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The Cost of Living

Fame is a funny thing. Apart from my friends and family and of course some old enemies (what's life without a few old enemies?) most people who know of me now, know of me as the author of that very successful book – *The God of Small Things*. Success of course, is a funny thing too. Many are familiar with the public story that surrounds the publishing of *The God of Small Things*. As stories go it has a sort of cloying, Reader's Digest ring to it – an unknown writer who spent secret years writing her first novel which was subsequently published in 40 languages, sold several million copies and went on to win the Booker Prize. The private story however is a less happy one.

When *The God of Small Things* was first published I truly enjoyed accompanying it on its journey into the world. I had a high old time. I spent a year travelling to places I never dreamed I'd visit. I was exhilarated by the idea that a story written by an unknown person could make its way across cultures and languages and continents into so many waiting hearts. At readings when people asked me what it felt like to be a writer who was published and read in so many languages, I'd say "The opposite of what is must feel like to be a nuclear bomb. Literature hugs the world and the world hugs it back."

After a year of travelling I decided I wanted to go back to my old life in what was now the New Nuclear India. But that proved impossible. My old life had packed its bags and left while I was away. As the Indian Government gears up to spend millions on nuclear weapons, the land it seeks to protect moulders. Rivers die, forests disappear and the air is getting impossible to breathe.

Delhi, the city I live in, changes before my eyes. Cars are sleeker, gates are higher, old tubercular watchmen have made way for young, armed guards. But in the crevices of the city, in its folds and wrinkles, under flyovers, along sewers and railway tracks, in vacant lots, in all the dank, dark places, the poor are crammed in like lice. Their children stalk the streets with wild hearts. The privileged wear their sunglasses and look away as they glide past. Their privileged children don't need sun glasses. They don't need to look away. They've learned to stop seeing.

A writer's curse is that he or she cannot easily do that. If you're a writer, you tend to keep those aching eyes open. Every day your face is clammed up against the window pane. Every day you bear witness to the obscenity. Every day you are reminded that there is no such thing as innocence. And every day you have to think of new ways of saying old and obvious things. Things about love and greed. About politics and governance. About power and powerlessness. About war and peace. About death and beauty. Things that must be said over and over again.

While I watch from my window, the memory of the years of pleasure I had writing *The God of Small Things* has begun to fade. The commercial profits from book sales roll in. My bank account burgeons. I realise that I have accidentally ruptured a hidden mercantile vein in the world, or perforated the huge pipeline that circulates the world's wealth amongst the already wealthy, and it is spewing money at me, bruising me with its speed and strength. I began to feel as though every emotion, every little strand of feeling in *The God of Small Things*, had been traded in for a silver coin. As though one day, if I wasn't very careful, I would turn into a little silver figurine with a gleaming, silver heart. The debris around me would serve only to set off my shining. These were my thoughts, this my frame of mind when, in February (1999), there was a ripple of news in the papers announcing

that the Supreme Court of India had vacated a four year long legal stay on the construction of the controversial, half completed Sardar Sarovar Dam on the Narmada river in central India. The court order came as a body blow to one of the most spectacular, non-violent resistance movements since the freedom struggle. A movement which, those of us watching from a distance thought, had more or less already achieved what it set out to. International attention had been focussed on the project. The World Bank had been forced to withdraw from it. It seemed unlikely that the Government would be able to cobble together the funds to complete the project. Then suddenly, with the lifting of the stay, the scenario changed. There was gloom in the Narmada Valley and dancing on the streets of Gujarat.

I grew interested in what was happening in the Narmada Valley because almost everyone I spoke to had a passionate opinion based on what seemed to me to be very little information. That interested me too, so much passion in the absence of information.

I substituted the fiction I intended to read in the coming months with journals and books and documentary films about dams and why they're built and what they do. I developed an inordinate, unnatural interest in drainage and irrigation. I met some of the activists who had been working in the valley for years with the NBA – the extraordinary Narmada Bachao Andolan. What I learned changed me, fascinated me. It revealed in relentless detail, a Government's highly evolved, intricate way of pulverising a people behind the genial mask of democracy. I have angered people in India greatly by saying this. Compared to what goes on in other developing countries, India is paradise, I've been told. It's true, India is not Tibet, or Afghanistan, or Indonesia. It's true that the idea of the Indian Army staging a military coup is almost unimaginable. Nevertheless, what goes on in the name of 'national interest' is monstrous.

Though there has been a fair amount of writing on the Narmada Valley Development Project, most of it has been for a 'special interest' readership. Government documents are classified as secret. Experts and consultants have hi-jacked various aspects of the issue – displacement, rehabilitation, hydrology, drainage, water-logging, catchment area treatment, passion, politics – and carried them off to their lairs where they guard them fiercely against the unauthorised curiosity of interested laypersons. Social anthropologists have acrimonious debates with economists about whose jurisdiction R&R falls in. Engineers refuse to discuss politics when they present their proposals. Disconnecting the politics from the economics, from the emotion and human tragedy of uprootment is like breaking up a band. The individual musicians don't rock in quite the same way. You keep the noise but lose the music.

In March I travelled to the Narmada Valley. I returned ashamed of how little I knew about a struggle that had been going on for so many years. I returned convinced that the valley needed a writer. Not just a writer, a fiction writer. A fiction writer who recognised that what was happening in the valley was perhaps too vulgar for fiction, but who could use the craft and rigour of writing fiction to make the separate parts cohere, to tell the story in the way it deserves to be told. I believe that the story of the Narmada Valley is nothing less than the story of Modern India.

The Narmada Valley Development Project is supposed to be the most ambitious river valley development project in the world. It envisages building 3,200 dams that will reconstitute the Narmada and her 419 tributaries into a series of step-reservoirs – an immense staircase of amenable water. Of these, 30 will be major dams, 135 medium and the rest small. Two of the major dams will be multi-purpose mega dams. The Sardar Sarovar in Gujarat and the Narmada Sagar in Madhya Pradesh, will, between them hold more water than any other reservoir in the Indian subcontinent. For better or for worse the Narmada Valley Development Project will affect the lives of 25 million people who live in the valley and will alter the ecology of an entire river basin. It will submerge sacred

groves and temples and ancient pilgrimage routes and archaeological sites that scholars say contain an uninterrupted record of human occupation from the old stone age.

The Sardar Sarovar project belongs firmly in the era of the great Nehruvian dream. But before I come specifically to the story of the Sardar Sarovar, I'd like to say a little about the raging Big Dam debate.

For a whole half-century after independence, Nehru's foot soldiers sought to equate dam-building with Nation-building. Not only did they build new dams and irrigation schemes they took control of small, traditional water harvesting systems that had been managed for thousands of years and allowed them to atrophy. To compensate the loss they build more and more dams. Today, India is the world's third largest dam-builder. According to the Central Water commission we have 3,600 dams that qualify as big dams, 3,300 of them built after Independence. A thousand more are under construction.

Nehru's famous statement about dams being the Temples of Modern India has made its way into primary school textbooks in every Indian language. Big dams have become an article of faith inextricably linked with nationalism. To question their utility amounts almost to sedition. Every school child is taught that Big Dams will deliver the people of India from hunger and poverty.

But will they? Have they? Are they really the key to India's food security?

Today India has more irrigated land than any other country in the world. In the last 50 years the area under irrigation increased by about 140%. It's true that in 1947, when Colonialism formally ended, India was food deficient. In 1951 we produced 51 million tonnes of foodgrain. Today we produce close to 200 million tonnes. Certainly, this is a tremendous achievement. (Even though there are worrying signs that it may not be sustainable). But surely nobody can claim that all the credit for increased food production should go to Big Dams. Most of it has to do with mechanised exploitation of groundwater, with the use of high-yielding hybrid seeds and chemical fertilizers.

The extraordinary thing is that there are no official figures for exactly what portion of the total foodgrain production comes from irrigation from Big Dams.

What is this if not a State's unforgivable disregard for its subjects? Given that the people of the Narmada Valley have been fighting for over fifteen years, surely the least the government could do is to actually substantiate its case that Big Dams are India's only option to provide food for her growing population. The only study I know of was presented to the World Commission on Dams by Himanshu Thakker. It estimates that Big Dams account for only 12% of India's total foodgrain production! 12% of the total produce is 24 million tonnes. In 1995 the State granaries were overflowing with 30 million tonnes of foodgrain, while at the same time 350 million people lived below the poverty line. According to the Ministry of Food and Civil Supplies, 10% of India's total foodgrain production, that is 20 million tonnes is lost to rodents and insects because of bad and inadequate storage facilities. We must be the only country in the world that builds dams, uproots communities and submerges forests in order to feed rats. Clearly we need better storerooms more urgently than we need dams.

Similarly, in the case of electricity, planners flaunt the fact that India consumes 20 times more electricity today than it did 50 years ago. And yet over 70% of rural households have no access to electricity. In the poorest states – Bihar, UP, Orissa and Rajasthan, over 80% of Adivasi and Dalit households have no electricity. Electricity produced in the name of the poor consumed by the rich with endless appetites. Official estimates say that 22% of the power generated is lost in transmission

and system inefficiencies. Existing dams are silting up at a speed which halves and sometimes quarters their projected life-spans.

It seems obvious, surely, that before the government decides to build another dam it ought to do everything in its power to maintain and increase the efficiency of the systems it already had in place. What happens in fact, is the reverse.

Dams are built, people are uprooted, forests are submerged and then the project is simply abandoned. Canals are never completed ... the benefits never accrue (except to the politicians, the bureaucrats and the contractors involved in the construction). The first dam that was built on the Narmada is a case in point – the Bargi Dam in Madhya Pradesh was completed in 1990. It cost ten times more than was budgeted and submerged three times more land than engineers said it would. To save the cost and effort of doing a survey, the government just filled the reservoir without warning anybody. Seventy thousand people from 101 villages were supposed to be displaced. Instead 114,000 people from 162 villages were displaced. They were evicted from their homes by rising waters, chased out like rats, with no prior notice. There was no rehabilitation. Some got a meagre cash compensation. Most got nothing. Some died of starvation. Others moved to slums in Jabalpur. And all for what? Today, ten years after it was completed, the Bargi Dam produces some electricity, but irrigates only as much land as it submerged. Only 5% of the land its planners claimed it would irrigate. The Government says it has no money to make the canals. Yet is has already begun work downstream, on the mammoth Narmada Sagar Dam and the Maheshwar Dam.

Why is this happening? How can it be happening?

Because Big Dams are monuments to corruption - to international corruption on an inconceivable scale - bankers politicians, bureaucrats, environmental consultants, aid agencies – they're all involved in the racket. The people that they prey on are the poorest, most marginalised sections of the populations of the poorest countries in the world. They don't count as people. Therefore the costs of Big Dams don't count as costs. They're not even entered in the books. What happens instead is that international consultants on Resettlement (global experts on despair) are paid huge salaries to devise ever more sensitive, ever more humane-sounding, ever more exquisitely written, resettlement policies that are never implemented. Like the saying goes – there's a lot of money in poverty.

When I was writing *The Greater Common Good* – my essay on the Narmada Valley project – wading through the fusillade of 'pro-dam' and 'anti-dam' statistics, what shocked me more than anything else was not the statistics that *are* available, but the ones that aren't. To me, this is the most unpardonable thing of all. It is unpardonable on the part of the Indian State as well as on the part of the intellectual community.

The Government of India has detailed figures for how many million tonnes of foodgrain or edible oils the country produces and how much more we produce now than we did in 1947. It can tell you what the total surface area of the National Highways adds up to, how many graduates India produces every year, how many men had vasectomies, how many cricket matches we've lost on a Friday in Sharjah. But the Government of India does not have a record of the number of people that have been displaced by dams or sacrificed in other ways at the altars of 'National Progress'. *Isn't this astounding*? How can you measure Progress if you don't know what it costs and who has paid for it? How can the 'market' put a price on things – food, clothes, electricity, running water – when it doesn't taken into account the *real* cost of production? Unofficial estimates of the number of displaced people have swung from an unsubstantiated two million to an unsubstantiated fifty million, and everything in between. There's plenty of scope for bargaining.

When I wrote my Essay, I thought it necessary to try and put a figure on how many people have actually been displaced by Big Dams; to do a back-of-the-envelope calculation - sort of sanity check. The point was to at least *begin* to bring some perspective to the debate. As my starting premise, I used a study of fifty-four Large Dams by the Indian Institute of Public Administration (IIPA) based on field data from the Central Water Commission. The reservoirs of these fifty-four dams, between them displaced about 2.4 million people. The average number of people displaced by each dam came to 44,000. Correcting for the fact that the dams the IIPA chose to study may have been some of the Larger Dam Projects, I pared down the average number of displaced people to 10,000 people per dam. Using this scaled-down average, the total number of people displaced by Large Dams in the last fifty years worked out to a scandalous 33 million people!

33 million people

Recently N C Saxena, Secretary to the Planning Commission said he thought that the number was in the region of 40 million people. About 60% of those displaced are either Dalit or Adivasi. If you consider that Dalits account for 15% and Adivasis only 8% of India's population, it opens up a whole other dimension to the story. The ethnic 'otherness' of the victims takes some of the strain off the Nation Builders.

What happened to these millions of people? Where are they now? How do they earn a living? Nobody really knows. When history is written, they won't be in it, not even as statistics. When it comes to resettlement, the government's priorities are clear. India does not have a National Resettlement Policy. Displaced people are only entitled to meagre cash compensation. The poorest of them, Dalits and Adivasis, who are either landless or have no formal title to their lands, but whose livelihoods depend entirely on the river – get nothing. Some of the displaced have been subsequently displaced three and four times – a dam, an artillery proof range, another dam, a uranium mine. Once they start rolling there's no resting place. The great majority is eventually absorbed into slums on the periphery of our great cities, where it coalesces into an immense pool of cheap labour (that builds more projects that displaces more people) ... and still the nightmare doesn't end. They continue to be uprooted even from their hellish hovels whenever elections are comfortingly far away and the urban rich get twitchy about hygiene. In cities like Delhi they get shot for shitting in public places, like three slum dwellers were, not more than two years ago.

On the whole there's a deafening silence on the politics of forced, involuntary displacement. It's accepted as a sort of unavoidable blip in our democratic system. Earlier this year in Kargil, while the Indian Army fought to regain every inch of territory captured by Pakistani infiltrators, hundreds of people in the Narmada Valley were being forcibly flooded out of their homes by the rising waters of the Sardar Sarovar Reservoir. The nation rose as one to support the soldiers on the front. Middle-class housewives held cooking festivals to raise money, people queued up to donate blood, they collected food, clothing, and first aid. Actors, sportsmen and celebrities swarmed to the border to bolster the moral of the fighting forces. There were no such offers of help for the people in the Narmada Valley. Some of them had stood in their homes in chest deep water for days on end, protesting the Supreme Court's decision to raise the height of the Sardar Sarovar Dam. They were seen as people who were unwilling to pay the price for National progress. They were labelled antinational and anti-development and carted off to jail. The general consensus seems to be "Yes it's sad, but hard decisions have to be made. *Someone* has to pay the price for development."

I often wonder what would happen if the Government was to declare that in order to raise funds to complete these mammoth projects, it was going to commandeer the assets and bank accounts of a

hundred thousand of its richest citizens. I have no doubt that it would become an international scandal. Banner headlines would appear in newspapers announcing the death of democracy. Suddenly the ecological and human costs of Big Dams would be Page One news. In a flash there would be phenomenal, imaginative solutions for irrigation and power generation. Cheaper, quicker, more efficient. Nuclear hawks would suddenly realise they could drastically scale down the number of bombs they need for a minimum credible deterrent.

So far I have only discussed the human and social costs of Big Dams. **What about the environmental costs?** The submerged forests, the ravaged ecosystems, the destroyed estuaries, the defunct, silted up reservoirs, the endangered wildlife, the disappearing biodiversity, the millions of hectares of land that are either water-logged or salt-affected. None of this appears on the balance sheet. There are no official assessments of the cumulative impact Big Dams have had on the environment. What we do know is that a study of 300 projects done by an Expert Committee on River Valley Projects reported that 270 of them – that's 90% of them – had violated the environmental guidelines laid down by the Ministry of Environment. The Ministry has not taken action or revoked the sanction of a single one of them.

The evidence against Big Dams is mounting alarmingly – irrigation disasters, dam induced floods, the fact that there are more drought-prone and flood-prone areas today then there were in 1947. The fact that not a single river in the plains has potable water. The fact that 250 million people have no access to safe drinking water. And yet there has not been an official audit, a comprehensive, honest, thoughtful, post-project evaluation of a single Big Dam to see whether or not it has achieved what it set out to achieve. Whether or not the costs were justified, or even what the costs actually were.

"This is exactly why the Sardar Sarovar Project is different", its proponents boast. They call it the 'most studied project' in the world. (You'll notice as we go along, that the story of the Narmada Valley is full of this sort of superlative – the most studied project, the most ambitious river valley project, the best rehabilitation package etc.) One of the reasons the Sardar Sarovar is so 'studied' is because it's also so controversial. In 1985, when the World Bank first sanctioned a 450 million dollar loan to fund the project, no studies had been done, nobody had any idea what the human cost or the ecological impact of the dam would be. The point of doing studies now can only be to justify what has become a *fait accompli*. So costs are suppressed and benefits exaggerated to farcical proportions.

The politics of the Sardar Sarovar Dam are complicated because the Narmada flows through three states – ninety percent of it through Madhya Pradesh, it then merely skirts the northern border of Maharashtra and finally flows through Gujarat for about 180 kilometres before it reaches the Arabian Sea.

In order for the three states to arrive at a water sharing formula, in 1969 the Central Government set up a body called the Narmada Water Disputes Tribunal. It took ten years for them to announce their Award. Geographically, the Sardar Sarovar Dam is located in Gujarat. Its reservoir submerges 245 villages, of which only 19 are in Gujarat. All the rest are in Madhya Pradesh and Maharashtra. What this means is that the social costs are borne by Maharashtra and Madhya Pradesh, while the benefits go to Gujarat. This is what has sharpened the controversy around it.

The cost-benefit analysis for the Project is approached in a friendly, cheerful way. Almost as though it's a family board game.

First let's take a look at the 'costs'.

In 1979, when the Narmada Water Disputes Tribunal announced its award, the official estimate for the number of families that would be displaced by the Sardar Sarovar Reservoir was about 6,000. In 1987 the figure grew to 12,000. In 1992 it surged to 27,000. Today it hovers between 40,000 and 42,000 families. That's about 200,000 people. And that's just the official estimate. According to the NBA, the actual number of affected families is about 85,000. Close to half a million people.

The huge discrepancy between the Government's estimate and the NBA's has to do with the definition of who qualifies as 'Project Affected'. According to the Government, the only people who qualify as Project Affected are those whose lands and homes are submerged by the reservoir. But when you tear up the fabric of an ancient, agrarian community, which depends on its lands and rivers and forests for its sustenance, the threads begin to unravel in every direction. There are several categories of displacement that the Government simply refuses to acknowledge.

For example, the Sardar Sarovar Project envisages bending the last 180 km of the Narmada and diverting it about 90 degrees north into a 75,000 sq km network of canals that planners claim will irrigate a command area of 1.8 million hectares. The government has acquired land for the canal network. 200,000 families are directly affected. Of these 23,000 families, let's say about 100,000 people, are seriously affected. They don't count as project affected. Not in the official estimates.

In order to compensate for the submergence of 13,000 hectares of prime forest, the Government proposes to expand the Shoolpaneshwar Wildlife sanctuary near the dam site. This would mean that about 40,000 Adivasi people from about 101 forest villages within the boundaries of the park will be 'persuaded' to leave. They don't count as project affected.

In addition to the sanctuary, the other mitigating measure is the extraordinary process known as Compensatory Afforestation in which the government acquires land and plants three times as much forest as has been submerged by the reservoir. The people from whom *this* land is acquired do not count as project affected.

In its plans for what it is going to do with its share of the Narmada water, the Gujarat Government has allocated no water at all -0 MAF - for the stretch of river downstream of the dam. This means that in the non-monsoon months there will be no water in the last 180km of the river. The dam will radically alter the ecology of the estuary and affect the spawning of the Hilsa and freshwater prawns. 40,000 fisher folk who live downstream depend on the river for a living. They don't count as project affected.

In 1961, the Gujarat government acquired 1,600 acres of land from 950 Adivasi families for the infrastructure it would need for starting work on the dam. Guest houses, office blocks, housing for engineers and their staff, roads leading to the dam site and warehouses for construction material. Overnight the villagers became landless labourers. Their houses were dismantled and moved to the periphery of the colony, where they remain today, squatters on their own land. Some of them work as servants in the officers' bungalows and waiters in the guest house built on land where their own houses once stood. Incredibly, they do not qualify as project affected.

In its publicity drive, the other sleight of hand by the proponents of the Sardar Sarovar is to portray costs as benefits. For instance there's the repeated assertion that Displacement is actually a positive intervention, a way of relieving acute deprivation. That the State is doing people a favour by submerging their lands and homes, taking them away from their forests and river, drowning their sacred sites, destroying their community links and forcibly displacing them against their wishes. Anybody who argues against this is accused of being an 'eco-romantic', of wanting to deny poor and

marginalised people the "fruits of modern development"- of glorifying the notion of the Noble Savage.

If the well-being of Adivasi people is what is uppermost in the Planners' minds, why is it that for fifty years there have been no roads, no schools, no clinics, no wells, no hospitals in the areas they lie in? Why is it for all these years they didn't take any steps to equip the people they care so deeply about, for the world they were going to be dumped in? Why is it that the first sign of 'development' – a road – brought only terror, police, beatings, rape, murder? Why must the offer of Development be conditional, i.e. You give up your homes, your lands, your field, your language, your gods and we'll give you 'development'?

As part of 'the best rehabilitation package in the world', the Gujarat Government has offered to rehabilitate all the officially 'project affected', even those from Madhya Pradesh and Maharashtra. The Madhya Pradesh Government has filed an affidavit in court declaring that it has no land to rehabilitate people displaced by the Sardar Sarovar Reservoir. This means that all the displaced people from Madhya Pradesh have no choice but to move to Gujarat – not a state known for its hospitality towards 'outsiders'. It's like displacing people in England and forcing them to live in France. Notwithstanding its feigned generosity, in point of fact the Government of Gujarat hasn't even managed to rehabilitate people from the 19 Adivasi villages in Gujarat that are being submerged by the reservoir, let alone those from the rest of the 226 villages in the other two states. The inhabitants of Gujarat's 19 villages have been scattered to 175 separate rehabilitation sites. Social links have been smashed, communities broken up. Not a single village has been resettled according to the directives of the Tribunal. Some families have been given land, others haven't. Some have land that is stony and uncultivable. Some have land that is irredeemably water-logged or infested with pernicious daab grass. Some have been driven out by landowners that sold land to the Government but haven't been paid yet. Some who were resettled on the peripheries of other villages have been robbed, beaten and chased away by their host villagers.

In several resettlement sites, people have been dumped in rows of corrugated tin sheds which are furnaces in summer and fridges in winter. Some of them are located in dry river beds which, during the monsoon, turn into fast-flowing drifts. I've been to some of these 'sites'. I've seen film footage of others: shivering children, perched like birds on the edges of charpais, while swirling waters enter their tin homes. Frightened, fevered eyes watch pots and pans carried through the doorway by the current, floating out into the flooded fields, thin fathers swimming after them to retrieve what they can.

When the waters recede, they leave ruin. Malaria, diarrhoea, sick cattle stranded in the slush. Forty households were moved from Manibeli, in Maharashtra to a resettlement site in Gujarat. In the first year, thirty-eight children died.

In April this year (1999) the papers reported nine deaths from chronic malnutrition in a single rehabilitation site in Gujarat, and in the course of the week, that's 1.2875 people a day, if you're counting.

Many of those who have been resettled are people who have lived all their lives deep in the forest with virtually no contact with money and the modern world. Suddenly they find themselves left with the option of either starving to death or walking several kilometres to the nearest town, sitting in the marketplace, (both men and women), offering themselves as wage labour, like goods on sale.

Instead of a forest from which they gathered everything they needed – food, fuel, fodder, rope, gum, tobacco, tooth powder, medicinal herbs, housing material – they earn between ten and twenty rupees a day with which to feed and keep their families. Instead of a river, they have a hand pump. In their old villages, certainly they were poor, extremely poor, but they were insured against absolute disaster. If the rains railed, they had the forests to turn to and the river to fish in. Their livestock was their fixed deposit. Without all this, they're a heartbeat away from destitution.

For the people who've been resettled, everything has to be re-learned. Every little thing, every big thing: from shitting and pissing (where d'you do it when there's no jungle to hide you?) to buying a bus ticket, to learning a new language, to understanding money. And worst of all, learning to be supplicants - learning to take orders - learning to have Masters - learning to answer only when they're addressed.

From being self-sufficient and free, to being further impoverished and yoked to the whims of a world you know nothing, *nothing about* – what d'you suppose it must feel like?

In fifteen years, the government has yet to resettle people displaced by *half* a dam. What are they going to do about the remaining 3,199 dams? There's something wrong with the scale of the operations here. This is Fascist Maths. It strangles stories, bludgeons detail and manages to blind perfectly reasonable people with its spurious shining vision.

So much for project costs. Now let's take a look at the benefits. The stated benefits.

The whole purpose of the Sardar Sarovar, the Government of Gujarat says, is to take water to the drought-prone regions of Kutch and Saurashtra which lie at the very end of the canal network. The Sardar Sarovar Narmada Nigam publicity campaign is full of pictures of parched earth and dying cattle. In the name of Kutch and Saurashtra, it justifies using about 80% of Gujarat's irrigation budget for the Sardar Sarovar. It says, categorically that there is no alternative to the Sardar Sarovar.

To understand what's really going on, the first thing you must do is to look at a map of Gujarat. Look for two other rivers – the Mahi and the Sabarmati. You'll see that both are miles closer to Kutch and Saurashtra than the Narmada is. Both have been dammed and the water diverted to Ahmedabad, Mehsana and Kheda, the Patel-rich, irrigation rich, politically powerful areas of Central Gujarat. The people of Kutch and Saurashtra haven't seen a drop of water from these rivers.

When the Sardar Sarovar Project was first planned, there was no mention of drinking water for the villages in Kutch and Saurashtra. It was supposed to be primarily an irrigation project. When the project ran into political trouble, the government discovered the emotive power of thirst. Drinking water became the rallying cry of the Sardar Sarovar Project. Officially, the number of people whose thirst would be slaked fluctuated from 28 million (1983) to 32.5 million (1989) to 10 million (1992) to 25 million (1993). The number of villages that would get drinking water varied from zero in 1979 to 8,215 in 1991. When pressed, the Government admitted that the figures for 1991 included 236 *uninhabited* villages.

Nobody builds Big Dams to take drinking water to remote villages. Of the one billion people in the world who have no access to safe drinking water, 855 million live in rural areas. The cost of installing an energy intensive network of thousands of kilometres of pipelines, aqueducts, pumps and treatment plants to provide drinking water to scattered population is prohibitive. When the members of the World Bank's Morse Committee arrived in Gujarat to do the Independent Review, they were impressed by the Gujarat Government's commitment to take drinking water to the state's remote

regions. They asked to see the plans. There weren't any. They asked if the costs had been worked out. 'A few thousand crores' was the breezy answer. A billion dollars, is an expert's calculated guess. But of course, that isn't a part of the cost-benefit analysis (the benefit-benefit analysis, shall we call it?)

As for the irrigation benefits, when the Government of Gujarat argued its case before the Water Disputes Tribunal it pleaded for more than its proportionately fair share of water because it said it desperately needed water to irrigate 11,00,000 hectares of land in the arid region of Kutch. The Tribunal accepted the argument and allotted Gujarat 9 MAF of water. It did not specify how that water should be used. The Gujarat Government then reduced the 11,00,000 hectares to less than a tenth of that- to 100,000 hectares; that's 1.8% of the cultivable area of Kutch.. and that's on paper. On paper it irrigates only 9% of the cultivable land in Saurashtra. If you ask what they're going to do about the rest of the drought-prone regions, they talk of 'alternatives'- water-shed management, rainwater harvesting, and well- recharging. The point is that if there are alternatives which are good enough for 98.2% of Kutch and 91% of Saurashtra, then why won't they work for the whole 100%?

There are some other interesting caveats which make it unlikely that water from the Narmada will ever get to Kutch and Saurashtra, situated as they are at the tail end of the canal.

First, there's a lot less water in the Narmada than the government says there is. Before the Tribunal announced its water sharing formula, it had to assess how much water there actually was in the river. Since there was no actual flow data available at the time, they extrapolated it from what was even at the time thought to be faulty rainfall data. They arrived at a figure of 27.22 MAF. In 1992, actual flow data indicates that there is only 22.69 MAF of water in the river – that's a whole 18% less!.

Second, the Sardar Sarovar Dam was planned in conjunction with the Narmada Sagar Dam, In the absence of the Narmada Sagar, on which construction has temporarily been stopped, the irrigation benefits of the Sardar Sarovar drop drastically.

Third, the irrigation efficiency of the Canal has been arbitrarily fixed at 60% when the highest irrigation efficiency ever achieved in India is 35%.

Last, and perhaps most important of all, are the competing claims being made on the water. The Authorities of the Sardar Sarovar Narmada Nigam declared that farmers would not be allowed to grow sugar-cane in the command area because sugar-cane is a water-guzzling cash crop and would use up the share of water meant for those at the tail end of the canal. But the Government of Gujarat has already given licenses to dozens of large sugar mills at the head of the canal. The chief promoter of one of them is Sanat Mehta, who was Chairman of the Sardar Sarovar Narmada Nigam – the Dam Authority – for several years. The chief promoter of another was Chiman Bhai Patel, former Chief Minister of Gujarat, probably the most ardent promoter of the Sardar Sarovar Project. When he died his ashes were scattered over the dam-site.

Other than the politically powerful sugar lobby, to get to Kutch and Saurashtra the canal has to negotiate its way past a series of golf-course, luxury hotels and water parks which, the Government says, it has sanctioned in order to raise money to complete the project! Apart from all this, and in complete contravention of its own directives, the government has allotted the city of Baroda a sizeable quantity of water. What Baroda gets, can Ahmedabad bear to lose? The political clout of powerful urban centres will make sure they get their share.

So the chances of the farmers of Kutch and Saurashtra benefiting from the Narmada get remoter by the day.

Of late, the people of Kutch and Saurashtra, who have endured water-shortages for years, have begun to recognise Government propaganda for what it is. Civil unease is stirring as realisation dawns that the Sardar Sarovar is mopping up their money but is not going to solve their water problems; that the solution lies not with the Government but with themselves. The Gujarat Land Development Corporation estimates that there is at least 15 to 20 million acre feet of rainwater that can be harvested by local watershed harvesting schemes in Kutch and Saurashtra. (The Sardar Sarovar promises, on paper, 3 million acre feet to these areas). In several villages, entirely through peoples' initiatives, successful water harvesting schemes are already under way. Hundreds of thousands of wells are being recharged with rainwater that was flowing away unused. So much for the Government of Gujarat's claims that there are no alternatives to the Sardar Sarovar. A people's organisation has filed a case again the Sardar Sarovar Narmada Nigam demanding an express canal to Kutch, with no designer stops on the way.

Another huge cost that does not figure in the benefit-benefit analysis of the Sardar Sarovar Project is the cost of installing drainage in the command area to prevent water-logging and salinisation. The cost of installing drainage is about five times higher than installing the irrigation system. So, traditionally drainage costs are left out in order to make projects in developing countries appear viable. I'm told this is an old World Bank practise.

Over the last fourteen years, the NBA has pointed to these facts over and over again, and asked for the project to be reviewed. After the World Bank's Independent Review was published and the Bank stepped back from the project, the Gujarat Government has systematically blocked every attempt at a review. It prevented the Five Member Group Committee from entering Gujarat. It refused permission to the World Commission on Dams to visit the dam site. It prevented the Commissioner for Scheduled Castes and Tribes from visiting the dam site. It prevented the Union Welfare Ministry from assessing the Rehabilitation and Resettlement situation. It stood by and watched while the NBA office in Baroda was ransacked and its documents publicly burnt.

In May 1994, the NBA filed a petition in the Supreme Court in which it listed all the points I've talked about, and asked for a review of the project. In early 1995, on the grounds that the Resettlement of displaced people was not satisfactory, the court ordered a halt to the construction. Over the years the court has managed to limit the whole issue to resettlement. It has cast itself in the role of a sort of Welfare Inspector of Resettlement Colonies whose jurisdiction is more or less restricted to Gujarat. It oversees the resettlement of only those who officially qualify as 'project affected'. Unfortunately even here it hasn't distinguished itself. In February 1999, despite the fact nothing had changed radically in the resettlement scenario, despite the fact that families who were supposed to have been resettled had returned in despair to their original villages, the Supreme Court lifted the four year long stay and allowed construction of the dam to continue.

The people in the valley responded by declaring that they would drown rather than move from their homes. The NBA defied the gag imposed on them by the court. In a statement to the press, its leader, Medha Patkar, announced that she would drown herself in the river if the court permitted any further construction.

As a response to this, the Gujarat Government filed a petition asking that the NBA be removed as petitioners for committing contempt of court and that criminal action betaken against me for writing

The Greater Common Good, which, they claimed, undermined the dignity of the court and attempted to influence the course of justice.

In July and August, while the waters rose in the Narmada, while villagers stood in their homes for days together in chest deep water to protest the decision of the court, while their crops were submerged, and while the NBA pointed out (citing specific instances) that government officials had committed perjury by signing false affidavits claiming that resettlement had been carried out when it hadn't the three judge bench in the Supreme Court met over three sessions. The only subject they discussed was whether or not the dignity of the court had been undermined. On the 15th October 1999, they issued an elaborate order. Here are some extracts.

...Judicial process and institution cannot be permitted to be scandalised or subjected to contumacious violation in such a blatant manner in which it has been done by her (me) ... vicious stultification and vulgar debunking cannot be permitted to pollute the stream of justice ... we are unhappy at the way in which the leaders of NBA and Ms Arundhati Roy have attempted to undermine the dignity of the Court. We expected better behaviour from them ... After giving this matter thoughtful consideration and keeping in view the importance of the issue of Resettlement and Rehabilitation ... we are not inclined to initiate contempt proceedings against the petitioners, its leaders or Arundhati Roy ... after the 22 July 1999 ...nothing has come to our notice which may show that Ms Arundhati Roy has continued with the objectionable writing insofar as the judiciary is concerned. She may have by now realised her mistake.

So. Shall I heed the warning or persevere with the contumely?

To heed the warning might be prudent, but in my opinion it would undermine the dignity of Art. And, as we all know, there's no excuse for bad art. Just as much as the valley needs a writer, I believe that writers need the valley. Not just writers – poets, painters, dancers, actors, film-makers every kind of artist. If we are to remain alive, if we are to continue to work, we need to reclaim the political arena which we seem to have so willingly abdicated. If we choose to look away now, at this point – somehow it doesn't say very much about our art. I'm not suggesting that everybody must turn out a hectoring, political manifesto. I'm all for Matisse and goldfish on a window sill. All I mean is that from time to time we could lift our eyes from the page and acknowledge the condition of the world around us. Acknowledge the price that someone, somewhere far away is paying, in order for us to switch out lights on, cool our rooms and run our baths.

Today the Sardar Sarovar Dam is 88 metres high. It has submerged only a fourth of the area that it will when (if) the dam reaches its full height of 138 metres. It's true that the Government has already spent a lot of money on the project. But continuing with it would mean spending about six times that amount – throwing good money after bad. There is a detailed engineering proposal in place for how the dam can be used at the current height in order to take water straight to Kutch and Saurashtra, if that is indeed what the Government wants to do. Restructuring the project with this lower dam height would mean saving hundreds of thousands of people from certain destitution. It would mean saving thousands of hectares of forest. It would mean saving some of the most fertile agricultural land in Asia from submergence. It would mean having enough money to fund local water harvesting schemes in every village in Gujarat.

It would mean a victory for non-violence and the principles of democracy. It would mean that we still have hope.

Since this is the Nehru Memorial Lecture, let me end with a quote from a speech he made in November 1958 at the Annual Meeting of the Central Board of Irrigation and Power.

"For some time past however, I have been beginning to think that we are suffering from what we may call the "disease of gigantism". We want to show we can build big dams and do big things. This is a dangerous outlook developing in India ... it is the small irrigation projects, the small industries and the small plants for electric power which will change the face of this country far more than half a dozen big projects in half a dozen places ..."

Needless to say this speech never made it into the school books.

I've made myself very unpopular in India by saying the things I say. Fortunately, I'm not standing for elections. As a writer, I would rather be loved by a river valley than by a nation state - **any day!**