacement per hectare (based on data of 83 dams) was 1.51 per hectare. Extrapolating from these, the total figure of displacement comes to 5,66,81878 or 5.6 crores. Perhaps even this is an exaggeration, but what it does establish is that those displaced by large dams number not in the hundreds or the thousands but in crores. Further, data available for 34 dams shows that tribals formed 47 per cent of those displaced, despite the fact that their national share of population is only a little over eight per cent.

So, clearly, the major costs of large

dams are borne by the poor and the weak. But who are the major beneficiaries? The irrigation benefits go to those downstream and, among them, disproportionately to the large farmers. Similarly, the peaking power that dams provide goes primarily to meet the peak demand of the urban rich and the industry. What does the nation gain as a whole? According to the WCD study, large dams, after 1990, show no economic benefits over costs and only have a distributional function, where "the benefits are reaped by farmers and others in the command areas and the costs are borne by the society at large, the tax payers and the project-affected people. There is possibly no net gain to society from major and medium irrigation projects". Even if hydroelectric generation is taken into consideration, "the gains from power are unlikely to compensate for losses from irrigation unless hydro-power generation is extremely large". And this is when only a small proportion of the environmental and social costs are being internalised.

So, we have a situation today where thousands of dams have been built, with little or no environmental assessments and safeguards, and huge adverse social impacts. Millions of hectares of forests have been destroyed, huge areas have become water logged, the incidence of water related diseases has increased, lakhs of people have been thrown out of their homes, mainly tribals, the poor and the weak. And all this to create structures that, even without acknowledging most of the environmental and social costs, add not a rupee worth of value to the Indian economy. All they do is re-distribute the existing resources so that the poor are further deprived and the relatively well off get the benefits. If this is development, then let me awake in another world.

The writer is on the faculty of the Indian Institute of Public Administration, New Delhi, and is a member of the Narmada Control Authority Sub-Group on the Environment

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25 OCT 2000

25 OCT 2000

Cause for dismay?

By Harsh Sethi

The Narmada struggle still awaits an authoritative account. One hopes that future historians will shed better light on how such struggles should be conducted, and how not.

THE SUPREME Court has now pronounced. In a majority (two vs one) judgment, the Court turned down the appeal to stay further construction of the Sardar Sarovar dam and permitted the Nigam to raise the height of the dam to 90 metres. In so doing it upheld the contention of the authorities about the progress made with respect to relief and rehabilitation of the oustees as also compensatory afforestation.

Not unexpectedly, the Supreme Court decision was greeted with glee in 'official' Gujarat. The Chief Minister, Mr. Keshubhai Patel, called it a Diwali gift to the State and rapidly announced a half-day holiday so that the people could properly celebrate. Equally expectedly, the Narmada Bachao Andolan (NBA) leader, Ms. Medha Patkar, and her associates were devastated, describing the majority judgment as a betrayal of the people and focussing instead on the dissenting judgment. Equally, they have vowed that the struggle will go on and have decided to return to the valley to mobilise opinion against the judgment.

Whether or not we are now witnessing the 'final act' of this long saga of resistance, arguably the most written about social protest movement in independent India, is a matter of debate. True that the NBA has been dealt a bad body blow; there is little left in the institutional framework once the Supreme Court pronounces. And appeals to the President and other notables to 'force' a reconsideration are unlikely to meet with any success. Nevertheless, the NBA and other cognate protesting groups are unlikely to sit quiet; just too much energy has been invested in the movement. Possibly we will now see, at least in the proximate period, an escalation of direct action by the affected and their representatives.

Not having access to the detailed judgment, it is difficult to comment on the grounds, both legal-technical and substantive, on the basis of which the Court made its decision. Politically, however, it has been evident for some time now that

ly-favoured local water harvesting efforts. It is not that the struggle had no positive fallout. Public pressure did force the Governments to release more data and permit greater scrutiny of its claims. What few realised was that as the project got caught in a cycle of delays, costs mounted and potential donors/investors were scared off — drastically affecting the viability of the project. The dissenters saw this as a success, little realising the build-up of a chauvinist backlash in Gujarat.

Movements of the affected cannot be maintained at a fever pitch for long. Even the media, forever hungry for spectacle, tires. Slowly the impression gained ground that the protesters would do 'anything' to ensure that the project be scrapped. The fact that much of the 'visible' support to the Andolan came from distant metropolitan centres, within the country and abroad, gave fillip to a charge that the movement was both elitist and anti-national.

Truth is rarely a privileged commodity in political struggles, even in Gandhi's India. And as the war of 'images', despite eloquent testimonies from Arundhati Roy, shifted against the NBA, the die was cast. In a country keen to speed up the process of industrialisation and modernisation, in particular of its infrastructure, any expectation for a sympathetic hearing to a no-dam position is foredoomed to failure.

It does not matter that the Sardar Sarovar dam, or the larger Narmada project, is incapable of even partially meeting its objectives. The brutal fact is that the dam will be built. And whether or not history proves the dissenters right, they have lost the battle. No wonder the creative alternatives proposed by K.R. Datey or Suhas Paranjpe et al got such little notice.

The Narmada struggle still awaits an authoritative account. One hopes that future historians will shed better light on how such struggles should be conducted, and how not.

ket no-big-dam position, a 'fundamentalist' critique of development. What was foregrounded were new notions of community, relationship to nature, the sacred nature of the river. Of course, there was also criticism based on 'alternative social cost-benefit analysis, or that the proposed rehabilitation package was unlikely to suffice. The pride of place clearly went to no-dam-at-any-cost, with periodic threats of 'jal samarpan' in the event the project went ahead.

Why this shift took place and how is a complex story of a new politics of symbolism and rituals involving new actors with new skills in new locations. Ever so often, the terrain of the struggle moved from the valley to metropolitan centres within the country and abroad. International bodies from the World Bank to the U.S. Congress, the Japanese Diet and the Scandinavian Parliament were lobbied, and successfully. All this was fine. What was not was a drowning out of even those groups which wanted to carry out surveys of the affected in the valley, such that, in the event the dam was actually built, the Government could be pressured to not renege on its relief promises. They were chased out of the valley, not by the Government, but by NBA activists.

One is not even referring to those social peasant movements which were in favour of large dams, albeit with a different design content. These groups wanted large irrigation projects. Others argued that endemic water scarcities could not be mitigated without major interventions. All of these were dismissed as pro-development, pro-kulak. Consequently, the little space that we had to propose and have considered serious alternatives to meeting the water and energy requirements was squeezed out, not even the now high-

the NBA-led agitation had been losing ground. This despite the fact that, if one is to go by the English language press as also the international development community, the Sardar Sarovar dam has acquired a negative iconic status. It is routinely, in such circles, held out as a prime example of mal-development.

Few today may remember that the early protests about the dam were all centred around issues of compensation, relief and rehabilitation of potential oustees. The language of protest drew on political economy (who gains, who loses and at whose cost) and human rights (principles of natural justice and the right to be consulted before decisions are taken) considerations. Since India's record of appropriately resetting development oustees could hardly be described as exemplary, the protest was able to draw in a wide spectrum of actors, even in Gujarat. Further, since the project involved external co-financing from the World Bank, it self-facing criticism for showing inadequate concern about oustees, the advocacy process was successful in instituting new conditionalities and (at least on paper) a rehabilitation package superior to anything promised before.

It was at this stage that the movement, I believe, got derailed politically. The State Government which stood to gain most from the project invited, after some prodding, constructive cooperation from dissenting NGOs. Some, particularly in Gujarat, agreed, arguing that involvement was necessary to ensure proper relief and rehabilitation. Many other groups, particularly from outside the State, saw any involvement with the State as an example of co-optation, if not a sell-out.

What slowly became hegemonic, at least at the level of discourse, was a blan-

urgency operators, armed insurgents who are engaged in a large scale in hill areas. Innocents are killed and terrified insurgents who were in wanton abductions he deplored.

man of the ruling party said the poor hill people have become fed up with the excesses by the ruling party. Dr Chakraborti, SES director, said the armed resistance has been found in 17 villages themselves. The armed rebels collected from Alipore.

The sample study was conducted at Commander Engineering and 1 here Estate (a housing of government employees).

Chakraborti said here Estate has an content of 141ug/l (grams per litre), two the CWE complex have and 97ug/l, 4 National Avenue (residence) has it of 55ug/l, National has 29ug/l and two collected from Alipore

water has arsenic above acceptable limit

easily result in a combined cancer risk of 1 in 100," he said.

Mr Ashesh Roy, chief engineer of the state public health engineering, said the notion of the permissible value is debatable. "The Central Public Health Engineering Organization recommended 10ug/l in May. But we are still to accept that," he said. "Fixing guidelines is easy, but that need not necessarily be accepted, for we have to see the situation in totality in the specific area."

The state still thinks it right to accept 50ug/l as the permissible limit, though Mr Roy clarified that "this is a grey area". He said the number of arsenical dermatosis cases have fallen since 1996. And this is

because the government has succeeded in arresting the spread of the menace.

Dr Chakraborti, on the other hand, said arsenic contamination is spreading. The reason: more underground water is being taken out than should have been permitted by the government. The vacuum created under the surface is thus contaminating lower layers.

The PHE, however, is not willing to buy that. Mr Roy said: "There are some opinions which recommend just the reverse."

Caught up in this tussle, the common man is not sure how "safe" is the water he uses.

The PHE minister, Mr Gautam Deb, is not surprised that Alipore has emerged as a

LEVEL OF CONTAMINATION	
Belvedere Estate	55 micrograms/litre
National Library Avenue	51 micrograms/litre
Alipore Zoo	43 micrograms/litre
Kothari Medical Centre	40 micrograms/litre
Woodlands Nursing Home	40 micrograms/litre

Permissible limit:

US-EPA recommendation : 5 micrograms per litre

WHO guideline : 10 micrograms per litre

Maximum permissible limit : 50 micrograms per litre

contaminated area. "It requires in nature," he said.

How many of us have heard of that? The good thing is that Mr Deb admits the government

prone to the arsenic problem and it is difficult to overcome this hazard which is geogenic

See ARSENIC: page 3

down
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THE STATESMAN

25 000 2000

Concern over arsenic report

STATESMAN NEWS SERVICE

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Gwinon

CALCUTTA, Oct. 26. — Residents and hospital authorities in Alipore are concerned about the remarkably high arsenic content in the area's water.

Reacting to the report **The Statesman** carried today, they said measures would be taken immediately, but also pondered what their next step should be.

Woodlands Nursing Home has stopped using for human consumption water that has been found to contain unacceptable levels of arsenic by Jadavpur University's School of Environmental Studies.

Mr AK Roy, HOD (Engineering) at Woodlands, said: "The water from the bore well pumps was used in toilets only."

He said that before collecting the samples, the School of Environmental Studies didn't ask the nursing home authorities if the water from bore well pumps was used for drinking.

The School of Environmental Studies director, Dr Dipankar Chakraborti, however, said it was

up to the authorities to see how the water was used. "What I want to prove is that arsenic contamination in city's underground water is gradually increasing."

Woodlands authorities want to send more samples to various centres for test. Presently, they are using the "contaminated" water only for running machines in the hospital. "The drinking water is being supplied by the CMC. It is used after taking all the necessary safety measures," Mr Roy said.

Dr Chakraborti today said he had been "warning the government" for a long time that arsenic contamination was likely to affect the entire city, but the government didn't react. "When the Commander Works Engineering authorities approached us for arsenic tests last year, the figures were far below this year's findings," he said.

Kothari Medical Centre, though surprised by the findings, will continue to use the contaminated water. "There are no immediate

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NARMADA DAM / ADVANI TO VISIT SITE

Re-construction to begin on Oct. 31

By Gargi Parsai 28/10

NEW DELHI, OCT. 27. The Government has decided to put all its might behind the commencement of the re-construction of the controversial Sardar Sarovar project in Gujarat following the Supreme Court clearance to raise the height of the dam by two metres at one go.

The Home Minister, Mr. L. K. Advani, who is a Member of Parliament from Gandhinagar in Gujarat, and the Union Minister for Water Resources, Mr. Arjun Charan Sethi, will be present at the dam site to oversee the work on October 31.

In addition, efforts are on to bring to the site, the Chief Ministers of Maharashtra, Rajasthan and Madhya Pradesh "to boost the efforts of the Government to raise the height of the dam", says the Water Resources Ministry here.

Meanwhile, it appears that amid the din of the court order, the non-rehabilitation of project-affected people even at the height of 85 metres is likely to get lost.

Whereas, as per the Narmada Water Disputes Tribunal Award the rehabilitation and resettlement should be at least one year in advance, following the court order, the accountability of the Central and State

Governments concerned seems to be no longer there, at least for the moment.

There appears to be no redress mechanism for thousands of rural and tribal people whose land is going to come under water and who are going to be uprooted in the valley.

The court has observed in its judgment, the lack of preparedness of the Madhya Pradesh Government in resettlement and rehabilitation of the affected people and the lack of commitment on the part of the State in looking into the welfare of its people.

There are provisions in the tribunal award linking submergence, displacement, rehabilitation and resettlement. Irrigable land, for instance, must be made available one year in advance of submergence.

The award has said that in no event, shall any areas in Madhya Pradesh and Maharashtra be submerged under the project unless all payment of compensation, expenses and costs are made for acquisition of land and property and arrangements are made for the rehabilitation of the oustees and they are intimated about it.

Despite the Centre and the State Governments being vague about the

arrangements being made for the resettlement of the project-affected people even at the height of 85 metres, the court has cleared construction up to a height of 90 metres from the present 88 metres, including the humps.

The clearance of the construction up to a particular height is done on the basis of the decision taken by the technical Rehabilitation and Resettlement Sub-Group of the Narmada Control Authority.

In this case, however, there is no categorical clearance by the R&R Sub-Group to raise the height of the dam up to 90 metres without simultaneous resettlement and rehabilitation of the oustees.

It has happened in the past, though, that the green signal for raising the height of the dam is given with retrospective effect, after construction has begun. It is possible that this may happen again.

PTI reports from Pune:

The Gujarat Chief Minister, Mr. Keshubhai Patel, told presspersons today that the Sardar Sarovar dam would be constructed within the next two years with an additional expenditure of another Rs. 10,000 crores.

THE HINDU

28 OCT 2000

NBA refutes 'foreign funds' charges

51-8 28/10

STATESMAN NEWS SERVICE

BHOPAL, Oct. 27. — The Narmada Bachao Andolan today slammed the Gujarat's Narmada development minister, Mr Jaynarayan Vyas for questioning its financial sources.

Mr Vyas had urged Mr LK Advani to order a CBI probe against the NBA to ascertain the sources of its alleged international funding and to find out if it violated foreign exchange regulation laws.

The NBA has said it is ready to face an inquiry by any top investigating agencies on condition that if the allegations are proved wrong, Mr Vyas should publicly tender an apology to the NBA and resign from his post.

Mr Alok Agarwal, an spokesman of the Narmada Bachao Andolan said today the organisation had never accepted funds from foreign sources. The NBA is a social organisation of dam oustees run with the support and donations of local communities, Mr Agarwal said. "Several politicians have alleged in the last 15 years that the NBA is fuelled by international funding, but nobody has ever brought any evidence to corroborate this charge".

The Madhya Pradesh deputy CM, Mrs Jamuna Devi had earlier alleged that the NBA is a "foreign agent" funded by dubious foreign sources. The NBA dismissed such charges as "unfounded, baseless and absurd".

The NBA today denied Mr Vyas's statement that the for-



Arundhati Roy (right) speaks to Medha Patkar at the NBA dharna in Bhopal on Friday. The NBA is protesting against the Sardar Sarovar Dam project which, it claims, will displace thousands. — AP/PTI

mer had given a call for "giving and taking lives" for the sake of its campaign. "We have never given any such call, we have always carried out a non-violent struggle in a democratic manner", Mr Agarwal said.

The fast by NBA leader Ms Medha Patkar and seven dam oustees since 25 October entered its third day today. They are protesting against the 18 October "majority judgement" of the Supreme Court Chief Justice Mr AS Anand and Mr Justice BN Kirpal clearing the construction of the controversial Sardar Sarovar dam on the Narmada river.

Arundhati Roy alleged that the majority judgment is replete with contradictions and that it

violates the Narmada Tribunal Award. She said the dissenting "minority verdict" of Mr Justice SP Bharucha is completely at variance with the majority judgement which violates the fundamental human rights of Indian citizens. She said no official studies have ever been conducted to counter the point that big dams prove to be catastrophic for the people. "40-56 million people have been displaced due to big dams since 1947, but more than 80 per cent of these people could not be rehabilitated".

She urged Mr Digvijay Singh to make his stand clear on the issue of further construction of the Sardar Sarovar dam as cleared by the Supreme Court.

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30 OCTOBER 2000 Vol. CXXXIV 256

ARSENIC MENACE

Sir b It is time to act *30/10*

JADAVPUR and Baruipur in Calcutta were known to be affected by arsenic poisoning; the problem has now spread to Alipore, which suggests that much of Calcutta is now affected like districts in West Bengal. The World Health Organisation has established a provisional guideline value of 0.01 mg/litre as a safe level of arsenic in drinking water, and clarified why this is provisional: "because of lack of suitable testing methods. Based on health concerns alone it would be lower still." The state government, however, has established 0.05 mg/litre as its own standard, a level which creates, according to the US National Research Council, a 1 in 100 chance of causing cancer. An epidemiology team from the University of Berkeley, California, sent by WHO to Bangladesh where a similar problem exists, found "the largest mass poisoning of a population in history ... on a scale greater than Bhopal and Chernobyl". The source of the problem in both West Bengal and Bangladesh is the same: the digging of deep tube wells which brings up arsenic in geological deposits underground. It would be foolish to assume that national borders will limit the problem: according to the state government's own estimates, taking its jacked up safety levels as the yardstick, one million people spread over six districts in West Bengal are drinking poisoned water. It is reasonable to suppose that many more people are at risk.

The Public Health Engineering department recognised only in March this year that a problem exists in Calcutta, seven years after Jadavpur University's School of Environmental Studies blew the whistle on arsenic in the city's wells, and quite a few years after arsenicosis patients started showing up among its residents. The state government fears that acknowledging the problem will create "undue panic", but this does not have to be the case, as the mix of short term and long term measures needed to combat the menace has by now been identified. Public awareness can be an important means of combating the menace. The measures which need to be taken are identification and sealing of poisoned wells, shallow hand pumps for zones where arsenic is yet undetected, arsenic free water from aquifers deeper than 100 metres, distribution of arsenic removal kits to affected people, spreading awareness about arsenic related symptoms and training health personnel how to handle arsenic patients (short-term); setting up structures to hold rain water, pond-sand filtration of water, piped water supply from safe or treated sources, stepped up research on low cost methods of treating water (long term). This will require money and organisation, but most of all, imagination and shaking off lethargy. This is not a task of the state government alone; the Centre needs to come up with funds from the National Drinking Water Mission, or from other sources. Enough deliberations have taken place; it is time to act.

THE STATESMAN

30 OCT 2000

Narmada oustees protest against Digvijay move

Swapan

8/9
51-81

STATESMAN NEWS SERVICE



Ms Medha Patkar

BHOPAL, Sept. 5. — Several hundred Narmada dam oustees affiliated to the Narmada Bachao Andolan today organised a rally and staged a demonstration in front of the Madhya Pradesh chief minister's residence.

They were protesting against Mr Digvijay Sing's efforts to press for fixing the maximum height of the Sardar Sarovar dam at 436 ft. The NBA termed the move as "arbitrary, illegal and anti-oustees".

NBA leader, Miss Medha Patkar, blasted Mr Singh for his alleged bid to strike a deal with Gujarat on the

height. She said such "compromise agreement" would be absolutely unacceptable to the NBA as "it is not based on a comprehensive review of the flawed Sardar Sarovar dam and does not involve the people of the Narmada Valley".

Miss Patkar said the Supreme Court is likely to give its judgment in the case soon. The court has already completed its final hearing of the public interest petition filed by the NBA challenging the construction of the dam.

"When resettlement and rehabilitation (R&R) of project-affected families (PAFs) have not been carried out at the current height of 88 mt, how it would be done when the height would be 436 ft", Miss Patkar said adding that "the appropriate and adequate land for the R&R of PAFs (if the height of the dam is fixed) at 436 feet is non-existent".

Miss Patkar said the agitation has reached a "decisive stage". "It's now a matter of life and death for thousands of oustees who have decided to intensify their struggle and fight to the finish".

THE STATESMAN

7 6 SEP 2000

Environ
47-10

Struck down by apathy

W 9 W

A recent study shows that cancer is linked with environment. ANIL AGARWAL hopes that this new finding will make the Government sit up and draft a much-needed public health policy

IT IS the environment, stupid, not the genes'. This is the stunning message delivered in a powerful paper published recently in the prestigious *New England Journal of Medicine* by scientists of the Karolinska Institute in Sweden. The study is bound to shake up the cancer establishment in India and abroad.

The study is huge — it covers nearly 90,000 twins — but very simple in its approach which makes it so powerful. Identical twins carry the same genes. So, if genes predominate as a cause of cancer then each twin should get cancer and the same type of cancer. Non-identical twins share only half the genetic structure. The study found that if one identical twin had cancer, the other twin had less than 10 per cent chance of contracting the same disease. Only a few cancers like breast and prostate appeared to have a stronger genetic link. The results are clear: genetic factors are far less important than environmental factors (chemical pollution, radiation, smoking, diet, infection, etc.) in causing cancer.

In the case of several cancers — Non-Hodgkin's lymphoma, Hodgkin's disease, cancer of the lip, oral cavity, pharynx, kidney, thyroid, bone and soft tissue — no genetic risk was found, only environmental risk. The incidence of Non-Hodgkin's lymphoma, a form of blood cancer, is on the increase in the incidence of all cancers. The 1988 to 1991 data available for Delhi shows that this polluted city has a very high incidence of this cancer compared to other cities, especially among men.

Many scientists believe it has to do with some environmental change that is taking place worldwide, such as the growing use and human exposure to chemicals. Living in Indian villages makes a difference — the chance of getting cancer in your lifetime can climb down from one out of every nine to 15 persons in Indian metros to one out of every 18 to 34 persons. Delhi is extremely high in the incidence of lymphatic and haematopoietic tissue (that is, blood) cancers — which include lymphomas and leukaemias — almost twice that of other metros. But

PLATFORM

nobody in India's medical establishment has cared to find out why.

The Swedish findings are at one level very empowering, but at another level frightening. Empowering because we can do a lot to control our environment — pollution, diet, lifestyle, stress, etc — but we can do little to control our genes. Therefore, it is possible for everyone to prevent cancer just as in the United States where lung cancer rates have dropped substantially after the no-smoking campaigns began.

But given the speed and scale with which



pollution is growing in poorly governed countries like India, given the highly toxic Western economic model we are adopting with such bravado, we will see an enormous rise in cancer cases. How will we deal with such a high-cost disease unless we have the foresight and courage to take strong preventive action?

As long as cancer was in the genes, we could expect the private sector to put in a lot of research investment as genes can be patented and economically exploited. But if cancer is in pollutants, most of the research investment will have to come from State coffers and the industrial community will oppose every finding. Despite overwhelming evidence, the

tobacco industry fought back tooth and nail on the issue. The diesel lobby is today doing the same. So moving from genes to environment also means moving from public-private cooperation to public-private conflict. Will our politicians be able to deal with this challenge or just leave a lot of people, especially the poor, to die?

The study should also have serious lessons for the Indian cancer establishment, which till now has been extremely conservative to the point of fooling the public. Is cancer increasing in the country especially with the growing pollution? Cancer experts have two pat replies: "No, we cannot say anything with certainty. First, because our database on cancer incidence is very poor" (as if it is the public's responsibility to create one!); and "Because we did not have much knowledge of cancer diagnosis in the past, we have no data on past trends and therefore nothing to compare our results with."

All these are indeed true but they are also half-truths meant to support the callousness and inaction of the Government *babus* who are too powerful to be challenged. As of today, the Indian Government does not even have a serious programme to deal with cancer. Even the data on cancer incidence is not readily available to cancer specialists. The Ministry of Health is behaving like an ostrich, leaving the poor who can hardly afford the cost of treatment to die.

Hopefully, however, now that there is strong evidence that cancer is in the environment, civil society and irate citizens will force the politicians and bureaucrats to wake up, especially as it is often their policies and actions that are behind the dreaded disease. The Ministry of Environment mandarins believe this is the responsibility of the Ministry of Health to do something. The Health Ministry mandarins are, of course, so overworked dealing with diseases like malaria and diarrhoea that they don't want to hear about cancer.

As a result, nobody wants to deal with the threats to public health resulting from environmental change.

Swimmer 1999

Global warning H210

THAT THREE oxygen atoms should continue to huddle together in the form of an ozone molecule in the earth's stratosphere is not something most people include in their daily prayers. Even after NASA scientists discovered last week that the ozone sheath protecting us from harmful ultraviolet radiation has ruptured more than ever before, most of us continue to treat it as a matter of concern only for those busy waving banners and dressed up as trees. The recent findings show that the ozone hole has grown to thrice the size of the United States and is no longer a concern for the well-meaning paranoid.

An international agreement was reached in 1987 banning the use of ozone-destroying chloro-fluoro carbons (CFCs). Ozone is unstable; it breaks down and forms again. But the presence of CFCs in the atmosphere disrupts the ozone-reforming process. Even though the use of CFCs in products like refrigerators and aerosols have dwindled, these long-living chemicals are expected to go on damaging the ozone layer for decades. The polar regions are especially at risk because the chemical reaction which destroys ozone is helped by weather conditions in these regions. Along with other factors (such as global warming caused by industrial emission), this has already resulted in the Arctic ice cap shrinking by about six per cent from its 1980 size. More distressingly, the ozone hole is touching the tip of South America for the first time.

Ozone depletion causes skin cancer and cataracts. It is also harmful for plants and microbes. The precious layer has been thinning dramatically over Antarctica — and more recently, over the Arctic — for the last 15 years. Concentrations of CFCs in the stratosphere are now reaching their peak, decades after their use. Fifteen years after the hole was first discovered over the Antarctic, the effects of uncontrolled CFC use (primarily in Western households) are taking their toll. Which is why one should think twice before scoffing at all those warnings about environmental degradation — not for some airy-fairy reason, but to see that future generations do not have to pay for the sins of their fathers.

India gears up for another battle on ozone

By Chandrika Mago

The Times of India News Service

NEW DELHI: India, set to receive a \$82 million grant to gradually phase out the production of CFCs (chloro-fluorocarbons), is gearing up for another battle: A proposal to advance the deadline on a consumption freeze of other ozone-eating gases, HCFCs, in developing countries.

With meetings scheduled in Geneva from Sunday, over 12 days, the team from India is getting ready to rally support and stave off the move.

More immediately, on Friday India and the World Bank formally signed an agreement to provide financial compensation to the four CFC producers here to meet the annual production ceilings agreed to by India and the executive committee of the Montreal Protocol Multilateral Fund. CFCs are used for refrigeration and foam blowing, among other things.

The 1987 Protocol mandates that CFC production is to be stepped down, and stopped by 2010. India produced more than 22,000 tonnes last year; it is the second biggest producer of this gas, three-fifths of which is exported.

As the Union environment ministry led the effort to compensate the four CFC producers for their loss, negotiating the \$82 million grant to be given over 10 years, a new threat looms for industry—the European Union proposal on

“commercial use” HCFC gas.

A review of the phaseout of ozone-depleting substances in developing countries was scheduled for this year. Official sources say the HCFC phaseout deadline for countries like India is 2040, with domestic consumption levels to be frozen at 2015 levels till then. The EU plan seeks to advance this consumption freeze to 2006 levels.

“We have to fight this,” says W.J. Samuel of the Refrigerant Gas Manufacturers Association. The reasoning is simple: Those expected to step down production of ozone-eating CFCs were given to understand they had HCFCs as a standby. They are, therefore, gearing to step up production of HCFCs so they don't go out of business. India produces nearly 10,000 tonnes of this gas and more than 3,000 tonnes of this is used within the country—the market is growing at a rate of five to seven per cent, says Mr Samuel. The EU move could mean deep trouble.

Why the EU proposal at this juncture? One official says, “They are probably wanting to look more green.” But sources suggest the motive could be to benefit their own industry where production peaked a decade ago and a consumption freeze means a widening gap they have to contend with. In India, production hasn't peaked and the market is growing—the proposal may be an attempt to grab a share.

THE TIMES OF INDIA

2 JUL 2000

PM convenes Cauvery meet for July 14

By Our Special Correspondent

NEW DELHI, JUL. 3. The Prime Minister, Mr. A.B. Vajpayee, has convened a meeting of the Cauvery Water Authority for July 14 in which the Chief Ministers of the three southern States and the Union Territory of Pondicherry are expected to take part.

The meeting which was scheduled to take place on May 19 had to be postponed after the Karnataka Chief Minister, Mr. S.M. Krishna, decided to stay away from the meet.

In September last also the meeting had to be postponed due to the illness of the then Chief Minister, Mr. J.H. Patel.

Besides the Prime Minister, who is the Chairman of the Authority, the Chief Ministers of Tamil Nadu, Karnataka, Kerala and Pondicherry are its members.

The meeting cannot be convened even if one Chief Minister is absent.

The meeting is intended to discuss the rules and regulations of the Authority suggested by a committee chaired by the Cabinet Secretary, Mr. Prabhat Kumar, and to discuss the implementation of the interim order of the Cauvery River Water Dispute Tribunal, according to which Karnataka has to release 205 tmcft of water to Tamil Nadu during the water year.

THE HINDU

4 JUL 2000

NBA trumpets German no-confidence for Maheshwar project

STATESMAN NEWS SERVICE

BHOPAL, July 4. — A study commissioned by the German government has severely criticised Madhya Pradesh's Maheshwar dam project, highlighting the complete failure of resettlement and rehabilitation efforts for thousands of oustees.

The report of the international team of independent experts who visited the dam site in Khargone early last month, was released by Narmada Bachao Andolan here today. The German economic cooperation and development ministry had commissioned the study on the 400 MW Shree Maheshwar hydroelectric project on the Narmada before deciding to give the "Hermes export credit guarantee" to two prospective German financiers in the project, Siemens and Hypovereins Bank.

The report says "the (Maheshwar) project hasn't implemented the land-for-land policy (for dam oustees) set by the Madhya Pradesh government and by international standards, nor ... does it have sufficient land available to carry it out if it decided to do so.

"The approach of the R&R programme to date has failed to be transparent, participatory, or democratic, and dissent has been handled with police force rather than communication." There is "significant uncertainty" over the amount of land that would be seriously affected (submerged or waterlogged), as well as over the number of people who would be seriously affected by the project.

An NBA activist said the report "confirmed" fears of the NBA and dam-affected people that the project would be "absolutely catastrophic" for the Narmada valley. Various central and state government agencies had come to "similar conclusions", he said, but they had been ignored by governments in both Delhi and Bhopal.

The andolan urged the Central and state governments to take cognisance of the German ministry report and immediately scrap the "destructive" project.

It also urged Germany to "decisively" turn down the Hermes guarantee sought by the two companies.

"The dam will devastate the lives and livelihood of about 40,000 people living in 61 villages of the Narmada valley, submerge thousands of acres of irrigated fertile land, destroy draw-down land, sand quarries and fisheries," the activist said, "the R&R of the project-affected people continues to remain non-existent and seems impossible".

THE STATESMAN

- 5 JUL 2000

OVERHAUL WATER MANAGEMENT

By POONAM SINHA

EVEN as the parched areas of Gujarat and Rajasthan have had the worst ever harrowing experience of drought in the last 76 years, it becomes incumbent to overhaul the need for water management. Water scarcity which is a reflection of human failure is likely to worsen in the coming years with increased population and profligate uses of natural resource.

The country has 4 per cent of the world's fresh water resources while its population is 16 per cent of the global population. The projected demand for various uses in the country as assessed by Central Water Commission, for the year 2000, is 750 billion cubic metres (bcm). Out of this, 630 bcm is for irrigation, 33 bcm for domestic uses, 30 bcm for industrial purposes, 27 bcm for energy and 30 bcm for other uses. The point to be noted is, India's water availability per head of 1,947 cubic metres is well ahead of Israel's 184 cubic metres, Belgium's 1,228 cubic metres and Singapore's 193 cubic metres. Still unable to match the successful water policies of these countries. India continues to pass through the vicious cycle of drought and flood every year. Official statistics reveal that the number of drought-affected districts during 1999-2000 is 126 spread over 11 states. Promises are made and forgotten. With the arrival of rain all claims of rain water harvesting and storage are dumped. Instead all attention is diverted towards containing floods. Complacency towards water harvesting or its storage sets in till next drought.

Our objective should be to complete all our water management projects within a stipulated time. It is believed that the Sardar Sarovar project aimed at irrigating 18 lakh hectares of land in Gujarat and 0.75 lakh hectares of land in Rajasthan and having a sprawling length of 88,000 sq km could well be a solution to water woes of a millions. But it seems that our escapist tendency beckons us to sway away from all the problems rather than to solve them ultimately. The social and environmental problems associated with the mega-projects are no doubt accountable. The environmental impacts of large dams are the loss of vegetal cover with an associated loss of flora and fauna, soil erosion and enhanced seismic activities due to pressure of water. The social drawback is the displacement of a large number of people from the area of submergence and the destruction of the tribal culture. But are these problems insoluble? Instead of criticising the mega-projects, we could take a glance at the Three Gorges dam being built on the Yangtze river in China. This dam will displace one and a half million. But their political establishment has launched a rehabilitation campaign by building entire new cities, schools and hospitals providing employment opportunities as well. They are showing how development and social expectations can be brought together. In fact, but for the Bhakra dam and Govindsagar dam underpinning the water availability for the lands of Punjab and Haryana, we would not be so self-reliant in food grain as we are today.

RAINWATER

It has to be admitted that compensatory measures like afforestation and restoration of land in the construction area, controlling aquatic weeds and rehabilitation of ousted people should be dealt with on a priority basis while planning these mega-projects. There is a need for holistic understanding of the relationship between the environment and development.

We cannot afford to waste water in abundance in the flood season because of past failures. The water resource ministry puts the usable surface water availability by conventional methods at 690 bcm. A total

live storage capacity of 177 bcm has been provided through 3,600 large dams and reservoirs and 250 barrages. An additional storage capacity of 75 bcm will be created on completion of various dams under construction.

It is unfortunate that with big dams plunging into a controversy, other alternatives have also been ignored. What we have failed to understand so far is that a large part of the problem can be solved by various water conservation strategies like rain water and ground water harvesting, recycling techniques and watershed management.

Storage and harvesting has to be dealt at a local level, since scarcity of water varies from place to place fluctuating with demand and supply. The present malady could well be minimised substantially, had our traditional water storing skills not been forgotten. Over centuries, various traditional water harvesting structures have been developed in our country. For instance — the *kundis* of Rajasthan which look like huge saucers and are used to hold rainwater, the bamboos to tap stream and spring water in Meghalaya, or *jheels* in the Kutch district of Gujarat and many more. Rajasthan is replete with water harvesting structures which are dwindling out of negligence. The fact is, these traditional water structures have been proved beneficial at a local level. One glaring example is Jaisalmer which receives a meagre rainfall of 100 mm. It could withstand drought conditions tenaciously, thanks to its ingenious system of wells and canals which preserve each and every drop of rainfall it receives.

WATERSHED

The total annual water resources of the country amount to 1953 cubic km, but the total utilisable quantities of water drawn from the natural resources is 1086 cubic km and that too unevenly distributed. Holistic management is thus required. With the present rate of population growth, the coming years are likely to witness more demand of water in agriculture as well as the industrial sector. The Tata Energy Research Institute estimates that water demand will virtually double from 540 bcm in 1997 to 1,048 bcm in 2047. A long-term solution is needed.

An approach towards integrated watershed management will help keep a balance between demand and supply. In this approach, the area bounded by the divide line of water flow is treated as a watershed. It may be a drainage basin or a stream. Various civil structures like contour *bunds*, gully plugs and percolation tanks are constructed over the catchment area to conserve water and let it recharge into the ground.

Besides these cost effective measures, other measures like afforestation are adopted. In fact trees not only increase rainfall of an area, but also conserve rainwater. The pressure on forests can be reduced by replacing conventional fuel. Over-grazing should be curbed. The indigenous and unproductive livestock around the watershed should be replaced with genetically superior breeds. The participation and commitment of the local people with their sense of ownership guarantee the success of watershed management projects. Some such projects include EEC, KFW, DANIDA, SDC and ODA, being implemented in the states of Orissa, Karnataka, MP and Maharashtra.

The challenge before us is to develop a comprehensive and integrated water management to eliminate the drought and flood havoc. Local communities and panchayat institutions should be empowered and trained to institutionalise water management efforts. A clear perception of past mistakes and the options available, combined with focused governance and community participation can save us from drought and flood

The author is a research scholar in Delhi University.

Biodiversity Bill put in cold storage

By Soma Basu

NEW DELHI, JULY 9. As one of the 12 "mega biodiversity countries", India took decades to put together a Biological Diversity Bill to ensure inventorisation and monitoring of components of biodiversity, its conservation and sustainable use.

In 1997 a draft bill took shape after a "long drawn-out exercise involving years of discussions" with Prof. Saifuddin Soz at the helm of Environment Ministry. The Minister took credit for achieving a "first" and earned substantial publicity. Subsequently, a call for a national debate was given, which mostly remained unheard or unseen.

Three years down the line, a similar exercise now seems to be on yet again — this time it is the National Biodiversity Strategy and Action Plan Project (NBSAP), which threatens to set back the initial effort by two years.

The first draft Bill on Biological Diversity was introduced in the Lok Sabha last year to provide a comprehensive legal framework for conservation of biodiversity and equitable sharing of benefits arising from its use. But now it appears to have been stalled with the focus shifting "on formulating an action plan and identifying key players in its implementation" for ecological security.

No matter even if it sounds repetitive and efforts are duplicated and more time and money is expended at the cost of further degenerating the ecosystems and endangering more number of species, successive Governments and new incumbents in the ministry are known for "getting new reports drafted".

"Biodiversity is an all pervasive inter-disciplinary subject encompassing a wide range of issues. It cannot be the sole preserve of any single department, but requires the commitment of all stakeholders — the Government and non-

Government sectors, universities and colleges, research organisations, industry, senior citizens, women and foresters," a senior official justified the macro-level project for which the Environment Ministry has received Rs. 4 crores funding from the UNDP.

So over the next two years now, the otherwise unlikely participants like the citizens groups and communities, scientists and environment experts, conscientious and committed individuals and motivated organisations are expected to involve themselves in a "unique consultative process" that will help in going "much beyond simply protecting and conserving the biodiversity".

Notwithstanding the resources spent on the earlier effort, the existing policy already stands dismissed as a "statement of intent lacking cross-sectoral participation". According to sources, the new NBSAP will step in to transparently fill gaps and deficiencies and most importantly, "not be dependent on the Government for formulation."

Indeed the job has been handed over by the Environment Ministry to a technical and policy core group of non-governmental organisations coordinated by the Pune-based "Kalpavriksh". "Under the Convention on Biological Diversity, about 40 national action plans exist in the world. India is the last country in the South Asian region to undertake the exercise but is launching it in the most unique manner with diverse participation," said Mr. Ashish Kothari of Kalpavriksh. "For the first time, the concept of biodiversity will move beyond scientists and ecologists. Ordinary people will be involved to define biodiversity because they have always protected biodiversity," he told *The Hindu*. The Kalpavriksh has planned the exercise meticulously by "reversing the process of building a national action plan by starting at the bottom."

THE HINDU

10 JUL 2000

Farmers and dams — II

By Gail Omvedt

10-12 1997

WHY SHOULD farmers want dams? The answer may be not such an obvious one, because according to almost all the well-known environmentalists who have been writing on issues of drought these days, they should not. Leave aside the staunch no big dams eco-romanticists such as Ms. Medha Patkar and Ms. Arundhati Roy, even moderate environmentalists such as Mr. Anil Agarwal have been arguing that community-based rainwater harvesting is enough to stand the challenge of drought. For Mr. Agrawal also, dams are unnecessary and Green Revolution-style agricultural development is seen as something alien. Mr. Agarwal, head of the Centre for Science and Environment, has been opposing many of the extremes of eco-romanticism in many ways. On the one hand, unlike the tendency of the NBA and Ms. Patkar and others to target multinationals, the WTO etc., he has stressed the dire effects of the state bureaucracy on local communities' ability to handle ecosystem stress. On the other, he and the whole CSE group have worked with similar state officials and political leaders to represent India's interests in forums such as Rio and connected bodies. In other words, he is a reformist, not a revolutionary. But, just as Mr. Sharad Joshi and Prof. Nanjundaswamy agree that farmers need dams, so does Mr. Agrawal agree with Ms. Roy and Ms. Patkar that they do not need them. His has been the most eloquent voice recently arguing for a general localist position, that is, for a position that community action on water management (usually organised through NGOs but assisted by state efforts) is sufficient for drought-proofing and in tune with Indian tradition.

During the recent drought, Mr. Agrawal had argued, in a number of articles in major newspapers as well as in his own journal, *Down to Earth*, that local rainwater harvesting was sufficient to stand the test of drought. His claim is that if every village captured all the rainfall that fell within its own lands and associated Government revenue and forest lands, there would be enough to meet all drinking water and most irrigation needs. Citing examples

from December-January tours by *Down to Earth* in Gujarat and Madhya Pradesh, as well as from Alwar in Rajasthan and with references to the water-harvesting practices of our ancestors, Mr. Agrawal's message is that big dams are unnecessary.

Without going into the details of Mr. Agrawal's calculations, it can be noted that many engineers and water experts, including environmentally-conscious ones, will disagree. Among these is Mr. K. R. Datye of Mumbai and his team of the

ple. Basically, local watershed development, sometimes referred to as local rainwater harvesting, is in some ways a contradiction in terms. Watersheds may be very large areas; and without thinking and acting in terms of the whole area, true water management cannot be done. For example, if the village or locality is in a more elevated area, capturing all the rainwater that falls may simply mean that villages at lower elevations will be deprived. When a *Down to Earth* reporter tells us

There is room for a middle way environmentalism and a compromise between farmers and environmentalists.

Society for Peoples Participation in Ecosystem Management (SOPPECOM) who have worked extensively themselves with water management groups throughout India. While arguing for the importance of locally harvested rainwater and integrating traditional and modern methods of water management, they also clearly believe that it must be supplemented in drought-prone regions by "exogenous water", supplied from irrigation systems. They see such integrated systems as necessary to provide not simply drinking water, but water for all domestic and livelihood needs, including agriculture and pastoralism.

Two SOPPECOM activists, Mr. Suhas Paranjape and Mr. K. J. Joy, in a recent paper, focussing specifically on an alternative proposal for the Sardar Sarovar dam, favoured the integration of small and large, local and exogenous, water sources. They believe that exploitation of large sources is necessary if small systems are to provide a service with a high degree of reliability, meaning that large dams and their reservoirs are necessary to ensure that wells and tanks work on a sufficiently regular basis to provide a guaranteed livelihood. In contrast to the CSE group or the eco-romanticists, the aim of this team is to reconstruct large dams, to minimise their costs and spread their benefits, not to deny them or destroy them.

Lay people may find the statistics thrown around by teams of experts to be confusing. But some things appear sim-

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solving drinking water needs — there is just no reason, he writes, whatsoever for thirst in India — forgets that for farmers thirst is not the problem, surviving on the land is. He forgets that growing food for the country cannot be done simply through water-saving crops such as millets and maize. He forgets that the ancestors of farmers today built quite big irrigation systems for their times. And just like the others he writes of Green Revolution-style agricultural development as if technological development in agriculture were unnecessary. It is no wonder that farmers are sceptical of environmentalists.

But farmers must realise that there are other kinds of environmentalists, who do understand something of the needs of agricultural production. This is also not unlikely. The fact is that while the "kar seva" campaigns to raise the height of the Sardar Sarovar and Alamatti dams may disturb some environmentalists, neither Prof. Nanjundaswamy nor Mr. Sharad Joshi would support the sometimes mindless developmentalism of the Indian state. Just as they agreed that farmers need dams, they also seemed to agree on the principle of moderating this demand for more water. The Professor says he opposes dams such as the Bedti because it is in an area of biodiversity in the western Ghats, but has never opposed any dams in the plains. Mr. Joshi does not argue that the Sardar Sarovar dam should be raised to its full planned height of 138 meters, but would be satisfied with 110 meters, enough to let water into the canal. This is the height recommended by supporters of the alternative proposal of the SOPPECOM team, which would keep the height of the dam at 110 feet, prioritise water for Saurashtra, Kutch and North Gujarat, and avoid 90 per cent of the eviction that would otherwise occur.

In other words, in spite of often-inflated rhetoric, name-calling, and even mud-slinging that goes on at the public level and in the media, there is room for a middle way environmentalism and a compromise between farmers and environmentalists.

Concluded

Krishna assures TN CM of Cauvery water in 30 days

HT Correspondent
New Delhi, July 14

KARNATAKA TODAY agreed to release six thousand million cubic (TMC) feet of Cauvery water to flow into Tamil Nadu's Mettur reservoir "within the next 30 days" to make up the shortfall for June in accordance with the Cauvery Water Disputes Tribunal's order.

The State's assurance came during the second meeting of the Cauvery River Authority chaired by Prime Minister Atal Behari Vajpayee today. The meeting was attended by all its members, the Chief Ministers of Karnataka, Kerala, Tamil Nadu and Pondicherry.

The meeting also decided that Tamil Nadu would similarly endeavour to make available the "required quantities of water" to Pondicherry.

Tamil Nadu Chief Minister M. Karunanidhi and Karnataka Chief Minister S.M. Krishna said the meeting was "useful" and they faced no major problems. "Both of us are looking towards the rain Gods," Mr Krishna said.

Cabinet Secretary Prabhat Kumar told newsmen that the meeting also finalised the rules and regulations for the conduct of the authority's business. All decisions would be arrived at by consensus.

In case of any dispute, the matter would be left to

the Chairman. Constituted on August 11, 1998, the river authority has been entrusted the task of implementing the June 25, 1991 interim order and all related subsequent orders of the Cauvery Water Disputes Tribunal.

A spokesman of the Water Resources Ministry said:

"The meeting was held in a cordial atmosphere and in the spirit of cooperation and mutual understanding with the aim of arriving at an acceptable solution for the issues in hand relating to implementation of the Tribunal's orders."

The Tribunal's interim award stipulated that Karnataka should release 205 TMC feet of water every year and drew up a monthly schedule for the release of the water. As per the schedule, there was a shortfall of six TMC feet during June. Mr Krishna agreed to make good the shortfall when Mr Karunanidhi raised the issue at today's meeting. The water would benefit the kuruvai crop in the Thanjavur delta.

Mr Z. Hasan, Secretary, Water Resources Ministry said there had been no "deficit" in the release of water from Karnataka last year. The Ministers for External Affairs and Water Resources attended the meeting as special invitees.

The Prime Minister as the Chairman of the Authority had earlier convened its meeting on May 19 but it had to be deferred.

The tussle over water

- Sharing of Cauvery water has been a subject of dispute and discussion among Karnataka, Kerala, Tamil Nadu and Pondicherry for more than two decades.

- The Cauvery Water Disputes Tribunal was constituted on June 2, 1990, to adjudicate in the dispute. It gave its interim order on June 25, 1991.

- On May 14, 1992, the Tamil Nadu Government filed a suit in the Supreme Court pleading for a scheme to implement the tribunal's interim order.

- The SC directed the Centre to frame a scheme to implement the tribunal's order. The scheme was notified on Aug 11, 1998.

- The Cauvery River Authority was constituted, with the Prime Minister as its Chairman. The first meeting of the Authority was held on October 28, 1998.



MONDAY, JULY 17, 2000

A WELCOME DECISION

AFTER TWO ABORTED attempts, the Cauvery River Authority, set up in 1998 to secure the implementation of the Tribunal's June 1991 interim order, has met and decided, at last, on the technical nuances of conducting its business. Although a formality, this preliminary process remained stalled so far mainly because of the almost certain prospect of contentious issues pertaining to the release of water also being raised at the meeting, and the Authority cannot meet even if the Chief Minister of one member-State stays away for some reason or the other. The very fact that the CRA's Friday meeting went off smoothly must be seen as a positive development, given the complexities of the Cauvery dispute and the narrow regional, chauvinistic and essentially 'vote bank' politics-driven approaches of the two major riparian States — Karnataka and Tamil Nadu — to the problem. By all accounts, cordiality and an accommodative spirit have marked the deliberations.

What is of immediate relevance from the standpoint of Tamil Nadu's irrigation needs for the standing kuruvai paddy crop is Karnataka's commitment to make good the deficit (in water releases) over a period, although there seems to be some confusion about the precise quantum agreed upon — whether it is six tmcft as first reported or "much more" as claimed by the Tamil Nadu Chief Minister, Mr. M. Karunanidhi. It passes one's comprehension how there could be an ambiguity on such a vital and potentially controversial issue. Admittedly, the upper riparian is not comfortably placed, the precipitation during the current southwest monsoon so far helping only partially to improve the combined storage in its Cauvery-based reservoirs, although Kabini is surplussing. The comment of the Karnataka Chief Minister, Mr. S. M. Krishna — that he was looking to the rain-god — is significant. Tamil Nadu, where the Government took a calculated risk by opening the Mettur dam for kuruvai cultivation on the customary date of June 12, is not facing any emergency at the moment, particularly in the context of the

boosted inflow from Kabini. This and the hope of the favourable trend sustaining for some time must have contributed not a little to Tamil Nadu choosing not to queer the pitch and thus paved the way for a consensus. Mr. Karunanidhi's reaction to the promised release by Karnataka — he described it as a "good decision" — may not sound very enthusiastic but reflects an appreciation of what may be possible in the circumstances.

Crucial indeed are the months of July, August and September; close to 62 per cent of the 205 tmcft which Karnataka is required to make available for the lower riparian during a water year is slated for release during this period as per the schedule laid down by the Tribunal. It is when the monsoon starts showing distinct signs of playing truant that pressure mounts, with the all-too-familiar Karnataka-Tamil Nadu wrangle breaking out generally in August-September. Even last year, it was in September that Tamil Nadu, faced as it was with an evolving crisis, sought the CRA's intervention to get the upper riparian to clear the backlog in water releases. That the Authority could not meet because of the then Karnataka Chief Minister, Mr. J. H. Patel's 'inability' to participate (on health grounds) and that, subsequently, monsoon revived vigorously to bring copious supply to the reservoirs is public knowledge. Obviously Mr. Krishna is pinning his hopes on such a fortuitous denouement this year too.

As it has turned out, the two-year-old CRA — an institutional dispute resolving mechanism (within the limited ambit of the Tribunal's interim award) created under sustained pressure from the apex court — is yet to be tested seriously for its effectiveness. In a critical way, its success is contingent upon its evolving a 'deficit sharing' formula, which is at once reasonable and viable, and the ideal period for undertaking the task is evidently when the monsoon has been good and when no State is under the sort of political and sectional pressures associated with conditions of acute water scarcity.

THE HINDU

Centre grants freeze to arsenic battle

STATESMAN NEWS SERVICE

CALCUTTA, July 24. — The Centre's decision not to provide grants to states under the National Drinking Water Mission will affect about 30 hundred thousand people in North 24-Parganas living in areas where water contains more than the permissible limit of arsenic.

The state minister for public health and engineering, Mr Goutam Deb, said this today. The PHE has taken up a Rs 235-crore scheme to tackle the arsenic menace in the district.

In a letter to Mr SL Patwa, Union minister for rural development, Mr Deb said he had been facing questions from MLAs and the public about steps taken by the PHE on arsenic poisoning. Mr Deb wrote, "It is

increasingly becoming impossible for me to give satisfactory answers about the actions taken and the efforts made on our part to mitigate the sufferings of these unfortunate people."

"It is not possible for a state government to tackle permanently a problem of this magnitude with its limited resources," the letter said.

Mr Deb spoke to Mr Patwa last week. He said that he would ask all MPs from the state to meet and request the Prime Minister to reconsider the Cabinet decision. But Mr Patwa himself can't do anything about a Cabinet decision.

Mr Deb's department submitted to the Centre a long while ago, a detailed plan for supplying water in North 24-Parganas. He said senior PHE officers discussed the

scheme with a foreign funding agency. The Centre recently informed him that the agency was unable to take up the scheme.

He said that the decision would affect a similar scheme in Murshidabad. The state government has so far spent around Rs 100 crore to tackle arsenic poisoning in six districts. In Malda and South 24-Parganas schemes to supply piped water in affected areas were nearing completion, at an estimated cost of Rs 322 crores. The state government spent 25 per cent of the total estimated cost in these two projects.

In the Assembly, where Mr Deb today spoke on the PHE budget, he was accused of neglecting people suffering from arsenic poisoning in the districts. He shot back that it was the Centre that had frozen funds for arsenic-treatment schemes.

THE STATESMAN