### Raise in Narmada dam height cleared

Statesman News Service

NEW DELHI, Dec. 26. — The environment sub-group of Narmada Control Authority today cleared the proposal to increase the Narmada Dam height by seven more metres.

If the water resource ministry accepts the recommendation, the height of the Narmada dam will go up from 103 metres to 110 metres, submerging an additional area of 11,000 hectares.

The impact assessment committee, also known as the environment sub-group of Narmada Control Authority, today had a meeting to decide on the proposal of the Sardar Sarovar Project authority to in-

crease the height.

The government had constituted two sub groups on the directions of the Supreme Court, a rehabilitation sub group and environment sub group. Any addition to the project has to be cleared by these two sub-groups before work starts. This is just a beginning. The rehabilitation sub group will have a

meeting next week and give its final recommendation. The water resource ministry will take the final decision.

According to the government, the increase in height will increase the power generation capacity. The height of 110 metres is considered critical for getting economic benefits in terms of power generation, irrigation and water supply, said a senior ministry official.

Most non-governmental organisations, however, termed the decision a political move aimed at the coming parliamentary elections. The issue affects Madhya Pradesh, Gujarat and Maharashtra. There is no need to increase the height of the project as it would bring no additional benefit, said the co-ordinator of South Asia Network on Dams, Rivers and People, Mr Himanshu Thakkar.

There is no point increasing the height when the project has not built infrastructure to harness additional water for increasing power, irrigation and drinking water supply, Mr Thakkar added.

SETTLING A DUSTY PROBLEM

A YEAR AGO, the United Nations Environment Programme (UNEP) issued a report on the 'Asian Brown cloud', creating the image of a vast blanket of pollution choking the Indian subcontinent. This cloud of aerosols created by human activity would, it was claimed, have disastrous effects on the climate, including on the monsoon rain. Aerosols, which are fine particles in the atmosphere, can be natural or humanmade. Winds whip up sand and dust from the ground, and also carry vast quantities of fine sea salt into the air. Motor vehicle fumes, and the burning of coal, other fossil fuels and biofuels such as wood, generate fine carbon particles. Emissions from industries can produce sulphate and nitrate particles. By scattering or absorbing the light coming from the sun or being reflected back into space from the Earth, these aerosols can have an impact on the climate. But such effects depend on the nature of aerosols present as well as their size and concentration. Aerosol levels, composition and geographical spread vary greatly from season to season and year to year. Natural aerosols may often predominate. So the question is whether the anthropogenic aerosols (that is, those generated by humans) are of such a level and kind that they have a significant impact on the climate in the way greenhouse gases are causing global warming.

The UNEP report left the impression that the 'cloud' of anthropogenic aerosols from Asia was having such an impact. Indian scientists disagree, pointing out that erroneous conclusions were being drawn largely from a single data collection campaign over the Indian Ocean and that such forms of aerosol pollution were present in other parts of the world too. A paper by American researchers published recently in a scientific journal notes that pollution plumes off

the east coast of the United States could be just as intense as those over India and other parts of Asia. Although there is greater recognition that the 'atmospheric brown cloud' (as it is now called) is a global phenomenon, the focus on India and China as large contributors to human-made, and by implication avoidable, aerosol pollution persists. Such concern is not without reason. The declining air quality in towns and cities across India is all too obvious. It is not just vehicles and industries that enhance aerosol levels in the air. It may be that the burning of dung, wood and other biological material poses a more widespread and less easily controlled problem.

India therefore needs a sustained research programme of its own to quantify and understand aerosols all over the country. The Indian Space Research Organisation has been studying this subject over the past two decades, but at just a few places. It has plans for a countrywide multi-institutional campaign next year to collect aerosol data using ground-based sensors. It is also known to be considering similar shipborne and aerial campaigns for a later stage. There have been press reports that the India Meteorological Department is to acquire ground instruments for continual aerosol measurements. Both steps are welcome. However, it would probably help to have a single overarching programme so that aerosol data collection and its utilisation for properly reviewed research projects across institutions can be coordinated and brought to bear on this problem. The Department of Science and Technology's successful Indian Climate Research Programme offers a good model. In any case, irrespective of the impact on the climate, identifying the sources of anthropogenic aerosols and taking steps to reduce their levels is an imperative if air quality is to be improved in India.

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### wide angle

### Setback to environment

N announcement from Moscow that Russia was unlikely to ratify the Kyoto Protocol has more or less extinguished hope for this agreement on safeguarding the environment. The labour that went into its making in 1997, the expectations it generated, have all fallen by the wayside. The Kyoto Protocol has long been teetering on the brink, ever since the Bush administration withdrew support and campaigned against its supposed weaknesses, especially the favourable provisions for the developing countries. The Russian decision, if it finally goes through, would make it impossible for the agreement to come into effect. It can be activated only when ratification is completed by industrialised countries responsible for at least 55 per cent of the polluting emissions of the base year 1990: if USA and Russia both keep out, this threshold cannot be reached.

The Protocol is only one of a number of international agreements that the current US administration has targeted, on the basis that they do not serve the country's national interest. Earlier administrations may have considered these often complicated, strenuously negotiated agreements as part of its enlightened self-interest in global affairs, but not today. A stricter accounting and a more hard nosed pursuit of immediate interest has characterised the present US approa Cd. with a striking willingness to go it alone and adopt a thickness courses of action. In the process, standing commitments may not always be regarded as sacrosanct. Others have been tempted to follow where America has shown the way: even India has not been immune from this temptation, as was seen in the sentiment generated here tollowing unilateral and preemptive US actions in Afghanistan and Iraq, to the effect that if they can do it, why not us. The Russian statement on Kyoto is in comparable vein, looking only to its own immediate concerns and short term interests. It is similar, too, in playing up as a defect of Kyoto the apparent favours shown in the Protocoi to developing countries.

Nothing has been said officially in Washington about the imminent demise of the Protocol but some commentators have tried to minimise its significance. They characterise the it as something important in its time but no longer critical today: it has already made its contribution by promoting legislation and policy decisions on curbing emissions. It suffers from the defect of a short duration, running only until 2012, and from its failure to place any restraints on major developing countries. This latter point is something of a theme song for the Protocol's opponents: in their perception, China, India and Brazil, in particular, have got away with a lot, and should be subject to close regulation, as are the industrialised countries. Such arguments are essentially self-regarding and amount to little more than an excuse to re-open issues that were extensively discussed at Kyoto and formed part of the give and take of the final agreement. The USA and Russia signed the treaty in full knowledge of its provisions and if they do not wish to proceed further today, it is unnecessary to try to attach blame

to the developing countries for this decision.

An innovative and imaginative part of the Kyoto Protocol is the provision to trade in credits for reducing emissions. A country that did better than its minimum obligation under the treaty could be compensated by those that did not. This feature could have been a big incentive for Russia in particular, whose industrial production had declined and which was trying to re-tool and modernise its industrial plant at the time. Today this may be less of an incentive for Russia as it has moved a long way in the last few years, which could add to its readiness to withdraw. With it, this useful provision of Kyoto will become even more difficult to put into operation: it was a complex undertaking at the best of times, requiring international cooperation in which

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Russia had a key role. The interests of the developing countries are closely engaged in the Kyoto Protocol. It recognises that it is the industrialised countries, the major polluters today, who must take the lead in curbing emissions. This is only appropriate, for in their crucial period of development they have had the benefit of being able to grow without any environmental restraints. It has been different for the developing countries now on the path of industrialisation. They have been doubly affected, first by paying high prices for industrial equipment bought from the industrialised world, and then by being led towards discarding that equipment in favour of more expensive, environmentally acceptable replacements. They sought, and obtained, time at Kyoto to make the necessary adjustments. They also sought favourable terms to develop and transfer new, environmentally sound technologies to the poor countries. Now even the limited exemptions they obtained are under attack.

A few hopes remain for Kyoto. Russia's "no" may not be definitive and could be a negotiating ploy. The EU has said no matter what happens elsewhere, it will remain on course with its policy to put a ceiling on emissions and to reach national targets by investing in emission-reducing projects in other countries. But such last ditch hopes notwithstanding, there is much to regret in the backsliding on the Protocol by important countries that had earlier signed up on it.

### PROTECTING BIODIVERSITY EXT

TO THE GLOBAL community of biologists and naturalists, the confirmed spotting of the long legged warbler Trichocichla rufa in Fiji after it was thought extinct for nearly 110 years is as exciting a moment as some of the earliest discoveries of the natural world by Darwin. Ornithologists working in India have had their own happy moments. They spotted the Jerdon's Courser in Andhra Pradesh in 1986 (after believing it to be permanently lost for 86 years) and, more recently, found the forest owlet in Maharashtra after 113 years. Even the rediscovery of a species is a landmark event today, as countries across the world race to industrialise often at the cost of their natural riches. It must come as a sobering truth to leaders of rich and poor nations that the International Union for the Conservation of Nature and Natural Resources (IUCN) has on its Red List no less than 12,000 species of plants and animals threatened with extinction on the planet. Future generations of humans are at risk of permanently losing over 1,130 species of mammals, which constitute 23 per cent of recorded species, and over 1,190 species of birds, or 12 per cent of all known bird

The growing interest in the natural environment is marked by intensive scientific studies and the active involvement of the younger generation in preserving what is rightfully its heri-Scientists have been continuously from plants and animals. Conservation issues are no longer viewed from the perspective of preserving as exotica what is left of the world's flora and fauna. This wealth of genetic material in the living world — "nature's infinite book of secrecy," in the words of Shakespeare — is poised to help medical science make major breakthroughs. Research reported in leading journals shows that antibiotics naturally produced by frogs could hold clues to developing miracle drugs against infection, while a species such as a tropical cone snail is believed to contain in its venom chemical secrets that might help the production of new painkillers.

Biodiversity, with which the country is richly endowed, could do with more active protection. Scientists are alarmed that the clandestine stripping of biologically rich habitat in the Western Ghats and the Northeast for commercial exploitation could be sending species to their doom before they are even discovered. The reporting of a new genus of frog in the Sahyadris in recent weeks, unrelated to any other frog species in the region, strengthens their apprehensions. A ray of hope comes in the form of the National Biodiversity Strategy Action Plan, which awaits formal sanction from the Union Government. Together with the recently notified National Biodiversity Act, it seeks to involve the States and local communities in salvaging many threatened areas from permanent destruction, including wetlands and the oceans. Under the law, even corporations benefiting from the research done using flora and fauna would have to share their profits with the National Biodiversity Authority. The States would have to declare the sensitive zones as "heritage sites" and keep some areas pristine. Communities can now rightfully demand from the Government at the Centre and in the States the resources to help wean away those who need to exploit the forests and the seas for sustenance. Such action is critical to sustainable conservation. Efforts to protect habitat from the pressure of a growing population have failed in some States even under flagship programmes like Project Tiger partly on account of poor rehabilitation options for tribals who do the bidding of poachers and loggers. If politicians and bureaucrats get closely involved in sustainable conservation, more species could live on.

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INCE IT was negotiated in Jaemissions linked to global warming, has lingered in an indeterminate state, between enactment and outcol, the first treaty that would require countries to curb pan in 1997, the Kyoto Protoright rejection.

levels.

cy say that whether the treaty is ever dealt what may have been a fatal blow when a top Russian official said that his country would not ratify it. On Tuesday, its prospects were But experts on climate and diplomaenacted matters less every day.

emitters of heat-trapping "green-house" gases — the treaty has al-ready changed the world in small but fourth on lists of the world's largest significant ways that will be hard to any case, they add, new approaches reverse, these experts say. And because its terms extend only to 2012 in must be developed now if atmospheric levels of the gases are ever to Even without approval by the United States and Russia — first and

the only way to reach a threshold for The Protocol has been approved by 120 countries but was rejected by the U.S. President, George W. Bush, 2001. Without the United States, plicated terms was with Russian parenactment under the treaty's comij.

alised countries until 2012 to reduce f enacted, it would give industritheir combined emissions of carbon

## Divisions over emissions

CNV By Andrew C. Revkin dioxide and other heat-trapping gases more than 5 per cent below 1990

ropean Union and Japan, the treaty's mir Putin, was just a negotiating ploy, aimed at extracting as many concessions as possible from the Eu-The possibility remains that Tuesday's statement by the Russian offi-cial, Andrei Illarionov, the top economic adviser to President Vladi-

on a path to solving a long-term problem. Other multilateral regimes dard is whether this puts the world dealing with huge complex prob-lems, like the World Trade Organisation, have taken 45 or 50 years to get established."

Mr. Sandalow and other experts noted that the European Union had already passed a law requiring a cap and credit-trading system for the and credit-trading system

ference, though they say it is a harmful one. "Kyoto is dead and has damage," said Myron Ebell, a climate policy analyst for the Competitive Enterprise Institute, an industrybeen dead, but that doesn't mean that it hasn't done some real damage and won't continue to do some real backed group that opposes regulato ry solutions to environmental probedge that it has already made a dif-

"If global warming turns out to be a problem, which I doubt, it won't be "It will be solved through building reand through long-term technological solved by making ourselves poorer through energy rationing," he said. siliency and capability into society innovation and transformation.'

will be no incentive for industry to innovate and find the cheapest, most Doniger, the climate-policy director sions. Without limits, they said, there effective ways to limit human impact on the atmosphere, said David D. of the Natural Resources Defence Council, a private environmental Critics of this view say the one feature of the Kyoto treaty that cannol be jettisoned is a ceiling on emisping gas, comes largely from burning

would still be sitting on a shelf and the catalytic converter but not "If the United States had invented we'd still be choking in smog." New York Times News Service.

### The Kyoto Protocol has been dealt a blow by Russia's threat not to ratify it.

main boosters.

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Economics Minister, sounded a note are moving towards ratification." Mr. of hope for the treaty, declaring, "There are no decisions about ratification apart from the fact that we cial, Mukhamed Tsikanov, a Deputy On Wednesday, a lower-level offi-Putin, meanwhile, remained silent.

gun, said David B. Sandalow, a guest during the Clinton administration But regardless of which way Russia steps, the process of moving the world toward limiting releases of the relentless increases has clearly bescholar at the Brookings Institution and an assistant secretary of state gases after more than a century of who worked on the treaty.

whether the first treaty out of the box "The standard of success isn't sails through," he said. "The stan-

es and adjusting investments to focompanies with long-term business heat-trapping gases starting in 2005 that will follow the pattern laid out by the Kyoto Protocol no matter what Spurred by the prospect of international curbs on emissions, many plans have started changing practiccus on improving energy efficiency. (Carbon dioxide, the main heat-traphappens with the treaty.

Even in the United States, where Mr. Bush and the Republican-controlled Congress strongly oppose the treaty, legislation that would require some momentum, with a recent vote those in the Kyoto treaty has gained on one such bill getting 43 senators coal and oil.)

### Mercury dumping: Tragedy awaits

EXPRESS NEWS SERVICE NEW DELHI, NOVEMBER 4

INDIA is fast becoming the world's dumping ground for toxic mercury. While developed countries are phasing out mercury, India's consumption has doubled in the last decade. Imports have gone up six times in seven years and worse, India has no regulatory mechanism.

India is now the second largest user of mercury in the world (170-190 tonnes a year) after the US (372 tonnes). Import of organomercury compounds like pesticides have gone up more than 1,500 times. On the other hand, global mercury use has gone down from 5,356 tonnes in 1990 to 2,700 tonnes in 2000.

"We are rapidly becoming the dumping ground of the world's mercury. At this rate we will become the world's dirt capital," said Sunita Narain, director, Centre for Science and Environment (CSE) said on Monday.

"Mercury can cause severe damage to the central nervous system, lungs and kidneys. There is need to do a nationwide study," said J.S. Chopra, president, Neurological Society of India. Europe has decided to phase out all its chlor-alkali (caustic soda) plants and has 13,000 tonnes of mercury that it intends to discard. In seven years, it has sold 3,000 tonnes to India. The other regular exporters are Spain, UK; Russia, Italy and US. 100

How does Europe manage to send consignments to India, considering they are signatories to the Basel convention that prohibis sale of hazardous waster CSE claims it has signed an agreement with the biggest mercury mine of Spain to circumvent this. The mine will buy 13,000 tonnes of mercury from a chlor-alkali plant and put in place of mined mercury, making it pure mercury that can be dumped.

CSE has marked mercury hot spots in the country after it discovered that the main user of mercury plants did not account for 90 per cent of the mercury they were using.

A collation of sporadic studies shows it is the coastal areas that are at maximum risk. Mercury pollution is caused by things we use everyday—mercury cells, pesticides, electrical fittings, thermometers, dental amalgam and paints. Consumption of these things is go-

ing up rapidly — sales of mercury vapour lamps have gone up from 2,100 to 0.12 million, thermostats from 1.73 to 2.51 million and button cells from 17.1 to 91 million.

Making dumping easier is the fact that industries are completely unregulated. In the name of Government action, there has been a draft notification to phase out mercury from consumer products, but no action has been taken so far.

In the 2003 Union Budget, tax exemptions for importing membrane cell components to mercury cell plants were granted. This was another wake-up call for indistry to clean up its act before the country faces a disaster like Japan's Minamata tragedy where thousands lost their lives and were maimed by mercury poisoning.

### India a toxic mercury dump: CSE

Statesman News Service ( ) NEW DELHI, Nov. 3. — According to a study conducted by the Centre for Science and Environment, fish in the coastal waters of the country have been diagnosed to have a high quantity of mercury in them.

"Mercury contamination in the blood takes three days to be emitted out of the body. If it enters the body its-

sue it takes 90 days and 20 years if it enters the brain. Unlike other chemicals, mercury passes through the placental

nant women to pass onto the unborn

barrier and blood-brain barrier in preg-

Speaking at a press conference, the co-hairman of UNEP, Dr RC Srivastava, said: "Even fillings in the teeth have been found to have mercury content to the extent of 52 per cent of their composition and it can be fatal and may cause chest pains, abdominal cramps, lethargy and neurological problems."

The CSE revealed that India was becoming a toxic mercury dumping
ground for the world. While developed
countries are substituting mercurybased processes and products because
of public health concerns, India has in-

creased its consumption and has be-pours from burning coals also can al come the highest user, with imports infect workers in thermal power plant creasing six fold in the past seven years.

Chandra Bhushan, who has done the study, said: "India has become the biggest consumer of mercury displacing the USA. It uses 50 per cent of repbal production and processes, 69 per cent of mercury even after known as it severely damages brain function."

growth that Indian industry is promising us? We'll become the dirt capital if than doubled between 1996 and 2002 from 254 tons per annum to 531 tons the situation prevails," CSE director, Sunita Narain said. Mercury imports to India have more pounds like pesticides, slimicides and biocides imports have increased by 1,500 times. "Is this the eight per cent per annum. Organo-mercury comhospitals and even in crematoria have age," informed the President of the Indian Neurology society, Dr JS Chopra. "Lack of adequate safeguards and ination. If a thermometer breaks, the child causing severe and permanent brain and central nervous system dampublic awareness can lead to an insurmountable problem. Employees in gram of mercury in the air can affect been diagnosed with mercury contam-

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### Climate Challenge

### Poorer Nations Must Hang Together Must Hang Together Must Hang Together Munities in all countries. A delay

It was a little over a year ago that around 70,000 persons, including heads of states from several countries, converged on Johannesburg for the World Summit on Sustainable Development. One of the spectacles that several participants witnessed, and which was reported widely in the media worldwide, was the burning of a large pile of sugar imported from Europe. The farmers of Africa were protesting against the huge subsidies provided to agriculture in Europe, which have apparently

made the whole of Africa dependent on food

imports from the North, wiping out the livelihoods of farmers on that continent.

Anyone who sensed the strong sentiment behind this incident in Johannesburg would readily understand the firm stand that the developing countries took at Cancun in the WTO meeting recently. While several issues remained unresolved during this meeting, the most contentious subject on which an agreement could not be reached related to the phasing out of subsidies on agriculture by the developed countries. Some inferences can be drawn now a month after the Cancun meeting ended inconclusively. First,

ended inconclusively. First, while Cancun represents a major setback, it is not necessarily the end of the road in the ongoing Doha round of negotiations under the WTO. Our commerce minister Arun Jaitley has voiced this view. This means that there is considerable work to be done, and the government of India would do well to seek the best expertise available in the country.

in the country.

The second observation that could be put forward is that perhaps for the first time in a critical area of international negotiations, the major developed countries stuck together without breaking rank, despite concerted efforts to divide them. Consequently, the developed countries have learned a lesson, which may impact on the course of future negotiations under the WTO, and perhaps in other areas as well where multilateral agreements are under negotiation.

The most unfavourable outcome of Cancun could be a lasting impasse in negotiations under the WTO, which would certainly restrict international trade and continue with agricultural subsidies in the developed countries to the detriment of the developing world. Even more serious would be the implications for negotiations in other areas where multilateral action is critically overdue. Most prominent among these is the urgency of an agreement to reduce the emissions of carbon dioxide and other greenhouse gases (GHGs) under the Framework Convention on Climate Change.

As it happens, the worst impacts of climate change are likely to be felt in the developing countries, and by the poorest com-

munities in all countries. A delay in reduction of emissions to stabilise the concentration of GHGs in the earth's atmosphere essentially implies an intensification and prolongation of the impacts of climate change, which would affect health, agriculture and availability of water in several parts of the world; sea level rise is already threatening societies in the small island states and coastal areas worldwide. A weakening of the multilateral system under the United Nations, for instance, would in the end leave no winners. As common inhabitants of spaceship earth we need global agreements in areas where the actions of any society threaten on the welfare of any other.

A stronger affirmation of support to multilateral bodies and their effectiveness would create conditions whereby humanity may rise above narrow interests and illusory short-term gains. The alternative would be social disorder, political tensions and threats to global security. In the year 2005, negotiations are scheduled to begin for an agreement on the second commitment period of the Kyoto Protocol, beginning after 2012. And yet, it is not clear whether the Kyoto Protocol will be ratified. The outcome is entirely in the hands of Russia, which has

still not revealed any decision on ratification or otherwise.

Irrespective of whether the Kyoto Protocol comes into existence or not, in the next round of negotiations growing pressures would be applied on the developing countries, particularly China, India and Brazil, to take on certain commitments for limiting the emissions of GHGs. Would the same unity among developing countries that was exhibited

in Cancun remain at work in climate change negotiations also? And, if there is a complete stand-off between North and South, can we at all escape the ill-effects of climate change in every corner of the globe? By contrast, the swift action that was taken globally for implementation of the Montreal Protocol stands out as a remarkably prompt initiative in multilateral decision-making.

However, the question could be asked legitimately whether the Montreal Protocol received swift global support only because it threatened the countries of the developed world far more seriously than societies living in the tropical and sub-tropical regions.

Countries like India also need substantial analysis on issue like linking trade and environment to forestall other barriers being erected by the North. There is at least a large degree of understanding today that poverty on a wide scale anywhere in the world is a threat to the world as a whole. A fair and equitable trading regime is the most effective means to reduce poverty and an essential step in creating favourable conditions for multilateral initiatives, which must prevail to overcome the critical challenges facing the world today.

# Twin norms plea for pesticide in food like soft drinks. For instance, one norms as that would mean changing the sions in rural areas are expected to f

New Delhi, Oct. 10: Adding fresh fizz to Science and Environment (CSE) in its the soft drink controversy, the Centre for ed two different sets of norms for nutritious and non-nutritious food while fixing presentation before the Joint Parliamen tary Committee (JPC) today recommend

CSE president Sunita Narain told the JPC that with our food basket containing therefore, become necessary to make a distinction between nutritious and nonsuch a huge amount of pesticides, the situation has now boiled down to a "tradeoff" between nutrition and poison. It has, maximum pesticide residue levels.

ould, however, prescribe stringent norms can relax the norms for pesticide residue to keep the level down in non-nutritious evels in essential nutritious food. It sh The government, the CSE suggested,

entire pattern of agriculture, which is dependent on fertilisers and pesticides. cannot substitute apple with coke or even orange juice with coke, the CSE said.

Narain argued that an increasing use of pesticides in the cultivation of fruits versal of this is not possible. What is, howpesticide residues in essential food. A reever, possible is restricting the intake of pesticides from a variety of other non-esand vegetables has led to a high level of sential foodstuff, which includes soft drinks.

A JPC was instituted in August followels of pesticide residues in 12 brands of ing an exposé by the CSE on the high levsoft drinks, including Coca-Cola, Pepsi, Limca and Thums Up.

The first meeting of the JPC took place last month and the second began yesterday with a presentation from the food pro-

The ministry argued that it was not possible to stick to European Union

rtments in urban areas and the Rajiv Gandhi National Drinking Water Mis-

Municipalities and public health depa-

down guidelines for its quality.

sions in rural areas are expected to follow these guidelines.

ture. It is for the state governments to adopt and enforce these standards," a CSE "But water is a state subject and the role of the ministry and the CPHEEO is, therefore, merely recommendatory in naofficial said.

> Conformity with EU norms would mean importing agricultural raw material, it Investigations have shown that almost

### Summons for Cola giants

nated by pesticides. Drinking water, too, The Bureau of Indian Standards has

continues to be hazardous.

all foodstuff consumed daily is contami-

Coke and Pepsi officials may be part of ed for the JPC hearing charges that the cola majors were selling soft drinks laced the trade delegation that will be summon

vention of Food Adulteration Act but

standards for drinking water remain vol-

untary.

urban development ministry, and the Cengineering Organisation under it lays

set norms for bottled water under the Pre-

will be called for deposition might include soft drink officials. "(The) JPC has no After a two-and-a-half-hour meeting drawn from the CII and the Ficci — that of the committee, its chairman Sharad hesitation in meeting Coke and Pepsi," Pawar indicated that the delegation Drinking water comes under the tral Public Health and Environmental En-

# Disaster looms large as Gang Change Change Course Course of the plan and huge funds to keep NH-34 is less than to

Kolkata, October 4 Aloke Banerjee

rusting; the historic Malda town and large parts of the district wiped out; the Kolkata and Haldia ports beding to an economic disas-IMAGINE THE fertile lands of South Bengal graudally turping into a desert; Farakka barrage lying redundant coming non-operational leaand all north-eastern South Bengal gradually

states cut off from the rest

inary stuation and a devastating eality like this. Erect dapur ip Malda separates South Bengal from an imaged lag year, to keep the 15 ment erected at Panchanankm-vide raging Ganga from A 50-metre long embankmering with Pagla, this feebledmbankment is civilisan the past, eight embank tid's last line of defence. of the country.

ent one, have been washed away by Ganga, which is ments, much longer and more powerful than the pressteadily moving eastward, "Once this happens, Ganga eager to unite with Pagla. will flow through Pagla and merge with Padma. This will ceiving little water to keep it result in Farakka barrage rerunning. Malda town, barely 24 kilometres from here, will be wiped out of existence in a

couple of years from now," observed Kaliachak-II BDO Shantanu Naha.

On August 3, it approached Ganga Bhavan in Panchanandapur gram panchayat. On August 16, Ganga merged with Pagla and on September 4, it ate up Ganga

> Rushing out of Rajmahal Hills, Ganga has been steadily shifting, gobbling up villages and prime agricultural land on its way. The erosion Panchanandapur this year has been swiff. It began Sakullapur and Jot Kosturi villages of Bangitola gram panchayat on July 6. Since then it has eroded from

block taking the course of Pagla," the BDO said in his we see now is mere flood. Erosion will begin once the report to the DM. "Real-time erosion is yet to begin. What said Kaliachak-II sabhapati water begins to recede, Dipti Kumar Chakraborty.

Senior Farakka barrage officials spell doom once Ganga and Pagla finally merge. What is needed is a master

Panchanandapur has been "All out efforts are on to

restrict water from flowing wiped out of existence.

chayat of KB Jhaubona does not even exist. Part of north Bhavan. Now the gram pan-

course. The Centre has to realise the impending danger Ganga tied to its original

Murshidabad is not out of danger either. At Sankopara and Nayansukh in Farakka, erosion is wreaking havoc. The gushing Ganga is now barely 250 metres from the the rest of the country. The railway track linking the north-eastern states with and act in haste, they say.

NH-34 is less than two km away and the river is steadi

ly approaching.
"Erecting small embankments will not solve the enough funds and undertake ing the Centre to release problem. It will aggravate it A national disaster is wait ing to happen. We are press permanent remedial measures," said Murshidabad zilparishad sabhadhipat

THE HIDUSTAN TIMES

### নদী-সংযোগকে সাহায্য নয়, বিশ্বব্যাঙ্ককে আর্জি ঢাকার

ক্রিন্দ্র ক্রিন্দ্র প্রার্থিত নদী-সংযোগ প্রকল্পকে সাহায্য না করার জন্য

২৩ সেপ্টেম্বর: ভারতের প্রস্তাবিত নদী-সংযোগ প্রতিক্সকে সাহায্য না করার জন্য বিশ্বব্যাঙ্ককে অনুরোধ জানিয়েছে বাংলাদেশ। বিশ্বব্যাঙ্কের কানট্রি ডিরেক্টর ক্রিস্টিন ওয়ালিথ বাংলাদেশের জলসম্পদ মন্ত্রী হাফিজউদ্দিন আহমেদের সঙ্গে দেখা করলে তিনি তাঁকে এই আর্জি জানান। আহমেদ বলেন, "ব্রহ্মপুত্রের জল যদি নদী-সংযোগের মাধ্যমে ভারতের ভিতরেই টেনে নেওয়া হয়, তবে বাংলাদেশের কৃষির ভয়ানক ক্ষতি হবে। দেশের বিস্তীর্ণ অঞ্চল মরুভূমিতে পরিণত হবে।" ওয়ালিখ এ ব্যাপারে তাঁর সহমত জানিয়ে বিষয়টি পশ্চিমবঙ্গের সংশ্লিষ্ট কর্তৃপক্ষের নজরে আনবেন বলে আশ্বাস দেন।

ও দিকে, বাংলাদেশের নদী-বিশেষজ্ঞেরা ভারতের এই 'মারণ' পরিকল্পনার বিশদ তথ্য জোগাড় করে তার বিরুদ্ধে প্রতিবাদ গড়ে তোলার আহ্বান জানিয়েছেন। অধ্যাপক আইনান নিশাত সাংবাদিকদের বলেন, "নিজের খরা-প্রবণ এলাকাগুলিকে বাঁচানোর জন্য ভারত অনেকদিনই জল টেনে নেওয়ার কথা ভাবছে। আমরা যথেষ্ট তথ্য পাষ্টি না বলেই উপযুক্ত প্রতিবাদ কর্মসূচী গড়ে তুলতে পারছি না।" উল্লেখ করা যেতে পারে, গঙ্গা, ব্রহ্মপুত্র, তিস্তা ও অন্য কয়েকটি নদী থেকে প্রায় ২০০-২৫০ শতকোটি কিউসেক জল নিয়ে উত্তরপ্রদেশ, মধ্যপ্রদেশ, হরিয়ানা, মহারাষ্ট্র, রাজস্থান ও গুজরাতে সরবরাহ করার ভেবেছে ভারত। ১২ বছর পরে দিল্লিতে আগামী সপ্তাহে 'জয়েন্ট রিভার কমিশনে'র যে বৈঠক হওয়ার কথা, সেখানে সরকারি ভাবে ভারতের এই পরিকল্পনা সম্পর্কে বিস্তারিত জানতে চাওয়া উচিত বলে নিশাত মত প্রকাশ করেন।

আখতার হোসেন উল্লেখ করেন, যে ভাবে ১১২-২০০ শতকোটি ডলারের এই পরিকল্পনা বাস্তবায়িত করার জন্য অনাবাসী ভারতীয়রা সাহায্য করছেন বা সুপ্রিম কোর্ট এর ক্রত রূপায়ণের জন্য সুপারিশ করেছে, তা থেকে বোঝা যাচ্ছে ভারত বিষয়টি নিয়ে যথেষ্ট ব্যগ্র। সুতরাং বাংলাদেশের পরিবেশ,অর্থনীতি, জনস্বাস্থ্য ও জীবনযাত্রার উপরে তার বিধ্বংসী প্রভাবের দিকটি তুল্লে ধরে জাতীয় ও আন্তর্জাতিক স্তরে জনমত গঠন করা দরকার।

The Kyoto protocol's pledge to pollute the environment to a lesser extent than other countries means falling behind in terms of economic growth

By VYACHESTAV NIKONOV

t's an open secret that human progress tends to impair environmental efficiency. However, scientists have failed to prove that the greenhouse effect is bad for this planet's climate. I know quite a the Kyoto protocol alone. few serious books and other publications whose authors claim that this factor has nothing to do with global warm-

ing. Planet Earth has experienced numerous warming periods well as global and local ice ages

All this happened long before mankind started polluting the environment. Global temperatures rose by one degree Centigrade in the early 20th century, that is, when any substantial carbon-dioxide emissions were

nowhere to be seen.

Secondly, mankind faces no less important problems requiring economic growth. As I see it, some other problems considerably influence carbon-dioxide levels, thus requiring serious attention. There are one billion undernourished people all over the world; 1.6 billion people lack electricity; 2.5 billion people use bio-mass as fuel and energy. Forests measuring one football field in area are being destroyed on this planet every four seconds.

Consequently, 22,000 football fields are destroyed the world over every day. We are talking about the need for development and the need to cut carbon-

The author is Director of the Politika Foundation in Russia

dioxide emissions at the same time. Still this can be accomplished with the help of other measures rather than through

Thirdly, there is the political aspect of this problem. Russia now voices a moral stand on the issue, fulfilling and even overfulfilling the Kyoto protocol's requirements.

Unfortunately, a nationwide recession set in throughout the 1990s, thereby making it possible to slash carbon-dioxide

Fourthly, the United States. which is the main prospective quota buyer, will never rejoin the Kyoto protocol. This is absolutely out of the question under the incumbent Republican Administration. The Democrats are highly unlikely to do this, either. It should be mentioned in this connection that the United States withdrew from the Kyoto protocol under Bill Clinton (Dem.), rather than George Bush Jr. (Rep).

And now a few words about



The EU, which wants Russia to ratify the Kyoto protocol, should offer something in return

emissions by an unprecedented margin. Incidentally, no other country will ever manage to do the same. Therefore, any reproaches to the effect that Russia doesn't abide by the Kyoto protocol are absolutely groundless. So, what did Russia get in return? They are promising that Russia will be able to sell its own quotas some time in the future.

Europe. There exist pretty slim chances for receiving something from the European Union. The EU established its quota market without asking Russia's advice.

Besides, the EU still refused to consider Russian carbondioxide emission cuts in the 1990s. Consequently, our future cuts will be heeded. The EU is the Russian Federation's tough est and most intractable negotiating partner. We failed to obtain any concessions on the Kaliningrad problem and on our projected World Trade Organisation membership. The same is true of visa-free exchanges and anti-dumping anti-dumping investigations. The EU, which wants us to ratify the Kyoto protocol, should offer something to Russia in return.

Can we estimate Russian financial benefits from quota sales? Some people believe that Russia might earn a fantastic sum of \$50 billion. However, the relevant market doesn't exist.

Meanwhile, lack of a quota market rules out any prices whatsoever. So, why should we ratify the Kyoto protocol? It's impossible to sell any product, whose price is unknown. Mind you, normal sellers don't act that way.

The Russian economy faces extremely serious problems at this stage. However, the Kyoto protocol's ratification essentially signifies Russia's refusal to set ambitious tasks for the sake of a serious economic breakthrough.

A pledge to pollute the environment to a much lesser extent than numerous other countries, including the United States, means that Russia will continue to fall behind in terms of its economic development levels. It, therefore, turns out that we can simply sell our future economic growth for an unspecified price.

THE STATESMAN

# Elame game echoes in Taj corridor. Le environment aroland Taj Mahal. six priority projects approved by the DPRs (Aptailed moinst room 14 hours.)

) ALIPSINGH

The Rs 175-crore corridor project aimed at developing a neritage zone encompassing Taj Mahal, Agra Fort, Rambagh,

> when CBI sleuths questioned New Delhi, Sept. 18: Former Taj heritage corridor project on former state principal secretary Uttar Pradesh chief secretary D.S. Bagga tried to shift the en-(environment) R.K. Sharma tire blame for the controversial

Itmad-ud-Daula and Chini-ka-

es" took place, Bagga distanced out after the recent change of Admitting to the officials that "gross procedural irregularitihimself from the anomalies during his tenure. He was shunted him early last month.

the Supreme Court to protect the the Mission Management Board (MMB) set up on the directives of guard in Uttar Pradesh.

Bagga was also chairman of

Roja. It would have been part of a On April 6, 2002, Bagga decidin consultation with then chief minister Mayavati that the Union Cabinet Committee on Economic Affairs' approval was mandatory for releasing funds and beginning any heritage progreen belt along the Yamuna. eq

er the Supreme Court interventhe state had given Rs 17 crore of

nce work, which was stopped afted. But he failed to clarify why the Rs 175-crore project to NPCC. At this point, he tried to pass the

> uction -- a claim investigators Bagga told the CBI that Mayavati cleared the proposal, but did not give the go-ahead for constrare taking with a pinch of salt as Taj project was among the tection scheme. the

the DPRs (detailed project reports) of all the schemes are attachbeen approved in the meeting (of ed and that the same had already the MMB) held on 12th October, 2002, which is apparently false." The former chief secretary said the National Project Construction Corporation (NPCC) was only told to prepare a detailed project report and not to comme the MIMB on August 4 last year.

rma could release Rs 17 crore on funds for the project never came leased, there is no mention of his own, Bagga said the file on to him. But he claimed: "In the Management Board which have When the CBI asked how Shafile on which Rs 17 crore were re higher orders except the minutes of the meeting of Mission ulently recorded and mischiebeen, as explained above, fraud vously misconstrued

The CBI has said Rs 17 crore was given to NPCC before formal orders were issued to start work

CBI documents showed Bagga

claiming: "Surprisingly, he has mittee's approval for the project

mentioned in the said letter that

Bagga said that would have rerupees. He blamed Sharma

When the CBI asked how the NPCC could be awarded the contract without floating tenders, Bagga said the corporation was asked to prepare a project report

It has found that officials had sanctioned another Rs 20 crore on did not reach the construction

May 21 this year, but the money

company as officials were alert ed after the scandal was exposed Bagga said he had strongly

Interestingly, four days after ng they had issued a denial. He a report on June 15 this year that work had been started without statutory approval, Bagga wrote ment's (environment) version, to cabinet secretariat additiona] nothing is being done in connecby the environment department also wrote that "as per depart tion with Taj Protection Missior Project at Agra near Taj Maha! secretary R. Poornalingam, say

> objected to the release of funds and start of work in a noting on

the project file. On the contrary,

the environment department had noted that all formalities had been completed and even the cabinet committee had released some money which, he again Asked why he did not stop the illegal work at the project site, sulted in the wastage of crores of

claimed, was not true

Bagga claimed Sharma wrote

to the Centre on November 16 la st year, seeking the cabinet com-

buck to Sharma, who was suspe-

nded over the controversy.

of India Act and the Supreme after realising that the project ther the orders of court or guidewhich in any way may be construed to be in contravention of eiines of Government of India'

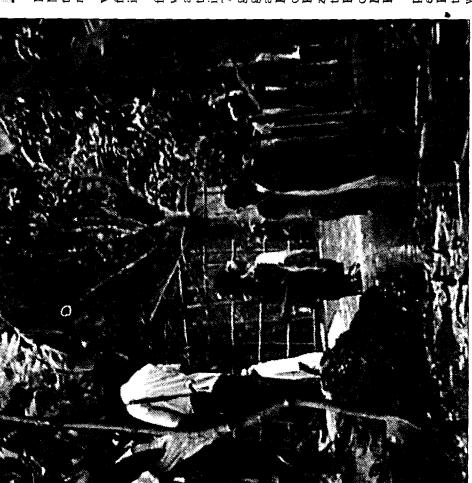
Yamuna bed between the Agra Fort and the Taj Mahal. Build a "heritage The project: Spend Rs 175 crorn corridor" on the reclaimed land complete with shopping malls, and fill a 2-km stretch of the parks and restaurants

Sourt's guidelines to protect the Tai violated the Archaeological Survey was revealed that the project had not received statutory clearances from the Centre and environment October 2002, But in June 2003, \*The problem: Work started in protection agencies. The Centre ordered the work to be stopped

THE TELEGRAPH

SEP 2003

# Malda floods worsen, red alert sounder



Men try to put up a bund at Sakullapur, Kaliachak II, on Wednesday. — The Statesman

MALDA. Sept. 17. — The situation in Malda took a turn for the worse today with the flood affecting several southern and northern parts of the district.

northern parts of the district.
Reports sent by the Malda DM today to Writers' say 20,590 families have been affected due to the flood which have till now inundated 123 villages.

and Bhagirathi at Mahadipur near Gour in gladesh has caused huge volumes of water to Though the Ganga flowed steadily for a few hours in the southern parts yesterday, the water level was on the rise again today. The t crossed the danger mark of 28.30 metre. The "back flow" of the Padma waters in Bangush into the confluence of the rivers Pagla English Bazaar. Several villages along the Inadministrations sounded a red alert today in he protected banks of the Fulohar river after to-Bangla border have been inundated in Kaliachak I, Kaliachak III, and English Bazar. The waters of the Mahananda have started a "back flow" since yesterday in English Bazar. Patrolling along the Indo-Bangla border is likely to be affected, the BSF has said. District authorities have asked the English Bazaar BDO to monitor the situation.

The Malda DM informed the relief department principal secretary today that an embankment at Gholamari point in Katihar, Bihar, has breached and water is rushing into the Mahananda and Fulohar taking the water level of the Fulohar above the danger level. Also, floodwaters from Bihar have af-

fected several families in Harishchandrapur Ratua, and Chanchal in the northern parts.

Statesman News Service

ted. Two days ago a gate collapsed due to the schemes like Swarnajayanti Gram Rojgar utive engineer, Mahananda embankment division, said: "In the name of repairing the along with the superintending engineer, the villagers did not agree to repair the damaged Restoration work of a five-vented sluice water pressure of the Fulohar river and the more than 800 people. The DM has asked the BDO to allot funds from any of the rural lojona for any relief related work. The execsluice gates some criminals have damaged Ratua, and Chanchal in the northern parts. gate at Teljana in Harishchandrapur has star Par-Valuka village was marooned along with he gates. Earlier when we visited the spor gate. A sub-assistant engineer has been sen

today to oversee the matter."

The Malda irrigation division has said that over 22 lakh cusec of water is being released by the Ganga in Malda. The Farakka Barrage Project has been forced to open almost all the gates, and nearly 14 lakh cusec of water is being released towards Bangladesh. According to the irrigation officials, though the waterlevel has been falling in Buxer, Dighaghaat, Gandhighaat, and Hatida, it is constant in Munger and Bhagalpur, following which there has been a rise in the water level in Kahelgaon, Manikchakghaat, and Farakka.

At Manikchakghaat the water level is 26.15 metres, 85 cm above the danger level, at 3 p.m. today. The Ganga irrigation division officials say till 26.30 metres the spillage can be checked at Sakurullahapur and Jotekosturi in Kaliachak II by dumping plastic sand bags.

# Buddha blames Centre for erosion

HT Correspondent & PT] Malda, September 15

eas, he said adding that the

Mission

Ramakrishna

been sent to the affected ar

ganisations had joined the His claims, however, rang hollow as victims in Malda continued to brave the floods than 2,500 residents have

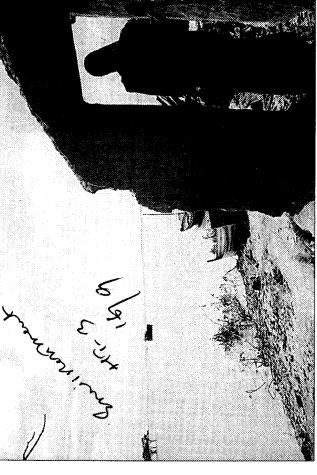
CARE and some other or government in the services. without food or water. More

been stranded on Gadaichar

ure to tackle erosion as fresh complaints of slack resands of residents stranded lief poured in from thou BHATTA CHARJEE on Monday bla on a remote island in Ma med the Centre for the fail nikchak, Malda. BUDDHADEB

Minister and the Deputy ment to launch measures to the matter with the Prime sent water resources minister Arjun Shetty to assess The Centre's delay in apand Murshidabad had made it difficult for the governtackle the problem, the chief minister said. "The problem tre has not yet accepted the Prime Minister. They had district. But nothing has been done. Erosion in the pared by us. I have discussed proving the state's anti-ero sion master plan for Malda of erosion cannot be tackled by the state alone. The Cen anti-erosion master plan pre the situation in the affected istrict is a national issue,

hattacharjee, who visit-urshidabad on Sunday, hattacharjee said.



SAD RUINS: A woman looks out to the Ganga from the door of what once was her home in Panchanandapur, Malda, on Monday.

said 29,000 people had been Farakka and Bhagabangola in the district of which nearaffected in the floods in ly 500 families had been shifted to safer places. He

watch on the situation," the chief minister said after a meeting with home secretary A.K. Deb earlier in the day. Adequate relief had wards Murshidabad and pos-ing a threat to the National said the Ganga is flowing to-Thermal Power Corporation "The next two days are

and Farakka barrage

for the past 15 days. Just twoisland in Manikchak block was among the first areas to be flooded. Manikchak MLA from Manikchak, Gadaichar the allegations but said the relief reaching the island and-a-half hours by boar Asima Choudhury denied might not be adequate. ASHOK NATH DEY/HT

after complaints of more than 200 people stranded in The outcry came two days hand reached relief minisma, meanwhile, flooded Par ving more than 30,000 ho Gidarmari Char in Jhark The back flow of the Pad leonapur, Sovanagar, Kum bhira and Bakrabandh, lea meless. The BDO admitted ter Hafiz Alam Sairani.

had ferry to the block office to collect relief material. shortage of relief; Villagers crucial. We are keeping a

### More Malda areas under flood water 3,5

six blocks in the district after a further rise in water level," the Malda district magisfresh areas in the unprotected zone of - "The Ganga and the Fulohar rivers have inunda-MALDA/KOLKATA, Sept. 15. Statesman News Service ted

submerged 23 gram panchayats. In all 1,430 of In the unprotected zone, the two rivers have tering into Bangadesh from Farakka and flowthe 8,000 families in the area have been ren-According to the officials, floodwaters are en-Since yesterday, a fresh area of the Kaliachak III block has been inundated by floodwaters from Bangladesh through Mora-Ganga. ing down to the Golapgani areas in this block. ernment today.

The administration today faced law and accept the beneficiary list prepared by the While the Ganga water in Malda has another 1000-odd, affecting around 55,000 order problem during distribution of tarpau-CPI-M gram panchayat members refused to lin sheets among flood victims when the Congress gram panchayat pradhan of Mantouched the danger mark, the state government is hopeful that the situation won't worsen any further. In Murshidabad too flood water has, as per government figures, washed away about 750 houses and partially damaged kchak trate, Mr AK Bala, informed the state gov-

charjee, while stating the bad part of the er, said the situation was "not alarming". The chief minister Mr Buddhadeb Bhattastory, said: "Flood waters have swept Farak-

dered homeless by floods and erosion.

people. Government representatives, howev-

tional cause of concern in the region. The river water level at Malda has reached 26 present infrastructure can withstand. Yesterka in Malda to Bhagabangola in Murshidabad. Erosion caused by the rivers is an addimetres today - the optimum level which our day it was 25.92 metres."

"The level of water at the upper catchments is receding steadily. Relief materials of Care and Unicef will reach today," he stahave already reached the affected. The ready started with their relief work. Officials Ramakrishna Mission volunteers have alted as the good side of the story.

ence minister who recently visited the flood from the relief department, Mr Hafiz Alam Sairani, also briefed reporters at Writers' Mr Srikumar Mukherjee, state civil deaffected regions alongside his counterpart

Buildings today. "In Malda, the affected area chayats. The total inundated area is 68.3 comprises six blocks covering 23 Gram Pansquare km covering 85 villages. The three worst hit regions are Bhutnir Char, Ratua and Harishchandrapur. The present situa-Allahabad is fast receding and the area hasmajor cause of concern was to prevent waters of the rivers Ganga and Pagla from merging at the lowlying area in Sakalyapur. That we tion is, however, better as the water level at n't received heavy rainfall recently." "Our have managed successfully by means of sand-

fice on 17 September. We have already identified alternative cultivable lands for affected villagers and will talk to the NGOs on ernment funding agencies at the Unicef of-"We'll hold a meeting with the non-govbag boundaries," the minister said.

the possibility of building a colony for rehabilitating the homeless," he added.

Bhagabangola I, II and Maheshpur are the three most inundated blocks. Although the Ong the plight of the flood affected regions in Murshidabad, Mr Mukherjee said: water level is on the rise there, the situation is not alarming.

Referring to the proposed master plan to tional issue and not just of this state. Despite prevent erosion caused by the Ganges and Padma, the chief minister said: "This is a namy repeated intimations to the Prime Minister and the deputy Prime Minister, the Centre is yet to formally approve of this Rs 900. ects, the Farakka Barrage and the NTPC power plant, are among those that are being crore project. Two Central government proj seriously affected by the erosion.

THE STATESMAN

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### Cancer scare in mosquito coils gen The exposure could be hi-

**MONOBINA GUPTA** 

gh if the coils are used overnight, as they often are," the

to coils cause cancer but we do know they can cause a lot of health hazards, the most pristudy underlines. New Delhi, Sept. 14: A recent study by US scientists warns that mosquito coils emit smoke that could cause cancer among people exposed to the fumes for a long period.

The research, conducted by the University of California and published in the journal of environmental health perspectives, was based on a study of 50 samples of coils. The samples contained S-2 or Octachlorodipropyl, banned for sale in the

romethyl Ether, also known as "It is possible the coils are BCME, a potent lung carcinoexposing the users to Bischlo-

It is, therefore, virtually impossible for people not to use one or another mosquito repelroundings often have stagnant breeding grounds for mosquilent. More so, because the surwater or open drains that are

"We do not know if mosqui-

mary being breathing difficulty, particularly for people with

asthma," said Dr B.K. Sharma,

a general physician in Delhi.

What is of concern is that it is not mosquito coils alone that are harmful to health - researches both in India and abroad have shown that almost all mosquito repellents have hazardous side-effects.

> In India, two million people are afflicted by malaria every

diseases like encephalitis and

year. Apart from malaria, mosquitoes are carriers of killer anese Encephalitis in Andhra

Pradesh recently.

Scores of people died of Jap-

emy of Sciences, a part of the Indian Council for Medical Rerepellents use synthetic pyret-A study by the Indian Acad search, shows that almost all proids, that is, Diethyl Tolu-

imide. The market for mosquiannually at 7 to 10 per cent, is to repellents - coils, mats, lotions and vaporisers-growing about Rs 500-600 crore.

vealed that " mosquito repellents widely used in the coun-Earlier, the Malaria Research Centre had carried out a survey in nine states and retry are harmful to health".

The result of the survey revealed that 11.8 per cent users of Diethyl Toluimide, cutting across all age groups, complained of toxic effects.

The most common complaint was breathing difficulty, followed by irritation in the eye, headache and skin reaction. Two persons said they de-

veloped asthma after using mosquito repellents.

Doctors recommend safe alter-Researchers said the side-effects might not appear immedi natives like mosquito nets. neem cream made of neem oil ately, but do surface over time and coconut or mustard oil.

Kochi in Kerala, where the ried out an experiment to kill mosquitoes when they are at problem is endemic, has car the larvae stage.

canals and stagnant pools -The Kochi corporation increased the salinity of water in major breeding grounds. The experiment was successful as it killed the larvae in the breed ng ground itself.

Vajpayee to consult CMs . over CRA 🛚 meeting

STATESMAN NEWS SERVICE

CHENNAI, Sept. 13. The Prime Minister, Mr Atal Behari Vajpayee, will consult the chief ministers of the Cauvery Basin states to convene a meeting of the Cauvery River Authority, of which he is the chairman, in view of the crisis in the Cauvery delta districts in Tamil Nadu.

The DMK president, Mr M Karunanidhi, disclosed to reporters outside the Apollo Hospital here today that the Prime Minister's response followed his appeal made to him during their meeting at the hos-pital highlighting the plight of the Cauvery delta farmers in Tamil Nadu.

Only a few days back, the various farmers' associations and political activists had organised a hartal and agitation in the three Cauvery delta districts of Tiruvarur, Thanjavur and Nagapattinam, to press the state government to impress on the Centre to convene a meeting of the Cauvery River Authority. The Prime Minister told him he would convene the CRA meeting "as soon as possible after consulting the chief ministers con-cerned," Mr Karunanidhi said.

The Prime Minister, who was accompanied by a few Union ministers from Tamil Nadu, state BJP leaders and family members of Mr Maran, spent about 30 minutes at the Apollo Hospital where he arrived at 1.15 p.m. to enquire about his Union minister, Mr Murasoli Maran, undergoing intensive treatment for multiple organ failure. Mr Karunanidhi said that Mr Maran responded when the Prime Minister called out his name. Mr Vajpayee is on a day's visit to Chennai to take part in the inaugural function of The Hindu's 125th anniversary this evening.

1 4 SEP 2003

# कांत्र कार्य नमें बुए (मुख्यांत् व्हे भर्नामा थक्ष

নদীগুলি জুড়ে দেবেন। প্রকৃতির ভয়াবহ পরিণাম ডেকে আনবে। লেগেছেন, দেশের বড় বড় কেন্দীয় সরকার উঠে পড়ে বিৰুদ্ধে এই অভিযান এক লিখছেন সুব্ৰত সিন্হা

ভট্টাচার্যের মতো বিচক্ষণ ও চিন্তাশীল ব্যক্তি কী করে ত ছাবিশে অগস্টের আনদবাজার পত্রিকায় নুদী সংযোগ প্রকুল্প নিয়ে বুদ্ধ-প্রভূর কথা চেয়ারম্যান সুরেশ প্রভুর উদ্ধৃত জবানিতে মুখ্যমন্ত্ৰীও এই ব্যাপারে সব রকম সাহায্যের আশাস ওয়াকিবহাল তাঁরা এই খবরটি পড়ে সত্যিই আতঙ্কিত হবেন। সবচেয়ে আশ্চর্যের ব্যপার যে বুদ্ধদেব বলা হয়েছে যে দেশের বড় বড় নদীগুলি জুড়ে দেওয়া হলে পশ্চিমবঙ্গের উপকার হবে এবং কলকাতা বন্দরের নাব্যতা বাড়বে। আমাদের |শীর্ষক সংবাদটিতে টাঙ্ক ফোর্স-এর দিয়েছেন। যাঁরা ওই প্রকল্প সম্বন্ধে কিছুটা এতে সায় দিলেন!

পরিপ্রেক্ষিতেই বোঝা দরকার, এই প্রকল্প রূপায়িত नक्कनीय, এই ব্যাপারে পূর্বাঞ্চলের রাজ্যগুলির তা ছাড়া প্রতিবেশী বাংলাদেশ তো আন্তর্জাতিক মাধ্যে অসম, বিহার ও সিকিম ঘোর আপত্তি তুলেছে। স্তরেও প্রতিবাদ করেছে। মনে রাখতে হবে, দুই *দৈশে*র নদীবন্টন চুক্তি অলম্ভেমনীয়। হলে পশ্চিমবঙ্গের কী বিপর্যয় হবে।

নদী-সংযোগের রূপরেখাটি বহু বছর আগে কে এল রাওয়ের কারিগরি চিজ্ঞাভাবনা-উল্পত একটি খসড়া। আগেও কয়েক বার এ রকম প্রকন্প করার চেষ্টা হয়েছে, তার সবগুলিই বাতিল করা হয়েছে। তবে এ বারের প্রকল্পের আকৃতি-প্রকৃতি ও অভিসন্ধি একেবারে অন্য খাঁচের।

'স্বপ্ন সম্ভব' করার অনুমতি দেন। অবশ্য আপত্তির গত বছরের স্বাধীনতা দিবসে মহামান্য রাষ্ট্রপতি ভিত্তিতে আবেদন করায় দেশের উচ্চতম আদালত 'জনস্বাৰ্থ উপযোগী' আখ্যা দিয়ে রাষ্ট্রপতির তাঁর নদী-শুঙ্খল করার স্বপ্ন জনসমক্ষে প্রকাশ করেন।

বহর দেখে আদালত এটাও পরে স্পষ্ট করেছেন যে কোনও বীতিনীতি বা নিয়মকানুন লগুমন করা চলবে না। দুশ্চিজার কথা এই, আদালতের নির্দেশ প্রায়শই অগ্রাহ্য করা হয়। এফ সি আই গুদাম থেকে গরিবদের খাদ্যসামগ্রী দেবার নির্দেশ আজও কার্যকর করা হয়নি। এ ক্ষেত্রেও তা-ই হবে না তো?

জোর দিয়েছেন। 'ন্যাশনাল ওয়াটার পলিসি'র গুরুত্বত তুলে ধরেছেন। তিনিই আবার ছ'মাসের মুধ্যে সম্পূর্ণ বিপরীত্রমী নদী-সংযোগ প্রকল্পটি 'হবুচন্দ্র রাজার গরুচন্দ্র মন্ত্রী র গঙ্গের মতো। লক্ষণীয় এর পিছনে আবার প্রায় সমস্ত বড় রাজনৈতিক দলের প্রধানমন্ত্রী গত বছর ১ এপ্রিল বৃষ্টির জল সংরক্ষণ ও গ্রামে-গ্রামে জল ধরে রাখার আবশ্যকতার ওপর অনুযোদন করেছেন। সমন্ত ব্যাপারটাই যেন সেই

514410 সায় রয়েছে। নির্বাচন এবং প্রচুর অর্থসমাগম সংকাজ হয়তো এর পিছনে আছে পরিবেশসচেতন রাজনৈতিক

এই দেশে দারিদ্র, অস্বাস্থ্য আৰ্থসামাজিক দুৰ্গতি ও

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সভাসমিতিতে, ইন্টারনেটে. পৰ্যন্ত অনেক যুক্তি দেখিয়ে এই প্রকল্পের বিরোধিতা অনেক ওজর আপত্তি কেন্দ্ৰীয় আশ্বাস এ সব নাকি খতিয়ে দেখা হবে। আমাদের অভিজ্ঞতা অন্য রকম। এমনকী প্রধানমন্ত্রীর দরবারে পরিবেশ দফতর। 'প্রভুজি'র করেছেন। পরিবেশ সংক্রান্ড ক্ষ আপত্তিগুলিকে পত্ৰপত্ৰিকায়,

হয়েছে খরচ হিসেবে, তার

হাজার কোটি টাকা ধরা

নদীশৃঙ্খল প্ৰকল্পে যে কোটি-কোটি মানুষ।

কিছু ভাগ কি এদের জন্য

ভিত্তিতে বিচার করলে সারমর্ম এই দাঁড়ায় যে এই প্রকৃতির বিরোধিতায় নামলে সের্ভান্তেস-এর 'দন প্রকল্পটি রূপায়িত হলে দেশের জলমাটির ভারসাম্য সম্পূর্ণ বিপর্যস্ত হবে। ইতিহাসকে বিকৃত করা চলে, কিন্তু প্রকৃতিক বাস্তবতার অবহেলা করলে তার খেসারত প্রকৃতি আদায় করে ছাড়বে। সরাসরি কিহোতে ও সাঞ্চো পানসার লড়াই করার গল্প মনে

তিন মাসের ঘোর বর্ষা (মৌসমী) ও বাকি বছর পলি পড়া, বন্যা, নদীর নাব্যতা হ্রাস এবং দিক শুষ্কতা-প্রবণ আমাদের এই দেশে নদীগুলি বর্যাকালে পরিবর্তন আমাদের কাছে নতুন নয়। সব নদীই তার থরা ও জলস্ফীতির চক্রে বাড়ে-কমে। দুটি নদীকে বিপুল জলরাশিকে কেনও প্রকার বাঁধ নির্দিষ্ট খাতে জুড়ে দিলে দুই নদীর সমস্যাই বেড়ে যাবে। যে কেউ <u>রূপ দেখেছেন, তাঁরাই বুঝকেন এই দুই নদীর সমন্বিত</u> বৰ্ষাকালে গঙ্গা-ছগুলি বা ব্ৰহ্মপূৱের দুৰ্দান্ত ভয়াল পরিচালিত করার প্রচেষ্টা বাতুলতা মাত্র।

আর খরচের বহর। এর কাছে 'ঋণং কৃঞা ঘৃতং পিবেৎ' দৰ্শনত হার মানে। তা হলে কাদের স্বার্থে এই

দেশের ৩৬টি নদী এবং উদ্ভট প্রকল্প ? একটু খতিয়ে দেখা দরকার। ঋণজন্তরিত আমাদের

রাজস্থান ক্যানাল-কে নিয়ে যে হচ্ছে তাতে ৩০টি বন্ধনে তৈরি হবে প্রকন্ধিত নদী-শৃঙ্খল। উত্তর-পূর্বাঞ্চলের রহ্মপুত্র ও গাঙ্গেয় উপত্যকার পূর্বভাগে (সরকারি মতে)। তাই এখান করে জলরাশি নেওয়া হবে। ऽ) मिक्किन मित्क ऽधि বয়েছে উদ্বত জলের ভাণ্ডার অঞ্চলগুলিতে নদী সংযোগ যাত্রাপথের রেখাচিত্র দেখলেই কিন্তু প্রকৃত উদ্দেশ্য ধরা পড়ে

চরম অশিক্ষার শিকার

मात्मामत्र, मूर्यनीत्रथा, भ्रयानमीत সংযোগ (link)— শোন, গতিপ্থে প্রধানত কর্ণাটক, তামিলনাড়ু ও অক্ষে যাবে জল

কাজে লাগানো যায় না ?

সাধারণ

বদ্ধি ও ভৌগোলিক জ্ঞানের

 छेखत मितक 8िं সংযোগ— কোমি, গভক, ঘগড়া, গঙ্গা, মেছি ও

৩) পশ্চিম দিকে ৭টি সংযোগ মূলত গুজরাতে জল নেওয়ার জন্য হয়েছে। এই যাত্রাপথে রাজস্থান, মহারাষ্ট্র এবং মধ্যপ্রদেশও কিছুটা জল পাবে। অঞ্চল জলসিক্ত করবে।

যমুনার নদীপথে হরিয়ানা এবং দিল্লির চারপাশের

৪) পূর্ব দিকে ব্রহ্মপুত্র ও গঙ্গাকে যুক্ত করার প্যেথ ফরাক্কা থেকে সুন্দরবনের সংযোগ— জলক্ষীত

পশ্চিমবঙ্গে আরও উদ্বত্ত জল ঢালা হবে।

কুদুরূপ ধারণ করে। ভূমিক্ষয়, ভাঙ্জন, ধস, অত্যধিক ' প্রকল্পটি বিশেষ কয়েকটি রাজ্যাঞ্চলের সুবিধার্থে করা হয়েছে। যে নামেই হোক দিল্লির আশপাশে গভে কিছুটা মহারাষ্ট্র ও মধ্যপ্রদেশে— এ সব রাজ্যে অনেক বিশাল ও বহুজাতিক শিল্প ও বাণিজ্যিক সংস্থা উঠেছে নতুন শিল্পাঞ্চল ন্যোশনাল ক্যাপিটাল রিজন)। গুজরাত, কর্নাটক, তামিলনাডু, অন্ধ

ভৌগোলিক কাঠামো অথবা কম বৰ্ষাজনিত শুষ্কতার ফলে এ সব অঞ্চলে জল সংরক্ষণের ক্ষমতা অনেক কম। কিন্তু শিল্পায়ন ও তার অবিচ্ছিন্ন সঙ্গী নগরায়ণ— সর্বদাই জলতৃষ্ণায় জর্জরিত। এ ছাড়া ক্ষিক্ষেত্রেও আখ ও বিদেশি উচ্চফলনশীল গম এবং পানের জন্য প্রভূত পরিমাণে জলের প্রয়োজন। এ সব সাষবাস করে রাজনৈতিক প্রভাবশালী অতিবৃহৎ কিন্তু চাষ তো জল ছাড়া হবে না। কাজেই মেরুর বরফ গলিয়ে না হোক, দেশের সুদুরতম প্রান্ত থেকে চাষিগোষ্ঠী। এরা বিশাল পরিমাণে সরকারি অনুদানে রাসায়নিক সার ও কীটনাশক ওষ্ধ পেয়ে থাকেন হলেও জল আনতেই হবে।

আরও প্রশ্নয় দেওয়া হবে।

উপরের চিত্র থেকে স্পষ্ট হয়ে যায় যে, সমস্ত **শি**কড় গেড়েছে।

অথচ প্রকৃতি বিমুখ। ভূতাত্ত্বিক পরিস্থিতি,

কৃষিব্যবস্থায় প্রচুর জমি চিরদিনের মতো অকেজো হ্রে পড়ছে। নর্মদা, উকাই, মাহি, চম্বল, রাজস্থান ক্যানাল তার অকাট্য প্রমাণ। পানীয় জলের মধ্যে কীটনাশকের অবস্থিতির মতো ভয়ানক ঘটনাও এই সবজ বিপ্লব'-এর অবশ্যজ্ঞাবী পরিণাম। এই প্রকল্প রূপায়িত হলে এই ধরনের সর্বনেশে কৃষিপদ্ধতিকে এখানে বলা প্রয়োজন যে এই ধরনের

একেই তো ফরাকা ব্যারাজের ধাকায় এই রাজ্য ভামক্ষয় ও তজ্জনিত জনবসতি বিলাপ্তি আজও ঘটে চলৈছে। এ বছর মালদহ জেলাতেও তার ভয়াবহ মাজও বিপৰ্যন্ত। কলকাতা বন্দর নাব্যতার অভাবে এখন প্রায় অকেজো। আবার ফরাক্কার জন্য মালদহ-মুশিদাবাদে অনেক নদীপথ উল্টেপালে যাছে। এ বার পশ্চিমবঙ্গের কথাটা একটু ভাবা যাক। স্থাক্ষর পাওয়া যাজে

এর উপর যদি নদীপথে ব্রহ্মপুত্রের বর্যাকালীন নিয়ে যাওয়া হয়, তা হলে জলক্ষীত এ রাজ্যের কী উদ্বস্ত জল ফরাক্কা থেকে পশ্চিমবঙ্গের উপর দিয়ে দুর্গতি হবে তা সহজেই অনুমেয়। তা ছাড়া, সারা

বিশ্বের উষ্ণতা বৃদ্ধির কারণে সমুদ্রের জলগুর এমনিতেই বেড়ে যাওয়া সম্ভব, এবং সেটা ঘটবে

প্রাকৃতিক সম্ভারে সমৃদ্ধ হিমালয় পাদদেশের এই বিশ্ববিশত সৌন্দৰ্যময় উপত্যকার কিছুই অবশিষ্ট একে ভো ডিজা প্রকল্পের সর্বনেশে পরিণামের প্রকল্পের প্রধান গঙ্গা-বক্ষাপুত্র সংযোগ যদি এই আশঙ্কায় উত্তরবঙ্গ আতঙ্গিত হয়ে আছে। নদী-শুঙ্জাল অঞ্চলের উপর দিয়ে উপর দিয়ে নেওয়া হয় তা হলে থাকৰে না।

(অত্যাপ্তিক ক্ষারযুক্ত করা) করে তিলে তিলে জমির জেলায় প্রতি বছর বন্যা ও ভাঙনে ক্ষতিগ্রস্ত মানুষের ব্যবস্থা আজও নেওয়া হয়নি। অন্য দিকে, দেশের কিছু কিছু অংশে অত্যধিক জলসেচ ও রাসায়নিক উর্বরতা শেষ করে দিচ্ছে। এর সঙ্গেই যুক্ত হয়েছে ডুয়ার্স ও অভয়ারণ্যগুলি। মালদহ বা মুর্সিদাবাদ সারের অবাধ ব্যবহার দ্বারা, 'হাইব্রিড' ফস্লের salinisation (লবণাক্ত করা) ও alkalisation নদীশঙ্জল প্রকন্ধ ছত্রখান করে দেবে উত্তরবঙ্গের মারফত লক্ষ লক্ষ টাকা ঘরে তুলছে চাষিগোষী। পুনবাসন প্রকল্প করার জন্য কোনও বড় পরিকল্পন প্রকৃতির নিয়ম মেনে দীর্ঘমেয়াদি কোনও বড় মাপে? আজও করা যায়নি। প্রকৃতির সঙ্গে লড়াই না করে নিদারুণ জলমিক্কাশন সমস্যা।

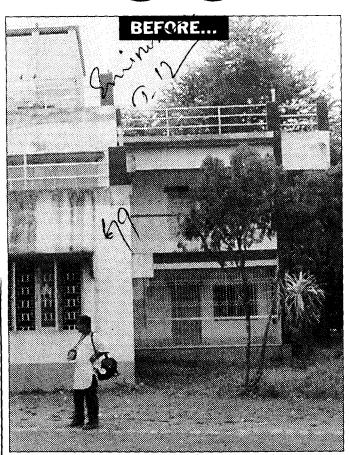
অপুরণীয় ক্ষতিই দেলের হোক না কেন, তার এতটুকু এই সঙ্গে এটাও মনে রাখতে হবে যে যত খেসারত তো এই সব বিশাল শিল্পসংস্থা বা অতিবৃহৎ চাষিগোষ্ঠীকে দিতে হবে না।

অক্সন্থ্য, আর্থসামাজিক দুর্গতি ও চরম অশিক্ষার কিছু ভাগ কি এদের জন্য কাজে লাগানো যায় না १ এই বিশাল মানবসম্পদকে যদি উন্নততর জীবনের গুরে তোলা যায়, সৃষ্টিশীলতায় এই প্রাচীনতম থাকতে হবে না। কিন্তু বর্তমান ও ভবিষ্যৎ প্রজন্ম কি শিকার কোটি-কোটি মানুষ। নদীশুঙ্খল প্রকল্পে যে সভ্যতার দেশ অনেক দুর এগিয়ে যাবে। বিদেশি রাষ্ট্রের শর্ডাধীন হরে ভিক্ষাপাত্র হাতে নতজানু হয়ে হাজার কোটি টাকা ধরা হয়েছে খরচ হিসেবে, তার ঋণজৰ্জনিত আমাদের এই সময় থাকতে সেটা বুৰ্তে পাৰবৈ গ

9 লেখক ভুতত্ববিদ, জিওলজিক্যাল সাৰ্ভে ইভিয়া-র ভূতপূর্ব উপমহানির্দেশক

### Water moves 250 m in five hours, 450 families homeless

### Ganga gobbles up Bhavan





(Left) A recent picture of the Ganga Bhavan. Villagers (right) remove bricks from the remains on Friday. Pictures by Surajit Roy

### **DEBARATI AGARWALA**

Malda, Sept. 5: The irrigation department's pride, the Ganga Bhavan, was eaten away by the ravenous Ganga that ran through banks last night at Panchanandapur, gobbling up more than 450 homes.

A small portion of the building stands out of the water now, the only reminder to the bungalow built in 1975 by then irrigation minister A.B.A. Ghani Khan Chowdhury.

The river was in no mood to relent. The boulders that were placed along the bank a year ago to stop the river from cutting in further tumbled into the water every second minute. The erosion continued even as officials and villagers looked on in a daze.

The Ganga has washed away everything, from trees and electric poles to homes. "There is nothing left of the Ganga Bhavan. In just five hours, the river ate into 250 m of the embankment. The building, which stood on three bighas, is inundated and so is most of the area that was Ganga Bhavan para," said block development officer Shantanu Naha, who visited the site at 4 pm.

He added that around 450 to 500 families had been flooded out of their homes.

It was the roar of the river pounding against the bungalow that woke up Rakesh Sheikh, who worked as an errand boy for the guests at the Bhavan, a little after 2 am.

Realising what was about to happen, he woke up Afsar Ali, the night guard, and ran out of the building to alert others

the building to alert others.
Outside, the villagers slept,
unaware of the devastation.

Around 3.30 am, the local mosque issued a warning over its microphone, asking the villagers to evacuate.

"We ran out and informed the other villagers. There was noth-

ing else to do. The river had just gone wild and was lashing at the bungalow. We stood for hours along with people who had abandoned their homes and watched the land go down. It was terrible." said Afsar.

ble," said Afsar.
"I would have been swept away had it not been for Rakesh who woke me up," he said.

Irrigation department executive engineer Pundarikaksha Roy said he was informed about the Bhavan's collapse at 3 am.

"We knew the bungalow was in danger of being washed away but did not imagine it would be so soon. I have informed the chief engineer about the damage over phone," he said.

That the department officials had apprehended a damage was evident from the fact that bookings for the bungalow had been stopped. Expensive kitchen ware had been removed along with television sets and some of the furniture.

The Bhavan was a luxurious two-storeyed bungalow with eight bedrooms, a spacious dining hall and a living room. Roy pegged the loss at Rs 10 lakh. Some pieces of furniture were lost forever, he added.

Interestingly, the irrigation department had spent Rs 4 crore last year to prevent erosion from reaching the guest house.

A huge quantity of boulders had been laid at strategic spots along the river to prevent it from breaking banks.

In 1975, the bungalow was 4 km from the river and provided a scenic view of the Ganga to visitors from a distance.

"Yesterday, the level of the river had risen to 24.82 m. The level increased by 1.39 m in no time because of heavy rain in the catchment areas in Uttar Pradesh and Bihar and the release of over 200,000 cusecs from Indrapuri dam in Bihar," said irrigation engineers.

### Distress in Malda Rubbing salt into old wounds Rubbing salt into old woun

The West Bengal government's decision to release Rs 3 crores for rehabilitation of families in Malda affected by erosion of banks of the Padma looks like a public relations exercise to stem resentment rather than an effort to get to the roots of the problem. Steady erosion has left thousands without homes. That the affected people are getting increasingly restless was evident when the finance minister visited Malda on 20 August — only to repeat the promises made over the years and never honoured. Predictably, this has incensed the victims. The government grant is a knee-jerk reaction. The state had sought no less than Rs 1,487 crores from the National Calamity Relief Fund to tide over distress caused by floods in the region. The amount sanctioned does not proceed beyond rubbing salt in the wounds. And now the formalities of identifying and allotting land worth Rs

5,000 to each family will take a long time while victims continue to live in distress.

Distribution of relief in North Bengal has been a source of tension among political parties even within the Left Front. The problem has assumed another dimension after the CPI-M lost control of the Malda Zilla Parishad to the Congress-Trinamul-BJP alliance. Marxists need to recover lost ground. What they didn't bargain for was the fiasco surrounding Asim Dasgupta's visit. The relief minister makes it worse by suggesting that rehabilitation work was not taken up in Malda because similar demands would come from Murshidabad, Cooch Behar and North Dinajpur. This is adding insult to injury. While fair and adequate distribution of relief without political strings attached is of utmost importance, it is equally essential to devise a more permanent

scheme to cope with erosion.

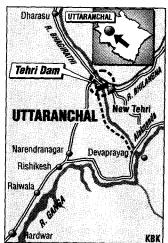
### Supreme Court nod for Tehri dam project ag

By Our Legal Correspondent

NEW DELHI, SEPT. 1. The Supreme Court today cleared the decks for the construction of the ongoing Tehri hydel dam project in Uttaranchal, holding that there was no material on record to show that statutory environmental conditions had not been complied with

not been complied with.

A three-judge Bench,
comprising Justices S.
Rajendra Babu, D.M.
Dharmadhikari and G.P.
Mathur, said by a 2:1 majority
that the petitioner, N.D. Jayal,
had not established nor placed
any material to show that the
work was being carried out
without complying with the
environment norms and
guidelines. Justices Babu and
Mathur, giving the majority
verdict, said the work was



being carried out under the supervision of a monitoring committee.

The Bench, however, made it clear that tunnels number

one and two should not be closed and no further impounding of water should be carried out till the rehabilitation work was completed.

Justice Dharmadhikari, giving the dissenting verdict, said that an expert committee should be set up to carry out all scientific tests, including a 3-D seismic survey, and suggest corrective measures. He also said that the rehabilitation work should be completed. The petitioner had alleged that the construction of such a big project in an active seismic zone had rendered the dam unsafe as no tests regarding safety of the dam from earthquakes, experienced frequently in the region, had been carried out so far.

1. 2 SEP 1000

### Taj file tamper cloud on secreta

On the Supreme Court's order,

the "interpolated and tampered" files had been sent to the Central Forensic Science Laboratory for ver-The CBI is now planning to quesification by a handwriting expert. hra, of tampering files pertaining to and forests secretary, Mr KC Misthe start of work on the controver-NEW DELHI, Aug. 31. — The CBI has accused the Union environmen Statesman News Service and Agencies

According to the CBI, Mr Mishra of the joint secretary and special secretary" that the UP government be had made "interpolations and tampered with files in order to cover up his failure" to approve the "proposal asked to proceed with the work only after getting statutory clearances and approvals. The CBI, on the Supreme Court's order, is probing into alleged irregularities in the construcsial Taj Heritage Corridor project. tion of the Rs 175-crore project.

triggered the recent political crisis in

the go-ahead.

the state, leading to the change of

government.

The Supreme Court ordered the

Efforts to get Mr Mishra's comceed because he refused to take nied having tampered with the files when he was questioned by CBI offiment on the ČBI charge did not succalls. The official had reportedly de-

cials. The agency is yet to register a had directed the CBI to interrogate specific case against Mr Mishra.

around five "high and mighty" persons named in the agency's interim report for their alleged complicity in the construction of the project. The agency was asked to probe the assets of these people (incidentally, the UP government had released Rs 17 crore The CBI was asked to complete the for the project and allegations of kickprobe "expeditiously" and submit the backs have been doing the rounds) final report by 11 September. The controversy over the project is believed to be one of the factors that tion former chief minister Miss ect started only after her office gave Mayawati because work on the proj-

Taking note of the CBI's charge the Supreme Court also ordered the Central Forensic Science Laboratory director to conduct a handwriting that files had been "interpolated" analysis of the files.

muddin Siddiqui (considered close to Miss Mayawati), suspended envi-The CBI has questioned former ronment secretary Mr RK Sharma, UP environment minister Mr Nasee chief secretary Mr DS Bagga, and irregularities in the project. The proved the project without the mandatory environmental and other CBI on 16 July to probe the alleged clearances. The probe brought sevagency was asked to identify the officials and other people who had aperal top UP and Union government

Another report on page 4

On 21 August, the Supreme Court

officials under scanner.

> 1 SEP 1003

THE STATESMAN

P & SFD

### Court notice to Centre on water poison

### OUR LEGAL CORRESPONDENT

New Delhi, Aug. 25: The Supreme Court today issued notices to the Centre for framing guidelines to fix standards for drinking water to rid it of pesticides and other harmful chemicals.

The court issued notices to the Union food ministry and the consumer affairs, health and environment ministries on the basis of a petition by the Centre for Science and Environment (CSE).

The CSE, whose findings this month that samples of 12 soft drinks contain very high levels of pesticides caused a furore, said drinking water across India contains similar substances.

In a letter to the Supreme Court, the CSE said potable water samples tested nationwide contained pesticides and sought a direction to the Centre to fix standards for drinking water. A bench of Chief Justice V.N. Khare and Justice S.B. Sinha treated the letter as a petition and issued notices to the Centre today.

On Friday, Trilochan Singh Kathpal, a scientist with the all-India co-ordinated research project of the Indian Council of Agricultural Research, had said agricultural scientists have been sitting for years on evidence that India's water is contaminated with pesticides. He said the first signals of the extent of pesticide

residues in groundwater and in irrigation water emerged five years ago and have been supported by subsequent reviews. But scientists have not gone public with the information for fear of causing an explosion of public concern.

Appearing for the CSE, senior counsel Rajeev Dhawan and lawyer Sanjay Parikh today said the Centre had issued a notification fixing standards for bottled water after the institute revealed in February the presence of pesticides in the water. But it said similar guidelines had not been issued for potable water. The CSE counsel said the Centre should fix standards for drinking water "as crores of Indians drink water which is not even potable".

The judges directed additional solicitor-general Mukul Rohtagi to take instructions from the Centre and file an affidavit within four weeks.

The apex court clubbed the CSE petition with a similar plea by Sakshi, an NGO. Sakshi said indiscriminate use of pesticides in agriculture had resulted in contamination of food, milk, groundwater and even breast milk (since vegetables that are consumed contain pesticides). The court has made the Association of Pesticide Manufacturers a party to the case and said both matters should come up for hearing after seven weeks.

### NO 'CLEAN CHIT' TO COLA GIANTS: SUSHMA

### Pawar heads JPC to probe soft drinks issue

By Our Special Correspondent

NEW DELHI, AUG. 22. Parliament today appointed a 15-member Joint Parliamentary Committee (JPC) with the Nationalist Congress Party leader, Sharad Pawar, as chairman, to suggest "suitable safety standards for soft drinks, fruit juice and other beverages" after evaluating the findings of the Centre for Science and Environment on pesticide and other harmful residues in soft drinks.

The JPC has been asked to finalise its report by the first day of the winter session of Parliament.

The 10 members from the Lok Sabha are: Mr. Pawar, Anantha Kumar and Sudha Yadav (BJP), Ramesh Chennithala and Avtar Singh Bhandana (Congress), K. Yerran Naidu (Telugu Desam Party), E. Ahamed (Muslim League), Akhilesh Yadav (Samajwadi Party), Anil Basu (CPI-M) and Ranjit Kumar Panja (Trinamool Congress). The five Rajya Sabha members are Prithviraj Chauhan (Congress), S.S. Ahluwalia (BJP), Sanjay Nirupam (Shiv Sena), Prasanta Chatterjee (CPI-M) and Prem Chand Gupta (Rashtriya Janata Dal).

Talking to the media later,

the Parliamentary Affairs
Minister, Sushma Swaraj,
denied that she had given a
"clean chit" to the cola giants,
Pepsi and Coca-Cola. "If some
companies had used her
statement in Parliament to
advertise their soft drink as
safe, that was wrong of them,"
she added.

"I had only stated what the laboratory findings were and juxtaposed them against the analysis done by the Centre for Science and Environment," she said. "In fact, it was the media which described my statement as a clean chit to the cola giants," Ms. Swaraj added, pointing out that her report was "mixed" with some brands faring better than others.

To a question, she clarified that the "ban" on serving of colas and some other soft drinks in Parliament would continue till the JPC submitted its report and came to a conclusion.

### Offer rejected

Ms. Swaraj was more than annoyed that some people had continued to insinuate that money might have changed hands.

It was for this reason that the Government had straightaway offered the chairmanship of the JPC to the Opposition. She said she had asked the Congress whether the Leader of the Opposition, Sonia Gandhi, would like to chair the JPC, but that was turned down, as was the offer that the Congress deputy leader, Shivraj Patil, chair it.

As against the rules under

As against the rules under which the BJP and its allies would have dominated the JPC, the Government had been content to let the Opposition parties have the majority, yet another "proof" of its strict neutrality on this issue.

At the same time, Ms. Swaraj was at pains to point out that she could not take action against the cola giants when their product was within the norms of the country "as of now".

After the JPC report is made available, the Health Ministry would notify new standards for soft drinks, juices and other packed beverages that contain 90 per cent water, she said.

Ms. Swaraj also cautioned against judging everything in India against European Union norms.

"If that is done we will all die of thirst," she said. At the same time she would like to ensure that what was available was safe

### Furore over to clean chit' to soft drinks firms

**By Our Special Correspondent** 

NEW DELHI, AUG. 21. The Government today agreed to set up a Joint Parliamentary Committee to inquire into allegations of high-level of pesticide residues in soft drinks in the wake of demands by the Opposition parties in the Lok Sabha that a JPC be set up to probe the matter.

The demand followed a statement by the Minister of Health and Family Welfare, Sushma Swaraj, in which she said that "the samples of the soft drinks tested were well within the safety limits as per the existing standards of packaged drinking water"

Her statement sparked angry protests with the Opposition parties alleging that the two big soft drinks manufacturers had been given a "clean chit" by the Government. "How much donation was paid before the statement was made," asked Satyavrat Chaturvedi of the the Congress.

Charges flew thick and fast as the Minister sought to defend the report sent by the Central and Technological Research Institute, Mysore, and the Central Food Laboratory,

Kolkata.

The Samajwadi Party's Mulayam Singh Yadav demanded that the Government agree to set up a JPC. He was supported by the Congress, the Telugu Desam Party and the Lokjanshakti Party.

Reacting to the Opposition demand, Ms. Swaraj said the Government had no objection to setting up a JPC. Stung by charges that she might have helped the soft drinks manufacturers, Ms. Swaraj said that as far as she was concerned she had no objection even if the JPC comprised only Opposition members. "Let it be headed by an Opposition member, I have no objection," she said. She challenged Mr. Chaturvedi to name the person who had re-ceived the donation and urged the members to refrain from casting aspersions on the CFTRI findings. "It enjoys an interna-tional reputation and is not under the control of the Health

Earlier, in her statement to the House, Ms. Swaraj said that "results clearly showed that all the 12 samples do not have pesticide residues of high order as alleged by the Centre for Science and Environment (CSE) report and were well within the safety limits". The samples were sent for examination to the CFTRI and the CFL and her statement was based on their findings.

Though the safety standards had been met by the soft drinks the Governmanufacturers. ment was considering bringing in European Union (E.U.) norms for water content in soft drinks, she said. "It is also to be noted that the assertion of the soft drink manufacturers that their product is within the E.U. standards has not proven to be correct for 100 per cent of the samples.'

Later, Ms. Swarai told reporters that the JPC could consist of 14 or 21 members. If it was a 21-member panel, 14 could be from the Lok Sabha and seven from the Rajya Sabha.

The existing norms may have been adequate some time ago when the use of pesticides in India was much less, but now with increasing use of pesticides, the groundwater and other water sources are likely to be more contaminated and therefore stricter norms need to be in

place," she conceded.

By April 2004, E.U. norms would be enforced for bottled mineral water, and "there was no reason for the Government not to consider applying the same norms to the water content in soft drinks as well", she said. The norms would specify the methodology of tests the product needed to pass. She denied the CSE's charge that the lethal chemical, malathion, was present in the soft drinks. If the SE report had been correct on this point, "we would have been dead", she said. But she emphasised that she did not want to denigrate the CSE and was thankful to it for highlighting a problem that needed attention.

**CSE** and cola companies stick to stand: Page 12

### Deadline for CBI Tai probe

OUR LEGAL S CORRESPONDENT

New Delhi, Aug. 21: The Supreme Court today directed the CBI to complete investigations into the Taj heritage corridor scam by September 11 and submit a report to the court the same day.

The bureau's plea for four months more to complete the probe was thus rejected. It had submitted an interim report to the apex court last week.

On the basis of the report, a division bench of Justices M.B. Shah and A.R. Lakshmanan observed that the "high and mighty" were involved, including "four to five important officers". So "a higher officer of the CBI" should interrogate them, the judges directed.

The bureau should also interrogate "the person who is wielding the authority there (in Uttar Pradesh)", they said.

"On the basis of the report, we direct a higher official of CBI to immediately interrogate four to five or more persons who are involved in the decision-making process to grant contract for the construction of the Taj heritage corridor project," the bench said in its brief order.

Declining to make the interim report public, the bench said it was imperative for the CBI to speed up the investigation so

persons named did not get time to "manoeuvre".

The bench ordered that the report be kept in sealed covers as "it would not be proper to make public the names of the persons at this stage".

The director of the Central Forensic Science Laboratory was ordered to engage a handwriting expert for an opinion on the alleged interpolation of certain documents.

The bench rejected the plea of court commissioner and amicus curiae Krishan Mahajan that the officials named in the report be suspended pending investigation. They could not be suspended without a hearing, the judges observed.

For the CBI, additional solicitor-general Altaf Ahmed said that one of the four or five important persons the bureau questioned in the preliminary stage "refused to sign a single paper". The bench said the bureau could question that person again.

The Rs 175-crore corridor project was feared to endanger the 17th century Taj Mahal and devastate the Yamuna because of land reclamation.

The bench said that Rs 17 crore were released for the corridor construction, violating rules and norms and without sanction from departments such as pollution control, environment and tourism.

### Clean chit to colas, Opp cries cheat

HT Correspondent New Delhi, August 21

THE CENTRE on Thursday gave a clean chit to all the 12 soft drinks brands in the pesticide controversy, but was forced to agree to a Joint Parliamentary Committee probe after the Opposition alleged it was bribed by the cola majors.

Health and Family Welfare Minister Sushma Swaraj told the Lok Sabha that the government's tests had found the colas safe for drinking according to current Indian norms — that is, the Prevention of Food Adulteration (PFA) rules relating to packaged drinking water.

But she virtually acknowledged the laxity of these standards by adding that the Centre might introduce the stricter European Union norms for soft drinks as well as packaged water. She also admitted that 9 of the 12 samples were unsafe according to the EU norms.

As soon as the minister gave a certificate of safety to the colas, the Opposition alleged a "coverup job". Congressman Satyavrat Chaturvedi asked the government how much "donation" it had received from the soft drinks giants ahead of the elections.

An angry Swaraj replied she was prepared for a discussion but the Opposition, led by Samajwadi Party chief Mulayam Singh Yaday, said it would not settle for anything less than a JPC probe, to which the government agreed.

Swaraj said that tests by the Mysore-based Central Food Tech-

**Neither Choke-a-Cola nor Pepsicide** Samples collected from Ghaziabad, Jaipur, How many times higher than EU norms? Mathura ... Hearts from where CSE got them Govt says CSE says Coca-Cola 37 Pepsi 30 Nit Limca **Diet Pepsi** Fanta 70 Mirinda (Lemon) 2.0 28 Mountain Dew 22 2.0 Thums Up 33 7 Up 1.6 3.4 39 Mirinda (Orange) 3.2 Sprite **Blue Pepsi** 

nological Research Institute (CFTRI) and the kolliata-based Central Food Laboratory (CFL) showed that the pesticide residues in all 12 samples was much lower than those found by the Centre for Science and Environment (CSE). But she acknowledged that "the assertion of soft drink manufacturers that their products are within EU limits has also not proved correct... in

some cases they are a few times higher than the EU limit."

The minister said the samples collected by the Centre came from the same bottling units from which the CSE had got its samples. The CFTRI Labe pessicite residual "In the remaining the

CSE alleges... the residues are higher... (by) 11 to 70 times", Swaraj said. Similar results were received from the CFL.

"The CFTRI conducted an additional sophisticated test using the GCMS method for identification of the molecular structure of all the pesticides in the samples. This is a confirmatory test not done by the CSE," Swaraj said.

CSE director Sunita Narain,

### **Bengal backtracks**

THE BENGAL government on Thursday climbed down from its tough posturings against the cola majors, saying it would not act against them even if the state pollution control board finds their products unsafe for drinking. The test report, to be released on Friday, will not be made public. Instead, it will be sent to the Centre, which alone has the right to act against the companies. Environment Minister Manab Mukheriee said. The state will not even recommend any action. Mukherjee had earlier vowed to close down the bottling units if cola samples were found to be high on pesticides. On Thursday, he said, "We don't have any right to take action against the soft drink manufacturers."

HTC, Kolkata

however, questioned the methodology used in the Centre's tests and said the government had acted in "private interest, not in public. We need to know when and where the samples were picked up and their batch numbers."

PepsiCo India welcomed the government clean chit and said it might take legal action against CSE.

### Doctor says Paes may have a common malady

HT Correspondent & PTI Kolkata, August 21

SO FAR, so good. Leander Paes is a lot chirpier than he was two days ago. And his doctor thinks he may not have brain tumour but a brain cyst from an infection "rather common in India".

"While not yet proven in Leander's situation, one rather common infection in India causing such a brain lesion is cysticercus granuloma caused by the larval form of a tapeworm," said Dr Clarence Brown, president-chairman of the MD Anderson Cancer Centre, where Paes is being treated. He said results of numerous tests on Paes are still being awaited.

"He is no longer experiencing headaches and his vision is normal. He remains in excellent spirits and is physically active."

The player's sister, Jackie, said she spoke to Leander on Wednesday and "he sounded a lot better". Father Vece left the city on Thursday evening to catch a connection to Orlando—the doctor and hockey Olympian had missed his flight on Wednesday. Jackie said Vece is expected to be at Leander's side early on Saturday (Indian time).

The dizziness and giddiness that had been bothering Leander since the Toronto Open has abated, Jackie said. Before departure, Vece Paes said on television that Leander played some basketball at the hospital on Wednesday.

### Parties in a fix over Malda erosion

Statesman News Service /

MALDA, Aug. 17. — All political parties in Malda have emphasised the need for rehabilitation of erosion victims, but have failed to decide how to rehabilitate them.

The Malda district magistrate, Mr AK Bala, today convened an all-party meeting to discuss ways to check erosion of the Ganga and combat the flood situation in the district. Political parties unanimously expressed their dissatisfaction over the work being carried out by the state irrigation department to prevent erosion in the district.

The food processing and horticulture minister, Mr Sailen Sarkar, said the state government had raised the rehabilitation issue in the Cabinet but failed to implement the project because of paucity of funds.

The state is not in a position to implement the project without financial assistance from the Centre, said Mr Sarkar.

The minister urged the political leaders, including those in the Left Front, to launch a joint movement to press for implementation of the rehabilitation project.

Mr Sarkar asked the sabhadhipati of the Malda zilla parishad to inform the MP, Mr ABA Ghani Khan Choudhury, about the proposed movement against Ganga merges with Pagla

MALD 17. — The Ganga and its risk is the marged in the Malda district.

People, oin the Ganga and Pull merged control of the district.

in Panchananpur area of the district last night, affecting some 5,000 people, Malda district parishad chief Mr Gautam Chakraborty said.

The district administration has sounded an alert in five blocks – Kaliachak I, Kaliachak II, Kaliachak III, English Bazar and Manikchak – about possible erosion. — PTI

the Centre.

The minister said all political leaders, including the MLAs and the MPs of Malda and Murshidabad, would go to Delhi to apprise the leaders at the Centre of the grave situation in the district.

Some leaders pointed out that the erosion victims might be rehabilitated in the land marked in different blocks. But Mr AH Khan Choudhury proposed that the banks of the Ganga would be protected in a better fashion with the aid of foreign technology as the existing technology had proved to be a failure.

He pointed out that the Bagladesh government had been able to protect the Padma bank line with Japanese assistance.

The district Congress p resident, Mrs Rubi Noor, urged the administration to decide how to tackle flood and erosion in the district.

The LF convenor, Mr Jiban Maitra, suggested that land that had come up on the right bank of the Ganga, after eroding the left bank, which is currently administered by the Jharkhand government, should be measured based on the mouja map of Malda district and distributed to erosion victims officially.

According to the superintending engineer, Mr B Dey, more than 53.20 hectare land has been eroded on the left bank of the Ganga at Kaliachak II, Englishbazar and Manikchak. The Kaliachak II and Ratua blocks were the worst affected.

The DM's report says 525 families have been affected by erosion at Harishchandrapur, 600 at Ratua, 900 at Manikchak and 1350 at Kaliachak II

The spokesperson of the Malda irrigation department assured that a dyke would be constructed in the Jotekosturi area within the next seven days as a step to prevent erosion.

The remaining part of the second defence line of the eighth retired embankment would also be completed soon, he said.

THE STATESHAR

1 8 AUG 2003

Heatwave scorches France, 3,000 dead

Paris: France's health ministry said on Thursday that up to 3,000 people may have died across the country from a two-week heatwave that scorched much of Europe, confirming the toll put forward by doctors who had accused the government of un-derstimating the scale of the disaster. "The (death) figures are high, per-

haps even very high..We can now talk about what happened as a true epidemic, with everything that means in terms of the number of victims, health minister Jean-Francois Mattei said in an interview to France Inter

The acknowledgement followed

days of warnings from doctors, police and undertakers that bodies had piled up staggaringly quickly in the fold up staggeringly quickly in the 40-degree-Celsius temperatures that had

baked the country.

An association of hospital emergency room doctors, AMUHF, which had accused the government of un-derestimating the crisis, held a news conference to say it estimated 2,000 people had died during the hot weath-

er.
"The figures are becoming catastrophic," the head of the association, Patrick Pelloux, said. "We can talk about thousands of victims, even though we can't yet fully measure the phenomenon." AFP

1 5 AUG 2003

THE TIMES OF INDIA

1 5 2003

# Supreme Court rejects Coke plea for fresh testing

### **OUR BUREAU**

India today received a strong rebuff from the Supreme Court which refused to entertain the cola multinational's petition New Delhi, Aug. 13: Coca-Cola seeking independent testing of its soft drink brands to prove

ments should not take action on the basis of an NGO's report that its soft drinks contained unac-ceptably high pesticide residue, a division bench of Justices S. Rajendra Babu and A.R. Lakshthat they were safe to consume. Rejecting Coke's contention that the Union and state governmanan observed that no right of the cola company was infringed

The bench allowed Kapil Sibal, senior counsel for Coca-Cola, to withdraw the petition, upon, declining the plea.

which in legal parlance is known as "dismissed as withdrawn".
The judges wondered why some cola companies had moved the Delhi and other high courts while others chose to approach the apex court directly.

The bench also declined to

entertain Sibal's plea that the petition be treated as a public interest litigation (PIL) as it would

"protect the interest of the consumers" at large.

"We approached the Supreme Court to quickly address the current consumer confusion

Coca-Cola "merely" on the basis of the Centre for Science and Environment (CSE) report. this issue. The Supreme Court did not want to interfere at Sunil Gupta, vice-president, public affairs and communicathis early stage but said we could return later if necessary," said In a signed statement, Coke said: "We continue to believe thtions, at Coca-Cola India.

at a consistent, professional testing protocol is necessary if the interests of consumers and the interests of beverage manufacturers are to be jointly served."

The statement said "cor

sumers need to know that the products they are buying in one part of India are manufactured under the same quality and safestandards that apply in al

other parts of the country!. Earlier, Sibal said various municipalities in Bengal, Punjab and Rajasthan had initiated the process to ban the sale of

forum" he deemed appropriate to "enforce his right" but "we will not entertain this petition".

Last week, Pepsi-Cola had made a similar plea before Delhi The judges said the petitioner could approach "whichever

High court, which ordered the government to form a body of experts to test the soft drink

requested the today Sibal

trine of forum shopping". The judges said there were many "appropriate forums" as the cola company was selling its prodto ban the sales of the soft drink "at least" till a committee of ex-perts to be set up by the Union government tested the samples Supreme Court to issue an order to the various governments not

ucts throughout the country. The Bihar government today jumped on to the testing bandwa gon by collecting soft drink samtaliputra and Pepsi's unit in Hajipur. The samples were collected ples from the Coke factory in Pa by the state's health department and sent for testing to the Centr al Food Laboratory in Calcutta

> Coke sales as public across the drinks — a point that Coca-Cola India has consistently refused to

Interestingly, Sibal admitted that the CSE report had hurt country were shunning soft

and gave its opinion.

There is, however, one bit of good news for Coca-Cola India, which has had a rough week bmits its reports on the findings. There is, however, one bit of

P. Sankaran informed the state since the CSE revelations on August 5. Kerala's health minister Assembly today that an interim test report on samples of Coca-Cola from the company's Plachimada plant in Kerala had revealed that the sludge did not contain cadmium and the lead content was much lower than the permissible level.

### US embassy

The US embassy today said it controversy over the alleged presence of pesticides in soft drinks made by Coca-Cola and was "carefully following" Pepsi, adds PTI.

The department will start furth-

When the judges declined to

acknowledge.

accept any of his arguments, Sibal said if the Supreme Court refused to entertain the plea, where else could the manufac-

turers go, advancing the "doc

er action after the laboratory su

Pepsi "Coca-Cola

working intensively with the Indian government to clarify these issues with the assistance of independent scientific experts and laboratories," the embassy said in a release.

confident that their products Both Coca-Cola and Pepsi are tional and international quality meet or exceed the highest na

in close contact with the two companies, the release said: "Coca-Cola and Pepsi are highly reput-able and responsible firms with have repeatedly emphasised it is Stating that the embassy was their top priority to provide the consumer with safe products". and safety standards, it said. worldwide operations.

AUG 2003

Crude spill fuels fears of eco-disaster

KARACHI, AUG. 13. A Greek-registered oil tanker that ran aground off Karachi's coast has developed cracks in its hull and is threatening to break apart and spill tons of oil in rich fishing waters, port officials and environmentalists said on Wednesday. A low tide Wednesday morn-

ing put extra stress on the MT Tasman Spirit — which is already leaking oil — and caused the ship to buckle, said Ahmed Hayat, Chairman of the Karachi Port Trust, which manages the southern city's port.

"The ship has cracked and can break apart within 12 hours," Mr. Hayat said.

The tanker ran aground on July 27 in monsoon rains and high tides, and crews have been racing to siphon off oil to make the vessel lighter so it can be pulled to deeper waters. The ship was carrying 62,000 tons of crude oil for state-run Pakistan Refinery Ltd., and about 20,000 tons have already been siphoned off into a second tanker, officials said. The ship was chartered by the Pakistan National Shipping Corp.

tanks and four had been emptied. Only three of the remaining tanks were 'vulnerable,' and each one contains about 5,000 tons of oil, he said.

An unknown amount of oil has already leaked out of the ship, and Karachi's government closed all public beaches on Wednesday afternoon, city official Hanif Akbar said. Children were finding dead fish and sea turtles covered in oil.

"If the oil spill is on a big scale, it will affect all marine life," said Ahmed Saeed, head of environment assessment services at IUCN, the World Conservation Union.

He added that if the spill



The Greek oil tanker, Tasman Spirit, which ran aground at Karachi harbour on Wednesday. (Below) People collecting oil leaked from the tanker. — Reuters, AP

Brig. Iftikhar Arshad, general makes its way to Karachi's man-manager at the Karachi Port grove forests — rich breeding Trust, said the ship had about 12 grounds for local fisheries — it would seriously threaten fish eggs and other marine life like sea turtles, shrimp, crabs and even dolphins.

But Mr. Hayat played down the threat of the spill reaching the mangroves. "The mangrove forest is in no danger from the spill because the oil would have to pass through the port to get to the forest, and we are controlling the spill at the port." He explained that the Port Authority had cordoned the ship off with "booms," large air-filled bal-loon-like objects made of rub-ber, that stop the spill from spreading and suck in the oil which is disposed of later. Work on the oil transfer got



off to a slow start when the ship's pumps got stuck and stopped working.

The problem was fixed and

oil from the tanker was being moved to another tanker that arrived from the United Arab Emirates. — AP



## Govt. ordered to test soft drinks samples

By Our Staff Reporter \( \)(0.1

NEW DELHI, AUG. 11. The Delhi High Court today directed the Union Government to get samples of the soft drinks produced by PepsiCo India Holdings Pvt. Ltd. tested in accredited laboratories for presence of pesticide residues within three weeks and sub-

Justice B.D. Ahmed issued the direction when the Additional Solicitor-General of India, K.K. Sud, agreed to a proposal by the Salve, counsel for the petitioner company, that his client was ready to have its soft ormer Solicitor-General of India, Harish mit a report to it.

Mr. Justice Ahmed directed PepsiCo and the Centre for Science and Environment

pany to the court to supply all scientific rection to the Government not to rely on the CSE report. and technical data available with them regarding such tests to the Government to

cause notice issued to it by CSD threatening to stop purchase of soft drinks produced by Mr. Justice Ahmed also directed the petitioner company to file a reply to a showthe petitioner in view of the CSE findings.

facilitate rigorous tests of the samples. The judge also noted the CSE's contribu-

tion towards bringing the issue of contam-

ination of soft drinks to public notice.

The court issued notices to all the respondents, including the Union Government through the Ministry of Health and

The CSE director, Sunita Narain, who was present in the court during the hearing, later expressed satisfaction over the court

Central Committee on Food Standards would take up the issue of setting standards Mr. Sud also assured the court that the for presence of pesticides in soft drinks to his admission made earlier that at the when Mr. Justice Ahmed drew his attention moment there was no ceiling on the presence of pesticides in soft drinks Family Welfare, the Canteen Stores Department (CSD) through the Defence Ministry and the Ministry of Food Processing Industries, for September 22. A counter-reply and a rejoinder to it would have to be filed within four weeks and five weeks respectively The court passed the orders on a civil

CSE), whose test report brought the com-

writ petition filed by PepsiCo seeking a di-

from today, Justice Ahmed said.



### House nod must for river water pacts

**THIRUVANANTHAPURAM, AUG 11.** The Irritation Conservation Bill seeking to bring inter-State river water agreements within the Minister, T. M. Jacob, today introduced waters, establishment of a Dam Safety Authority and farmers' participation in prohibition of inter-linking of river water resources management and purview of the State Legislature, the Kerala Irrigation and Water

Piloting the Bill through its preliminary stages, the Minister said Section 30 of the Bill clearly stated that "no water from a agreement between the State Government and the Government of such other State or the Union territory in terms of a resolution passed by the State Legislative distributed to any other State or Union Ferritory except in accordance with an water course in the State shall be utilisation.

the legislation envisaged the setting up of In other words, the provision precludes a Dam Safety Authority, comprising officials and experts. The Bill, which was Legislature, he added. The Minister said referred to the Subject Committee, also decisions without the knowledge of the prohibits diversion of water from one the possibilities of any Governmental Assembly to that effect." river to another.

Mr. Jacob said the new Bill had been

and was not averse to any suggestions from the Opposition during the Subject

mind on such an important legislation

renewed in tune with the changing times. The existence of different types of laws in the Travancore-Kochi and Malabar areas hurdles. The new Bill had been brought in the context of the vast changes that had taken place in the concept of water through a comprehensive unified law. The existing laws governing irrigation were as old as 1865 and had not been had also posed several administrative protect the State's water resources management and utilisation.

The Minister said the Bill provides for a management with the participation of the farm community. The Bill has provisions Management and Utilisation Board would also be set up to advice the Government carry out maintenance of field channels audit mechanism that ensures equitable which empowers farmers committee to on issues related to water management and canals, besides instituting a social sharing of water resources among novel concept of water resources farming communities. A Water

the basis of the sentiments and opinions expressed at an all-party meeting convened by the Chief Minister and He said the Government had an open He said the Bill had been drafted on

averse to the proposal to appoint judicial officers to head the Dam Safety Authority. within 500 meters of dams, checkdams provisions which banned sand-mining He said the proposed legislation had He said the Government was not and other irrigation facilities.

### Marad: Govt. to consult parties

By Our Special Correspondent

sultations with major political parties on the rehabilitation of families displaced from Marad following the May 2 violence. Replying to a submission by V. K. C. leys were already on between the Government and the Opposition on the subject. The Government was keen on re-Minister, A. K. Antony, has said that the day, the Chief Minister said informal parsuming rehabilitation of the displaced fam-THIRUVANANTHAPURAM, AUG. 11. The Chief Government proposed to hold more con-Mammed Koya (CPI-M) in the Assembly to-

He said the Beypore police had registered a case on five counts against the persons who had threatened one Ummer and famlly, who had returned to Marad. ilies at the earliest, he added

FRIDAY, AUGUST 8, 2003

### CORPORATE IRRESPONSIBILITY (19 )

MULTINATIONAL COMPANIES HAVE been put in the dock once again by the Centre for Science and Environment: its laboratory tests have revealed that the soft drinks marketed by these firms contain pesticide residues well in excess of European Union norms. Just six months ago the CSE's tests of bottled drinking water sold by Coca Cola and Pepsi revealed levels of toxicity that would not meet international regulations. That was clearly not enough warning for the global giants to tighten quality standards in all their products. It says something as well of the Government's attitude towards food safety norms that after introducing new regulations for bottled drinking water, it did not formulate similar standards for soft drinks. It has taken the latest round of CSE tests to goad the Bureau of Indian Standards into reviewing the norms for soft drinks.

The responses of the two companies to the new findings have been less than responsible. The corporates have merely asserted that their products are absolutely safe. They have even turned aggressive with threats of legal action against the CSE. And one of the firms, Coca Cola, has now released the results of an independent test conducted in the Netherlands that do not in any way establish that its soft drinks meet food safety norms. The examination by the Dutch laboratory was only of sets of bottled water produced in different locations in India. Those one-time tests showed that the chosen samples of drinking water products did meet safety standards. However, the soft drinks produced in the country were themselves not tested in the laboratory. The cola companies have to demonstrate that they are serious about meeting food safety norms and specifically that they do not follow double standards in India. The problem, of course, is partly that the existing national regulations allow the firms to be lax about standards. The Government does not at

present specify detailed norms. This, however, does not absolve the corporates of the duty of independently following the strictest of standards. The argument that there are many other products on the market in India — fresh and processed agricultural produce — that contain far greater residues of pesticide is also no defence for the soft drink giants. Companies that claim to have introduced world class products in the country should also be able to raise the bar in domestic food safety standards.

Much as the multinational soft drink companies have a lot to account for, there are issues in the production and use of pesticides and also in groundwater quality where the Government has been found wanting. For one thing, the CSE tests of both drinking water and soft drinks revealed the presence of pesticides like DDT whose use in agriculture is prohibited. Obviously the state agencies have been lax in monitoring the production and use of banned pesticides. Secondly, environment groups have for years been emphasising that aggressive marketing by manufacturers and poor agricultural extension services have led to farmers spraying excessive amounts of pesticides on their crops. The result has been that these toxic products either remain as residues on the agricultural produce or leach into the soil and then enter the aquifers. Thirdly, agricultural and drinking water needs are increasingly being met from groundwater, especially during years of a rainfall deficiency. In the absence of any monitoring of groundwater, the chemical residues in these resources are entering the food chain or are present in drinking water. If the present controversy turns the Government's attention towards preventing pesticides from percolating into groundwater and towards enforcing strict standards in supplies of drinking water and all food products, a lot will be achieved in improving food safety.

## Deadly heat wave leaves Europe gasping

ROME, Aug. 7. — A deadly heat wave in Europe blamed for deaths, drying rivers and scorching wildfires could last through September, experts say.

societed Press ( ( '

Belgium's Royal Meteorological 40 °C today — the highest temper-Institute predicted it could reach ature it has ever forecast since the institute's founding in 1833.

blistering temperatures or on fires fed by the heat rose to 38 today, The death toll blamed on the death of an officer deployed to after Croatian police reported the

some homes as a precaution in In Italy, fires raging across the country today forced officials to coast in the south and evacuate close a state road on the Amalfi guard the US embassy in Zagreb.



HOT AND WILD: Two boys and a German shepherd escape from the heat by bathing in the Ruhr river near Schwerte, Germany, on Wednesday — AFP

planes were dousing the flames, Weather experts from Italy's which have already destroyed state-funded CNR research centre Water-toting helicopters and Tuscany and the northwest.

hundreds of hectares (acres) of woods and Mediterranean bush.

High-temperature records have five worst in the last 150 years and also been broken in several its highest-temperature ever yes-French cities, and London, where betters wagered on just how high the mercury would rise, registered would likely last until September.

said the heat wave was among the

Spain, Portugal and France, as well as Italy. In the German state of Brandenburg, which surrounds Berlin, authorities today said a had been closed to the public Wildfires, fanned by hot winds. total of 160,000 hectares of forest were reported in Croatia, Greece, terday — 35.4 °C.

Few facets of life escaped the heat wave, which was particularly oppressive because air conditioning in homes and shops is uncombecause of the danger of fires. mon in much of Europe.

#### Passing the bucket Soft drinks, softer laws 44

f only consumer safety laws in the country were drafted and applied as quickly and efficiently as Parliament's reaction to reports on high toxin levels in soft drinks and bunned colas from its canteen! MPs will look after themselves without being told. But they are also public representatives and lawmakers. Their responsibility does not include indulgence in a spot of MNC-bashing. Indian food and beverage companies in general are no better, and probably worse, when it comes to quality control. Recently there were reports that the European Union had refused to accept exports of Indian spices because of high levels of artificial colouring. Whether Coca-Cola and Pepsico use water that contains too much pesticide or whether Indian spice merchants redden up their chilli powder, the issue is the same — bad laws and worse implementation. In the soft drink/pesticide case examined by the Centre for Science and Environment (CSE), the incredible fact emerges that although manufacturers have to obtain clearances from as many as nine authorities, there is no requirement in law that water, the basic ingredient, be tested. Why? Because the providers are official agencies and ex hypothesi can do no wrong or in the alternative are immune from accountability. The government requires that companies like Coca-Cola and Pepsico use potable water but does not consider it necessary to define potability.

The Prevention of Food Adulteration (PFA) authorities, therefore, test Coke, Pepsi, Mirinda, Sprite, etc for cola concentrates, fruit pulp, sugar, etc but not for contamination levels in the water in which is all this mixed. PFA officials say the PFA Act does not include water. The buck, or the bucket, is passed to the urban development ministry. But the latter only has guidelines, not legally enforceable norms, for drinking water. Water is a state subject, central officials say. The Bureau of Indian Standards has norms for bottled (mineral) water. Even that was shown to be inadequate by an earlier CSE study. New BIS norms have been drafted. Perhaps, BIS will be tasked to frame norms for soft drinks, too. But the basic problem is the quality of ground water and the lack of legal teeth in enforcing standards. To begin with, the PFA Act should be amended. As for Goca-Cola and Pepsico, their aggressive counters to CSE findings does not answer why soft drinks sold in the West have lower toxin levels than those gulped down by Indians. The answer is: in India manufacturers know they can get away with it.

# s pesticides in soft drinks

HT Correspondent New Delhi, August 5

the sperm count and damage the

central nervous system.

The level of pesticides in Pep-

si is 37 times that allowed by Eu-DIL MANGE more... pesticides? Delhi NGO Centre for Science jor soft drink brands it tested. In ers Coke and Pepsi held a joint and Environment (CSE) released a report on Tuesday that revealed high pesticide content in 12 ma a rare show of unity, market leadpress conference later in the day to junk the claim and threatened legal action against the NGO.

was found to be particularly

thick with pesticides — 70 times the level allowed by the EEC norm (0.0005 mg/litre). Coca-Cola (45 times) is followed by

Individually, Mirinda Lemon

ure for Coke brands is over 40

(EEC) norms, says CSE. The fig-

ropean Economic Commission

chlorpyrifos — toxic pesticides brands. In the long term, these CSE has found high levels of insecticides — in major DDT, malathion, lindane and cancer or birth defects, decrease chemical compounds can trigger and

Surprisingly, the NGO found

and Pepsi (37).

Fanta (43), Mirinda Orange (39)

no pesticides — not even the per missible level — in the two bot

obtained from the US

ta of Coke said the allegations were "wild, baseless and should be disregarded". They questioned the authenticity of the report, saying CSE doesn't have the ucts tested from 'gold standard' laboratories in Hyderabad and Prevention of Food Adulteration department picks up random Bakshi of Pepsi and Sanjeev Gupexpertise to conduct such sophisticated tests. "We get our prodthe Netherlands. Moreover, the samples every 10-12 days. All our products are world standard and meet the compliance standards of the Bureau of Indian Standards, their joint statement said.

CSE director Sunita Narain said the tests were conducted at the NGO's laboratory under the tles of Coke and Pepsi that they Hitting back at the NGO, Rajiv

supervision of Dr H.B. Mathur, an IIT alumnus. "The accepted GC-ECD and GC-NPD procedures were used to test for 16 pesticides. All samples contained pesticides and in all the samples, the count was higher than EEC standards, she told a news conference.

Smirnen

for checking pesticide residues in soft drinks," said Narain. Narain said the country has no al for soft drinks. "Neither the Food Products Order, 1955, nor the Prevention of Food Adulteration Rules, 1955, lay down the standard laws to regulate the quality of water, which is the basic raw materi

According to her, the pesticide ing as the soft drink industry is findings is particularly alarmgrowing in India

### Injurious to health?



Pepsi, Mirinda Orange, Mirinda Lemon, Blue Pepsi, 7-Up, Coca-Cola, **CULPRITS** Pepsi, Mountain Dew, Diet **CONTAMINANTS** Residues of four toxic pesticides and insecticides Fanta, Limca, Sprite, Thums Up

DANGERS Can cause cancer, affect the lindane, DDT, malathion, chlorpyrifos central nervous system

**EQUALLY GUILTY** Pepsi and Coca-Cola Mirinda Lemon had highest pesticide pesticide residue -- about 40 times content among the brands tested brands have similar amounts of higher than the permitted limit.

#### Residues of toxic pesticides in 12 soft drink brands: CS

#### Coca-Cola, PepsiCo challenge findings

By Our Staff Reporter

NEW DELHI, AUG. 5. The Centre for Science and Environment (CSE) today announced that samples of 12 soft drink brands collected for testing from in and around Delhi contained residues of four extremely toxic pesticides and insecticides lindane, DDT, malathion and chlorpyrifos.
 The multinational companies, Coca-Cola and PepsiCo, immediately challenged the report and indicated that they might consider legal action.

Presenting the findings at a press conference here today, the Director, CSE, Sunita Narain, said that in all the samples, the levels of pesticide residues far exceeded the maximum residue limit for pesticides in water used as "food" as set down by the European Economic Commission (EEC).

She said that each sample had enough poison to cause long-term cancer, damage to the nervous and reproductive systems, birth defects and severe disruption of the immune

The tested soft drinks include Pepsi, Coca-Cola, Mountain Dew, Diet Pepsi, Mirinda Orange, Mirinda Lemon, Blue Pepsi, 7Up, Fanta, Limca, Sprite and Thums Up.

Ms. Narain said that according to the findings, Coca-Cola and Pepsi had almost similar concentration of pesticide residues. While contaminants in Pepsi were 37 times higher than the EEC limit, Coca-Cola overstepped the norm having 45 times the prescribed limit of pesticide contamination.

Faring the worst in the "health test", accord-

ing to her, was Mirinda Lemon followed by Co-ca-Cola, Pepsi, Fanta, Mirinda Orange, 7Up, Mountain Dew, Limca, Thums Up and Sprite. It was also found that pesticides in soft drinks were similar to those in bottled water, which the CSE had tested earlier this year.

Releasing the report, Ms. Narain said: "The inference drawn from the tests is that ground-water used for making soft drinks is infested

Another interesting find was the fact that the same brands found and tested abroad did not contain these pesticides.

"Why these companies are never booked in India is simply because one cannot take them to court since the norms that regulate manufacture of cold (soft) drinks here are not well defined. The 'food' sector is virtually unregulated," she said.

Reacting to the CSE report, both the multi-

national companies — Coca-Cola and Pepsi — described it as "unreliable" and indicated that they might resort to legal action.

The chairman of PepsiCo, Rajiv Bakshi, said, "Our company is well within the limits of the pesticide residue norms set by the European Union for water used in products within public domain. We conform to all norms and are open to all testing by an internationally-accredited independent laboratory and by experienced people."

The chief executive officer of Coke, Sanjiv Gupta, said, "Our product is world class and is the same we sell in Europe and the U.S. These are tested by top grade labs like Vimta in Hyderabad and TNO in The Netherlands.'



WEDNESDAY, AUGUST 6, 2003

#### INTERLINKING PROBLEMS

THE DECADES-OLD proposal to link all of India's major rivers with one another was revived with much fanfare last year. Most political parties welcomed it then as a solution to the country's drinking water and irrigation problems. But it has not taken long for the proposal to come face to face with the hard reality of planning what will be the largest project ever taken up in India. A number of States, from Punjab in the north to Kerala in the south, have expressed their opposition to a transfer of river waters from their territory to other States. The latest example is the considerable anxiety in Kerala about including a link between the Pampa and the Achankovil (flowing through Kerala) and the Vaippar (in Tamil Nadu) in the proposed national river grid. This is only one of many reasons why the ambitious, many would say unrealistic, schedules for execution of the project have already been thrown out of gear.

The high-level task force on the project, constituted in December 2002, was expected to prepare the schedule for completion of feasibility studies and estimate the cost of the project by the end of April this year. It was to then come up in June with the options for funding the project. It was also expected to convene a meeting in May/June of State Chief Ministers and obtain their agreement and cooperation. None of these deadlines has been met and there is no indication that these events will take place in the near future. This is not surprising, for while the interlinking proposal has been spoken about for decades, all the complex engineering, economic, environmental and social issues involved in the project have never been

carefully studied. It is, therefore, not an easy task to draw up in a few months even the time lines for implementation. It will also be impossible to complete within a decade (as decreed by the Supreme Court) execution of a project that at first approximation is estimated to cost Rs. 5,60,000 crores, which is twice the size of India's gross domestic product at present. In fact, the one Government committee that did examine aspects of the proposal to some extent, the National Commission for an Integrated Water Resources Development Plan, was in 1999 ambivalent about the benefits of interlinking the country's rivers.

The drought of 2002 was the context in which the proposal to build a grid connecting India's rivers was revived. Before another drought leads to another round of active interest in the project, it is necessary to come up with answers to two broad sets of questions. The first question is, what will be the total costs and benefits of a river grid project in economic, environmental and social terms. The second will be, what are the different options to meet the future requirements of water and is the interlinking proposal the best among them. Answers to these questions will have to address issues in agricultural technology, patterns of water use, extraction of ground and surface water resources, efficiency in consumption of water in crop cultivation, resource mobilisation, human displacement and changes in the environment. A plan on such a scale and of such complexity as the proposal to link the country's rivers can be taken up only after a range of such substantive issues are analysed threadbare.

त्ताः माप्छ

0 6 AUG 2003





HOT AND BOTHERED: Children frolic in the Trocadero fountains in front of the Eiffel Tower in Paris on Monday, with temperatures reaching 35 degrees Celsius in the city. (Right) Flames engulf a forest close to an important motorway in central Portugal on Sunday. — AFP. AP

#### Heat wave, forest fires wreak havoc across Europe

By Vaiju Naravane

PARIS. AUG. 5. Twenty-five peogan 130 years ago.

ara desert in Africa.

ment to declare a national have been at work. calamity.

ple have perished in a series of planes imported from Canada, these fires for the sheer diabolraging forest fires that rayaged Russia, Italy and France have ic pleasure of seeing the forest huge swathes of territory across been pressed into service. go up in flames. This is worse people have moved out. The Pevrac of the Friends of the degrees Celsius on Monday. In Spain, Portugal, France and Thousands of people have seen than criminal. These people forest has become a place of Earth environmental group. Italy as Europe continues to be their homes destroyed and va- will be found and they will be recreation used essentially by in the grip of the worst heat cationers have had to leave punished," a French Interior hikers and vacationers who do bodies of people in their cars in crossed the 50 degrees mark, wave since record keeping be- their campsites to be herded Ministry official said. into schools and gymnasiums and the Adriatic coast.

"We know there are people Helicopters and fire-fighting who have gone around lighting how to look after forests. Now, dustry. Unfortunately, the trees

A stubborn anti-cyclone has for safety. In what has been depart, human greed and selfish derstand that setting up a bar-found dead after attempting to total number of the dead since settled over the European land-scribed as one of the hottest ness are at the root of many of becue or throwing a cigarette escape the fires in his tractor. mass, keeping out rain-bearing summers in recorded history, the fires. Environmentalists say butt into the bushes could start winds from the Atlantic and fires are raging across parts of the fires are encouraged by an inferno. Also, the forests vices battled to put out almost amongst the worst sufferers sucking in hot air from the Sah- Spain, Portugal, France, Italy modern plantations that have have been taken over by com- 100 separate blazes spread and I have treated several peochanged the eco-system and panies which have replanted across large expanses of forest. ple suffering from ozone pollu-Eleven people have died in No all the fires are due to made it more fragile. "Even 20 them with plantations — that is European cities are sweltering. tion and heat stroke in the past Portugal alone in the last two natural causes. Police forces years ago, these countries had a to say, only one type of tree ei- Florence, Pisa, Rome, Madrid few days," said a doctor. Marc days, prompting the Govern- across Europe say arsonists substantial rural population, ther eucalyptus or acacia, and even Paris saw mercury Bassil.

the underbrush, they know tions for the paper and pulp inunder cultivation and rural more flammable," said Michel corded temperatures over 40

only four per cent of our land is are fast growing and much Toulouse and Bordeaux re-

not know how to respect the central Portugal on Saturday, one more person died of heat While natural causes play a laws of nature. They do not un- while a man in his 50s was also stroke on Sunday, bringing the

Firemen and volunteer ser-

Rural folk know how to clear These are commercial planta- breaking the symbolic 40 degree Celsius mark.

The south-western cities of the Extremadura region of Firemen found three charred Spain where temperatures Thursday to seven.

"Old people and children are

#### LINKING RIVERS-II

A Cure Worse Than The Disease? Some num

By KB SAHAY

The experience in other countries like the former USSR, China, the USA etc. with linking of rivers has been quite discouraging. According to experts in this group the maximum flow that LRP will be able to divert from the Ganga and Brahmaputra during the flood seasons would be hardly four and six per cent, respectively, and this will barely make a difference to the flood flow. The second group does not believe that LRP would be a generator of large quantities of surplus power as is being claimed by the proponents of the project.

#### No justification

The second group thinks that. India's present water crisis is due mainly to mismanagement and lack of proper policies to use water from various sources and for various purposes and there is no valid justification for undertaking the LRP. In fact, the group believes that this project may lead to a situation when the cure would prove to be worse than the disease.

Measures like rain water harvesting, proper management of ground water, prevention of water pollution and stoppage of water wastage can go a long way in solving our water problem and the group believes that there is no need to resort to a drastic step like LRP which is grossly undesirable from any angle.

There is a third group which holds the view that the main cause of India's water crisis is that ever since Independence, governments have always pursued policies to increase the supply of water for meeting the demands of constructing dams and diversions and by promoting ground water extraction through electric or diesel pumps, showing little concern for moderating or optimising the demand factor. This exclusive-supply-side-hydrology adopted by the authorities has given rise to many serious problems like unsustainable exploitation of ground

water, waterlogging, salinisation and soil erosion in a very large part of our land area and submergence of forests and environmental damage by the dams which are now suffering badly due to high siltation rates.

Hence this group is stressing the need to redefine our water policy and change it from the irrigation in India instead of the wasteful conventional system of irrigation.

Also, water scarce areas should not grow water intensive crops like sugarcane or paddy. The experts belonging to the demand side approach question the propriety of any inter-basin water transfer to "make the

concede that the main cause for the country's escalating water requirement is our rising population. About 85 to 90 per cent of our water demand is for agriculture and domestic purposes taken together and both these water demands for agriculture and domestic uses are almost directly proportional to the population.

Yet none of the groups — not even the votaries of the demand side approach — has asked for population control which alone can provide a sustainable solution to our water problem.



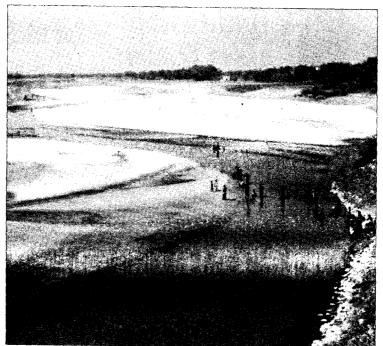
It is amazing that the government is ready, even eager, to undertake a truly massive and Herculean project like LRP with all the ecological uncertainties and risks but is most apathetic towards population control knowing fully well that rising population is the root cause of our water crisis. The 10th Five Year Plan (2002-07) is a glaring example of this apathy, as it blatantly negates the objectives set in the National Population Policy adopted in 2000.

According to the National Population Policy, India's population is to be restricted to 1,119 million in 2011 while the 10th Plan stipulates to let it go up to 1,193 million by that time making it impossible to stabilise our population by 2045 as required by the National Population Policy.

Our experts and bureaucrats can suggest any and every method right from using a bucket instead of a shower for a bath; to rainwater harvesting; to microirrigation and to interlinking of rivers to solve the water crisis. But it cannot plead for controlling our burgeoning population effectively.

Unless we stop our population growth soon and start bringing it down there is no sustainable solution to India's water crisis.

(Concluded)



supply-side-hydrology to a demand-side approach. This paradigm shift alone can solve our water problems and save India from the looming crisis.

#### Simply wasteful

For this we need to redesign our irrigation technology and crop pattern in tune with water availability because about 80 to 85 per cent of our total water requirement is for agriculture. And sadly the irrigation efficiency in India is as low as 25 to 35 per cent implying that about 65 to 75 per cent of water provided to the crop is simply wasteful.

The group advocates the use of drip-irrigation and micro-

desert bloom".

An overview of all the measures suggested by various experts from all the three groups as given above shows that the only real controversy is about the proposed inter-linking of the rivers while all other measures put forward by the various groups are, in fact, in no way contradictory to each other and hence could, nay must, be implemented to contain our alarming water crisis.

But what is most surprising and worrisome is that none of the experts from any of the three groups has advocated an effective and timely check on our population growth while all

#### LINKING RIVERS-I

500

11/3

**Debate On Averting Water Famine** 

By KB SAHAY

Prompted by a Supreme Court judgment, the NDA government has set up a task force to give effect to the idea of linking the Indian rivers to solve the country's worsening water problem. This project to link our rivers is estimated to cost a huge 560,000 crore and is to be completed by the year 2016.

#### Public debate

This decision of the government taken at the instance of the apex court has thankfully led to, for the first time, a serious public debate on the country's biggest crisis in terms of its wide-ranging impact and implications, acute severity and spread. It is extremely encouraging to note that several ex-bureaucrats, activists, experts, politicians, journalists and editors are all debating the "link river project"; and naturally, in the process, the country's water problem is also getting analysed and debated as never before.

In fact, this kind of serious public debate on the country's impending water crisis ought to have started much earlier and not as late as now when the calamity is almost upon us. It is realised now by the authorities that "water precedes roti, kapada aur makan". The public debate triggered by the LRP on the water crisis which has put the livelihood of millions at risk is proceeding in broadly three directions.

One group is arguing that the

The author is Professor, Centre for Biomedical Engineering, Indian Institute of Technology, Delhi country must link the rivers to increase the availability of utilisable fresh water to solve our water crisis worsening year after year as our demand for water is increasing continuously. According to the latest estimates made by the National Commission for

1,580 million in 2050, the country's water requirement will mount to 1180 cu km per year and will thus exceed the annual availability of the utilisable water. But because of unequal distribution of water in the country and the massive pollution of the



Integrated Water Resources Development, the total annual renewable freshwater supply in the country is about 1950 cubic kilometre.

#### Unequal distribution

But out of this only 1100 cu km of water can be utilised if the Himalayan and peninsular rivers are to remain non-interlinked. It is also estimated that for an expected population of about water bodies the water crisis will become catastrophic in many parts of the country much before 2050.

Our current water demand is estimated to be only around 800 cu km and yet about 30 per cent of our population are suffering acute water scarcity and distress. So with our increasing water requirement every year mainly due to our rising population, the water crisis will continue to wor-

sen in the coming years. To overcome this problem, the group argues, we must increase the availability of the utilisable water by linking the rivers. This measure will also help in preventing devastating floods that the Himalayan river basins experience every year.

#### Prime concern

Moreover for any government, the prime concern is — and rightly so — to avert, at any cost, the impending water famine and its dire consequences so that the government is not hauled up for inaction leading to a large scale calamity. But if in spite of interlinking the rivers, the calamity does not get averted — as the other groups are claiming — the government can at least save its skin by pleading that it did whatever was possible to do for averting the crisis.

Another group which is the most vocal one is of the view that LRP will solve neither the flood problem in the Ganga-Brahmaputra basins nor the water scarcity in the peninsular region to any significant extent. On the contrary, the project will create serious ecological, political and socio-economic problems with potentially grievous results for the country and its geography. The group thinks that LRP will amount to redrawing the geography of the country and altering the nature with horrendous ecological consequences. Moreover except for the Brahmaputra basin, no river basin in the country has any "excess" water to spare.

(To be concluded)

THE STATESHAU

1 1 JUL 2003

NEW DELHI, JULY 3. Indians were not alone season of searing heat wave conditions, with the temperatures peaking up to 49 when they recently passed through a per Celsius in several areas.

According to the World Meteorological Organisation, record high temperatures have also been reported from several

E HINDO

While the coastal areas were struck by

experienced an unusual spell of wet and a quick parade of 562 tornados, eastern

and southeast parts of the country

cold conditions that prevailed for well

Warning that this was not the end as

over a month

recent scientific assessments indicated

extreme weather events might increase,

continuing increase in global

that the number and intensity of

The countries that suffered a stiffing Switzerland, the "paradise on earth". une this year was the hottest in the other parts of the world this year. heat in recent months include

the maximum day time temperatures did not drop below 25 degrees Celsius even In Geneva, in particular, since May 29 for a day, making it the hottest June on country in at least the past 250 years. record for the city.

highlighted that several records in terms In a press release here today, the international organisation also

Change set up jointly by the WMO and

Inter-Governmental Panel on Climate Quoting recent assessments by the temperatures due to climate change. the WMO said it was all because of

# Heat wave, a Worldwide phenomenton of other extreme weather events such as the United Nations Environment to rorados too were broken in recent Programme, the WMO said the global

estimated to have increased by about 0.6 about 0.15 degrees Celsius larger than what has been estimated till now. degrees Celsius over the 20th century, average surface temperature was were set both in terms of the number of tornados hitting the country in any month, and in terms of the unusual wet and cold conditions during May.

In the U.S., for instance, new records

months across the world.

It said that new analyses of proxy data release emphasised that "the influence of 1,000 years. In an apparent reference to that increase in temperature in the 20th frequent reports linking extreme events to the phenomena such as El Nino, the for the northern hemisphere indicated El Nino and La Nina on these extreme largest in any century during the past century was likely to have been the

linkages in collaboration with research connections totally, stating that the research to probe if there were any events in general (still) undefined' WMO would continue to organise But it did not rule out such nstitutions across the world.

# Coke stands accused of eco-poisoning

#### **OUR CORRESPONDENT**

ers use it as fertiliser.

Cola India today found itself report said the sludge produced at its factory in Kerala's Palakkad district contained dangerous chemicals that were polluting water supplies, the land and the food chain. New Delhi, July 28: Cocamired in a crisis after a BBC

The sludge is the waste produced at the factory that the company provides free of around its plant at Plachimada village in Palakkad. The farm

in permissible levels. The report on BBC's Radio 4 programme *Face the Facts* said the sludge contained "dangerous" levels of the known carcinogen cadmium". It said sludge samples from the plant had been test

that can cause kidney failure ed at the University of Exeter which found unacceptably high Cadmium is a carcinogen cially among children — can cause mental retardation, severe while exposure to lead — espelevels of toxins, including cad Coke, which has been swat anaemia and is potentially fatal.

mium and lead.

Mary's Hospital in London, who ting away similar allegations in is trying hard to face down the BBC report by arguing that it the local media for almost a year, had independent reports that proved the chemicals were with-

A top Coke official said the company would send a team Face the Facts presenter John Waite visited the plant following water supplies were drying up complaints from villagers that because the Coke plant was a guzzler: "The results have devastat ng near the areas where this wa there to examine the accusation ing consequences for those livi

ste has been dumped and for the thousands who depend on crops produced in these fields," said John Henry, a leading toxicology expert and a consultant at St

"What worries me about the fect the pregnant women in this levels found is how this might afarea. You would expect to see an increase in miscarriages, still births and premature deliver was interviewed by the BBC

Scientist David Santillo, who was involved in the investigaspread to the water supply and is

logue with local community well above the World Health Or-Coke officials said the plant ganisation (WHO) levels.

was certified as conforming to "The plant at Palakkad is certified to ISO 14001 and is open to cies," the company's official the highest environment maninspection by all regulatory and accredited monitoring agenagement standard — ISO 1400] spokesperson said.

ISO 14001 was first published in 1996 and specifies the actual requirements for an environ mental management system

isting studies with regulators revalidate and recheck those exand agencies and seek further India's vice-president, public af-

independent inputs to this envi ronmental audit process. fairs and communications, said: "We will ensure our ongoing dia-

chayat refused to renew the Coca-Cola licence, saying the plant was depleting ground water in Early this year, the local panditional impetus and ensure their voices and concerns are better heard." leaders around the plant gets ad-

The issue has already taken CPM launching an oust-Coke the region. The licence was reon political overtones with the ening to intensify the agitation against Coke, rated the world's brands-Businessweek survey of largest brand for the third year campaign in the region, threat newed after court intervention. running in the latest Best Global Brands. The official spokesperson seriously and will continue to said: "Independent studies from with the environment and academic institutions have given government agencies concerned our plant a clean bill of health.

TELEGRA

#### E.U.-Bush spat on GM foods SSELS, JUNE 24. The Eunations avoid investing in bioWashington. The FULL relative of the first state of the first s

BRUSSELS, JUNE 24. The European Union on Tuesday rejected a complaint from the U.S. President, George W. Bush, that the E.U.'s restrictions on genetically modified crops were hurting poor African farmers.

"It is false we are anti-biotechnology or anti-developing countries," said a E.U. spokes-man. "These things said by the United States are simply not true."

On Monday, Mr. Bush criticised European restrictions on bio-engineered food, saying they were based on unfounded, unscientific health fears. "Because of these artificial obstacles, many African technology, worried that their products will be shut out of important European markets," Mr. Bush told a meeting of the Biotechnology Industry Association in Washington. For the sake of a continent threatened by famine, I urge the European governments to end their opposition to biotechnology," he added.

U.S. farmers estimate that the E.U. biotech restrictions have cost them nearly \$300 millions a year in lost corn exports alone. The issue has soured the world's biggest trading relationship and will loom large at an E.U.-U.S. summit on Wednesday in

Washington.
The E.U. claimed it spent seven times more on development aid to Africa than the U.S. He said the E.U. focused its spending on longer term improvements to help African farmers improve their yields. U.S. officials have previously blamed the E.U. restrictions for decisions by African nations to reject American food aid because it contains genetically modified grain. The E.U. imposed a moratorium on the import of genetically modified food products in 1998, responding to mounting fears of European consumers about possible health risks from the products. — AP

## GM for one Frankenstein food for other

London, June 24 (Reuters): A transatlantic storm is brewing over genetically modified crops with the US extolling the benefits of biotechnology and Europeans insisting on proof that "Frankenstein foods" really are safe to eat.

In the latest salvo in what is turning into a bruising battle, President George W. Bush accused European nations of contributing to famine in Africa because of their reluctance to accept GM foods.

But critics in Europe said his comments are more about promoting the biotech business than ending world hunger.

"He can only have been informed by the multinationals, the Monsantos of this world, to make a statement which displays as much ignorance as that," Patrick Holden, of the environmental group the Soil Association, said.

Monsanto Co , the St. Louis, Missouri-based agribusiness giant, is moving to commercialise biotech wheat.

"It is nonsense," Holden added. "Even serious experts on GM will concede that there is no evidence that GM can make any greater contribution to feeding the world than existing agricultural science."

Friends of the Earth, echoed his comments and accused the US leader of exploiting famine to sell GM products.

"GM crops will not feed the world. Indeed making poor farmers dependent on biotech companies for their seed may only make matters worse," said spokeswoman Clare Oxborrow.

The debate about GM foods highlights huge differences between Americans, who seem to have accepted the technology in which plants are genetically al-

tered to repel insects and withstand drought and Europeans, who are more sceptical and less trusting of regulatory authorities after food scares such as the outbreak of mad cow disease.

Last week the Bush administration announced it would file a formal complaint with the World Trade Organisation to overturn a European ban on new biotech foods.

"If Bush thinks that getting his way with Europe over Iraq was a precedent for this GM decision, he should think again because the degree of informed public opposition to commercialisation is growing by the day." Holden said.

Proponents of GM technology say it will increase farm yields, lower costs, reduce the level of chemicals used on plants and help to feed a hungry world.

Critics warn that too little is known about health risks such as allergic reactions and resistance to antibiotics and that not enough testing has been done.

They are also concerned about the threat to the environment and that GM crops could contaminate other natural breeds. Environmentalists worry about the creation of so-called "super weeds" and the loss of biodiversity.

"No one really knows what the long-term impact of GM will be on our health or the environment," Friends of the Earth's Oxborrow said. "Consumers in Europe know this and have made it perfectly clear that they don't want to eat GM food."

Holden said Americans are more accepting of biotechnology because they have not been given information about it. "There has never been a proper public debate (on GM crops) in America," he said.

#### TRANSGENIC CROPS AND APPROVAL

NEWS THAT A second seed company has been officially permitted to carry out large-scale field trials of Bt Cotton may seem as if some momentum is being generated on the sluggish agro-biotechnology front. Far from it. By asking Rasi Seeds to conduct trials on one lakh acres in the southern and the central parts of the country, the Genetic Engineering Approval Committee (GEAC) has once again demonstrated a wearisome attitude of getting involved in issues that go beyond its principal mandate — that is, ensuring environmental safety. The Tamil Nadu-based company's RCH 2 Bt cotton uses the same gene (Cry1Ac) used by Mahyco in its transgenic cotton variety, which has been tested extensively for biosafety and been granted permission for commercialisation. If further trials must be conducted by Rasi Seeds, then these must be to settle issues that go beyond biosafety - possibly, the agronomic value or the economic viability of the new hybrids. Rather than allow the market to determine such issues, the GEAC has shown a tendency to get entangled with them. For instance, Mahyco's approval for commercialisation of Bt cotton was delayed by a whole year largely because of certain agronomic questions. And earlier this year, Mahyco's Mech 915 Bt cotton variety failed to win approval because of susceptibility to the leaf curl virus, a reason totally unconnected to Bt technology, which is meant to protect the cotton crop from only the bollworm.

One of the direct consequences of excessive red tapism and a tardy and unhelpful approval process has been the rampant and unchecked manufacture of unapproved Bt cotton seeds. Sale of such seeds has become so commonplace in Gujarat that illegal Bt cotton blooms in the cotton-growing regions of the State. It was two years ago that the manufacture and sale of illegal transgenic cotton seeds (Navbharat 151) came to official notice. Ironically, all that has resulted from promises of launching a search and destroy operation against this single varia-

nt is the proliferation of vast numbers of Bt hybrids, which now dot Gujarat's cottonscape. The GEAC's declaration that it will bring this to the attention of the State Government is akin to closing the stable door after the horse has bolted. The most effective way of shutting out the illegal (and potentially dangerous) manufacture of transgenic seeds is to ensure that the regulatory process works quickly, effectively and transparently and the GEAC, a widely-represented body under the Environment Ministry, has not performed satisfactorily on any of these counts.

Given its track record, the GEAC's decision on the Rasi Seeds hybrids was not unexpected. But another piece of news from the biotechnology front was, to say the least, very surprising. The announcement by the Secretary of the Department of Biotechnology (DBT) that a genetically modified potato, which contains more protein and other essential nutrients, will receive approval in six months has raised many eyebrows. With the final approving authority, namely the GEAC, not even having been approached yet, the so-called 'prorato' is nowhere even near reaching the final stages of regulatory approval. The transgenic potato, which has been developed by a team of Indian scientists by importing a gene from the amaranth plant, has already completed over two years of limited field trials. Although the results are reported to be extremely encouraging, suggesting that the nutritionally enhanced potato will start supplementing the diet of India's poor by early next year, it implies an extremely speedy schedule of evaluation on toxicological, nutritional, allergenicity and other fronts. Approval within such a time-frame would also mean short-circuiting the large-scale field trials and on what ground these may be done away with is not clear. In the absence of specific clarifications, it is impossible to predict whether the prorato will be on Indian dining tables as quickly as the head of the DBT suggested.

## in her arrest S Medha, Dy CM row en Sur nemm

**EXPRESS NEWS SERVICE** 

BHOPAL, MAY 20

CITVISTS of the Narmeda Bachao the Narmada Valley Develop-Andolan (NBA) led Lby Medha Patkar today laid siege to the residence of Madhya Pradesh Deputy CM Subhash Yadav, who also heads ment Authority in the state, for most of the day on Tuesday.

Medha sat on a 24-hour fast in Sardar Sarovar by another five earlier threatened to go on a fast unto death if police attempted to The activists had gone to Yaday's house to "challenge and cision to raise the height of the metres but following his remarks, protest. She was arrested for trespassing around 6 pm. She had caution" the state on its recent de-

dispute over the tone and tenor of Yadav's remarks against Patkar.

Yadav emerged from his house in NBA activists said as soon as fice without meeting them. Yadav said he asked NBA activists to acthey were only interested in raising the morning, he headed for his ofsat on the road to talk to them but company him. He claimed he even slogans against him.

in the state. She is only interested which he repeated while talking to camera. "These people are responsible for the power problem in publicity and international awards. She wants to build her international image, show that no should direct her remarks to the severa ournalists, alleging she was only interested in media publicity and statements about Medha Patkar Yadav then made

hekedar yahin hain (they believe Ye bolti jab hai, jab media ka focus hota hai (She speaks only when the media focuses on her). Nau saal se jhel rahan hun (I have been than her. They think akele they are the only ones concerned) putting up with it for nine years).

Told that Patkar had sat down on a fast in the May sun to protest such remarks and would not even 'Isse paani pila kaun raha hai take water for 24 hours, he said (Who is offering her water?)."

Yadav ended up a sorry figure ing resettlement, claiming that He then went on to defend the government's record regard every effort had been made.

when he agreed to meet other NBA representatives in the evening. Speaker after speaker punctured his claims and left him

with no answers.

one is a bigger environmentalist

sions of what followed, there is no



Medha Patkar with Subhash Yadav in Bhopal. Raj Patidar

evict her forcibly.

The drama began around 9 administration was stationed at the Deputy CM's house for the am, as a result the entire district

2 meet Subhash Yaday and were waiting outside his house. Though the two sides offer conflicting verday. The activists had gone

#### To keep the minimal relationship going

pacity-building, the millennium development goals will never be achieved. This critical water development process is often treated as an add-on to programmes, with scant regard to local capacity-building institutions, or to long-term commitment. Capacity building is a process that must be sustained and financed for the long-term and undertaken in a holistic and integrated manner and therefore a new global strategy for capacity building needs to be developed...

The project of IFNet global flood warning system... will promote future exchange of information, experience, technical knowledge and future plans for national and international cooperation for action. The project is prospected to raise public awareness of floods and vastly improve flood counter measures from reactive to proactive actions worldwide.

...The existing gap between developing and developed counties in using communication technologies can be reduced by documenting successful capacity building cases and support the ongoing initiatives to promote distance and e-learning programmes.

Recommendations: Mechanism should be established to support and enhance exchange of regional experiences. ...Capacity building actions should be structurally incorporated in all water programmes, while international, regional and local capacity building centres should be

Extracts from the final report of the third World Water Forum, organized by the United Nations Development Programme, Kyoto, Japan, March 16-23, 2003

equipped to provide guidance in the process. To ensure sustainability of the above and new actions, a much larger financial investment must be made on a global scale.



Better understanding

Key issues: The objects of the world heritages registered by the UNESCO are of various ranges, all of which have a close relation with water. However, very few people realize the...relation... There is an urgent need to search and adopt new ways to preserve world heritages and perceive their great relation o water

Actions: Grasp the situations of the various heritages around the world that have close relation with water, and to discuss the best water management practices for protecting the world inheritance.

Recommendations: The construction of a database concerning world heritages related to water..., to take appropriate actions to tackle-over the relation between water and heritages. Promoting public awareness and appropriate water management is very important to protect world heritages from disasters.

Key issues: If a sustainable use of groundwater is not reached, groundwater development will undoubtedly prolong the negative impacts on groundwater-fed wetlands and their ecosystem. In many regions of the world, especially in arid and semi-arid countries, it is an important challenge to develop compatible guidelines for rendering groundwater intensive use.

...Introducing the concepts and importance of groundwater to citizen and children, especially in rural and isolated areas, is recognized as a challenge. The aim is to understand and recognize the role of groundwater in environmental problems near city.

Trans-boundary aquifer resources management lack legal and institutional aspects. The main existing international law only applies to shared aquifers connected to surface water.

TO BE CONCLUDED

## Clearance for raising Narmada dam heigh region, how can they then claim that they

By Gargi Parsai

95 metres to 100 metres (plus three metre humps), enlarging the area and habitations NEW DELHI, MAY 14. The Narmada Control Authority today gave its clearance for raising the height of the controversial Sardar Sarovar Project in Gujarat from the present arat Government was allowed to raise the height to 95 metres (plus three metre humps) before the Assembly elections last under submergence this monsoon season. The permission comes a year after the Guj-

This is a clear violation of the Supreme

moved as they are being offered cash. Gui-

Court order and the Narmada Water Dis-

putes Tribunal Award. It seems Govern-

ments have now stopped caring for

people," she said.

The decision to increase the height was taken at the 66th Emergency Meeting of the Secretary and NCA chairman, A.K. Goswami. The Secretary, Social Justice and Empo-

NCA here chaired by the Water Resources

werment, Gopal Reddy, who heads the Rehabilitation and Resettlement (R and R)

Even while Maharashtra has to complete ment of displaced people, the Sub-Group in its meeting on Tuesday accepted the State's "undertaking" to do so before the monsoon

Sub-Group, also attended.

the mandatory rehabilitation and resettle-

When contacted over telephone in a re-Medha Patkar, lashed out against the decimote village in the Narmada Valley, the sion saying it spelt "disaster, destruction als and villagers in Madhya Pradesh and Bachao Andolan (NBA) leader. and human tragedy" for thousands of trib-Maharashtra who would face temporary permanent Narmada

ment took us to show some land in a hilly "Just last night the Maharashtra Govern-

ments concerned to make contingency arand recommended to the NCA to permit project-affected families against any "unraising the height of the dam to 100 metres It, however, directed the State Governtoward" incident during the flood season. "safeguard" rangements hya Pradesh nothing has happened. Only a handful of landless people have been shift-ed to house plots. The landed have not have settled affected people. Even in Madon paper. How can the NCA accept this? arat has shown ex-partee allotment, only

fected families settled in temporary shelters to R and R sites well before the monsoon. The State was also directed to look into the grievances of the previously settled families The R and R Sub-Group asked the Maharashtra Government to shift all project-afand redress them.

nearly 3,700 families from 51 villages, partly in Gujarat. After claiming that it had no Madhya Pradesh said it had resettled land to rehabilitate a total of more than State has moved for giving cash 33,000 families who would be displaced, th compensation.

As per a Supreme Court Order and the NWDT award, oustees must be resettled and rehabilitated six months before raising the height of the dam with land for land compensation

#### Dump for a dump, from India to US

Press Trust of India

NEW DELHI, April 16. — In the first ever case of "reverse dumping", 1,416 drums filled with 290 tonne of hazardous mercury wastes from a thermometer factory at Kodaikanal in Tamil Nadu are being sent back to the USA.

The largest hazardous waste transfer from India marks the end of a long struggle by local people and environmental activists led by Greenpeace India.

They had alleged that mercury vapours released from the factory owned by Hindustan Lever Ltd — a subsidiary of the multi-national Unilever — ruined the health of

the workers and community and caused lasting damage to the environment during its 18 years of operation. HLL has at last arranged to ship the hazardous mercury and related wastes from its now defunct thermometer factory in Kodaikanal back to the USA. The consignment, including glass cutlets, finished and semi-finished products and sludge is leaving the Tuticorin port tomorrow aboard the ship Indmax Dalian. The shipment is heading to the hazardous waste recycling firm, Bethlehem Apparatus, in Pennsylvania, a Greenpeace official said.

The controversial thermometer factory was transplanted in India in 1983 after

it was shut down in Water-town, New York.

The factory imported all its mercury, primarily from the USA, and finished thermometers were exported back to the USA for distribution to markets abroad.

Environmental groups had alleged that the factory had been responsible for considerable mercury contamination over the last 18 years. Contamination levels outside the factory were measured at 600-800 times permissible limits but HLL had been denying this figure. On 7 March 2001, Greenpeace and a local environment group — Palani Hills Conservation Council exposed mercury bearing waste glass

dumped by the company at a local scrap yard. Demonstrations by local people at the factory site forced its closure by the Tamil Nadu Pollution Control Board.

The Board discovered that 10 tonne of mercury were unaccounted for and has been lost to the environment in addition to the amount of 559 kg the company had admitted. It also found that HLL workers were exposed to unacceptable mercury vapour levels leading to bleeding gums, skin patches, eye irritations. Mercury from the factory adversely impacted on the tropical forest of the Pambar Shola where it is located and contaminated the nearby Kodi Lake.

THE STATES INN

17 APR 183

#### TIMES NEWS NETWORK 19 back-breaking trek with pitchers creating a huge image of Lord Shi-

Bhuj/Ahmedabad: Inhabitants of Kutch allowed themselves to be swept away by a flood of emotions on Sunday as waters of the Narmada started flowing into this semiarid region of Gujarat, 600 km away from the Sardar Sarovar dam.

State water supply minister Narottam Patel said more than 3,000 of the 5,800 villages of Saurashtra and Kutch would soon reap the benefits of the project, on which the state government has so far spent Rs 1,000 crore. In the first phase, water will be provided to 70 villages of

Bhachau and Rapar taluka.
For Vanita Trikam of Adhoi village—and many others like her the daily ritual of undertaking a on her head may soon be history.

While Vanita could not hide her glee on seeing running water for the first time in her life, Rava Dhira Ahir of Jangi village, after tasting sweet water for the first time ever, said, "Bo saru lage chhe (It tastes very nice)." They reflected the joy of the people of this parched region who have waited for more than halfa-century for this day. It was not surprising that they broke out into a song and dance on Sunday.

"There is a festival-like atmosphere in the rural areas," said Pravin Bhatt, an advocate from Jamnagar.

In Samakhiyali, the BJP government attempted to attach some religious significance to the event by

va, from whose 'jata' (locks of hair), the water flowed into the canal.

In Jamnagar, overjoyed at the Narmada waters reaching her city, social worker Rajshri Jani said, "For us it is a dream come true; it is nothing short of a miracle.

The Jamnagar Municipal Corporation has started supplying water received from the Narmada for 25 minutes every alternate day. Earlier, water would be supplied once in three days.

With the arrival of the Narmada waters, the municipal corporations of Rajkot, Junagadh and Jamnagar have been forced to create a new network of pipelines.

Medha raps MP, Maharashtra, Page 3

#### "'River grid project will lead to new inter-State disputes'

By Gargi Parsai

NEW DELHI, MAY 17. The rivers interlinking project will generate a whole new set of inter-State disputes even as long-standing inter-basin disputes such as the Cauvery and Sutlej-Yamuna Link canal remained unresolved, a group of intellectuals observed here today at a 'Citizens

Meeting'.
The Narmada Bachao Andolan leader, Medha Patkar, the former High Commissioner, L.C. Jain, the former Water Re-sources Secretary, Ramaswamy Iyer, and the water expert, Himanshu Thakkar, attended the meeting, among others

The meeting urged the Government to take people into confidence and urged it to put the feasibility reports of various links in the public domain. It sought details on the source of funding and the socio-economic and ecological costs of the es-560,000-crore project.

Mr. Jain questioned the "legitimacy" given to the proposal by the President, A.P.J. Abdul Kalam. He questioned the knowledge base of the Supreme Court on which it decided that rivers be interlinked in 10 years. He wanted to know whether the natural resources the project would consume could ever be reproduced. "Citizens need drinking water 10 times a day, not in 10 years from now.

His opposition was primarily on the ground that though the project claimed to solve the water problem of drought-prone areas, two-thirds of such geographical area would remain uncovered and would have to be augmented by local water harvesting programmes. even the worst of governments can be so insensitive to promise

something so prima facie absurd in terms of fulfilling the objective for which public opinion is solicited.

Ms. Patkar said the project was an example of how the system could be used to subvert as in Iraq and in Gujarat. "The Government proposes to sign contracts for eight links on which no details are available. There is no project plan nor is there a financial plan nor a comprehensive plan for the social and environment impact of interlinking rivers. Not just a task force for interlinking rivers but a contractors force is being raised." She said the issue about 'zamin, jungle, paani (land, forest and water) and human bepeople's organisations, intellec-

tuals and civil society should speak up. "This whole connection is not only being overlooked but is ridiculed and the Government is going ahead with its plan in these two election years.

Whether it is the question of drinking water, displacement, floods, drought, farmers or fishermen - will it really solve the problems or worsen them. Whatever little surface or ground water remains in the hands of people and is accessible to them is being snatched. This has to be challenged by the tribal and riverine populations, who would be the prime targets. Mr. Suresh Prabhu as Task Force Chairman, who is giving face to this abstract project, must come face to face with the

people," she said.

Stressing people's right to information, Ms. Patkar said to start with, there was no information and later the project would become "fait accompli" the pretext that some amount had been spent on it, as it happened in the Sardar Sarovar Project.

"By the time the project is implemented, its cost would increase manifold and not even the World Bank and the ADB would be able to fund it and multi-nationals and anti-national agencies would step in." Mr. Iyer said the Constitution did not mention intra-basin transfers.

He said even long-standing inter-basin disputes were unre solved. "If consensus worked out on quid pro quo inducements or political compromises how lasting would those be. If the only principle that'll work would be money then it'd be dangerous and would have implications on international treaties with neighbouring countries," he said.

The environmentalist, Shekhar Singh, said interlinking rivers with different biological, chemical contents and ecosystems was like linking blood vessels without checking the blood group.

The meeting, organised by the South Asia Network on Dams, Rivers and People, Toxics Link and Ecological Foundation, decided to convene similar meetings in parts of the country to generate awareness. It also decided to bring together various social groups working in the sector on a common platform.

It said that drinking water was a local issue and could be tackled with water harvesting projects and changes in crop ping pattern.

#### 'Where is the project located?'

By Our Special Correspondenti

NEW DELHI, MAY 17. The Annual Report of the Ministry of Water Resources, which was recently tabled in Parliament, makes no mention of the ambitious river grid project estimated to cost Rs. 560,000 crores for 30 links.

This was mentioned by the former Planning Commissioner member and High Commissioner, L.C. Jain, while participating in a Citizens Meeting here today on the proposal to link rivers.

Mr. Jain said the report dated March 2003 neither mentioned the interlinking of rivers nor the constitution of a task force headed by Suresh Prabhu, nor of any finances linked with the project. The Task Force was set up in December 2002.

Where is the project located? In the PMO? It is not part of the plan; does not seem to be part of the Government, at least not of the plan," he said.

"Keep your vessels out for Ganges waters.

But water may not come," was his message to the people of Tamil Nadu, who are said to have kept their vessels ready for receiving Ganges waters through the interlinking project.

## FILD SOIGS SIONAL OHAL

THOMAS H. MAUGH CAN

HE World Health Organisation on Saturday issued a rare emergency advisory cautioning travellers and airline employees to be on the alert for a severe form of pneumonia that has killed at least nine people and hospitalised hundreds of others, particularly in the Fast.

The advisory did not call for a halt in travel, but warned travellers to be alert for symptoms of the disease and to seek treatment immediately if they become apparent. "We want people to be aware that if they have symptoms, they should go to a doctor," said WHO's Christine McNab.

said WHO's Christine McNab.
WHO said it has detected 150 new cases of the disease — which it is calling severe acute respiratory syndrome, or SARS — and expressed alarm at the speed with which it is spreading. Two deaths and several cases of SARS were reported in Canada last week, and on Saturday, a Sin-

A presumonia patient being taken into a ward at Prince of Wales Hospital in Hong Kong on Sunday.

gaporean physician travelling from New York was hospitalised in Frankfurt, Germany, afterfalling ill on his flight.

Others on the flight were quarantined in Germany. Late on Saturday, it was re-

ported that another traveller, returning from Asia, had fallen ill aboard a flight from Atlanta to Canada. "SARS is now a world-wide health threat." said Dr Gro Harlem Brundtland, WHO's director general. Officials stressed that there is no evidence linking the outbreak to terrorism.

"The emergence of two clusters of this illness on the North American continent indicates the potential for travellers who have been in the affected areas of Asia to have been exposed to this syndrome," said Dr. Julie Gerberding, CDC director. "Therefore, we are instituting measures aimed at identifying potential cases among travellers returning to the US and protecting people with whom they may have come in contact."

Both WHO and CDC have sent teams of disease experts and other physicians to southeast Asia to help identify the cause of the outbreak and to assist in control efforts. The agencies are also sending masks, gowns, gloves, goggles and other hospital equipment to medical facilities to help break the transmission chain. —LATWP

NOIAN EXPRESS

#### 'Burning of oil wells a threat to environment'

NEW DELHI, MARCH 30. The Energy and Resources Institute (TERI) will approach the United Nations Environment Programme (UNEP) to study the impact of the ongoing war in Iraq on that country's environment. The UNEP has already announced that it would document the extent of environmental damage caused by the war.

The director-general of TERI, R.K. Pachauri, told *The Hindu* here today that the study would be worthwhile as it could help in preventing future wars. However, it might be a few weeks before the war's impact on the environment starts showing. The greatest threat to the environment was from the burning of oil wells and from chemicals released during bombing.

"The extent of damage to environment will ultimately depend on the duration of the war and the number of oil wells set on fire," Dr. Pachauri said. The longer the oil wells burnt, the higher would be the quantity of harmful gases such as sulphur, carbon dioxide and carbon monoxide emitted into the air. "However, it is the unburnt or partially burnt hydrocarbons that hang in the air in the form of particles that act as most harmful pollutants and attack respiratory system," added.

The chemicals released from the bombs also polluted the at-mosphere. "Of course, the Napalm bombs used in the Vietnam war were defoliants (destroying vegetation), but these bombs are not being used in Iraq. But then, we really do

not know the exact kinds of bombs being used and the chemicals released from them,"
Dr. Pachauri said adding that

reports suggested that only conventional bombs were being used. Then much would depend on the direction of winds. If the winds blew away the gaseous and particulate emissions to nearby areas, the harmful effects on Iraq would be reduced. If they hang over the war zone, the health of the people would be affected. "As it is the people are facing a shortage of food and water there. Epidemics are not far away in such a situation," he said. Another area of concern is the psychological impact of war on the people as well as on the U.S. and British soldiers who are fighting in an alien land and under difficult conditions

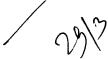
an underground lake of kerosene seeps toward the Irtysh river, which runs through Siberia and feeds into the mighty Ob. The lake was formed in the mid-1970s from a leak in a fuel station at a military air base poor. at a military air base near Semipalatinsk, now known as Semey, a town in eastern Kazakhstan where the Soviet Union had its largest testing ground for nuclear weapons. It contains approximately

\*\*Kerosene lake\*

\*\*poses threat\*\*19

\*\*ALMATY (KAZAKHSTAN): Kazakh ecologists have warned of what they call a looming environmental catastrophe as an underground lake of kerosene seeps toward the secological catastrophe, not just on a local but on a just on a local but on a universal scale," Vladimir Tyurin, the chief specialist of the Semey city administration, said. "Flora and fauna will die off, and a whole series of cities will be left without drinking water". An adviser at the Environment Ministry said the kerosene might already be seeping into the river. — AP





#### WATER SOLUTIONS

brishing. 10

THERE IS HOPE and despair in meeting the human need for water; this is the message from the third meeting of the World Water Forum which was held in Kyoto last week. There have been local, national and international exercises, which have proved successful in harnessing water for direct and indirect consumption. But these are as yet too few to make a difference to the direction of a larger trend, which is one of a spreading water stress in the world. The third WWF meeting, organised by the World Water Council (a forum which counts among its members U.N. agencies and civil society organisations) heard both messages from participants from more than 160 countries. But despite the welter of promises made in Kyoto by government and non-government agencies, the larger message is one of the world falling back in solving the water problem. Compare the situation at the time of the first and second WWF meetings in 1997 and 2000 with that in 2003 and the conclusion cannot be otherwise. Too little is being done to follow up words with successful action on the ground.

The meetings in Japan heard experts project that the demand for water is increasing three times faster than the global growth in population. The WWF conference was also presented with a gloomy prediction that the population experiencing water stress would rise from 450 million today to as many as 2.7 billion people, or a third of the world's population, by 2025. But both these are business-as-usual projections, which assume that the norms of water extraction and consumption will continue as before and cannot be changed. This need not be so. Consider, for example, the cliche of a doomsday prediction that the wars of the 21st century will be fought over water, not oil. Yet, as the WWF conference was informed, a resolution of international water disputes has been the rule rather than the exception over the past half-century. Violence between countries has erupted in 37 instances but as many as 200 bilateral and multilateral treaties on a sharing of waters have been signed. A notable example has

been the Indus Water Treaty that has been adhered to by India and Pakistan through two open wars and decades of tension. But there is no denying the existence of a multifaceted problem in water. One facet is that the world still has 1.2 billion people who do not have access to drinking water, while there are 2.4 billion people who have to make do without proper sanitation. Another facet of the water crisis is that sources of freshwater are drying up around the world, while pollution is damaging many others. The problem is, however, that the dominant approach - worldwide - to tackling the crisis in water is essentially one of augmenting supplies without any attention being paid to forms of use of water. It is not a new set of observations but the discussions at the WWF meet highlighted three sets of practices which have blighted national efforts to tackle the water crisis. Inefficient and wasteful use of water in agriculture, industry and homes (the latter more common in the advanced countries) is one of them. The second is the pollution of water sources. The third is unsustainable extraction of groundwater resources. Action on all these fronts supplemented by exploitation, storage and transport of water will provide the solution, instead of the pure supply-side approach to 'production' of water that continues to rule national programmes, especially in developing countries.

A bouquet of solutions that was suggested at the WWF meet included improved governance in management of water resources, capacity building and additional financing for water projects in the poorer countries of the world. These are unexceptional suggestions to operationalise a different approach to solving the world's water problems. What is needed and is yet to be accepted is that be it in crop cultivation, industrial production or residential consumption only an integrated approach that combines improved efficiency in water use with augmented supplies will tackle deficits and prevent disputes between communities, regions and nations. A pure supply-side approach only aggravates both sets of problems.

#### Interlinking of rivers — By A. Vaidyanathan

NTHUSIASTS OF interlinking of rivers tend to be dismissive of the concerns over the environmental and human consequences of the project. They claim that these fears are vastly exaggerated or argue that they are unavoidable costs of "development" and that they should not be allowed to hold back the project. One has to be extraordinarily insensitive not to recognise the consequences of ignoring these aspects in our water resource planning in the past. They are reflected in the callous manner in which displaced persons have been treated, land degradation due to misuse of water, depletion of groundwater and the growing pollution of water sources. The experience of the Indira Gandhi Canal is a stark example of the problems arising in the wake of bringing in vast amounts of water without adequate understanding of and concern for its impact on the fragile desert ecology.

There are also good reasons to be sceptical about the state of preparation for the interlinking projects. Anyone familiar with the planning of projects such as Bhakra Nangal and Sardar Sarovar knows that the detailed investigations and site surveys preparatory to the design and the analyses and studies needed for the actual design take many years of intensive effort and expense by a large body of experts in diverse fields. A mega project of such complexity as interlinking of rivers calls for preparatory work of far, far greater dimensions. Moreover, the quality of preparatory investigations and surveys for many, if not most, of the irrigation and water resource projects leave much to be desired. Inadequate investigations, changes in scope and design, huge cost escala-tions and inordinate delays in completing projects are all-too-familiar features of irrigation planning in the recent decades.

Under these circumstances, it is difficult to believe that the interlin-king programme has been worked out in sufficient detail to qualify for serious examination, leave alone immediate implementation. The best way to counter this scepticism is to make all the studies, analyses and reports available for public scrutiny.

There is little authenticated infor-

mation on the likely cost of the programme and its various component projects. Figures as high as Rs. 5,600 billion are mentioned but no details are available. This is about 50 times the total allocation for the ongoing water resource development projects in the Tenth Plan.

In a situation of severe resource scarcity, the question of the relative priorities to be accorded to the imsi-judicial mechanisms such as tribunals. We know from experience how contentious, prolonged and difficult this process is. The awards them-selves have so far been accepted as binding on all the States concerned and the Centre. But the implementation of these awards has given rise to innumerable inter-State conflicts. which the Centre, despite the powers given to it under the law and its fifor a serious, open and informed debate based on facts and analyses. Regrettably, apart from a few sketch maps purported to be taken from the Hashim Commission report, very little information on the specific schemes envisaged, details of their design, environmental impact, displacement, and likely costs and benefits is available in the public domain.

Even the main report of the Commission, though claimed to be a priced publication, cannot be obtained from either the Ministry or the Publications Division. The annexure to the report, in which the details have reportedly been discussed, are considered secret.

Time was when the opinions of the Government's irrigation establishment were accepted without much question. Times have changed. There is much greater awareness now that there is more, much more to water resource development than constructing dams and canals, that the process of scrutiny and appraisal is at once too narrow, too lax and too se-cretive, and that there is now a sizeable body of knowledge and expertise on water resource management outside the Government. The assessments of the engineering establishments are no longer taken as beyond challenge. Hardly anyone takes seriously, much less accepts, the claim that "the National Perspective Plan (linking rivers) has been drawn up by a scientific and professional organisation, conceptually and technically upheld by the Technical Advisory Committee of the Ministry of Water Resources, the Central Water Commission and the National Commission on Integrated Water Resources Development Water Resources Development Plan..." and that "...the studies have been ratified by engineers, sociologists and economists". If this is so, why should the details of these studies and appraisals be a closely-held secret, instead of being made public to facilitate informed discussion?

The least that Suresh Prabhu, head of the task force on interlinking rivers, can do is to make all the rele reports and documents available to the public and provide an opportunity for various interested "stake holders" to voice their concerns.

(Concluded)

#### It is difficult to believe that the interlinking programme has been worked out in sufficient detail to qualify for serious examination, leave alone immediate implementation.

provement of existing facilities and the expeditious completion of viable projects on hand as against mega projects based on questionable premises is particularly relevant. projects This issue ought to be debated seriously. Questions about the sources of funds for interlinking tend to be dismissed cavalierly. The notion that private sources can be attracted is the height of naivete and wishful thinking. A Government already saddled with huge public debt, and whose precarious fiscal situation continues to deteriorate rapidly, can hardly expect the financial institutions to fork out such large sums for a programme, the content and eco-nomic viability of which have not been assessed.

There are also important institutional and legal issues to be sorted out. There is no provision for any mechanism to deal with matters concerning inter-basin transfers. The Centre has no legal authority to decide on this and no State will agree to vest the authority with the Centre. There is talk of deciding these matters through consultation and consensus among the States. One can hardly take this seriously, given our experience with the working of existing laws and procedures for dealing with water allocation between the States within the same basin. The allocation of water among riparian States even within a single river basin has so far been determined by law through negotiated legal agreements and treaties, and by judicial and qua-

nancial clout, has been unable to prevent or settle. These disputes and conflicts are the subject of numerous litigations. The courts have been cautious in dealing with these cases and have instead suggested that they be settled through mutual discussion, arbitration, Central mediation and other extra-judicial mechanisms.

This caution is both wise and understandable, given the complexity of the issues involved and the fact that courts have no means to enforce the judgments and the record of compliance by Governments is at best mixed. No judgment or award can satisfy all the interested parties. Indeed, of late, the States are pleading their inability to enforce court judgments on grounds that they are unfair and likely to cause unmanageable law and order problems. Instances of Governments condoning blatant violations of their own rules regarding allocation of uses of water and acquiescing or even permitting the violation of established rules regarding the rights of access and use are distressingly widespread.

These questions are pertinent and

basic to a considered assessment of the river-linking programme. In the absence of satisfactory answers, criticisms of the decision to go ahead with the implementation of the project are reasonable and legitimate. The current discussions in the media and on public forums hardly focus on these issues, much less help allay the apprehensions. That would call

#### Interlinking of rivers —

HE CONCEPT of interlinking rivers is evidently appealing to considerable sections of the general public and to policy-makers. More than three decades ago, K. L. Rao proposed the linking of the Ganga and the Cauvery. It was followed by Dastur's plan for a garden canal, linking all the major rivers in the country. Both the proposals attracted considerable attention. But due to widespread criticism of their feasibility, desirability and viability, these were shelved.

In the 1990s, the Government appointed a Commission to examine the strategy of water resource development, including the possibility of interlinking rivers. Its report — which is not available to the public — is understood to have given cautious support. subject to a careful examination of all relevant aspects, to the idea of link canals to divert surplus waters from some selected rivers to the watershort basins and regions.

Meanwhile, the Supreme Court, on a public interest litigation, directed the Centre to draw up and implement by 2015 a programme to interlink major rivers. Subsequently, the Prime Minister announced the Government's decision to act on the court directive and appointed a task force to ensure the implementation of the project by 2015. The task force headed by Suresh Prabhu is now active.

The popular appeal of interlinking rivers is based on the understanding that an enormous amount of water of our rivers flows into the sea and that if only this is prevented, and water transferred from water-abundant rivers to water-deficit areas, there will be adequate supply for everyone in every part of the country. At another level, the project is seen as promoting national integration and a fair sharing of the country's natural water wealth. Both these presumptions are far too

Whether the linking of rivers will promote integration or generate more disputes and tensions is a moot question. Besides, several obvious, but prima facie important, questions about the concept, and the feasibility, desirability and viability of the proposal need to be clarified before its implementation can be considered seriously. The belief that interlinking is necessary to ensure adequate and safe water supply to everyone and everywhere is wholly misplaced. Domestic use currently accounts for a mere five per cent of the total use of water harnessed through canals, tanks, wells and tube-wells.

The requirements are no doubt growing rapidly but will still be relatively small compared to those of other uses. Interlinking is hardly justified irrigation during the kharif season. Practically everywhere, including the northwest, irrigation is essential between November and June. So far, these imbalances have been met by constructing storages to store monsoon surpluses for use in the dry season and by exploiting groundwater. Some areas, such as Tamil Nadu, have exhausted the potential for harness ing the surface flows. In several others, the possibilities for constructing

total flow occurring during these months may be somewhat smaller but not all that much smaller. For instance, over 80 per cent of the annual flow in the Kosi is between May and November; and almost three fourths between June and October.

The monsoon happens to be the season when rainfall in the aggregate is adequate for crop growth. Of course in some regions, such as Rajasthan and parts of Gujarat and the Deccan, even the kharif rain is far too low and variable for productive agriculture. In some others, more water could help switch to more productive crop patterns. These "deficit" regions are far from those considered "surplus" requiring transport over very difficult terrain and long distances.

Moreover, since the surplus occurs in the rainv season and the demand is in the dry season, it is not enough to merely carry the water from one point to another. Large storages will be necessary. One needs to know the quanof water to be stored, whether and where potential sites on the required scale are available, and their likely impact on environmentand human displacement.

All we have to go by are some maps published in the media, purportedly from the Hashim Report, indicating from which rivers and at which locations surpluses will be diverted and to which river(s), and at what points in these rivers the divertedwater will be taken. There is no information on the quantum of water to be transferred through different link canals; the extent and location of the area to be benefited at the receiving end; and the distribution system through which water is to be distributed to this area.

The maps and the sketchy accounts in the media and official pronouncements tell us little on these aspects. If these maps accurately reflect the concept of the interlinking projects sought to be implemented, it will only mean that instead of the surplus flows flowing to the Bay of Bengal via the Ganges and the Brahmaputra and the Mahanadi, they will flow to the sea through the Krishna, the Godavari, the Pennar or wherever!

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

#### The belief that interlinking is necessary to ensure adequate and safe water supply to everyone and everywhere is wholly misplaced.

as the solution for this problem. Even if interlinking were justified for other reasons, it will not be possible to reach the water to all the habitations without huge investments in a centralised distribution network. Decentralised local rain-water harvesting. by reviving and improving traditional techniques, can meet essential requirements for domestic purposes more effectively and at a far lesser

By far, the largest user of harnessed water is agriculture. Currently, more than 85 per cent of water from canals, tanks and wells and tube-wells is used for irrigation. The demand on this account is growing and will continue to be, by far, the biggest claimant on available supplies. There is much scope for increasing the efficiency of irrigation systems in place by reducing waste and through better water management. Measures needed for this purpose — by way of investment in physical improvements and institutional reform — are not receiving due attention.

The need for irrigation arises in regions and seasons when rainfall is inadequate for raising crops and obtaining optimum yields. The total rainfall is adequate to meet crop water requirements in the kharif season over large parts of the country. Irrigation is required essentially to tide over inadequate soil moisture during dry spells within the season. There are, of course, some areas especially in Punjab, Haryana, Rajasthan, parts of Gujarat, Tamil Nadu — which need storage are limited. Groundwater resources are already under a severe stress. The scope for expansion is limited. In many areas, the problem is to check expansion and contain the rate of exploitation. It is in this context that interlinking is seen as a way out.

A closer examination of the interlinking idea raises several questions: First, it is based on the presumption that there are large surplus flows in some basins and that the physical transfer is feasible in terms of physical engineering, and can be accomplished economically without creating any adverse impact

On what basis and who determines the surplus basins and the magnitude of the surplus? The volume of flows during the flood season is misleading as a basis for judging surpluses. Nor can the regions where floods occur be considered water surplus. Most of them may have floods in the monsoon but have inadequate water for use in the dry season. Substantial tracts in these regions do not have the benefit of irrigation. Estimates of surplus made by Central agencies such as the National Water Development Agency

are hotly contested by the States.

A more serious difficulty arises from the fact that most of the flow in practically all rivers occurs during the southwest monsoon. Published data from official sources show that 90 per cent of the flow in south Indian rivers occurs between May and November. Data on the Indo-Gangetic and Brahmaputra river basins are classified. Being perennial, the proportion of the

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## World water forum ends with focus on climate theme focus on climate theme

By G. Venkataramani

kyoto MARCH 23. Over a hundred new commitments on water, with focus on the climate theme and gender issues, were made on the concluding day of the third World Water Forum, here today. "The forum has become a truly 'action-oriented' conference," said its Vice-Secretary General, Kenzo Hiroki.

"Water issues are of long-term nature;" "Water issues are of long-term nature; all institutions and decision-makers must take this seriously. The poor come first and poverty eradication is foremost on the agenda," said Mahmoud Abu-Zeid, president of the World Water Council and the Minister of Water Resources and Irrigation, Egypt.

water challenges and to meeting the goals set forth at the Millennium Summit of the United Nations in New York in

2000", — cutting by half the proportion of poor people without secure access to

World water infrastructures, especially those in developing countries, are in a

The commitments included several

water and sanitation by 2015.

dire need for renewal, expansion and upgradation to meet the present and future needs of all population. The emergence of a large body of knowledge and experience on the financial, economic, social and environmental aspects are pointing to the way for sustainable decayantees and upgradation to meet the present and furnishmental aspects are cation and access to information for en-

"The need for capacity building, education and access to information for enhanced effectiveness in water management is unquestioned.

The organising committee issued a

preliminary 8-page forum statement in which it agreed that they would be "solemnly committed to facing the global

velopment practices that can be adopted by each country and community.

These critical elements of the water development processes are often treated as an add-on to programmes, with scant regard to local capacity building institutions, gender mainstreaming, cultural diversity and traditional knowledge or to long-term commitment," said the forum

committee.

Among the 21 winners of the 'Water voice contest' organised by the forum were five Indians — Navaraj Samy Iyyah

Konar from Yadava college Madurai, S. Krishnammal of Yadava Women's College, Madurai, Abhik Gupta, R. Jagadiswara Rao of Sri Venkateswara University, Tirupathi and Surendra Kumar Sharma. A Gujarat-based NGO, the Self-Employed Women's Association (SEWA) also won the contest.

The former Prime Minister of Japan, Ryutaro Hashimoto, who is the Chairman, national steering committee of the forum, distributed the prizes.

rorum, distributed the prizes.

About 24,000 participants from 182 countries attended.

The forum was held in the three Japarnese cities of Kyoto, Shiga and Osaka from March 16 to 23, holding 351, separate sessions on 38 interlocking themes dealing with water

THE TRIDE

#### 'Water vital for rural development'

By G. Venkataramani 24 3

SHIGA (JAPAN), MARCH 21. "Water is essential for broad-based agricultural and rural development in order to meet the Millennium Development Goals to improve food security and poverty alleviation. The challenges of sustainable water use and enhancing the partnership of all stakeholders in all aspects of agricultural water use, development and management and in providing increased access to water resources by all will be recognised and assigned top priority." This is the essence of the declaration adopted by the Ministerial Meeting on Water for Food and Agriculture at the third World Water Forum here today.

"We emphasise that achieving the objective of food security and poverty alleviation for an increasing world population will require the mobilisation of all resources of financing and increased investment in water-related infrastructure, research and development to sustain productivity gains and create new opportunities for the sustainable development and integrated management of water resources," said the

Ministers responsible for food and agriculture and the representatives of international organisations assembled here.

Outlining a plan of concrete actions, the participants said, "We will promote improved governance of agricultural water use through integrated water resources management including non-agricultural water use. This process should be efficient and equitable. It would involve the active participation of all user groups, including women and the poor in local water resources settings."

Several social and environmental activists protested the ministerial and other declarations favouring the private sector involvement in managing the water resources, and prevented the proceedings of the session in Kyoto. They took out a procession shouting slogans and waving banners condemning the blatant support of the international development agencies to privatisation of water. "Water is for people and not for profit. Let people and water remain the nature's way."

In the session on 'Rainwater harvesting and educational awareness', K.R. Gopinath,

Chairman of the KRG Rainwater Harvesting Foundation, a civil society organisation from India, highlighted the successful case studies of poor communities in Limdi municipality, Gujarat, being converted into multi-purpose "clean-green park". Using a multimedia presentation, he explained how integrated waterharvesting models have become a reality benefiting more than 3,000 families in the rural areas of Gujarat and other pockets in India. "We need to create more awareness among children, and we have done this successfully by employing simple, visible projects in the rural and urban centres in the country," explained Mr. Gopinath.

The World Water Council, meeting in Kyoto at the time of the outbreak of the hostilities in Iraq, has expressed serious concern about the sufferings that may be caused to innocent civilians by the destruction of water supply and sanitation infrastructures. The council intends to send a team of experts, at the earliest possible moment, to the affected areas to evaluate damage and recommend measures for emergency relief and rehabilitation of stricken systems.

#### Meet on win conservation of marine biodiversity

By Aarti Dhar Riologists,

NEW DELHI, MARCH 19. Marine biologists, scientists and experts will come together in Kankyakumari, on March 21, to evolve an action plan for conservation of makine biodiversity. The two-day national conference organised by the Ministry of Environment and Forests will also deliberate upon ecological security.

Coastal areas in the country are increasingly under pressure from anthropogenic activities with the major areas of concern being over-exploitation of coastal resources and the impact of land-based activities and ship traffic. A number of issues arise in the management of marine environment, despite numerous laws the management of marine environment, despite numerous laws and programmes. The conference will attempt to address them and draw an action plan for conservation of marine biodiversity.

Increasing population, besides economic and industrial growth have created pressure on coastal resources with some stretches in the country becoming highly polluted due to urbanisation and tourism, industrial waste, chemical waste from fertilizers and pesticides and sile from degraded and state waste from fertilizers and pesticides and sile from degraded and state waste from fertilizers. ticides and silt from degraded catchments. Untreated sewage and non-industrial waste account for more pollution than industrial effluents.

Mining of sand from the seabed results in increase of turbidity in the ambient water affecting organisms and their productivity by limiting the availability of light. Aquaculture activity in some parts of the country has also exerted considerable pressure on the coastal resources. Construction relating to port development alters the sediment transport mechanisms in the coastal zones and result in

There has been a considerable influx of non-fishermen communities into the fishing sector, resulting in over-exploitation of marine resources. Though marine production has not exceeded the maximum sustainable yield (MSY), inappropriate exploitation patterns, such as concentration of fishing efforts in coastal waters, have had a detrimental effect.

The Agenda 21 — An Assessment, a document brought out by the Ministry of Environment and Forests has suggested strict implementation of the Co. the Ministry of Environment and Forests has suggested strict implementation of the Government policies with specific stress on check of pollution from use of persistent organic pollutants, such as DDT for crop protection, and the need to provide adequate and appropriate support from the developed countries to ocean-related capacity-building in the developing countries. The effect of paints used on ships on marine organisms is being studied. The change of sex in Gastropoda, shell thickening, imbalances in growth and reproductive stages, and on larvae in oysters and mussels because of the antifouling paints are already known.

The need for some form of international involvement in the management of high-seas fishery resources, as observed by the

The need for some form of international involvement in the management of high-seas fishery resources, as observed by the U.N. Conference on Straddling and Highly Migratory Fish Stocks and the release of persistent hydrocarbons through ship traffic and their effect on global warming and climate change are other aspects highlighted by Agenda 21. It has also recommended framing of policies for coastal aquaculture, keeping in view the socio-conomic and environmental aspects

nomic and environmental aspects.

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END HINDU

#### Impact assessment of fishing in Jambudwip island sought

By Our Staff Correspondent

NEW DELHI, MARCH 18, Back from the Jambudwip island, south of Sunderbans in the Bay of Bengal, a group of environmental activists have asked the Centre to conduct an impact assessment study of fishing and fish drying activity on the island to conserve the mangrove forest.

The activists from the Environmental Justice Initiative and the Delhi Forum, have demanded that the study be conducted by an independent commission of experts and no action be taken against the fishermen before such a study is completed. The visit was prompted by the report of the Central Empowered Committee (CEC), instituted by the Ministry of Environment and Forests, recommending eviction of the transient fishermen from the Jambudwip is-

land by March 31.

Suggesting that the area around the fish drying bed on the island be clearly demarcated and fenced, the environmentalists in their fact-finding report Endangered Livelihood fact-finding have said the transient fishing community should be made equal partners in any conserva-tion effort and monitoring programme undertaken on the island. "The transient fishermen should be provided with economically viable alternative fuel so that the fishermen are not blamed for concerns regarding mangrove destruction,

The report says.

Over 10,000 fishermen go to the Jambudwip island between October and February to catch and dry the fish which becomes their source of livelihood. However, the World Wildlife Fund and the Wildlife Protection Society of India had complained to the Ministry of Environment and Forests regarding en-croachment of forest land and destruction of mangrove forest because of fishermen and their fishing activities.

The CEC visited the island in December 2002 and directed the authorities concerned to ev-

ict the fishermen.

transient should be issued identity cards by the Fisheries Department so as to eliminate the security concerned raised in the CEC report because of the island's proximity to a neighbouring country. There was also an agreement between the West Bengal Government and the fishermen on August 9, 2002 according to

which the State Government had assured that it would apply to the Ministry of Environment and Forests to regularise the drying of fish on the island, the fact-finding report says, while recommending that the agreement should be followed in letter and spirit.

Supporting the suggestion of anthropologist Bikash Ray-choudhury, author of "The Moon and Net" (life of the fish-ermen on Jambudwip island), that rather than evicting them and depriving them of their livelihood, every step should be taken to protect this unique community of transient fishermen as they reflect not only an anthropological and cultural heritage.

The Jambudwip island including the waterways is a reserved forest notified in 1943.

The Forest Department of West Bengal claims that since there were no inhabitants when it was notified.

#### Nations urged to address water issues

TOKYO, MARCH 16. The World said at the opening ceremony.
Water Forum opened today in Japan's western Kyoto prefecture, with more than 1,000 eo message for the opening people from 160 countries taking part to discuss how issues including poverty and conflicts relate to water resources.

At the opening ceremony, the former Japanese Prime Minister, Ryutaro Hashimoto, called on the participants to come up with "concrete action" to tackle water issues.

"The forum should not be a mere forum for discussion. The time has come to put what has been discussed into action," said Mr. Hashimoto, who serves as head of the forum's steering committee.

Among other matters, Mr. Hashimoto called for efforts at meeting the international community's goal of halving by 2015 the proportion of people without access to potable water and basic sanitation.

"International organisa-tions, Governments and exas well as many individuals and groups such as NGOs (non-governmental organisations) working at the grassroots level are gathered at this third world water forum to search for complete measures for initiating action," the Japanese Crown Prince Naruhito ceremony, emphasising the French Government's commitment to addressing water issues, which he said would be discussed at the upcoming Group of Eight summit in Evian, France, in June.

Mr. Chirac, who had been

scheduled to attend the forum, apologised for having had to cancel his trip to Japan, with-out citing a reason. The World Water Council, which is organising the forum, and the Moroccan Government presented Mahmoud Abu-Zeid, Egyptian Minister of Water Resources and Irrigation, and Jerson Kelman, president of Brazil's Na-tional Water Agency, with the first-ever Hassan II Great World Water Prize.

The third international forum continues through March 23. The meeting will culminate in ministerial-level meetings on March 22 and 23.

Participants are scheduled to draw up statements for each of the 40 themes and submit them to the ministerial meeting so that Ministers can base their discussions on the inputs, according to the Water Forum secretariat.— DPA

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#### GLOBESCAN Nuclear accident: 6 sentenced

TOKYO: Six executives who allowed workers to use buckets to fill a tank with uranium, triggering Japan's worst nuclear accident, received suspended prison terms at a court on Monday. One of them, the former head of the plant where the accident occurred, and the company that operated it were also fined. The six admitted negligence in the 1999 incident, which killed two workers and caused hundreds of people living near the uranium processing plant at Tokaimura, 140 km northeast of Tokyo, to be exposed to radiation. Passing sentence, Judge Hideyuki Suzuki said: "The accident gravely shocked society and vastly undermined public confidence in nuclear power." A string of accidents, scandals and cover-ups over the past decade has deeply dented public confidence in Japan's nuclear industry and its 52 commercial reactors. Resource-poor Japan relies on nuclear power for about 34 per cent of its electricity output and plans to raise that to 40 per cent. — Reuters

#### Bottled water can't be destroyed: Sushma

Statesman News Service

NEW DELHI, Feb. 20. — The government today expressed its inability to take action against the bottling plants of various brands of bottled water by confiscating the stocks and destroying them. Mrs Sushma Swaraj said in the Lok Sabha today that under the

existing norms laid down by the Bureau of Indian Standards, the level of pesticide residues by the standard of "below detectable limit" was found to be all right.

Until the laws are amended, there could be no action, the health minister told Mr Naresh Puglia and three others in response to their calling attention motion in the Lok Sabha.

When Mr Puglia wanted to know why BIS withdrew ISI marking from eight bottling

plants of different companies whose products were found to contain higher levels of pesticide residues after the test conducted by the Centre of Science and Environment, Mrs Swaraj said: "That is for the minister for consumer affairs to reply. Whatever I had to say concerning my ministry of health I have already said."

The consumer affairs minister, Mr Sharad Yaday, was not present in the House when the calling attention motion was taken up. The Motion was listed for the health minister to speak on behalf of the government. Mr

Ramjeevan Singh, Mr GM Banatwal and Mr IM Saradgi along with Mr Puglia questioned the irresponsible approach to the matter concerning public health by the Centre which created doubt in the public mind about the integrity of the government machinery.

Mrs Swaraj assured the members that the government has already initiated steps to amend the Prevention of Food Adultera-

tion Rules to upgrade the mechanism as per the 'Capillary Method', which is the international standard of checking impurities in water.

The government has already notified the proposed amendments in the Gazette of India and invited 'objections' and/or 'suggestions' from the public within a month of the notification by 18 March so that they can be placed before the Central Committee for Food Studies before the amendments are



Mrs Sushma Swaraj

finalised.

The following amendments to the PFA

rules have been proposed:

Pesticide residues considered individu-

ally — .0.0001 mg/litre

■ Total pesticide residues — 0.0005 mg/

■ The manufacturers of drinking water and mineral water shall produce a no-objection certificate from the Centre/state government's Ground Water Authority for obtaining license from the BIS and Prevention of Food Adulteration authorities.

#### **Pesticide stick** for water units

New Delhi, Feb. 19 (PTI): The government has withdrawn the ISI quality mark for bottled water produced at Bisleri's Bangalore plant and Pepsico's Bharuch factory in Gujarat in the wake of reports of high concentration of pesticides in the water.

The drive against bottled water companies, through country-wide inspections; comes in less than a month of the findings by an independent study showing that the bulk of mineral water sold in India has very high levels of pesticide residue which is not in conformity with Euro-

The direction for withdrawal of the ISI mark to eight units. which would practically make it impossible for them to operate in India, came from consumer affairs minister Sharad Yadav on the grounds of failing to meet norms set by the Bureau of Indian Standards (BIS) or for flouting the existing regulations.

The units barred from using the ISI mark are Kothari Beverages, Thane; Ion Exchange, New Mumbai; Pepsico India holding, Bharuch; Bisleri International, Bangalore; Vaibhav Aqua, Mumbai; Sardul Mineral Water and Soda, Jamshedpur; Vaishali Mineral Water, Hazipur; and Surat Beverages,

Dadra.
"The minister has ordered withdrawal of the ISI mark from bottled water produced in eight locations based on nation-wide inspections carried out by the bureau. As a result these plants are debarred from producing and marketing the commodity, a top BIS official said.

A Pepsi spokesperson said the "water line in the Bharuch factory is very new and was in fact scheduled to receive its approval for starting operations last week after clearing the BIS tests".
"We had done independent

tests of bottled water at our nine plants in the country last week and it was found that all of them meet the BIS, WHO and the EU standards," the spokesperson

A spokesperson of the Mumbai-based Ion Exchange said the company's consumer products division, which handles the bottled water business, has not received any letter of communication from the BIS. "We will be able to comment only after we receive any notification from the BIS," the spokesperson said.

#### END OF A PROLONGED WRANGLE

THE CAUVERY RIVER Authority's latest order directing Karnataka to ensure for three more days from February 11(as stipulated by the Supreme Court on February 6) an average flow of 4,500 cusecs for Tamil Nadu at Mettur has, not surprisingly, left both the disputant States dissatisfied. The quantum which works out to a mere 2.8 tmcft over a week falls far short of the 10 tmcft Tamil Nadu said it needed, at the minimum, immediately to save at least a significant part of the standing rice (samba) crop raised over less-than-normal acreage and, as such, the Chief Minister, Jayalalithaa, is "terribly disappointed". And her Karnataka counterpart, S.M. Krishna, is "unhappy" because, as he insists, the severely depleted storage in the four reservoirs in the Cauvery basin, being woefully inadequate for meeting his State's requirements, precludes any further release for Tamil Nadu. The rather prolonged wrangle between the two riparian States, which started with the first signs of a failing south-west monsoon in July-August last year and took on some avoidable streaks of bitterness, is attributable basically to the poor precipitation during both the south-west and north-east monsoons, with the evolving grave crisis posing a challenge as much to the political leadership of the two States over 'distress sharing' as to the CRA, the institutional mechanism charged with the responsibility of overseeing the implementation of the Tribunal's interim award of 1991. At the end of it all, with the CRA's February 10 order signalling the end of the row that saw the issue being shunted between the Supreme Court and the CRA for well over four months, one cannot help feeling that a more flexible, conciliatory and accommodative approach on the part of the two States - their political executives, to be precise - would have served the cause of optimal utilisation of scarce water resources better and the process itself would have been less painful and acrimonyfree, apart of course from cutting down much of the delay that the litigatory route had necessar-

ily entailed.

Of profound significance, from the standpoint of cracking the highly ticklish and vexed question of 'distress sharing', is the clear message the Supreme Court has sought to convey to the basin States by the kind of importance it attached to the CRA as the most appropriate and statutorily mandated forum for settling contentious issues. The apex court almost invariably made its decisions on water release, at different stages, subject to the consideration and possible revision by the CRA and, what is more, frowned upon any deliberate attempt to defy or scuttle that institution's orders. Again, by giving the sort of CRA-related directions it did on this occasion that the quorum rules stand relaxed, that the CRA's order shall have the sanctity of a court order and, that in the absence of a consensus, the Chairman's (Prime Minister's) order shall be final - the Court has in effect passed a sharp indictment on those who tried to scuttle the Authority's meetings by resorting to strategic absenteeism or tended to render the institutional mechanism less than effective through devious methods. The major weakness of the CRA in not having worked out a fair and reasonable arrangement for sharing water in a bad monsoon year came into sharp focus as never before this time and it is regrettable that the body, created in 1998, has not been able to clinch a decision on a formula the monitoring panel has evolved for a 'pro rata' sharing. Its failure on this count has very much to do with the lack of political will on the part of the member-States, which in turn may be traced to their unwillingness to break free from the compulsions of realpolitik and rise above narrow partisan or parochial interests. One hopes that those who constitute the Authority, especially the Chief Ministers of Karnataka and Tamil Nadu, will learn the right lessons and work in all earnestness for a viable and mutually beneficial formula for 'distress sharing', a task that necessarily calls for understanding and constructive cooperation among the States.

YAL HINGES ON GROUNDWATER

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#### Saving samba ruled out

By S.Vydhianathan

۲, CHENNAI, FEB. 11. Saving even 20 per cent of standing samba in delta districts appears doubtful, as water to be released by Karnataka will be inadequate.

Already 80 per cent of the crop has withered and the fate of

the crop in the remaining area depends on supply from the Mettur reservoir. Till now, farmers could save 20 per cent of the crop with groundwater. But as the level has gone down substantially in the past few days owing to continuous pumping, supply from the reservoir is necessary. But the quantum fixed by the Supreme Court and subsequently by the Prime Minister at Monday's Cauvery River Authority meeting

may not meet the requirement.

As of now, about 4,500 cusecs has to be released in the Cauvery and in the Vennar and 3,500 cusecs a day in the Grand Anaicut to save the crop. For this, about 10,000 cusecs has to be released from the reservoir everyday for the next 10 days. But the storage in Mettur and the possible release of days. But the storage in Mettur and the possible release of 4,500 cusecs by Karnataka will not be sufficient. So saving the crop is ruled out, except in areas where groundwater is available. From the beginning of the season, the State had been scaling down the area under samba. Though the normal coverage in the delta districts is about 5.5 lakh ha, including thaladi (late samba) on about 1.77 lakh ha, the Government earlier targeted to bring 4.5 lakh ha. But owing to poor water realisation in the reservoir during October and November last, it could cover only about 2.85 lakh ha. The crop on about 2.25 lakh ha has almost withered.

#### Water yet to reach Mettur

By A.V.Ragunathan

SALEM, FEB. 11. Despite the claim that Karnataka has started releasing over 4,500 cusecs of water from the Kabini reservoir from February 7, the stated quantum is yet to be realised in the Mettur dam, where the inflow this evening was 845 cusecs.

It would normally take three days for water to reach the reservoir, a distance of about 250 km. But even after five days, the

inflow is not encouraging.

Unless the inflow picks up substantially, there could be further delay in water reaching delta districts.

#### Seepage loss

Two reasons are attributed to the poor inflow: the quantum is less and due to a break in the flow, seepage loss is significant. According to information reaching here, Karnataka started releasing 3,210 cusecs a day and stepped it up to 4,400 and 5,000 cusecs in the subsequent days.

As the volume is less, the flow could not acquire momentum to reach the destination within the expected time.

There is also the fear that the Karnataka Government, in anticipation of the Cauvery River Authority meeting, could have dis-

continued the supply on Monday, slowing down the flow further.

As per the Cauvery Disputes Tribunal award, Karnataka should have released 196.965 tmcft till today, but the inflow into Mettur was only 89.339 tmcft, leaving a shortfall of 107.626 tmcft.

#### ENFORCE BETTER STANDARDS

PURE WATER, AS claimed, is not pure enough. Many branded water bottles contain pesticide residues that exceed permissible levels, as a non-governmental agency's study showed last week. The Union Department of Science and Technology's experts have also confirmed it. Serious official efforts are now on to improve the existing standards and norms for "packaged drinking water". All this is putting pressure on the Rs.1,000-crore packaged or bottled water business. The Delhi-based NGO, Centre for Science and Environment, revealed that a random analysis of the bottled water of 30 brands in Delhi and Mumbai showed that many of the samples contained pesticide residues such as organochlorines and organophosphorous, including Lindane, DDT and Malathion. Within days of the study reports being made public, a flood of advertisements was released by the branded water manufacturers explaining the technologies they use to make their water as pure as can be.

But, the study report gained credence when the Union Minister for Science and Technology, Murli Manohar Joshi, personally wrote to the Prime Minister, A.B. Vajpayee, stating that the department scientists "found considerable merit in the findings and conclusions" of the NGO study. In a flurry of welcome initiatives, the Union Ministry of Food and Civil Supplies has decided to update the provisions of the Prevention of Food Adulteration Act to raise the standards for packaged/bottled drinking water and the Bureau of Indian Standards wants to adopt European standards to limit individual pesticide residues in drinking water to less than one part in a billion and total pesticide residues to less than five parts in a billion. At present, BIS standards merely say pesticide residues should be "non-detectable".

Millions of consumers countrywide buy bottled and packaged water not merely for taste or convenience, but for the potential health bene-

fits the pure water is supposed to provide. Studies by the World Health Organisation show that drinking water can be contaminated by a range of chemical (lead, arsenic, benzene) and microbial hazards (bacteria or virus such as Hepatitis A and Vibrio Cholerae) or even physical hazards (metal and glass fragments). Again to quote the WHO, because of these large numbers of hazards, the development of standards for drinking water requires significant resources and expertise which many countries may not be able to afford. To guide the countries to set up uniform and strict standards, the WHO has now released a draft of its Edition 3 on drinking water quality. Most of the branded water makers say they comply to the existing Edition 2 of WHO standards as also the BIS standards.

The reasons for pesticide residues found in the drinking water are not far to seek. The source for most of the bottled or packaged water is surface water or municipal piped supply. Sometimes they depend on local river systems or water sources. In many developing nations such as India, all these sources are known to be polluted beyond reasonable levels by the indiscriminate dumping of municipal and industrial wastes. The impact of these is there for the world to see. Nearly 3.4 million persons die worldwide annually of water-related diseases. What is now required is a serious effort at the national level to evolve and strictly enforce accurate quantitative standards, as also regular/random sampling and testing systems. The enforcement machinery should come within the purview of a unified head, instead of remaining distributed among the Food, the Health and the Science and Technology departments. The labelling on the bottles also needs standardisation. However, the onus continues to be more on with the social responsibility shown by the corporate citizens. The least the manufacturers can do is to ensure the best of health for their consumers by complying with global norms on water purity.

#### SC orders Karnataka to release 4,500<sub>1</sub> $\sim$ cusecs a day to T.N.

、いり By J. Venkatesan しんだ

NEW DELHI, FEB. 6. The Supreme Court today came to the rescue of the Cauvery delta farmers in Tamil Nadu to save the standing 'samba' crop by directing Karnataka to ensure an average release of 4,500 cusecs (amounting to 0.4 tmcft) of water a day from tomorrow at Mettur reservoir till the Cauvery River Authority headed by the Prime Minister took a decision at its meeting on February 10.

Significantly, a three-Judge Bench comprising Justice R.C. Lahoti, Justice Y.K. Sabharwal and Justice Arijit Pasayat made it clear that the CRA meeting would take place even in the absence of a quorum of three Chief Ministers and that the decision of the CRA would be final, having the sanctity of a court order and binding on all the parties.

While senior counsel for Tamil Nadu, K.K. Venugopal, pleaded that Karnataka should be directed to release at least 10,000 cusecs, senior counsel for Karnataka, F.S. Nariman, maintained that the State could release only 1,200 cusecs

In view of the divergent stand, the Bench summoned the Chairman of the Cauvery Monitoring Committee, A.K. Goswami and its previous Member-Secretary, R.K.

Sharma and ascertained from them (in their Chambers) the availability of water in the reservoirs of Karnataka, the quantity of water being released every day and the immediate requirement of water by Tamil Nadu to save its standing crops.

The Bench expressed the hope that the February 10 meeting of the CRA would positively arrive at a decision"

It gave liberty to the CRA to suitably modify or change the order as per the discussions and consensus that might be evolved therein.

The Bench recorded an undertaking from counsel of Tamil Nadu and Karnataka that their Chief Ministers would positively attend and participate in the meeting.

It was also made clear that in the absence of consensus among the States at the CRA meeting, the decision of the Prime Minister as Chairman of the Authority shall be decisive.

The Bench further said that this order, subject to such changes as the CRA might make on February 10, shall be treated as an order of the court and "it is the obligation of the parties to implement the same.'

> Of no use, says Jayalalithaa: Page 13

Poisoned Pani, m

Purified water, goes the label, but few of us quite believed that. Even by our now low expectations, the expose on branded bottled water conducted by the Centre for Science and Environment will both frighten and shock. The bottles contain, not just a few impurities we're quite used to that in almost all edible products — but dangerous levels of toxic pesticides. The more popular brands contain as much as 104 times the safe limit as prescribed by the EU. Pesticides like chlorpyrifos and malathion weaken the immune system, attack the nervous system and increase susceptibility to cancer. Yet, an increasingly health conscious public has been taking to these brands in the conviction that they are safer than our polluted drinking water supplies. Given that bottled water is drawn from tubewells, it should have been obvious to health safety authorities that it would contain various contaminants including pesticides. Numerous studies earlier have revealed that pesticides have leached into groundwater sources. But the issue here is that the water ought to be cleaned and made totally sterile. To be fair to the bottled water industry, it has only followed standards set by the Bureau of Indian Standards which prescribes tests that do not reveal pesticides. Indeed, these tests fall far below international standards. The BIS reaction? — We'll study the report.

The bottled water scandal is the latest in a series of entirely avoidable compromises made in food safety standards. Not long ago, it was revealed that under the law, there was actually a permissible limit for rat droppings and hair in atta. Then came adulterated mustard oil. As for doctored milk and spices, we have almost learnt to live with them. Since cheating the consumer seems to come so easily to manufacturers, it is up to the health authorities to exercise far greater vigilance. There is no justification for Indian standards to be lower than accepted international norms. The health of consumers apart, in sheer economic terms, India is losing out on the international market, as can be seen from the increasing rejection of Indian edible product consignments. There is no merit in the argument that more stringent standards will raise cost to consumers. The profile of the branded bottled water consumer is such that she will gladly pay a little more rather than compromise safety standards. With a huge per annum growth rate, Indian brands could have been looking at lucrative foreign markets. Instead they appear to have jeopardised their own domestic market.

## with mineral water and others (see table for other Not playing it

Statesman News Service

NEW DELHI, Feb. 4. — If you getting rid of them right now. In really "playing safe" but rather are mineral water, far from being pure, are a deadly cocktail of peshave stocked up those mineral water bottles, you would be better off the light of what the Centre for Sciénce and Environment demental NGO claims that bottled clared today, the consumers aren't living dangerously. The environicide residues.

their findings on samples of 17 samples were found having pesticide The organisation today declared prands of mineral water collected from various places, in Delhi and Ghaziabad. According to the direcor, CSE, Mrs Sunita Narain, the

residues up to 36.4 times in excess of the prescribed level of 0,0001, She said that these samples were collected from bore wells and other water sources used by manufacturing companies as raw material.

different pesticide residues exceed-

ing the specified standards.
"The irony is the least contamina-

brands). According to Mrs Narian, almost all of these contained five

> Experts say that in the long run pesticide contamination can cause birth defects and disruption of the mmune system. "Pesticides don't versible health disorders as they Most commonly found pesticide residues were Lindane, DDT, cancer, liver and kidney damage, disorders of the nervous system, kill immediately, but cause irreaccumulate in body fat," she said. malthion and chlopyrifos,

Kwenenger, Hello, Bailey, Paras The CSE found highest concen-No.1 Mc Dowell mineral water folowed by Bisleri, Volga, Kingfisher, ration of pesticide residues in

times higher than the prescribed

ropean norms because the standards set by Bureau of Indian She said the CSE had used Eu-Standards (BIS) were 'vague and undefined'.

She also said the studies were conducted in a planned way and had no malafide intensions.

largest selling brands," said Mrs

Narain. The concentration levels of pesticide residues ranged from 79

ted bottled brands have the lowest sale; those violating norms are the She said the CSE team had also wells located in industrial and agricultural areas in Delhi and in collected raw water samples and most of these were from bore Shahibabad, Noida and Ghazia-

les bought from the markets. The

laboratory tests showed that Del-

The study was conducted be-

times to 104 times.

tween July 2002 and January 2003 on randomly selected sealed botpesticide residues than the stipulated levels. The Mumbai samples

were found comparably better. But the worst offenders there also

had pesticide levels up to 16.4

hi samples had 36.4 times more

in Mumbai happened to be mu-nicipal water. The CSE also The source for the brands sold claimed these reputed brands did not use their micro-filtration facilities to purify raw water.

MINERAL WATER BRAND AND THEIR TWO RANDOM SAMPLES (In mg per Iltre) Found IN PESTICIDAL RESIDUES

■ No. 1 McDowell: 0.0550 & 0.0294 ■ Kwencher: 0,0241 & 0,0255 Aquaplus: 0.0528 & 0.0524 Kingflaher: 0.0289 & 0.029 Pure Lite: 0.0076 & 0.0068 🗖 Aquafina: 0.0054 & 0.0017 ■ Minscot: 0.0047 & 0.0049 Kiniey: 0.0140 & 0.00006 ■ Bisieri: 0.0552 & 0.0237 ■ Balley: 0.0209 & 0.0214 ■ Volga: 0.0265 & 0.0366 ■ Paras: 0.0196 & 0.0179 ■ Hello: 0.0209 & 0.0214 ■ Prime: 0.0071 & 0.006

■ Himalayan: 0.0020 & 0.0009 ■ Catch: 0.0035 & 0.0020

terlink rivers within 10 years. As a re- issue. the entire work by 2016.

#### The smaller, the better

ICHAEL EVENARI, an Is- hours out of the total 8,760 hours in raeli scientist, was in- a year. This water must be stored trigued when he saw properly and used sensibly during ancient towns in the middle of the the 8,660 hours without rain. Negey desert which gets only about India has a rich tradition of water 100 mm of rain every year. Not only harvesting at the local level. Wheth--did they have their own drinking er they are the 'zings' of Ladakh, the water systems, but surplus for agri- 'ahars' of Bihar, the 'johads' of Raculture too!

His research on this led to a path- Central India, the 'eris' of Tamil Nabreaking finding, that small catch- du or the 'kuntas' of Andhra Praments manage to hold more water desh, people in each region have than larger ones. He showed that evolved their own techniques keep-3,000 micro-catchments of 0.1 hec- ing in mind the local geo-climatic tares each give five times more wa- zone. ter than one catchment of 300 With the emergence of modern irhectares!

Similar studies by the Central Soil and Water India has a state institutions and rich Conservation Research Inrich tradition tarmers try to snatch tro, even three, harvests of stitute at its campuses in Agra, Bellary, Kota and of water hillong have shown that 10 tiny dams with a catchment of one hectare each the local would collect more water than one larger dam with a

catchment of 10 hectares. The late Anil Agarwal of the Centre better, pump groundwater with for Science and Environment calcu- electricity, all of which are subsilated that on average each Indian dised in the name of the poor. village can harvest about 3.75 billion Even in the context of a growing litres of water every year! This can commercialisation of agriculture not only cater to all the drinking wa- and increasing integration with the ter needs of the human and cattle market, it is possible to both enpopulation, but also provide for courage water conservation as well as promote efficiency of water use. some irrigation.

Himanshu Thakkar of the South But the trends point to an entirely Asia Network on Dams, Rivers and different direction. While irrigation People questions the wisdom of let- canals accounted for 41.3 per cent of ting rain water flow hundreds of the irrigated area in 1970, this had Mometres into a big river and then fallen to 31.3 per cent by 1998. Durmending crores of rupees to divert it ing the same period, the net area back again to irrigate lands where it irrigated by tubewells rose from 14.3 per cent to 33.8 per cent, while the originally fell as rain.

Being "monsoon country", Indian net area irrigated by tanks declined llages get most of their rain as a from 13.2 per cent to 5.7 per cent. reavy downpower for just a 100 A.A.

king plan has been enthusi- drought and floods is not a new pro- which lists 2016 as the date for comastically received for three posal but this wide-ranging consen-pletion. No explanation has been procentral claims it makes for it- sus has not emerged after a thorough vided on how this is to be managed. self. One, it would lead to a perma- debate over the merits and problems Such a project should have been ment drought-proofing of the country of this plan of hydrological engineer-preceded by a detailed assessment of by raising the irrigation potential to ing which perhaps has no precedent its financial viability, technological

30,000 MW of hydropower to the na- similar proposal of a "garland" canal Studies" over the past two decades. was submitted by Captain Dastur. The NWDA plan has divided the It is not often that there is such un- The Government prepared its own project into two broad "components" critical consensus over a policy issue, plan in 1980 and in 1982 the National \_\_\_\_ the Himalayan part with 14 river with the Supreme Court going so far Water Development Agency was set links estimated at Rs. 3,75,000 crores as to "direct" the Government to in- up to carry out detailed studies on the and the Peninsular component with

sult, the Government has set up a The NWDA budgets the entire pro-Task Force" headed by the former ject at Rs.5,60,000 crores (\$112 billion) Union Power Minister, Suresh Prabati at 2002 prices. But Mr. Prabhu himself however, gone on record that the "latbut to build national consensus, work says it could go up to \$200 billion. It est estimated cost" of only the Peninout the detailed plans, and complete envisions a 30-year plan but following sular component is about Rs.5,00,000 the Supreme Court directive, the Task crores! These links stretch from the

From being a river which supportjasthan, the 'baolis' of North and rigation and the spread of commercial agriculture, farmers try to snatch two, cash crops from the soil. This is when systems of

> conservation and use get neglected. The rich lan-One, the source of the river is drydowners would rather get irrigation water or, even

> > duced in the Ganga. their own plans to use this "surplus" There are not even any estimates re- to 60,000 cusecs can solve or even

capability, ecological sustainability bout 150 million hectares. Two, it It was the former Union Minister of and political feasibility. Unfortunatewould solve, or at least mitigate, the Irrigation and Power, K.L. Rao, who, ly, the NWDA is yet to publish any unual floods in the Ganga and the in 1972, first presented his plan to link "Detailed Project Report" though i Brahmaputra. Three, it would add the Ganga and the Cauvery. In 1974, a has conducted some "Feasibility

> 17 river links estimated at Rs. 1,85,000 crores. A former Secretary in the Union Water Resources Ministry has. Sutlei in the North to the Vaippar in the South and from the Brahmaputra in the East to the Mahi in the West. If the economics of the scheme

seem to make it extremely improbable serious reservations can be raised about some of its claims and assumptions too. Let us look at two of these — the claim of flood control and the assumption that the Ganga, the Brahmaputra, the Mahanadi and the Godavari are water surplus.

ed inland trade and passenger traffic 150 years ago, the Ganga has become a silt-choked shadow of its former self. The British used it to ship their troops from Bengal to Kanpur and Delhi during the 1857 War of Independence. Today, the Calcutta port is so silted up that crores of rupees have been invested to build another port at Haldia. It was to overcome the silting of the Calcutta port that the Farakka barrage was constructed to divert more water to the "Indian" stream. While Farakka has led to drastically reduced water flows to Bangladesh and resulted in constant diplomatic attrition with that country, it has not been able to save the Calcutta port Where has this water gone?

ing up, like almost all other Himalayan rivers. It is well known that the Gangotri glacier which feeds the river has receded by over 14 km in the last century alone. Today you will have to trek two days more than your grand-Try visualising Punjab parting with well as economic, costs of the project. parents did to reach Gangotri! Two, "its" water for Tamil Nadu, when But these rivers do have massive increasing amounts of the river's waters are already being used for irrigation as well as urban needs. Moreover, almost half of the Ganga's terlinked river grid would create may the monsoons. The plan envisions water at Patna originates in Nepal which has its own "plans" to develop dia like no terrorist can. its hydrological resources. Once these come up flows would be further re- sider the fallout of 200 large water canals to parched agricultural lands

Similar stories puncture the claims network of canals. Linking these riv- dia. While this may appear sound, the f the Brahmaputra, the Mahanadi ers and storage reservoirs would eat fine print reveals that only 1,500 cuand the Godavari being water surplus. into the natural habitats of wildlife secs of water is to be lifted from the In any case, the riparian States and re-shape the ecology of the counflood flows! How lifting 1,500 cusecs through which these rivers pass have try with unknown consequences. of water from a total flood flow of up

Serious reservations can be raised about some of

the claims and assumptions of the national river interlinking plan, writes Aniket Alam.

ward" regions. on the scheme's political feasibility. would surely add to the political, as

INSIGHT

water for "developing" their "back- garding the number of people who would be dislocated. 'Guesstimates' This puts another question mark vary from lakhs to a few crores! This

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VTERSTATE DISPUTES

neighbouring Karnataka was willing flood flows — estimated at 30,000 to to disobey the Supreme Court on this 60,000 cubic metres of water per secissue. The political minefield this in- ond (cusecs) — during a few days in perhaps threaten the very unity of In-tapping these flood flows, storing these in the reservoirs and draining Even on the ecological front, con- this water over thousands of km of storage reservoirs and an extensive in southern, western and central Inmitigate floods is a mystery. It must also be remembered that

floods are not merely destructive, but essential components of a river's life They flush out the river and recharge the drainage channel for water flow Any attempt to stop (or as it is said "utilise") all the water in a given river would be disastrous. A river is nature's method of draining the land of water and it has its own ecological rhythm. Capturing all its water and stopping its natural flow is tantamount to "killing it". Apart from severe water logging and consequent salinity, this would also lead to a cycle of uncontrollable floods and searing droughts as the consequences of such a massive disruption of the river basin's hydrological cycle unravel.

Countries with a history of playing around with their rivers and "controlling" them are now investing billions of dollars to "restore" them by removing dams and embankments. In the U.S. alone, more than 100 dams were removed between 1999 and

2002. In 2001, over 115 miles of River Baraboo were "restored" in Wisconing of this scale would also mal fusin. Attempts are now on to revive the ture Indian Governments so Colorado in southwestern U.S. as its more vulnerable to foreign finicia waters dry up before reaching the ocean and a \$8 billion plan has been passed in California to revive some of ts rivers. Popular protests have stalled the second phase of water transfer from Spain's Ebro river to the country's south.

Even as a drought-proofing measure, the river interlinking plan leaves many questions unanswered. India already has the world's largest irrigation infrastructure comprising about he entire water resources of 20 per cent of the global irrigated area. Much of it is in disrepair for lack of un!

demonstrated high efficiency rates. need" as distinct from "human right". Why are these methods not taken up By the WTO's definitions, which are by citing lack of resources by the same increasingly running the market, hu-Government which is willing to fi- man needs can be supplied by private nance this gargantuan river linking entrepreneurs for a profit, unlike a human right which accrues equally to

Its estimated cost, Rs. 5,6,000 everyone. crores at 2002 prices, equals 25 per The World Bank estimated in 1998 cent of our Gross Domestic Proluct, that global trade in water would genor two and a half times our annual tax erate \$800 billion a year in the first collection and double our present for- decade of this century. So, it is not eign exchange reserves. Where the difficult to identify where the eventual investible capital of this magnitude funds for the scheme would come available in the domestic economy? from and who would control it. Water, According to the Government's Eco- like air and unlike other natural renomic Survey for 2001-2002 the sources, is very difficult to own and country's Gross Domestic Saings control privately. It is a quintessential were lower than the estimated cst of "common" resource and most atthis project which is also higherhan tempts at making it a generalised India's total outstanding extrnal commodity to be bought and sold in debt by close to \$12 billion! the market have been unsuccessful The only option would be inds That may have been because these atfrom international sources, part tempts were piecemeal, one river, one from the fact that this would pice a town, one province at a time. India's

debt of about \$112 on every than national river linking plan attempts to (where average annual incomes inge bring all the water resources of an enbetween \$400 and \$800), it also ises tire subcontinent under one orgaquestions about how this loan ip be nised command. Rs.30,000 crores.

Pipe-dream?

project?

User charges for irrigation wer or well create conditions where largepower provided by this schemmay scale privatisation of water becomes make these uneconomical foroth the only option. That we are moving the agricultural and industrial scors. towards this future blindly is the real They would put inflationary preure danger. on the prices of our agricultura produce even as we try to make lese competitive in the internationaharket. A big question mark is als put over the political viability of collting these user charges. External boow 1ITS own admission, the Centre Broognises as a major hurdle the maging of a political consensus for its abitious project to interlink

pressures. The real threat is that after string rivers, een though the Government feels he project with much fanfare an in esting thousands of crores intat, uture Government would hat to in 10 yea. imply abandon it as its financiaimlications unravel, leaving billios of ubic metres of earth dug up anothe ace of the country scarred or cetu ies. The alternative would le to had

ea. Much of it is in disternal for lace of funds. The Planning Commission esfunds. The Planning Commission esfunds. The Planning Commission esfunds a matter of time before construction the Sutlej-Yamuna Link timates that a mere 10 per cent hike in the Government throws up its hands that a mere 10 per cent hike in the Government throws up its hands the causery waters between timates that a mere 10 per cent make in irrigation efficiency would provide and asks for private participation. An arnataka an amil Nadu, or raising the water for an additional 14 million army of apologists would argue that hight of the rdar Sarovar Project. Yet, hectares. Studies have also shown private participation is necessary to hectares. hectares. Studies nave also shown that traditional water conservation that traditional water conservation "save" the billions already sunk in the heat are shown that traditional water conservation that traditional water conservation to the ball of the states inved. Not just that, they that traditional water conservation and irrigation methods, which have and irrigation methods, which have project. This is the thin edge of the been deliberately neglected, can still wedge for the wholesale privatisation and the Cent cajoling. be revived at minimal expenses with of water in the country. At the World Water Forum meeting in 2001, water Court ad ored Punjab to complete by MNCs successfully lobbied to get the Januar 15, 2, the construction of the

Source: Union Ministry of Water Resource:

with the Yamuna, which is to carry Haryana's share (3.5 million acre feet) of Rs. 450 crores on the canal. The construction was abandoned in 1990 at the height of militancy in Punjab when a Chief Engineer of the Central Water Commission and some labourers were gunned down.

The Cort has compressed a proposed 30-year piect into 10 years by its ruling, which ma experts feel is neither practical r feasible. In recennonths, the Supreme Court has given t Vajpayee Government more

empowed, armed as it is with a

than a helpy hand to get around vexed inter-State ver problems, be it the

U.N. to define water as a "human | Central-fun canal linking the Sutlei

Sutlej waters. The Centre has spent about

SupremCourt order to complete the task

Instead of abiding by the apex court's decision, the Puniab Chief Minister. Amarinder Singh, has linked political demands such as the transfer of Chandigarh and the distribution of border districts between Haryana and Punjab with the SYL. He even raked up the distribution of Ravi-Beas waters between Punjab, Haryana, Rajasthan and Jammu and Kashmir at the time of reorganisation of Punjab in 1966 when an agreement was signed between the States. He stood up the Water Resources Minister, Arjun Charan Sethi, at least twice for scheduled one-to-one meetings. Finally, he has gone to Court in a tacit move to buy time.

In the Cauvery dispute also, the apex court intervened to direct Karnataka to release 1.25 thousand million cubic feet Water wars

Sharing the waters of inter-State rivers has proved problematic so far, points out Gargi Parsai.

(tmcft) of water (later reduced to 0.8 tmcft on the eve of the Gujarat Assembly by the Cauvery River Authority headed by elections, at a meeting convened by Mr. the Prime Minister) into the Mettur reservoir in Tamil Nadu to help the latter save the standing crop. Yet, despite personal assurances by its Chief Minister, S.M. Krishna, Karnataka did not release the requisite water to Tamil Nadu. Even in a crisis situation like this, when both States have to share distress, they stuck to Centre and the Court both are as yet their traditional positions. Karnataka flouted the directive given by the CRA, the order of the Supreme Court and then its own assurance in the CRA. Now, one Chief Minister or the other keeps away from the CRA meetings convened by the Prime Minister, not only undermining a body set up under the directive of the Supreme Court but also the authority of the Prime Minister.

In the matter of the Sardar Sarovar Project also, the Supreme Court

intervened to raise the height of the dam while directing States to do simultaneous rehabilitation and resettlement of project affected people. None of the States did

However, in a behind-the-scenes move Vajpayee, the Madhya Pradesh Chief Minister, Digvijay Singh, and the Gujarat Chief Minister, Narendra Modi, came to a tacit understanding after which Mr. Singh for the waters they spare. decided to offer cash compensation to the thousands of oustees in his State which is have to pay up for the criss-cross of quiet on this. In such a scenario, the Centre is

TAISHNA

moving cautiously on a consensus for interlinking rivers. If sharing the waters of inter-State rivers has proved problematic so far, things are hardly likely to get better in this day of coalition politics and regional parochialism. Senior officials in the Water Resources Ministry feel that nterlinking being a national-level

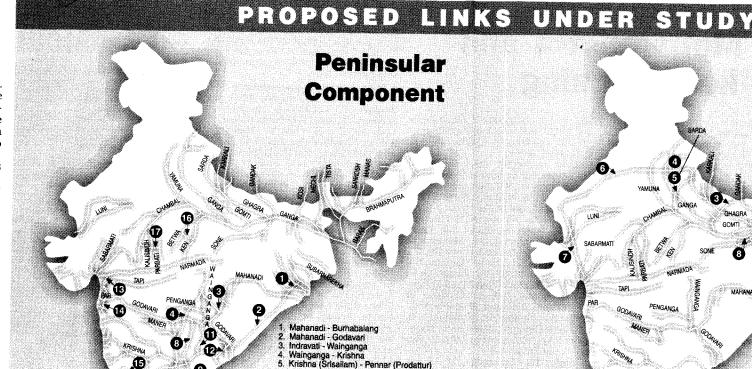
endeavour is a category in itself, unlike inter-State sharing of waters. It will be tied to water pricing, tariff structure. diversification of cropping pattern, internal rates of return, cost-benefits and so on, till the whole thing becomes selfsustaining.

All current inter-State water agreements will hold and only after meeting the surplus State's demands will the waters he transferred. Moreover, the donor States are likely to be compensated with hydropower or even development funds

But one thing is certain. People will the worst ever form of compensation. The canals and dams that will be constructed under this project, through raised water tariffs and irrigation costs. People will also have to pay with large-scale displacement of habitations, and loss of

forests and farmland. The Government would do well to ensure that this does not become another grandiose Centralised plan that is thrust on the people and later resisted by them. People's participation is as important as political consensus.

INSIGHT



returned, the guarantees and Jun- By stoking the Promethean ambiter-guarantees that would need be tions of engineers and planners, by given to secure it. Moreover, anual tickling the greed of the politician-buinterest on this amount wouldinge reaucrat-contractor nexus and by sebetween Rs. 20,000 crores and ducing the larger public with dreams of water security, this scheme may

o. Pennar (Gandikotta) - Palar - Cauvery 7. Cauvery - Valgai 8. Godavari (Ichampalli) - Krishna (Nagarjunasaga 9. Krishna (Nagarjunasagar) - Pennar (Somasila) 4. Krishna (Almatit) - Pennar 0. Pennar (Somasila) - Palar - Cauvery (Coleroon)

Ferniar (somasiia) - Palar - Cauvery (Coteroon)
 Godavari (Polavaram) - Krishna (Pulichintala)
 Godavari (Polavaram) - Krishna (Vijayawada)
 Par - Tapi - Narmada
 Damanganga - Tansa / Pinjal
 West flowing rivers of Kerala and Karnataka (West - East link)

Netravati - Hemavati Pamba - Achankovil - Vaippar

16. Ken - Betwa 17. Parbati - Kalisindh - Chamb.

 Sone dam - Southern tributaries of Ganga Brahmaputra - Ganga (MSTG) Brahmaputra - Ganga (JTF) (ALT)

5. Yamuna - Rajasthan 7. Rajasthan - Sabarmati

. Chunar - Sone barrage

13. Ganga - Damodar - Subernarekha 14. Subernarekha - Mahanadi

THE HINDU, Sunday, February 2, 2003 17

Himalayan

Component

Graphics by Varghese Kallada

#### **BHAVANI RIVER ROW**

struction of a weir to divert water from the Bhavani, an inter-State tributary of the Cauvery, highlights the disquiet over the potential ecological impact of the river diversion on the Nilgiris Biosphere Reserve. The Ministry has apparently paid heed to complaints about felling of trees in the Mannarkad forest area for creating the weir and a channel. The Union Ministry's intervention though not exactly on the water-sharing row but seeking to address the environmental fallout of the project may bring a pause in the standoff between the two States. What began as an innocuous minor irrigation work rapidly emerged as a confrontation point between Kerala and Tamil Nadu. The war of words appears quite disproportionate to the size of the project, which envisages the utilisation of less than one thousand million cubic feet (1 tmcft) of water to irrigate areas which Tamil Nadu says are outside the Bhavani river basin. The complaints by Tamil Nadu's farmers against the diversion and the Kerala Government's charge that Tamil Nadu is not honouring

THE UNION ENVIRONMENT Ministry's deci-

sion to withhold clearance to Kerala for the con-

further erode the already denuded brests. The Bhavani being a segment of the Cauvery basin, the standoff is also unfortunately emerging as another acrimonious point within the overall Cauvery dispute. The present arguments rose a month ago, when the Tamil Nidu Chief Minister wrote to her Kerala counterpart opposing the weir construction at Mukkali to divert the water course westwards, from the east-flowing Bhavani. Tamil Nadu feels that the diversion was being done even when the Cauvery issue is pending before the Tribunal. And second, the water is to be diverted outside the already water-deficient Cauvery basin. Both could idversely affect some drinking water supply and

its commitments in inter-State water sharing

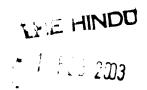
agreements seemed to drown the concerns

raised by environmentalists and Opposition

leaders in Kerala, that the water diversion may

irrigation schemes in Tamil Nadu. The State has taken it up with the Cauvery Tribunal already. However, Kerala contends that it wants to utilise only one tmcft for irrigation, although as per the 1973 inter-State agreement under the Siruvani Drinking Water Supply Scheme, it could utilise 2.5 tmcft of Bhavani water after construction of the Siruvani reservoir. Adding to the heat was the Kerala Water Resources Minister, T.M. Jacob's charge that Tamil Nadu was violating inter-State river water accords such as the Parambikulam-Aliyar Project, and the Mullaperiyar and the Siruvani water supply agreements, though Kerala was honouring its commitments to provide water to Tamil Nadu despite great difficulties.

As the trading of charges goes on, a saner argument needs to be articulated. Tamil Nadu need not have a grouse if the water is used within the river basin itself and not taken outside, or the course of the river is not changed. The Kerala Chief Minister's stand that he is prepared for talks with Tamil Nadu on all pending water disputes needs to be followed up. The experience of long-standing water disputes shows that only the farming communities and those in dire need of drinking water suffer in a standoff, as also the Government's administration and finances. If water disputes continue to foment hostility among States and their peoples, the concept of inter-basin transfers will be rendered meaningless. Any discussion on inter-basin transfers cannot centre around only water sharing, but should go into long-term means to ensure the nation's water and food security as also the environmental impact of changing river courses and transferring huge quantities of water across different land features. A rational starting point would be for the Irrigation Ministers of the States concerned to sit and settle water-sharing points before every irrigation season. The talks should be held under a structured mechanism that provides at least interim solutions to protect the interests of farmers on all sides in a balanced manner.



Water Ways wall

Convening the Cauvery River Authority (CRA) consisting of the prime minister and four chief ministers appears to be more problematic than convening the SAARC summit. The scheduled meeting of the CRA had to be adjourned twice for want of a quorum. But then we hardly expect our politicians to actually do the jobs they are elected for. Our readers might be interested to know why exactly water politics has come to occupy so much attention in the southern states. The genesis of the shortage may be traced to Tamil Nadu going in for two paddy crops a year as opposed to one earlier. The next problem arose when Karnataka decided to go in for water-intensive sugarcane cultivation with the mushrooming of distilleries. To compound problems, there is disproportionate wastage of water owing to badly-constructed open irrigation canals. None of this is unknown, yet there has been no attempt to address the problems in a holistic manner. The first step would be to change cropping patterns. Sceptics will argue that the farmers' lobby will oppose this but a way out can be found if the government reduces the support price on water-intensive crops and increases it for cash-intensive ones. Perhaps, both Tamil Nadu and Karnataka can take a leaf out of neighbouring Kerala's book. Despite not being water-deficient, the state has changed crop patterns, the emphasis being on high revenue-yielding crops like spices and floriculture.

This is all the more imperative as both Karnataka and Tamil Nadu are urbanising rapidly with the attendant demand on greater water usage. Perhaps it would be best to reconstitute an independent authority autonomous of political influence whose recommendations would be binding on the states concerned. It could evolve a package of policies which would optimise the benefits to the farmers of the Cauvery basin equitably in both states under conditions of water inadequacy. The farmers in both states have suffered for too long with the issue being used as a political bargaining chip. In the absence of any visible commitment to resolve the problem, extraneous players have been attempting to hijack the agenda. It was not so long ago that the sandalwood smuggler and brigand Veerappan took up the Cauvery issue in a blatant bid to fuel Tamil chauvinism. This is a dangerous trend and it is in the enlightened self-interest of both states to facilitate an early resolution of the issue.

WEDNESDAY, JANUARY 15, 2003

#### SHARING OF DISTRESS

THE QUANTUM OF Cauvery water Karnataka has agreed to release as a "gesture of goodwill" - a total of six tmcft at 1200 cusecs on a daily basis till the end of February - has brought some but not much cheer to Tamil Nadu. What the State has been promised is nowhere near the quantity it would require for the standing (samba) paddy crop — which according to the Chief Minister, Jayalalithaa, has been placed by an agricultural expert last November at 45 tmcft and represents just one-third of the 18-plus tmcft which Karnataka is reported to have run into 'deficit' as per the monitoring committee's formula for the proportionate sharing of 'distress'. Having lost almost entirely the short term (kuruvai) paddy crop due to a particularly bad south-west monsoon and having since been let down by the north-east monsoon also, Tamil Nadu farmers in the Cauvery delta are now haunted by the spectre of even the main samba crop meeting with a similar disaster. For its part, Karnataka has its own tale of woe and difficulties in meeting the irrigation and drinking water requirements, given the stark reality that this year has by any reckoning been an exceptionally bad one on the monsoon front. In the circumstances, prudence demands that the water requirements of the co-riparians are prioritised in a manner that would put the available storage to optimal use and this is precisely where mutual understanding and a spirit of accommodation are called for. Which is to say that whatever water is released should not be too meagre or so thinly spread over time to make any beneficial impact and that the two Governments would be well advised to co-opt apolitical sections of the farming community in such an endeavour.

On a different level, it needs to be noted that Karnataka's consent to spare "some water" for Tamil Nadu was an offshoot of the talks the Prime Minister had at the informal level with its Chief Minister, S. M. Krishna, after the postponement (for want of a quorum) of the Cauvery River Authority meeting called to consider the

contentious 'distress sharing' related issues. With the Supreme Court already seized of the question of its obligation under the Tribunal's interim order and as one facing a related 'contempt of court' charge, the upper riparian was evidently wary enough not to render itself vulnerable to a judicial frown yet again by taking a rigid 'no water to spare' stand. More basically, what stands out in the continuing Tamil Nadu-Karnataka wrangle over water sharing (under the Tribunal's June 1991 interim award) in a bad monsoon year is the palpable disinclination or lack of interest on the part of those constituting the CRA in working it the way a dispute-resolving mechanism — in a highly sensitive area such as sharing of the waters of an inter-State river ought to be worked. Witness, for instance, the fact that the two disputant States could not see eye to eye even on physically verifiable data or agree on the point of reference to determine the quantum of water released (by Karnataka) and that the CRA, in spite of constant goading by the apex court, failed to bring the necessary political will to bear on the crucial task of evolving a consensus on an equitable 'distress sharing' for-

What needs to be recognised is that for any method of dispute resolution to work — whether it be negotiation, conciliation, arbitration or even adjudication for that matter — a substantial degree of goodwill and sense of fairness is absolutely essential and this is one reason why the Supreme Court has, at every available opportunity during the ongoing Karnataka-Tamil Nadu legal battle, been consistently trying to impress upon the two States the wisdom of exploring the CRA route. If the involvement of the heads of governments of the riparian States, with the Prime Minister at the helm, provided the muchneeded leeway to the CRA in making decisions on contentious issues, the efficacy of the institutional mechanism depended ultimately on how exactly the individual players at any given time used that deemed advantage.

THE HINDU