"Till the Rivers All Run Dry": A Human Ecological Analysis of the
Narmada Bachao Andolan

Prasenjit Maiti
University of Burdwan, West Bengal, India

The World Commission on Dams report vindicates much of what dam critics
have long argued. If the builders and funders of dams follow the
recommendations of the WCD, the era of destructive dams should come to an end . . . Had the planning process proposed by the WCD been followed in the past, many dams would not have been built.

-Patrick McCully, Campaigns Director of the Berkeley, California-based International Rivers Network.

The Government of India claims that the multi-purpose Sardar Sarovar Project (SSP) would irrigate more than 1.8 million hectares (mostly in Gujarat and some in Rajasthan) and solve drinking water problems in drought-prone areas like Kutch and Saurashtra in Gujarat. The Sardar Sarovar Dam is the largest among the 30 'big dams' planned to be constructed on the Narmada River in central and western India. This dam, with a proposed height of 136.5 meters (455 feet), has emerged in the not-so-recent past as the focal point of the Narmada Bachao Andolan's (NBA) concerted opposition and resistance.

The NBA has steadfastly maintained that 'tall' claims on the part of the government are exaggerated and untenable. The SSP would instead displace more than 320,000 persons and adversely affect the livelihood of innumerable others. NBA activists have even estimated that a population of at least 1 million would be dislocated if the SSP were to be completed (as a result of displacements caused by the canal system and other allied projects). Although Varma's conclusions on the basis of the actual performance (karma) of large dams in India can be questioned he eloquently describes the growing need for water and power in India and concludes that it is the duty (or dharma) of dams to meet these growing needs.

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

Perhaps the best indicator of how lightly the nation has taken the environmental and social damage that large dams cause is the absence of data on these aspects. We do not know what the environmental impacts of most dams were. In most cases we do not know whether any of the safeguards prescribed actually worked. We do not even know the total number of people displaced or the area of forests submerged by large dams (Varma, 2000).

The NBA has been opposing this project for a decade now, and its activists sought to highlight demerits of the SSP during 1990-91 by employing statements of protest like dharnas, or sit-ins, and satyagraha, or non-violent non-cooperation. The World Bank (that was about to finance the dam for $450 million) was subsequently compelled to set up an independent review committee, the Morse Commission, the first of its kind. The Morse Report indicted the World Bank on many counts, and (tacitly) supported the major human ecological concerns raised by the NBA. Adverse international reaction that had followed the Morse Report finally decided the World Bank against financing the SSP.

The Supreme Court of India, the country's highest court, had suspended further construction of the dam in 1995, at a height of 80.3 meters, following a writ petition by the NBA demanding a comprehensive review of the SSP. However, the Supreme Court, in an interim order (February 1999), had given go-ahead for the dam's height to be raised to a height of 88 meters (85m + 3m of 'humps'). But this can lead to floods during the monsoon season displacing 2,000 tribal households in about 50 villages.

The Supreme Court finally delivered judgement on the SSP on 18 October 2000; it permitted immediate construction of the dam up to a height of 90 meters (in a 2 to 1 majority judgement). The judgement further authorized construction up to the originally planned height of 138 meters in 5 meter increments, subject to approval by the Relief and Rehabilitation Subgroup of the Narmada Control Authority (NCA).

The Supreme Court's judgement has not fundamentally altered the Narmada Water Disputes Tribunal Award (NWDTA) that had earlier decided that land should be made available to the dispossessed at least a year in advance before submergence [Clause IX, Subclauses IV(2)(iv) and IV(6)(i)]]. The Supreme Court's clearance of the SSP, moreover, has not been able to
resolve critical issues involved, like cost-benefit analyses of development and displacement (especially in a postcolonial democracy like India's) (Ray, 1989, 127-149; Ray, 1996, 101-112; Ray, 1991, 97-98), rehabilitation and social justice, grassroots (dis)empowerment, and environmental and human ecological problems (Iyer, 1991, 97-98).

This paper, therefore, would make an attempt to study the NBA as an important social movement in present-day India. We would argue that big river dams are informed by a certain definition of development that is intellectually hegemonized by the compulsions of globalization. Such a definition would not only reorient one's notion(s) of sustainable development but would also reorient one's worldview. This is, therefore, a politics of subversion of knowledge that ought to be first challenged and next resisted by alternative vision(s) of public action and development underpinned by civil societal initiative in the context of unequal exchange and an as-yet-unjust North-South dialog.

According to the World Commission on Dams (22 March 2000), India is second only to China in terms of population (1 billion) and dam building, with 4,291 dams. Irrigation is the primary or only function of 96% of the dams; only 4.2% were built for hydropower generation. Estimates of the number of people displaced by large dams in India range from 21 to 40 million.

Ensuring food security is one of the main objectives of India's development policy. Its irrigation potential increased from 22.6 million hectares in 1951 to 89.6 million hectares by 1997 and food production grew fourfold to 200 million tonnes, two thirds of the increase coming from irrigated land. Analysis of the costs and benefits of dams in India is hampered by a lack of post-construction assessment.

The global debate about large dams is at once overwhelmingly complex and fundamentally simple. It is complex because the issues are not confined to the design, construction, and operation of dams themselves but embrace the range of social, environmental, and political choices on which the human aspiration to development and improved well-being depend. Dams fundamentally alter rivers and the use of a natural resource, frequently entailing a reallocation of benefits from local riparian users to new groups of beneficiaries at a regional or national level. At the heart of the dams debate are issues of equity, governance, justice, and power-issues that underlie the many intractable problems faced by humanity.

We also argue in this paper that the very logic of globalization cannot be always reconciled with the institutions and imperatives of democratic
politics. However, globalization can, and actually does, facilitate a certain kind of development that is more often than not biased in favour of the North rather than the South. Globalization, therefore, entails a paradox of sorts: its dynamics require an enabling exercise of good governance characterized by democratic freedom, rule of law, civil liberties, and human rights.

While the Structural Adjustment Programs (SAP) (Gary & Mayo, 1995) of globalization may erode the popular bases of government. We would also try to identify and highlight certain angularities of the movement, and develop a few insights (in this process) that are perhaps beyond the texts of conventional subaltern critiquing and Strength, Weakness, Opportunity, Threat (SWOT) analyses. Let us first recount the facts and figures, and subsequently develop and substantiate our argument(s) in the course of this exercise.

Construction of large dams on the River Narmada in Central and Western India, and its disastrous impact on millions of people inhabiting this river valley have emerged as one of the most controversial socio-ecological issues in contemporary India.

NGOs and other activist groups like Friends of River Narmada, an international coalition of volunteer individuals and organizations (primarily of Indian descent) provide a support and solidarity network for the Narmada Bachao Andolan. They communicate grassroots viewpoints to the global community through dedicated websites in order to generate debates on whether the SSP (and such similar projects) should be allowed to continue or not in the larger interests of human ecology and sustainable development.

The Indian State, however, has never really been able to reciprocate any similar grassroots-level dialog, and has even treated the SSP as an exercise in pragmatrix that would focus on cost-benefit analyses in terms of an authoritative definition of development. The State's intransigent attitude is yet to be entirely overhauled despite the president of India's (implicit) criticism of his own government on December 6, 2000 during presentation of the Ambedkar International Award for Social Change to environmental activist Baba Amte.

Observations of Keshav Bhai, an adivasi (tribal) NBA activist from Nimgavan village in the state of Maharashtra in Western India, are rather significant. We come to realize that indigenous ways of tackling problems are occasionally better suited for sustainable development rather than solutions imposed from the above by what we generally prefer to address as 'rational'
modernity.

Savita: How were things in the village before the dam?

Keshav Bhai: We didn't have much interaction with the city. We used to farm for a living, we had Mother Narmada for water, the forests used to provide us with wood and various kinds of fruits. We used to grow grain on the farm that would last the whole year. Most of the farming was on the Narmada flood plains (after the rains and after the waters had receded). It was easy to farm here since the land was flat and there was not much clearing to be done. We did some farming near the huts, too.

Savita: Were all these mountains covered by forests?

Keshav Bhai: Yes, 30 years back this place was covered with dense forests. The forests were destroyed about 10-15 years back. I will explain why that happened. Before the forests were destroyed we used to cut small portions for farming. But the jungle was not our enemy; after all, we are forest people. We used to cut very few trees.

Aravinda: Were the forests there in 1980?

Keshav Bhai: Yes, they were there. The forests started disappearing around 1988-90.

Aravinda: When the surveyors came what was the reaction of the villagers?

Keshav Bhai: The surveyors told us that when the dam is built we would be compensated land for land, house for house. We would be provided with education and other amenities. The dam was being built in Jalsindhi. I used to work for that project.

After three years, Morarji Desai, who was the then Prime Minister, came and told us that there were a lot of dams being planned on Narmada. I didn't know that. The one in Jalsindhi was by the governments of Maharashtra and Madhya Pradesh, and would be submerged by the SSP project in Gujarat. So they halted the construction of the dam in Jalsindhi after sinking crores [ten million] of rupees [$1=Rs45 approximately]. He told us that the SSP was for the future generations, for the nation. Gujarat needs a lot of water and electricity. He promised to compensate us with flat land, nice houses and a lot of money. We were happy at that time.

Aravinda: You believed the government then?
Keshav Bhai: Yes, we did. Around 1985, the Bagul committee was here to survey the land and determine how much loss each person would incur in terms of land and other property. We have been in possession of this land for generations. And we wanted this land to be registered by the officials. The officials were using this to exploit us.

The government had sent about 50 officers. This turned out to be very expensive for us because we had to host these people. These people demanded that we provide them with chicken and alcohol. The village had to provide them with about 10-12 chickens and 4-5 pots of alcohol everyday. They also extorted money from us. If anyone in the village had to get their land or house registered they would have to pay Rs 50. They would also force us to sell our goats and cattle. They would make us sell a goat for Rs 50 when the market value of the goat was Rs 800.

Medha Patkar and Vasudha Digambar arrived on the scene around this time. We placed our issues before them. Medhatai and others took photographs of these officials when they were drunk. This scared the officials enough to pack their bags and leave. We started getting organized. We decided not to feed these people with chicken and alcohol, even if they didn't do the survey. We also stopped paying forest officers. Villagers from different villages started to get organized. Maharashtra has about 33 villages that would be submerged by the dam.

We figured that if we approached the government as a group then they would listen to us. The government was afraid now. We asked the government to show us the land for compensating 33 villages in Maharashtra. We organized district level meetings with government officials every three months. There were about eight representatives from each village. But nothing happened even after three years of negotiations.

Aravinda: A lot of people still believe that if you are compensated adequately then you can make progress. What do you say?

Keshav Bhai: We do not believe that development for us is possible through displacement and compensation. People have been leaving their land since 1992. The government has been sending the displaced people to faraway places like Sholapur and Gujarat. One of our demands was that we be relocated close to our villages. We do not want to lose our roots. The government tried to compensate us with land close by, but there were a lot of problems. The provided land was often fragmented. If a person were to receive five acres, he would get three acres in one village and two acres in another. We do not want that.
In the Fatehpur Amda village, the compensation officer pleaded with us to look at the land. So we went with him. The land looked good, but I noticed that there were some banana and sugarcane planted already. We went to the people living in nearby huts (who were also adivasis), and asked about these plants. They told us the bananas belonged to them and the sugarcanes belonged to a neighbour. We explained to them about the Sardar Sarover Project and told them the government was going to be using this land (their land) for compensation. They told us there would be a big fight if that happened.

The compensation officer was not happy with what we did. He did not want us to talk to these people. The story was the same wherever the government tried to find land for compensation. We told the government we would not go to Guajrat because we do not speak the language there. We are from Maharashtra and we wanted to be compensated here.

Once the Andolan started we refused all government officials from entering our village for 2-3 years, excepting the doctor (who came to the village only once a year, anyway). The government wanted to break the Andolan badly, and sent the police (on the pretext of surveying the land) to harass the people. The cops killed a 15-year-old lad on 19 November 1993.

*Savita:* By lathi [baton] charge?

*Keshav Bhai:* No, he was killed by a bullet. We organized a march along with thousands of people on 22 November to protest against the killing. The police attacked us with lathis, and injured about 300-400 persons who had to be admitted to the hospital. Some persons had their arms broken while some had their legs broken. People were scared and were considering compensation again.

Earlier we had made demands for some forestland. This caught the attention of Sharad Pawar who was the then Chief Minister of Maharashtra. He got approval of 2,700 hectares of forestland. Pawar came to the district meeting and told us: "We are satisfying all your demands. You wanted forestland. And here we are approving 2,700 acres of forest land for you."

We had agreed, but how many people would be accommodated on only 2,700 hectares of land? The government's response was that everyone would have to be accommodated on this land. And was this land meant for agriculture or housing? It was not clear.

We earlier claimed that at least 10,000 hectares would be required to compensate the 33 villages in Maharashtra. The government returned with
another 1,500 hectares next year, but the villages would now be split with only 4,200 acres. Moreover, we wanted 10,000 hectares of forestland (without the forests having to be destroyed). We wanted all these questions to be answered before the dam was built. We started protesting at this point in different places like Bombay and Delhi. There was a big protest in Harsukh against the SSP.

Aravinda: How many people were there?

Keshav Bhai: There were lakhs [one hundred thousand] of people. We announced that the SSP represents vinash [destruction] and not vikas [progress]. It had to be stopped. In Pherkua we protested for 36 days. There were 10,000 policemen; we were 10,000 ourselves and there were 10,000 people hired by the Gujarat government (who were paid daily by the government). Nothing happened even after 36 days. . . . We took a resolution that we would not be allowing any government officials into our village. We carried out several such protests.

The government started using new tactics during this time. The collector in this district at the time, a man called Gill, was quite ruthless. He came to the villages and started tempting persons one by one. The government officials were now telling the villagers that "adivasis would go to heaven" if they accepted compensation. They were now tempting people with stories of adivasis who have made it rich after compensation. Gill tried to buy me with Rs 1 lakh, a big house and a fat salary. But I did not budge. I was in Manivilli for the satyagraha. He followed me there and tried hard to break me. I started telling everyone that Gill is a thief looting the adivasis. This was embarrassing for Gill since there was a World Bank official in the area at that time. Gill is himself with the World Bank, drawing a salary of Rs 50,000 per month because of his work in the Narmada Valley!

We were always afraid that once adivasis are relocated close to cities they would be destroyed. This was evident from the story of the adivasis displaced by the dams on the Tapti. Our fears turned out to be true. Money was never important for adivasis. But once people were relocated close to cities with five acres of land, they could not survive. They would sell their lands for money and then blow their money away.

Let me give you an example from this village: I used to know this family. They used to live here together, they used to spend a lot of time with me. They accepted compensation from the government and were relocated to Amli village. But they could not survive there. Their money was spent in a year. Then they sold some of the wood they had. They finally sold their land.
What would they do now?

A lot of people who accepted compensation are selling their lands now. We have been thinking for the last 2-3 years. The dam will make our lives difficult here and accepting compensation is also difficult. We have approached the government asking for solutions. The people from Gujarat started making attempts to destroy our villages when we started opposing the dam in 1987. Dalals [middlemen] started coming from Gujarat telling the villagers they would buy the Sagwan wood from our forests. People sold their trees for a few hundred rupees and the dalals made crores from the wood.

Savita: Was all of this area covered with Sagwan forests back then?

Keshav Bhai: Yes, the forests stretched till Manivilli about 80-100 kilometers away. And everything got destroyed. We tried hard to protect them. We didn't have a chance. These people from Gujarat were threatening us: "Why are you opposing the dam? Why don't you let us cut the trees? We will beat you up if you oppose us." After the Andolan gained strength, we started protecting whatever that has remained. We have stopped the destruction of the forests.

Savita: Are you planting trees? Are you regenerating the forests?

Keshav Bhai: No, there is no need to plant trees. All you need to do is protect the land. The government is planting a lot of trees, but all the trees in the plantation are dying. The government is wasting crores of rupees. If you protect the land, the forests will come back. For example, a couple of years back the villagers from Seldah accepted their compensation and left their village. There is dense forest full of wild animals in Seldah now. The land is very fertile here; the forest will grow back.6

While we are not convinced with the treatment of present-day narratives as a collection of so-called grand narratives, we are also not always in consonance with the politics-from-below point of view that tends to examine contemporary social activism and public action as an absolute discourse in terms of black and white.

We cannot, therefore, afford to discuss our categories of analysis in straitjacketed terms like either the subaltern or the élite. We are not quite comfortable with such categories and would rather interrogate these in order to explore other in-between areas of our research.

This is why we do not want to examine the marginalized subaltern as
someone who is bereft of any further paraphernalia of identity. There are intra-subaltern strife and tension, problems of sustaining a workable stock of social capital (Coleman, 1994, p. 304) within the subaltern ranks and file. Moreover, can we at all afford to look at the subaltern as a class or should we rather focus on a neoinstitutional (actor-oriented) argument that has to be located within the framework of postcolonial India's politics of State repression and displacement?

It is thus clear by now that the judgement on Sardar Sarovar Project by the high court permits further construction of the dam, which will lead to forcible eviction and destitution through flooding of houses and lands, without rehabilitation of a few thousand families. The judgement thus has paved the way for violation of right to life and livelihood of innocent toiling masses and integrated natural resource-based communities. Will it not be a violation of the Constitution itself?

The judgement on the dam is then symbolic of both; the court's supporting violation of the Constitution against the common people from disadvantaged sections of society and judgements (such as the ones in Bhopal Gas tragedy, Enron and Niyogi murder, etc.) based on misinformation due to outdated, inadequate process and procedures to appraise the complex reality. While the judiciary is one of the four pillars of democracy, the time has come to recognize that peoples' movements and civil society groups make an additional fifth one taking the role of changing the judiciary, its value framework, its anti-people biases, and bringing in not just judicial reform, but revolution (Tandon, 1997, p. 39).

Battles of everyday life are sometimes best resolved with the help of organic resources. But subaltern actors are often without the permission to narrate (Spivak, 1995, pp. 24-28) and are, as a result, almost inevitably relegated to the margins of an elitist grand narrative that is empowered by superior (?) knowledge of the material conditions of existence (Smart, 1985). This contention of ours is corroborated by the International Rivers Network which has listed 30 "unsafe dams" in India at http://www.irn.org/.

NBA activist Shripad Dharmadhikary has itemized the movement's alternative agenda so that civil societal engagements can effectively resist implementation of the State's developmentalist agenda:

- The NBA would try to involve all aspects of the civil society;
- The NBA envisions the issue (in hand) as much larger than fight(s) over a specific project . . . the NBA is a coalition that challenges development philosophy, supports 'right to life', and challenges power/energy policy;
The coalition works to mobilize locally affected people;
The coalition demands local rights to fisheries;
The NBA would take steps toward decommissioning/removal of dams;
The coalition advocates re-operation/partial decommissioning to free land for people who have not been resettled;
Dam decommissioning is the next logical step as part of a spectrum from re-operation to decommissioning;
Experiences with decommissioning would help change mindsets;
It is important to share information and debate issues.2

The Narmada struggle has been non-violent, but certainly assertive. It has sought to innovate, sharpen and widen the means of non-violent satyagraha, which otherwise had become a routine affair, often ineffective. Like every movement, the Andolan has developed its own means, idioms, and work culture for spreading and sharpening the issues at stake.
According to Seetaram Kaka of Kadmal village in Nimad, who has been a key activist:

The movement has changed our lives. Now we cannot see anyone being exploited, anyone (unfairly) amassing wealth. We immediately question him, take his extra rotis (bread) and give to one who has nothing! Now, even suppose we were displaced, this new vision will be with us and we can devise our own ways. We can speak what others cannot. Women in adivasi areas and in the conservative society of Nimad have been in the forefront of the struggle against the dam. They question and argue with the officials and police; and they lead the rallies and meetings. Assertive tribal women like Jadikaki, Dedlibai, Khiali, Pinjaribai, Pervibai, and Geeta; and from Nimad: Rukmini kakis, Kamala didi, along with numerous young girls and women, have all been in the forefront of the movement. They mobilize villages, speak in urban and semi-urban places, and have gone to jails and faced police beatings. Though caste differences do not arise in the tribal regions, this has traditionally created social tensions and a wide gap among the (non-tribal) village communities of Nimad. However, through involvement in the Andolan, and the churning of joint struggle, the caste system of discrimination has been steadily weakening. The Andolan has been a stimulus, too, for the hidden, creative capacities of the people. The bhajan mandali of Jalkheda, the puppet troops of Pipri youths, the gayanas (songs), and the dances of the tribal regions, have all been parts of the movement, strengthening one another. A wonderful chemistry is at work here, with the young people, both boys and girls, the activists, and supporters of various castes and backgrounds collaborating and generating new comradeship. (Sangvai, 2000, p. 122-127)

So when do people at the grassroots finally begin to identify themselves with
their own institutions? This can only happen when they are compelled to de-identify themselves with the state's agencies (of coercion) that have been mai baap (i.e. as parents) (Chatterjee, 1982, pp. 9-38) to them, as in India, since time immemorial. Popular institutions serve as indices to assess the quality of grassroots activism. Such institutions, moreover, have a proclivity to become somewhat indispensable as their networks expand and become increasingly detailed in terms of organization; their levels of encompassment and embeddedness in the everyday politics at the grassroots rise accordingly.

The role of social trust and networks of cooperation in the context of such 'decentralized' governance is rather vital. As Confucius had once remarked that trust is the single most important factor in the political lives of men. Trust leads to social bonds and intra- as well as inter-institutional connectedness, and this actually coheres institutions, so to say.

Trust indicates a system of values; a system of values implies social mores; and social mores are themselves an important institution. So trust can, and often does, lead to the sustenance of institutions. Neoinstitutionalism as a dominant frame of reference in present-day political sociology serves to explain the reality of governance or even the lack of it; it introduces a fresh way of looking at and handling institutions.

For what are institutions but formal agencies and domains of human interaction? And is not the problem of governance really a problem of interaction in its primary sense, a problem of interface involving both the state and its civil society/societies? If rules are the accepted (and expected modes) of behaviour, then institutions are the facilitating channels that help socialize such behaviour. Theorists like Douglass C. North, Robert D. Putnam, and Subrata K. Mitra have developed this neoinstitutionalist paradigm (North, 1990; Putnam, Leonardi, & Nanetti, 1993; Mitra, 1997).

Neoinstitutionalism, to understand the baffling phenomenon of good governance, deals with actors and institutions as well as actors in institutions. Governance derives from an able handling of institutions. Actors who function through institutions tend to make a lot of difference as to how such institutions perform.

The kind of legitimacy and politics of ecology that we have in mind here would ideally emerge from real life, indigenous knowledge and intimate culture root paradigms of everyday life. We cannot deny the fact that institutions are necessary. But what are social institutions (Coleman, 1994, p. 114) other than interactive arrangements of power that are best evolved
indigenously? They are:

- a collective mode of behaviour,
- a matrix that sustains popular action and imagination,
- an integrating dynamic and
- a procedural and regulatory imperative within a political system.

But this is not encouraged so far as environmentalist values of the establishment in India are concerned. We have to also remind ourselves that democratic political systems are required to grapple with adaptation, goal attainment, integration, and latent pattern maintenance. Mitra has cautioned that "if the wielders of power concede the point to those who challenge established values and norms, they risk losing their legitimacy. On the other hand, the failure to give satisfaction to the discontented might deepen their sense of outrage and alienation which can further reduce their legitimacy" (Mitra, 1997, p. 23).

Our neoinstitutional argument is also supported by rational choice analysis that suggests that any democratic régime (Kohli, 1987, p. 29; Kohli, 1991; Kohli & Basu, 1998) would legitimately prefer entrenchment(s) of its own power and authority rather than problems of governance; this, however, prompts an essential cost-benefit analysis, namely what amount of political investment to establish pro-people, responsive institutions at the grassroots would yield good governance?

The above is a most critical analysis. A democratic regime like India's can be politically successful and thereby continue in power if it is able to properly read its ground realities and problems thereof. These problems are more or less popular in nature, and have a propensity to develop into discontent of the ruled actors against their ruling institutions. So the actors in power have to redress these grievances of the actors at the grassroots in a political manner by effectively establishing and handling pro-people institutions. Only then organic identification would bind actors with institutions; only then the incipient involvement noticed at the level of 'actors and institutions' would, arguably, transcend itself to the level of 'actors in institutions,' consolidating both the level and the quality of environmental/ecological governance in this process.

Notes

1. Data and maps used in this paper have been downloaded from different websites on the Narmada Bachao Andolan. I am grateful to Susanne Wong of the International Rivers Network and Subramanya Sastry of the Baroda, Gujarat-based Narmada Bachao Andolan among other activists and
academics for their kind cooperation that has considerably facilitated my research. Narmada literally means 'endower of bliss'. Sanjay Sangvai, *The River and Life: Story of the Narmada Bachao Andolan* (Mumbai: Earthcare Books, 2000), 9.

2. Save the Narmada Movement. The NBA, established in 1989, is a coalition of environmental and human rights activists, scientists, academics, and project-affected people working to resist the Narmada Valley Development Project. The NBA is also trying to compel the government to empty the partially filled reservoir of the Sardar Sarovar Dam.

3. According to M.S. Patel, Secretary of Narmada (water resources and water supply), Government of Gujarat, the total cropped area for *kharif* season in Saurashtra is 4 million hectares. At present, water for irrigation is being provided by 113 dams for 0.3 million hectares. Even after the Sardar Sarovar Project is implemented, 0.4-0.5 million hectares would be irrigated. Therefore, 3.15 million hectares would still be dependent on rain. Therefore, even Narmada water cannot solve the problem. However, with the small structures in Saurashtra, villages would have water for irrigation and drinking.

4. Social scientist Ramachandra Guha had written an article in *The Hindu*, a leading national daily, on 26 November 2000, attacking novelist-turned-environmental activist, Arundhati Roy, for her position on the Narmada controversy. Guha concluded his article accordingly: "I am told that Arundhati Roy has written a very good novel. Perhaps she should begin another. Her retreat from activism would—to use a term from economics—be a Pareto optimum: good for literature, and good for the Indian environmental movement." Guha's article has attracted considerable attention. *The Hindu* published 30 letters on 17 December; 22 supported Guha while 8 expressed reservations. Interestingly enough, 20 out of the 22 pro-Guha letters were from men, a majority among whom happen to be academically distinguished, even holding Ph.D. degrees. Of the remaining 8 letters, 5 were by women and only 3 by men! I am grateful to S. Ravi Rajan, Assistant Professor of Environmental Studies at the University of California, Santa Cruz, for having kindly pointed this out.

5. That differs from an *alternative* model of organic development (which takes into account grassroots uplift in real terms).

6. Excerpts from an interview with Keshav Bhai by Savita Kini and L.S. Aravinda of the NBA (during early 2000). Transcript by Girish Bhat. Adaptation mine. Available in the website of the Friends of River Narmada
7. At the International Dam Decommissioning Strategy Workshop, Walker Creek Ranch, Petaluma, California, organized by River Revival: International Campaign for River Restoration and Dam Decommissioning (23-25 July 1998).

8. I am grateful to Professor Thomas Fleiner, Director of the Institute of Federalism, University of Fribourg, Switzerland for this insight.

9. I thank Professor Lidija R. Basta Fleiner, Director of the International Research and Consulting Centre of the Institute of Federalism, Fribourg, for this exposition.

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Prasenjit Maiti <pmaiti@vsnl.com> is a lecturer in Political Science at the University of Burdwan, West Bengal, India. Residence: P-8 Beleghata Main Road, 2nd Floor, Calcutta 700 085, India. TEL: 91-33-3501042 / 3542517.